

Test Item File to Accompany

**Principles of  
Microeconomics  
Test Item File 1**  
*Ninth Edition*

by

Case/Fair/Oster

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# Chapter 1 The Scope and Method of Economics

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## 1.1 Why Study Economics?

### 1 Multiple Choice

- 1) Which of the following is NOT listed in the book as a reason to study economics?
- A) to learn a way of thinking
  - B) to understand society and global affairs
  - C) to be an informed voter
  - D) to learn how to make lots of money

Answer: D

Diff: 1

Topic: Why Study Economics?

Skill: Fact

- 2) Among the fundamental concepts in economics are
- A) opportunity cost.
  - B) marginalism.
  - C) efficient markets.
  - D) all of the above

Answer: D

Diff: 1

Topic: Why Study Economics?

Skill: Fact

- 3) Which of the following is the best definition of economics?
- A) the study of how individuals and societies choose to use the scarce resources that nature and previous generations have provided
  - B) the study of how consumers spend their income
  - C) the study of how business firms decide what inputs to hire and what outputs to produce
  - D) the study of how the federal government allocates tax dollars

Answer: A

Diff: 2

Topic: Why Study Economics?

Skill: Definition

- 4) The rise of the modern factory system in England during the late eighteenth and early nineteenth centuries is known as the
- A) Great Migration.
  - B) Industrial Revolution.
  - C) Wealth of Nations.
  - D) Dark Ages.

Answer: B

Diff: 1

Topic: Why Study Economics?

Skill: Fact

- 5) Which of the following statements is NOT correct?
- A) Economics is a behavioral science.
  - B) In large measure, economics is the study of how people make choices.
  - C) If poverty was eliminated there would be no reason to study economics.
  - D) Economic analysis can be used to explain how both individuals and societies make decisions.

Answer: C

Diff: 1

Topic: *Why Study Economics?*

Skill: *Fact*

- 6) The study of economics
- A) is a very narrow endeavor.
  - B) is a way of analyzing decision-making processes caused by scarcity.
  - C) is concerned with proving that capitalism is better than socialism.
  - D) focuses on how a business should function.

Answer: B

Diff: 2

Topic: *Why Study Economics?*

Skill: *Definition*

- 7) Sunk costs are
- A) costs that cannot be avoided, because they have already been incurred.
  - B) the costs of what we give up when we make a choice or a decision.
  - C) the additional costs of producing an additional unit of a product.
  - D) the additional costs of consuming an additional unit of a product.

Answer: A

Diff: 2

Topic: *Why Study Economics?*

Skill: *Definition*

- 8) Suppose that you purchased a ticket to a jazz festival for \$100 a month ago. Last week someone invited you to a hockey game on the same night as the jazz festival. You would much rather go to the hockey game than the jazz festival. You have tried unsuccessfully to sell the jazz festival ticket. Which of the following statements regarding this situation is correct?
- A) The \$100 you paid for the jazz festival ticket is relevant to the decision, as this represents the opportunity cost of attending the hockey game.
  - B) You should base your decision on whether or not the hockey game will provide you with more than \$100 in satisfaction.
  - C) The \$100 you paid for the jazz festival ticket should be irrelevant in your decision making, because it is a sunk cost.
  - D) The \$100 jazz festival ticket should be irrelevant in your decision making, because it represents the marginal cost of attending the hockey game.

Answer: C

Diff: 2

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

9) You have decided that you want to attend a costume party as Ironman. You estimate that it will cost \$40 to assemble your costume. After spending \$40 on the costume, you realize that the additional pieces you need will cost you \$25 more. The marginal cost of completing the costume is

- A) \$15.                      B) \$25.                      C) \$40.                      D) \$65.

Answer: B

Diff: 2

Topic: *Why Study Economics?*

Skill: *Analytic*

AACSB: *Analytic Skills*

10) The concept of opportunity cost

- A) is relevant only to economics.  
B) can be applied to the analysis of any decision-making process.  
C) applies to consumers but not to firms.  
D) refers only to actual payments and incomes.

Answer: B

Diff: 2

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

11) Opportunity cost is

- A) that which we forgo, or give up, when we make a choice or a decision.  
B) a cost that cannot be avoided, regardless of what is done in the future.  
C) the additional cost of producing an additional unit of output.  
D) the additional cost of buying an additional unit of a product.

Answer: A

Diff: 2

Topic: *Why Study Economics?*

Skill: *Definition*

12) The reason that opportunity costs arise is that

- A) an economy relies on money to facilitate exchange of goods and services.  
B) resources are scarce.  
C) there are no alternative decisions that could be made.  
D) people have limited wants.

Answer: B

Diff: 1

Topic: *Why Study Economics?*

Skill: *Fact*

13) Which of the following is NOT an opportunity cost of attending college?

- A) the tuition you pay  
B) the income you could have earned if you didn't attend college  
C) the alternative uses of the time you spend studying  
D) the cost of the food that you consume while you are attending college

Answer: D

Diff: 3

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

14) If your tuition is \$5,000 this semester, your books cost \$600, you can only work 20 rather than 40 hours per week during the 15 weeks you are taking classes and you make \$15 per hour, and your room and board is \$3000 this semester, then your opportunity cost of attending college this semester is

- A) \$5,600.                      B) \$5,900.                      C) \$10,100.                      D) \$11,600.

Answer: C

Diff: 3

Topic: *Why Study Economics?*

Skill: *Analytic*

AACSB: *Analytic Skills*

15) If your tuition is \$25,000 this semester, your books cost \$1,500, you can only work 20 rather than 40 hours per week during the 15 weeks you are taking classes and you make \$15 per hour, and your room and board is \$7,500 this semester, then your opportunity cost of attending college this semester is

- A) \$26,500.                      B) \$26,800.                      C) \$31,000.                      D) \$38,500.

Answer: C

Diff: 3

Topic: *Why Study Economics?*

Skill: *Analytic*

AACSB: *Analytic Skills*

16) If you own a building and you decide to use that building to open a book store,

- A) there is no opportunity cost of using this building for a book store because you own it.  
B) there is an opportunity cost of using this building for a book store because it could have been used in other ways.  
C) there are no sunk costs involved in this decision.  
D) the only cost relevant to this decision is the price you paid for the building.

Answer: B

Diff: 2

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

17) You own the *Star Wars* six DVD set. The opportunity cost of watching these DVDs for the second time

- A) is zero.  
B) is one-half the cost of the DVDs, as this is the second time you have watched it.  
C) is the value of the alternative use of the time you spend watching the DVDs.  
D) cannot be calculated.

Answer: C

Diff: 2

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 18) That which we forgo, or give up, when we make a choice or decision is called
- A) sunk cost.
  - B) marginal cost.
  - C) real cost.
  - D) opportunity cost.

Answer: D

Diff: 1

Topic: Why Study Economics?

Skill: Definition

- 19) Costs that cannot be avoided, regardless of what is done in the future, because they have already been incurred are
- A) total costs.
  - B) sunk costs.
  - C) marginal costs.
  - D) allocative costs.

Answer: B

Diff: 1

Topic: Why Study Economics?

Skill: Definition

- 20) If you can buy 9 DVDs for \$126 or you could buy 10 DVDs for \$130, then the marginal cost of the tenth DVD is:
- A) \$4.
  - B) \$13.
  - C) \$14.
  - D) \$130.

Answer: A

Diff: 2

Topic: Why Study Economics?

Skill: Analytic

- 21) If you eat at a sushi restaurant that charges \$20 for its all you can eat sushi special, then the marginal cost of your 10th piece of sushi is
- A) zero.
  - B) \$2.
  - C) \$200.
  - D) \$2,000.

Answer: A

Diff: 2

Topic: Why Study Economics?

Skill: Analytic

AACSB: Analytic Skills

- 22) A market in which profit opportunities are eliminated almost instantaneously is
- A) a laissez-faire market.
  - B) a capitalist market.
  - C) a socialist market.
  - D) an efficient market.

Answer: D

Diff: 2

Topic: Why Study Economics?

Skill: Definition

- 23) If information is less costly and more easily available, then usually this
- A) makes markets more efficient.
  - B) makes markets less efficient.
  - C) increases profit opportunities.
  - D) increases the opportunity cost of acquiring more information.

Answer: A

Diff: 3

Topic: Why Study Economics?

Skill: Conceptual

AACSB: Reflective Thinking

- 24) An efficient market is a market
- A) in which everyone always gets what they want.
  - B) in which profit opportunities are eliminated almost instantaneously.
  - C) in which profits are always very high and persistent.
  - D) in which opportunity costs are zero.

Answer: B

Diff: 2

Topic: *Why Study Economics?*

Skill: *Definition*

- 25) Related to the *Economics in Practice* on p. 6: Which one of the following best supports the argument that most of the value of Apple's iPod is in its conception and design?
- A) Apple's history of innovative product design includes the earliest use of a Graphic User Interface (GUI) in the home computer market.
  - B) The iPod would not have been as successful without the development of Web sites that allow users to purchase and download music.
  - C) Companies that assemble the iPod and those that manufacture iPod components together capture only a small fraction of the iPod's retail value.
  - D) Increases in the costs of components will reduce the profitability of the iPod, although price increases can be passed on to consumers.

Answer: C

Diff: 3

Topic: *Why Study Economics?: Economics in Practice*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 26) Related to the *Economics in Practice* on p. 6: Which one of the following best explains why Apple's iPod is neither a pure import nor a pure export?
- A) The iPod has earned a large share of the market for portable music players in both the United States and other industrialized nations.
  - B) Intellectual property laws protect the iPod in both domestic and international markets, although enforcement of those laws varies widely between countries.
  - C) Apple stock is publicly traded, and so citizens of any country can own Apple stock.
  - D) The iPod was designed and is sold by a U.S. company, but it is assembled in China from parts made in the United States and other countries.

Answer: D

Diff: 3

Topic: *Why Study Economics?: Economics in Practice*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

- 1) Resources are unlimited in a wealthy society.

Answer: FALSE

Diff: 1

Topic: *Why Study Economics?*

Skill: *Fact*



2) The value of the best alternative foregone is the opportunity cost of making a decision.

Answer: TRUE

Diff: 1

Topic: *Why Study Economics?*

Skill: *Definition*

3) Opportunity costs arise due to scarce resources.

Answer: TRUE

Diff: 1

Topic: *Why Study Economics?*

Skill: *Fact*

4) Sunk costs do not affect marginal decision making.

Answer: TRUE

Diff: 2

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

5) Marginal costs are those that can not be recaptured.

Answer: FALSE

Diff: 1

Topic: *Why Study Economics?*

Skill: *Fact*

## 1.2 The Scope of Economics

### 1 Multiple Choice

1) The branch of economics that examines the functioning of individual industries and the behavior of individual decision-making units is

A) positive economics.

B) normative economics.

C) macroeconomics.

D) microeconomics.

Answer: D

Diff: 2

Topic: *The Scope of Economics*

Skill: *Definition*

2) Studying how the management of Hewlett Packard decides how many computers to produce and the price to charge for its computers would be considered

A) descriptive economics.

B) empirical economics.

C) microeconomics.

D) macroeconomics.

Answer: C

Diff: 2

Topic: *The Scope of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 3) Studying how Joshua allocates his time between school and video games is an example of
- A) macroeconomics.
  - B) microeconomics.
  - C) industrial organization.
  - D) descriptive economics.

Answer: B

Diff: 1

Topic: *The Scope of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) The study of how benefits are determined for city employees would be considered
- A) microeconomics.
  - B) macroeconomics.
  - C) descriptive economics.
  - D) institutional economics.

Answer: A

Diff: 1

Topic: *The Scope of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 5) Inflation and unemployment
- A) are the focus of normative economics.
  - B) are a focus of microeconomics.
  - C) are a focus of positive economics.
  - D) are a focus of macroeconomics.

Answer: D

Diff: 1

Topic: *The Scope of Economics*

Skill: *Fact*

## 2 True/False

- 1) The rate of economic growth is a topic of microeconomics.

Answer: FALSE

Diff: 1

Topic: *The Scope of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) The aggregate price level is a topic of macroeconomics.

Answer: TRUE

Diff: 2

Topic: *The Scope of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 1.3 The Method of Economics

### 1 Multiple Choice

1) Better insurance benefits increase the incentive of some individuals to work. This statement is best described as a

- A) positive statement.
- B) Marxist ideology.
- C) normative statement.
- D) descriptive economics statement.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

2) The Bureau of Labor Statistics announced that the unemployment rate fell by one percentage point. This is best described as

- A) an economic model.
- B) Marxist ideology.
- C) a normative statement.
- D) descriptive economics.

Answer: D

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

3) The amount of education that one has is an important factor in the determination of his or her wage rate. This is best described as

- A) a positive statement.
- B) Marxist ideology.
- C) a normative statement.
- D) descriptive economics.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

4) The cost involved when choosing between alternatives is known as the

- A) marginal cost.
- B) sunk cost.
- C) opportunity cost.
- D) normative cost.

Answer: C

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 5) Positive economics is an approach to economics that
- A) seeks to understand behavior and the operation of systems while making judgments about their usefulness to society.
  - B) analyzes outcomes of economic behavior, evaluates them as good or bad, and may prescribe preferred courses of action.
  - C) applies statistical techniques and data to economic problems.
  - D) examines the role of government in the economy.

Answer: C

Diff: 1

Topic: *The Method of Economics*

Skill: *Fact*

- 6) Normative economics is an approach to economics that
- A) seeks to understand behavior and the operation of systems without making judgments.
  - B) analyzes outcomes of economic behavior, evaluates them as good or bad, and may prescribe preferred courses of action.
  - C) applies statistical techniques and data to economic problems.
  - D) examines the role of government in the economy.

Answer: B

Diff: 1

Topic: *The Method of Economics*

Skill: *Fact*

- 7) Which of the following is a normative question?
- A) Why do gasoline prices increase between Memorial Day and Labor Day?
  - B) What will happen to gasoline consumption if the federal tax on gasoline is eliminated?
  - C) To reduce the regressive nature of the gasoline excise tax, should the portion of the gasoline excise tax paid by high-income individuals be increased?
  - D) How will oil exploration be affected if the government subsidizes oil producers?

Answer: C

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 8) Which of the following is a positive question?
- A) Will the level of teenage unemployment increase if the minimum wage is increased?
  - B) Should the minimum wage be set at one-half the average manufacturing wage to guarantee individuals a decent standard of living?
  - C) Wouldn't it be more equitable if the minimum wage increased automatically with the cost of living?
  - D) Wouldn't it be better to try to increase people's wages through job-training programs rather than by requiring employers to pay minimum wages?

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 9) Health insurance should be provided to every citizen in a wealthy nation such as the United States. This statement is best described as
- A) a positive statement.
  - B) a normative statement.
  - C) a descriptive economics statement.
  - D) an implication of an efficient market.

Answer: B

Diff: 2

Topic: The Method of Economics

Skill: Conceptual

AACSB: Reflective Thinking

- 10) There is great concern over the fact that millions of Americans do not have health insurance. A study of the costs and benefits of implementing a national health-insurance program is an example of
- A) laissez-faire economics.
  - B) positive economics.
  - C) labor economics.
  - D) normative economics.

Answer: B

Diff: 2

Topic: The Method of Economics

Skill: Conceptual

AACSB: Reflective Thinking

- 11) Descriptive economics
- A) identifies actions and reactions.
  - B) requires model building.
  - C) looks at the outcomes of economic behavior and asks if they are good or bad.
  - D) mainly involves the compilation of data that describe phenomena and facts.

Answer: D

Diff: 2

Topic: The Method of Economics

Skill: Definition

- 12) An example of descriptive economics is when an economist
- A) collects data on the wage rates and employment levels in the farming industry.
  - B) tries to develop a model to explain the changes in employment and wages in the farming industry.
  - C) tries to understand the relationship between the price of imported agricultural products and the level of employment in the U.S. farming industry.
  - D) tries to determine if there are any regular patterns in the employment levels in the farming industry and then makes generalizations from these patterns.

Answer: A

Diff: 2

Topic: The Method of Economics

Skill: Conceptual

AACSB: Reflective Thinking

*Refer to Scenario 1.1 below to answer the questions that follow.*

SCENARIO 1.1: An economist wants to understand the relationship between minimum wages and the level of teenage unemployment. The economist collects data on the values of the minimum wage and the levels of teenage unemployment over time. The economist concludes that a 1% increase in minimum wage causes a 0.2% increase in teenage unemployment. From this information he concludes that the minimum wage is harmful to teenagers and should be reduced or eliminated to increase employment among teenagers.

13) Refer to Scenario 1.1. The statement that a 1% increase in the minimum wage causes a 0.2% increase in teenage unemployment is an example of

- A) descriptive economics.
- B) normative economics.
- C) positive economics.
- D) Marxist economics.

Answer: C

*Diff: 2*

*Topic: The Method of Economics*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

14) Refer to Scenario 1.1. The statement, "the minimum wage is harmful to teenagers and should be reduced or eliminated to increase employment among teenagers," is an example of

- A) descriptive economics.
- B) normative economics.
- C) positive economics.
- D) Marxist economics.

Answer: B

*Diff: 2*

*Topic: The Method of Economics*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

15) Refer to Scenario 1.1. The process of collecting data on minimum wage and teenage unemployment levels is an example of

- A) law and economics.
- B) economic history.
- C) econometrics.
- D) descriptive economics.

Answer: D

*Diff: 2*

*Topic: The Method of Economics*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

16) Refer to Scenario 1.1. The statement that an increase in the minimum wage causes an increase in teenage unemployment is an example of

- A) descriptive reasoning.
- B) an economic theory.
- C) normative economics.
- D) deductive reasoning.

Answer: B

*Diff: 2*

*Topic: The Method of Economics*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

17) Refer to Scenario 1.1. A graph of the value of the minimum wage on one axis and the level of teenage unemployment on the other axis is an example of

- A) an economic theory.
- B) an economic model.
- C) inductive reasoning.
- D) a variable theory.

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

18) To isolate the impact of one single factor, economists invoke the assumption of

- A) inductive reasoning.
- B) Ockham's razor.
- C) ceteris paribus.
- D) post hoc, ergo prompter hoc.

Answer: C

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

19) The principle that irrelevant detail should not be included in a model is known as

- A) Say's Identity.
- B) ceteris paribus.
- C) Ockham's razor.
- D) Hobson's choice.

Answer: C

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

20) Economists use the phrase "ceteris paribus" to express the assumption

- A) "all else equal."
- B) "everything affects everything else."
- C) "scarcity is a fact of life."
- D) "there is no such thing as a free lunch."

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

21) The Latin phrase economists use that means all else equal is:

- A) "ceteris paribus."
- B) "cogito ergo sum."
- C) "carpe diem."
- D) "caveat emptor."

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 22) Stanley Jevons, an economist in the nineteenth century, noted a high correlation between economic prosperity and sunspots. Based on this observation he developed a "sunspot theory" of how the economy operated. We now know that Jevons
- A) committed the fallacy of composition.
  - B) committed the ceteris paribus error.
  - C) was too quick to conclude that correlation implies causation.
  - D) showed good reasoning for the nineteenth but not the twentieth century.

Answer: C

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 23) Whenever the Democrats gain control of the Congress, spending on social programs increases; whenever Republicans gain control of the Congress, spending on defense increases. Hence, we know what the next party in control will do. This statement is an example of
- A) fallacy of inductive reasoning.
  - B) post hoc, ergo prompter hoc fallacy.
  - C) fallacy of composition.
  - D) ceteris paribus fallacy.

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 24) I have lived in a house on the Mississippi River for many years and have never seen a flood. Therefore, there is no reason for anyone to buy flood insurance. This statement is an example of
- A) fallacy of composition.
  - B) post hoc, ergo prompter hoc fallacy.
  - C) fallacy of inductive reasoning.
  - D) ceteris paribus fallacy.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 25) The economy was expanding during all of the years that I was a student, but as soon as I graduated, the economy contracted. Therefore, the labor market was waiting until I started looking for a job to contract. This statement is an example of
- A) ceteris paribus fallacy.
  - B) post hoc, ergo prompter hoc fallacy.
  - C) fallacy of composition.
  - D) fallacy of inductive reasoning.

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*



- 26) Experimental research in small cities suggests that mandating work for welfare recipients increases their income. Therefore, we should mandate work requirements for all welfare recipients. This statement is an example of
- A) fallacy of inductive reasoning.
  - B) ceteris paribus fallacy.
  - C) fallacy of composition.
  - D) post hoc, ergo prompter hoc fallacy.

Answer: C

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 27) Rent control laws are imposed when city officials believe landlords have been exploiting tenants. Which of the following criteria are they using to guide their actions?
- A) efficiency
  - B) equity
  - C) growth
  - D) stability

Answer: B

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 28) A government policy that tries to minimize inflation and unemployment can best be described as trying to achieve economic
- A) efficiency.
  - B) equity.
  - C) profitability.
  - D) stability.

Answer: D

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 29) Redistribution of income from the rich to the poor is achieved from a tax system that requires taxes to rise with income. Which of the following criteria best explains the goal of this tax system?
- A) efficiency
  - B) equity
  - C) growth
  - D) stability

Answer: B

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 30) You know that the computer lab at school gets very crowded at about 3:00 p.m. To avoid the crowds, you start going to the computer lab one hour earlier every day. However many students make the same decision, and now the computer lab becomes very crowded at 2:00 p.m. This is an example of the

- A) post hoc, ergo prompter hoc fallacy.
- B) ceteris paribus fallacy.
- C) fallacy of division.
- D) fallacy of composition.

Answer: D

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 31) It always rains about an hour after you finish washing your car. Concluding that washing your car caused it to rain is an example of the
- A) fallacy of composition.
  - B) post hoc, ergo prompter hoc fallacy.
  - C) fallacy of inductive reasoning.
  - D) ceteris paribus conditions.

Answer: B

Diff: 2

Topic: The Method of Economics

Skill: Conceptual

AACSB: Reflective Thinking

- 32) At a political rally, you stand up to see better. Everyone else stands up, as well. This is an example of
- A) ceteris paribus.
  - B) the post hoc, ergo prompter hoc fallacy.
  - C) the fallacy of composition.
  - D) Ockham's razor.

Answer: C

Diff: 2

Topic: The Method of Economics

Skill: Conceptual

AACSB: Reflective Thinking

- 33) You have observed that every time you do 30 minutes of cardio exercise before taking an exam you get an A. You therefore conclude that to get an A on an exam, all you have to do is 30 minutes of cardio exercise before you take an exam. You have committed the
- A) fallacy of composition.
  - B) fallacy of inductive reasoning.
  - C) post hoc, ergo prompter hoc fallacy.
  - D) fallacy of division.

Answer: C

Diff: 2

Topic: The Method of Economics

Skill: Conceptual

AACSB: Reflective Thinking

- 34) If you observe that Event A happens before Event B happens, and you conclude that Event A caused Event B, you would be guilty of an error called the
- A) fallacy of composition.
  - B) fallacy of inductive reasoning.
  - C) fallacy of ceteris paribus.
  - D) post hoc, ergo prompter hoc fallacy.

Answer: D

Diff: 2

Topic: The Method of Economics

Skill: Definition

- 35) Two variables are said to be \_\_\_\_\_ if one variable changes when the other variable changes.
- A) causally related
  - B) correlated
  - C) statistically related
  - D) dependent

Answer: B

Diff: 2

Topic: The Method of Economics

Skill: Definition

- 36) The fallacy of composition is
- A) the belief that if Event A happens before Event B happens, then Event A causes Event B to occur.
  - B) the belief that what is true for the whole is necessarily true of the parts.
  - C) the belief that what is true for a part is necessarily true for the whole.
  - D) the belief that it is impossible to draw generalizations about cause and effect.

Answer: C

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 37) The collection and use of data to test economic theories is
- A) empirical economics.
  - B) descriptive economics.
  - C) normative economics.
  - D) positive economics.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 38) A change in economic output is potentially efficient
- A) if the value of the resulting gains exceeds the value of the resulting losses.
  - B) if the value of the resulting gains exactly equals the value of the resulting losses.
  - C) only if no one is made worse off.
  - D) if the value of the resulting gains is less than the value of the resulting losses.

Answer: A

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 39) An efficient economy is an economy
- A) in which output is steady or growing and there is low inflation.
  - B) that produces what consumers demand and does so at the least possible cost.
  - C) that distributes output equally among all consumers.
  - D) in which there is a fair distribution of wealth.

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 40) An efficient market is characterized by the fact that
- A) output is steady or growing and there is low inflation.
  - B) profit opportunities are eliminated almost instantaneously.
  - C) there are no opportunity costs.
  - D) wealth is distributed fairly.

Answer: B

Diff: 1

Topic: *The Method of Economics*

Skill: *Fact*

- 41) The four criteria that are frequently used in judging the outcome of economic policy are
- A) efficiency, equity, stability, and economic growth.
  - B) efficiency, equality, stability, and economic growth.
  - C) efficiency, equality, profitability, and stability.
  - D) efficiency, equity, profitability, and stability.

Answer: A

Diff: 1

Topic: *The Method of Economics*

Skill: *Fact*

- 42) You have noticed that there is an increase in the number of homeless people in your city. At the same time you observe that there are also a number of vacant apartments. You believe that the government could reduce the number of homeless people if landlords were required to rent their apartments for less than they are currently charging. This policy recommendation would be motivated by concerns over

- A) efficiency.
- B) equity.
- C) economic growth.
- D) stability.

Answer: B

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 43) There is a possibility that a national sales tax will be implemented. Many economists argue that items such as food and clothing should be exempt from such a tax because low-income people spend a greater percentage of their income on these goods than do high-income individuals. This argument is motivated by concerns over

- A) economic growth.
- B) economic stability.
- C) efficiency.
- D) equity.

Answer: D

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 44) Which of the following is an example of a normative statement?

- A) The unemployment rate is six percent.
- B) There should be no unemployment in an advanced industrial society.
- C) Higher prices cause consumers to buy less.
- D) Equilibrium price implies that quantity demanded equals quantity supplied.

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 45) Which of the following is an example of a positive statement?
- A) There should be no unemployment in an advanced industrial society.
  - B) Higher prices cause consumers to purchase less.
  - C) Consumption should be distributed fairly in society.
  - D) People should pollute as little as possible.

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 2 True/False

- 1) Normative economics looks at outcomes of economic behavior and evaluates them as good or bad.

Answer: TRUE

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) Positive economics looks at outcomes of economic behavior and evaluates them as good or bad.

Answer: FALSE

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 3) An efficient economy is one that produces what consumers demand and does so at the least possible cost.

Answer: TRUE

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 4) "Ceteris paribus" literally translated means, "buyer beware."

Answer: FALSE

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 5) Positive economics seeks to understand behavior, but not make judgments.

Answer: TRUE

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

6) Stability implies a steady rate of economic growth and low inflation.

Answer: TRUE

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

7) The compilation of data to describe phenomena and facts is known as descriptive economics.

Answer: TRUE

Diff: 2

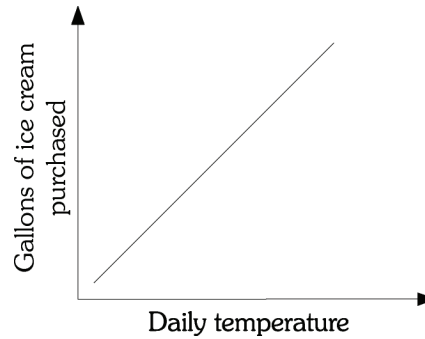
Topic: *The Method of Economics*

Skill: *Definition*

## 1.4 Appendix: How to Read and Understand Graphs

### 1 Multiple Choice

Refer to the information provided in Figure 1.1 below to answer the questions that follow.



**Figure 1.1**

1) Refer to Figure 1.1. There is \_\_\_\_\_ relationship between the daily temperature and the number of gallons of ice cream purchased.

A) a negative

B) a positive

C) either a negative or a positive

D) an inverse

Answer: B

Diff: 2

Topic: *Appendix: How to Read and Understand Graphs*

Skill: *Analytic*

AACSB: *Analytic Skills*



Refer to the information provided in Figure 1.3 below to answer the questions that follow.

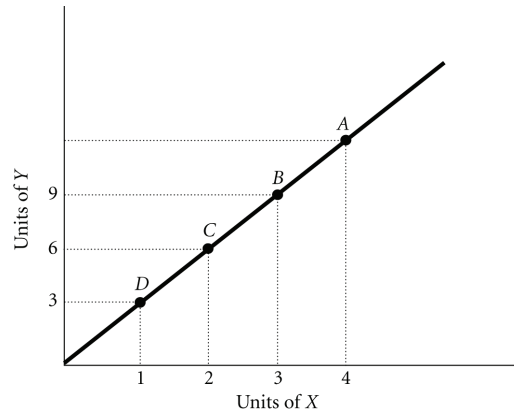


Figure 1.3

- 4) Refer to Figure 1.3. The slope of the line is
- A) positive.
  - B) negative.
  - C) increasing at an increasing rate.
  - D) decreasing at an increasing rate.

Answer: A

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

- 5) Refer to Figure 1.3. The slope of the line between Points B and D is
- A) -0.33.
  - B) -3.
  - C) 0.33.
  - D) 3.

Answer: D

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

- 6) Refer to Figure 1.3. The slope of the line between Points D and C is
- A) -0.33.
  - B) -3.
  - C) 0.33.
  - D) 3.

Answer: D

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Figure 1.3. If a 45 degree line were also graphed, the existing line shown on the graph would \_\_\_\_\_ it.
- A) lie above
  - B) lie below
  - C) cross
  - D) indeterminant from this information

Answer: A

Diff: 3

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills





11) Refer to Figure 1.4. Which of the curves or lines has a slope that is negative and then positive?

- A) A                                      B) B                                      C) C                                      D) D

Answer: A

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

12) Refer to Figure 1.4. Which of the following curves or lines has a zero slope throughout?

- A) A                                      B) B                                      C) C                                      D) D

Answer: C

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

13) Refer to Figure 1.4. Which of the curves or lines has an infinite slope throughout?

- A) A                                      B) B                                      C) C                                      D) D

Answer: D

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

14) Refer to Figure 1.4. At Point E in panel A, the slope is

- A) zero.                                      B) infinite.  
C) negative.                                      D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

15) The slope of a non-linear curve

- A) is always positive.                                      B) must first increase then decrease.  
C) is not constant.                                      D) is constant.

Answer: C

Diff: 1

Topic: Appendix: How to Read and Understand Graphs

Skill: Fact

16) The slope of a horizontal line is

- A) negative.                                      B) zero.  
C) continually changing.                                      D) infinite.

Answer: B

Diff: 1

Topic: Appendix: How to Read and Understand Graphs

Skill: Fact

- 17) If the slope of a straight line is 4 and if X (the variable on the horizontal axis) increases by 12, then Y (the variable on the vertical axis) will
- A) decrease by 3.
  - B) decrease by 0.33.
  - C) increase by 3.
  - D) increase by 48.

Answer: D

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

- 18) If the slope of a straight line is 4 and if Y (the variable on the vertical axis) decreases by 20, then X (the variable on the horizontal axis)
- A) increases by 5.
  - B) decreases by 5.
  - C) increases by 80.
  - D) decreases by 80.

Answer: B

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

- 19) The slope of a vertical line is
- A) zero.
  - B) infinite.
  - C) continually changing.
  - D) negative.

Answer: B

Diff: 1

Topic: Appendix: How to Read and Understand Graphs

Skill: Fact

Refer to the information provided in Figure 1.5 below to answer the questions that follow.

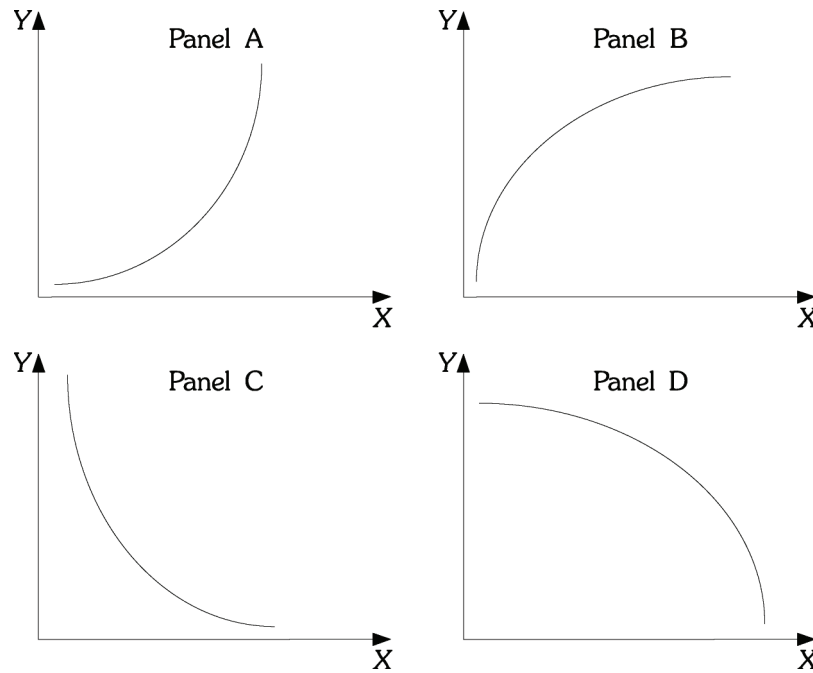


Figure 1.5

20) Refer to Figure 1.5. Which of the curves has a slope that is positive and decreasing?

- A) A                                      B) B                                      C) C                                      D) D

Answer: B

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

21) Refer to Figure 1.5. Which of the curves has a slope that is positive and increasing?

- A) A                                      B) B                                      C) C                                      D) D

Answer: A

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

22) Refer to Figure 1.5. As income increases, consumption increases, but for each additional increase in income, consumption increases by a larger and larger amount. If consumption is graphed on the vertical axis and income is graphed on the horizontal axis, the relationship between consumption and income would look like which of the following panels?

- A) A                                      B) B                                      C) C                                      D) D

Answer: A

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

23) Refer to Figure 1.5. In many industries, as firms produce additional units, average costs of production decline as the firm produces an additional unit, but average costs declines by a smaller and smaller amount as production continues to increase. If output is graphed on the horizontal axis and average costs are graphed on the vertical axis, the relationship between average costs and output would be like which of the following panels?

A) A

B) B

C) C

D) D

Answer: C

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

1) Dividing the change in quantity on the Y axis by the change in quantity on the X axis calculates the slope of a line.

Answer: TRUE

Diff: 1

Topic: Appendix: How to Read and Understand Graphs

Skill: Definition

2) A graph illustrating how one variable changes over time is a Cartesian coordinate system.

Answer: FALSE

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Definition

3) If as the variable on the Y-axis rises the variable on the X-axis rises, the relationship between X and Y is said to be direct.

Answer: TRUE

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Definition

4) If as the variable on the Y-axis falls the variable on the X-axis rises, the relationship between X and Y is said to be inverse.

Answer: TRUE

Diff: 1

Topic: Appendix: How to Read and Understand Graphs

Skill: Definition

5) The slope of a straight line is not constant unless the line is vertical or horizontal.

Answer: FALSE

Diff: 1

Topic: Appendix: How to Read and Understand Graphs

Skill: Definition

# Chapter 2 The Economic Problem: Scarcity and Choice

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## 2.1 Scarcity, Choice, and Opportunity Cost

### 1 Multiple Choice

- 1) The process by which resources are transformed into useful forms is  
A) capitalization.      B) consumption.      C) production.      D) allocation.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 2) Outputs in the production process are  
A) pollution.  
B) money.  
C) good and services of value to households.  
D) resources.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 3) Which of the following is NOT a resource as the term is used by economists?  
A) land      B) labor      C) buildings      D) money

Answer: D

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Fact

- 4) Which of the following would an economist classify as capital?  
A) a \$50 bill      B) a corporate bond  
C) a post office employee      D) a guitar used by a musician

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 5) Capital, as economists use the term,  
A) is the money the firm spends to hire resources.  
B) is money the firm raises from selling stock.  
C) refers to the process by which resources are transformed into useful forms.  
D) refers to things that have already been produced that are in turn used to produce other goods and services.

Answer: D

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 6) The concept of opportunity cost is based on the principle of  
A) need.                      B) consumption.                      C) scarcity.                      D) profit.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

- 7) The concept of trade-offs would become irrelevant if  
A) we were dealing with a very simple, one-person economy.  
B) poverty was eliminated.  
C) scarcity was eliminated.  
D) capital was eliminated.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 8) Suppose you are deciding whether to spend your tax rebate check on a new iPod player or a new digital camera. You are dealing with the concept of  
A) diminishing marginal returns.                      B) comparative advantage.  
C) opportunity costs.                      D) the fallacy of composition.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 9) According to the theory of comparative advantage, specialization and free trade will benefit  
A) only that trading party that has both an absolute advantage and a comparative advantage in the production of all goods.  
B) all trading parties, even when some are absolutely more efficient producers than others.  
C) only that trading party that has an absolute advantage in the production of all goods.  
D) only that trading party that has a comparative advantage in the production of all goods.

Answer: B

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Table 2.1 below to answer the following questions.

Table 2.1

	Krystal	Mark
Writing Poems	8	12
Writing TV Commercials	2	4

- 10) Refer to Table 2.1. For Krystal, the opportunity cost of writing one TV commercial is  
A) 1/4 of a poem.      B) 2 poems.      C) 4 poems.      D) 6 poems.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Table 2.1. For Mark, the opportunity cost of writing one TV commercial is  
A) 1/3 of a poem.      B) 2 poems.      C) 3 poems.      D) 8 poems.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Table 2.1. Which of the following statements is TRUE?  
A) Krystal has a comparative advantage in both writing TV commercials and writing poems.  
B) Mark has a comparative advantage in both writing TV commercials and writing poems.  
C) Krystal has a comparative advantage in writing TV commercials and Mark has a comparative advantage in writing poems.  
D) Mark has a comparative advantage in writing TV commercials and Krystal has a comparative advantage in writing poems.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 13) Refer to Table 2.1. To maximize total production,  
A) Krystal should specialize in writing TV commercials and Mark should specialize in writing poems.  
B) Mark should specialize in writing TV commercials and Krystal should specialize in writing poems.  
C) Krystal and Mark should both split their time between writing poems and writing TV commercials.  
D) Krystal should write poems and write TV commercials, but Mark should only write poems.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills



14) Refer to Table 2.1. For Mark, the opportunity cost of writing six TV commercials is \_\_\_\_\_ poems made.

A) 2

B) 18

C) 24

D) an indeterminate number of

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

15) Refer to Table 2.1. For Krystal, the opportunity cost of writing four TV commercials is \_\_\_\_\_ poems.

A) 2

B) 8

C) 16

D) 32

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

16) According to the theory of comparative advantage, \_\_\_\_\_ raise(s) productivity by lowering opportunity costs.

A) trade and specialization

B) investment in capital goods

C) economic growth

D) exchange and consumption

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

17) When two people trade

A) both of them expect to be made worse off by the exchange.

B) they are trying to help out each other.

C) they know one of them will get the better of the other.

D) they both expect to be made better off by the exchange.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

18) Someone has a comparative advantage in producing a good if they can produce that good

A) in greater quantities.

B) at a lower opportunity cost.

C) using more capital and less labor.

D) without sunk costs.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 19) If someone has a comparative advantage in growing pineapples,
- A) they can grow pineapples at a lower opportunity cost than other pineapple growers.
  - B) they also have an absolute advantage in growing pineapples.
  - C) they can grow more pineapples using the same resources than other pineapple growers.
  - D) pineapples are the only product they can grow.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 20) Which of the following does NOT constitute an act of "investment" as economists use the term?
- A) The city council authorizes the construction of a new fire station.
  - B) A retiree buys 50 shares of stock at \$10 a share and then sells the stock at a profit for \$20 a share.
  - C) An accountant attends a seminar on changes in the federal tax code.
  - D) A department store increases its inventory of football jerseys before the Super Bowl.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 21) In economics, investment always refers to
- A) the act of buying stocks or bonds.
  - B) the creation of capital.
  - C) increasing the quantity of labor.
  - D) an increase in per capita output.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 22) The process of using resources to produce new capital is
- A) research and development.
  - B) investment.
  - C) consumption.
  - D) economic growth.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 23) An example of forgoing present benefits in order to receive future benefits is
- A) production.
  - B) saving.
  - C) consumption.
  - D) growth.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 24) Because resources are scarce, the opportunity cost of investment in capital is
- A) zero.
  - B) forgone future consumption.
  - C) forgone present consumption.
  - D) infinite.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 25) An example of an investment is
- A) the purchase of a share of Google stock.
  - B) the purchase of an Exxon Mobil bond.
  - C) the purchase of a Hewlett Packard laser printer for use by a business.
  - D) all of the above.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 26) The opportunity cost of investment in capital is forgone present consumption because
- A) capital takes a long time to produce.
  - B) capital increases the productivity of labor.
  - C) resources are scarce.
  - D) capital is an intangible good.

Answer: C

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 27) If the unemployment rate increases from 10% to 14%, the economy will
- A) move closer to a point on the ppf.
  - B) move away from the ppf toward the origin.
  - C) remain on the ppf.
  - D) remain on the origin.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 28) Periods of less than full employment correspond to
- A) points outside the ppf.
  - B) points underneath the ppf.
  - C) points on the ppf.
  - D) either points inside or outside the ppf.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 2.1 below to answer the questions that follow.

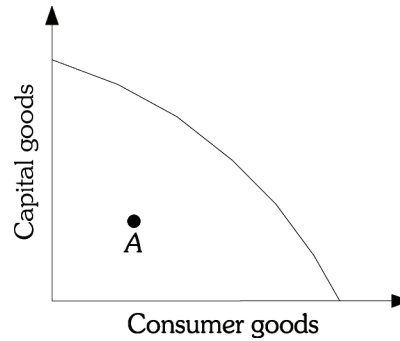


Figure 2.1

- 29) Refer to Figure 2.1. Macroland is currently operating at Point A. The best explanation for this is that
- A) the economy has very poor technology.
  - B) the economy's resources are being used inefficiently.
  - C) the economy has very few resources.
  - D) the economy operates as an efficient market.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 30) Refer to Figure 21. Macroland's production possibility frontier is bowed out from the origin due to
- A) decreasing opportunity costs.
  - B) trade.
  - C) unemployment.
  - D) specialized resources.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 31) Refer to Figure 2.1. The shape of Macroland's production possibility frontier shows
- A) increasing opportunity costs.
  - B) constant opportunity costs.
  - C) decreasing opportunity costs.
  - D) random opportunity costs.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 32) The production possibility frontier is used to illustrate the concept of
- A) the laissez-faire economy.
  - B) opportunity costs.
  - C) equilibrium.
  - D) aggregate demand.

Answer: B

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Fact

Refer to the information provided in Figure 2.2 below to answer the questions that follow.

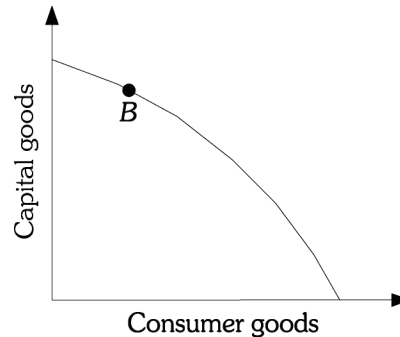


Figure 2.2

- 33) Refer to Figure 2.2. Point B represents a situation of
- A) full employment but production inefficiency.
  - B) less than full employment but production efficiency.
  - C) both full resource employment and production efficiency.
  - D) less than full employment and production inefficiency.

Answer: C

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 34) Refer to Figure 2.2. Microland is currently operating at Point B. You correctly deduce that
- A) in Microland all resources are fully employed and there are no production inefficiencies.
  - B) Microland has achieved a position of inefficiency.
  - C) Microland has recently experienced some type of technological breakthrough.
  - D) Microland has overcome the problem of scarcity.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 35) The production possibility frontier is a graph that shows
- A) all the combinations of goods and services that are consumed over time if all of society's resources are used efficiently.
  - B) the amount of goods and services consumed at various average price levels.
  - C) the rate at which an economy's output will grow over time if all resources are used efficiently.
  - D) all the combinations of goods and services that can be produced if all of society's resources are used efficiently.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 36) Production inefficiency occurs
- A) only when an economy produces underneath its production possibility frontier.
  - B) only when an economy produces at the wrong point on the production possibility frontier.
  - C) either when an economy produces underneath the production possibility frontier or when the economy is producing the wrong combination of goods on the production possibility frontier.
  - D) only when the economy produces outside the production possibility frontier.

Answer: A

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 37) An economy that is producing on the production possibility frontier at some point other than the output of efficient allocation is
- A) efficient, as it is on the production possibility frontier.
  - B) inefficient, as the combination of goods and services produced is not what people want.
  - C) efficient, as the economy is producing goods at the lowest possible cost.
  - D) inefficient, as that combination of goods could be produced at a lower cost if more efficient technology were employed.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 38) If resources are combined efficiently in production, then the society
- A) is producing at the most-desirable point on the production possibility frontier.
  - B) is producing at a point on the production possibility frontier but not necessarily at the most-desirable point.
  - C) is producing at a point outside the production possibility frontier.
  - D) is experiencing economic growth.

Answer: B

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 39) Suppose an economy produces hybrid engines and solar panels in perfectly competitive industries. The economy is currently operating at a point on its ppf. If a single firm gains control over the production of solar panels, which of the following is most likely to happen?
- A) The economy will move to a less-desirable point on the ppf.
  - B) The economy's ppf will shift inward.
  - C) The economy will now be able to produce at a point outside its ppf.
  - D) The economy's ppf will shift outward, but the maximum number of solar panels will remain the same.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 40) The value of the slope of a society's production possibility frontier is called its
- A) marginal rate of substitution.
  - B) inflation rate.
  - C) unemployment rate.
  - D) marginal rate of transformation.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 41) The marginal rate of transformation is the
- A) slope of the production possibility frontier.
  - B) dollar value of the best forgone alternative.
  - C) process of using resources to produce new capital.
  - D) transformation of resources into a form that is useful to people.

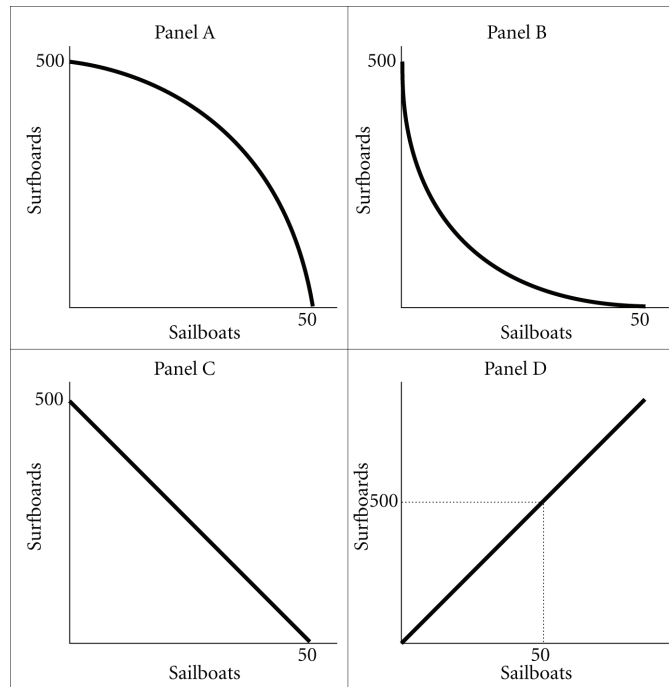
Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

Refer to the information provided in Figure 2.3 below to answer the questions that follow.



**Figure 2.3**

- 42) Refer to Figure 2.3. Assume that in this society the marginal rate of transformation of sailboats for surfboards is constant and equal to  $-10$ . A graph of this society's production possibility frontier will be represented by
- A) A.                      B) B.                      C) C.                      D) D.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 43) Refer to Figure 2.3. Assume that in this society the opportunity cost of sailboats in terms of surfboards is increasing. A graph of this society's production possibility frontier will be represented by
- A) A.                      B) B.                      C) C.                      D) D.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking



44) Refer to Figure 2.3. The law of \_\_\_\_\_ opportunity costs is best depicted by the production possibilities frontier in panel A.

- A) increasing                      B) constant                      C) decreasing                      D) zero

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

45) A society can produce two goods: donuts and beer. The society's production possibility frontier is negatively sloped and "bowed outward" from the origin. As this society moves down its production possibility frontier, producing more and more units of donuts, the opportunity cost of producing beer

- A) decreases.  
B) remains constant.  
C) increases.  
D) could decrease or increase depending on the technology.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 2.4 below to answer the questions that follow.

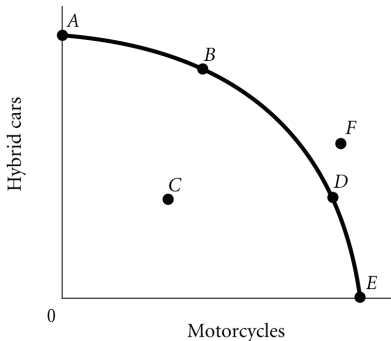


Figure 2.4

46) According to Figure 2.4, the point where only motorcycles are produced is

- A) A.                      B) B.                      C) C.                      D) E.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

47) According to Figure 2.4, the optimal point for the economy is

- A) A.
- B) B.
- C) F.
- D) indeterminate from the information given.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

48) According to Figure 2.4, which point cannot be produced with the current state of technology?

- A) A
- B) B
- C) C
- D) F

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

49) According to Figure 2.4, the point where only hybrid cars are produced is

- A) A.
- B) B.
- C) C.
- D) D.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

50) According to Figure 2.4, a decrease in unemployment may be represented by the movement from

- A) B to A.
- B) B to D.
- C) C to D.
- D) A to C.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

51) According to Figure 2.4, as the economy moves from Point A to Point E, the opportunity cost of motorcycles, measured in terms of hybrid cars,

- A) decreases.
- B) increases.
- C) remains constant.
- D) initially increases, then decreases.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 52) According to Figure 2.4, as the economy moves from Point E to Point A, the opportunity cost of hybrid cars, measured in terms of motorcycles,
- A) increases.
  - B) decreases.
  - C) remains constant.
  - D) initially increases, then decreases.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 53) Refer to Figure 2.4. The economy moves from Point A to Point D. This could be explained by
- A) a reduction in unemployment.
  - B) an improvement in technology.
  - C) an increase in economic growth.
  - D) a change in society's preferences for motorcycles versus hybrid cars.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 2.5 below to answer the questions that follow.

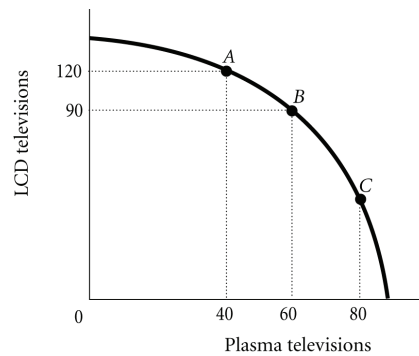


Figure 2.5

- 54) Refer to Figure 2.5. The economy is currently at Point A. The opportunity cost of moving from Point A to Point B is the
- A) 90 LCD televisions that must be forgone to produce 20 additional plasma televisions.
  - B) 30 LCD televisions that must be forgone to produce 60 additional plasma televisions.
  - C) 120 LCD televisions that must be forgone to produce 40 additional plasma televisions.
  - D) 30 LCD televisions that must be forgone to produce 20 additional plasma televisions.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 55) Refer to Figure 2.5. The marginal rate of transformation in moving from Point A to Point B is  
A)  $-2/3$ .                      B)  $-1.5$ .                      C)  $-3$ .                      D)  $-30$ .

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 56) Refer to Figure 2.5. For this economy to move from Point B to Point C so that an additional 20 plasma televisions could be produced, production of LCD televisions would have to be reduced by

- A) exactly 30.                      B) fewer than 30.                      C) more than 30.                      D) exactly 60.

Answer: C

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 57) Refer to Figure 2.5. The best point for society would be

- A) Point C, as at this point there are approximately equal amounts of LCD and plasma televisions being produced.  
B) either Point B or Point C, as the total amount being produced at either of these points is approximately the same.  
C) at any of the labeled points, as all of the points represent an efficient allocation of resources.  
D) indeterminate from this information, as we don't have any information about the society's desires.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 58) If the opportunity costs of producing a good increase as more of that good is produced, the economy's production possibility frontier will be

- A) negatively sloped and "bowed inward" toward the origin.  
B) negatively sloped and "bowed outward" from the origin.  
C) a negatively sloped straight line.  
D) a positively sloped straight line.

Answer: B

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 59) As you move down the production possibility frontier, the absolute value of the marginal rate of transformation
- A) increases.
  - B) decreases.
  - C) initially increases, then decreases.
  - D) initially decreases, then increases.

Answer: A

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 60) As more of a good, such as television sets, is produced, the opportunity costs of producing it increases. This most likely occurs because
- A) as more of a good is produced the inputs used to produce that good will increase in price.
  - B) consumers would be willing to pay higher prices for the good as more of the good is produced.
  - C) resources are not equally well suited to producing all goods and as more of a good is produced it is necessary to use resources less well suited to the production of that good.
  - D) as more of a good is produced the quality of that good declines and therefore the costs of production increase.

Answer: C

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 61) Economic growth may occur when
- A) a society acquires new resources.
  - B) a society learns to produce more using existing resources.
  - C) the society begins to produce the combination of goods society wants most.
  - D) both A and B

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 2.6 below to answer the questions that follow.

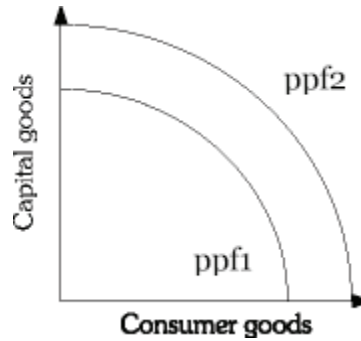


Figure 2.6

- 62) Refer to Figure 2.6. Economic growth is represented by a
- A) shift from  $ppf^2$  to  $ppf^1$ .
  - B) shift from  $ppf^1$  to  $ppf^2$ .
  - C) movement along  $ppf^1$ .
  - D) movement along  $ppf^2$ .

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 63) Refer to Figure 2.6. An improvement in technology may be represented by a
- A) shift from  $ppf^2$  to  $ppf^1$ .
  - B) shift from  $ppf^1$  to  $ppf^2$ .
  - C) movement along  $ppf^2$ .
  - D) movement along  $ppf^1$ .

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 64) Refer to Figure 2.6. Which of the following will shift an economy's production possibility frontier from  $ppf^1$  to  $ppf^2$ ?
- A) a decrease in unemployment
  - B) an increase in production efficiency
  - C) a change in consumer's tastes
  - D) an increase in the economy's capital stock

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

65) Refer to Figure 2.6. Which of the following will NOT cause the production possibility frontier to shift from  $ppf^1$  to  $ppf^2$ ?

- A) the discovery of previously unknown oil fields
- B) an improvement in technology
- C) an increase in the stock of capital
- D) a decrease in the unemployment rate

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

66) Refer to Figure 2.6. Which of the following is most likely to shift the production possibility frontier from  $ppf^1$  to  $ppf^2$ ?

- A) a change in consumer tastes
- B) the purchase of stocks on the New York Stock Exchange
- C) moving resources from capital to consumer goods
- D) an increase in the general educational level of the population

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

67) Refer to Figure 2.6. If the economy is at  $ppf^1$ , a change in consumer preferences would be shown by a

- A) shift from  $ppf^2$  to  $ppf^1$ .
- B) movement along  $ppf^1$ .
- C) movement along  $ppf^2$ .
- D) shift from  $ppf^1$  to  $ppf^2$ .

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

68) During the Iraq War many of Iraq's oil refineries were destroyed. This would best be represented by a

- A) movement down Iraq's production possibility frontier.
- B) movement off Iraq's production possibility frontier to some point inside the frontier.
- C) shift of Iraq's production possibility frontier toward the origin.
- D) movement up Iraq's production possibility frontier.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 69) For an economy to produce at a point beyond its current ppf, the economy must
- A) waste less.
  - B) be more efficient.
  - C) reduce inputs.
  - D) increase its resource base.

Answer: D

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 70) In terms of the production possibility frontier, an increase in productivity attributable to new technology would best be shown by
- A) a movement along the frontier.
  - B) the production possibility frontier shifting outward, away from the origin.
  - C) a movement from a point inside the frontier to a point on it.
  - D) a movement toward the origin.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 71) An improvement in technology will cause the
- A) production possibility frontier to shift outward.
  - B) production possibility frontier to shift inward.
  - C) economy to move down the production possibility frontier.
  - D) economy to move closer to its production possibility frontier.

Answer: A

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 72) Consider two countries, Japan and Malaysia. Japan devotes a smaller portion of its production to capital. All other things equal which of the following statements is most likely true?
- A) Japan is a poorer country than Malaysia.
  - B) Japan will move up its production possibility curve faster than Malaysia.
  - C) Malaysia is producing inside its production possibility frontier, whereas Japan is producing at a point on its production possibility frontier.
  - D) Malaysia's production possibility frontier will shift up and out farther and faster than Japan's.

Answer: D

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking



- 73) The gap between rich and poor countries
- A) has decreased over time because poor countries can more easily devote resources to capital production.
  - B) has increased over time because poor countries find it difficult to devote resources to capital production.
  - C) has remained constant over time because technological advances can be easily shared among nations.
  - D) has remained constant over time because the rate of capital production has remained constant in rich and poor nations.

Answer: B

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Fact

- 74) An economy produces capital goods and consumer goods. This economy is operating at a point on its production possibility frontier associated with a small amount of capital goods and a large amount of consumer goods. This is most likely to be a
- A) "poor" country because such a nation has difficulty devoting many resources to the production of capital goods.
  - B) "rich" country because such a nation can afford to sacrifice.
  - C) country with a free market.
  - D) country with a command economy.

Answer: A

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 75) The economic problem can best be stated as
- A) How can the economy improve technology so as to shift the production possibility frontier up and to the right?
  - B) Given scarce resources, how exactly do societies go about deciding what to produce, how to produce it, and for whom to produce?
  - C) Given the fact that the economy is inefficient, how much and what type of government intervention should be used to improve the efficiency of the economy?
  - D) What is the best rate of economic growth for a society?

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 76) Related to the *Economics in Practice* on p. 28: Which one of the following occurs when an individual enters the paid work force?
- A) The opportunity cost of time for housework increases, because time spent on housework could be spent on money-earning activities.
  - B) The opportunity cost of time for housework increases, because money earned at a job can allow individuals to pay someone to do household chores that the individuals used to do themselves.
  - C) The opportunity cost of time for housework decreases, because increased earning power makes individuals less likely to do their own housework.
  - D) The opportunity cost of time for housework decreases, because as more people enter the work force, businesses have greater incentives to develop innovations that make housework more efficient.

Answer: A

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost: *Economics in Practice*

Skill: Analytic

AACSB: Analytic Skills

- 77) Related to the *Economics in Practice* on p. 28: How did the introduction of the microwave in 1960 affect the market for frozen food?
- A) It encouraged people to leave the work force by making cooking easier and less time-consuming.
  - B) It reduced the opportunity cost of eating frozen food by decreasing the amount of time required to prepare frozen meals.
  - C) It increased the financial cost of alternative methods of food preparation, such as conventional ovens.
  - D) It made frozen foods more appealing by increasing the variety of meals that could be frozen and reheated.

Answer: B

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost: *Economics in Practice*

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

- 1) In economics, the term *capital* refers only to some form of money.

Answer: FALSE

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 2) Among the resources used in production are labor and capital.

Answer: TRUE

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

3) Things that have already been produced that are in turn used to produce other goods and services over time are called "capital."

Answer: TRUE

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

4) When two people trade, one must lose.

Answer: FALSE

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

5) Economic growth shifts a society's production possibility frontier away from the origin.

Answer: TRUE

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

6) A society's production possibility frontier is bowed in from the origin due to specialized resources.

Answer: FALSE

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Fact

7) The "economic problem" is that given scarce resources, how do large societies go about answering the basic economic questions of what will be produced, how it will be produced, and who will get it.

Answer: TRUE

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

8) Comparative advantage refers to the ability to produce better quality goods than a competitor.

Answer: FALSE

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

9) Comparative advantage refers to the ability to produce at a lower opportunity cost than a competitor.

Answer: TRUE

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

10) The government produces only what the market is willing to pay for.

Answer: FALSE

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

## 2.2 Economic Systems

### 1 Multiple Choice

- 1) An economy in which a central authority draws up a plan that establishes what will be produced and when, sets production goals, and makes rules for distribution is a
- A) free market economy.
  - B) laissez-faire economy.
  - C) public goods economy.
  - D) command economy.

Answer: D

Diff: 2

Topic: Economic Systems

Skill: Definition

- 2) An economy in which individual people and firms pursue their own self-interest without any central direction or regulation is a(n)
- A) command economy.
  - B) laissez-faire economy.
  - C) invisible-hand economy.
  - D) private-sector economy.

Answer: B

Diff: 2

Topic: Economic Systems

Skill: Definition

- 3) Which of the following statements is FALSE?
- A) Many planned economies have not fared very well in recent years; many of these economies have almost completely collapsed.
  - B) Command economies operate the most efficiently because the government makes all the production decisions.
  - C) In command economies consumers still exercise choice.
  - D) In a command economy the government answers the questions of what to produce, how to produce it, and how to distribute it.

Answer: B

Diff: 2

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

- 4) Which of the following is an element of a command economy?
- A) The market decides distribution.
  - B) The means of production are privately owned.
  - C) Production decisions are centralized.
  - D) The market decides what will be produced.

Answer: C

Diff: 1

Topic: Economic Systems

Skill: Fact

- 5) Which of the following statements is NOT true for a command economy?
- A) Consumers have some choices concerning what they buy.
  - B) The government decides what is produced.
  - C) The amount of a good supplied always equals the amount of the good demanded.
  - D) The state decides how to distribute what is produced.

Answer: C

Diff: 1

Topic: Economic Systems

Skill: Fact

- 6) In a laissez-faire economy \_\_\_\_\_ what gets produced, how it is produced, and who gets it.
- A) the behavior of buyers and sellers determines
  - B) the central government authority determines
  - C) firms but not consumers determine
  - D) consumers but not firms determine

Answer: A

Diff: 1

Topic: Economic Systems

Skill: Fact

- 7) An institution through which buyers and sellers interact and engage in exchange is
- A) a central authority.
  - B) "laissez-faire."
  - C) a market.
  - D) a production frontier.

Answer: C

Diff: 2

Topic: Economic Systems

Skill: Definition

- 8) Which of the following is NOT true of a market economy?
- A) In its pure form, it is also known as a laissez-faire economy.
  - B) Decisions are regulated by a central agency.
  - C) The interaction between buyers and sellers answers the basic economic questions of what gets produced, how it gets produced, and who gets it.
  - D) It relies on millions of individual economic decisions to determine economic outcomes.

Answer: B

Diff: 2

Topic: Economic Systems

Skill: Fact

- 9) Consumer sovereignty
- A) is dependent on profits.
  - B) is the idea that consumers can buy whatever they want to.
  - C) is the idea that consumers determine what is produced in the economy through their demands.
  - D) is only possible in a monarchy.

Answer: C

Diff: 2

Topic: Economic Systems

Skill: Definition

10) The idea that consumers ultimately dictate what will be produced by choosing what to purchase is known as

- A) laissez-faire.
- B) the economic problem.
- C) centralized decision making.
- D) consumer sovereignty.

Answer: D

Diff: 2

Topic: Economic Systems

Skill: Definition

11) The amount that households have accumulated out of past income through saving and inheritance is

- A) future income.
- B) wealth.
- C) consumption.
- D) past income.

Answer: B

Diff: 2

Topic: Economic Systems

Skill: Definition

12) In a free market system, the amount of output that any one household gets depends on its

- A) income.
- B) wealth.
- C) wage and interest income.
- D) income and wealth.

Answer: D

Diff: 1

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

13) Advocates of an unregulated market system argue that

- A) competition promotes efficiency.
- B) competition leads to innovation.
- C) competition leads to product variety and quality.
- D) all of the above

Answer: D

Diff: 3

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

14) The basic coordinating mechanism in a free market system is

- A) quantity.
- B) price.
- C) a central government authority.
- D) the corporation.

Answer: B

Diff: 1

Topic: Economic Systems

Skill: Fact

15) Which of the following statements is FALSE?

- A) In a free market system, the basic economic questions are answered without the help of a central government plan or directive.
- B) Individuals guided by their own-self interest will produce products and services that other people want.
- C) The basic coordinating mechanism in a free market system is quantity adjustments toward equilibrium.
- D) In a free market system, competition forces firms to adopt efficient production techniques.

Answer: C

Diff: 2

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

16) Some economists advocate government intervention in a market economy

- A) to produce collective goods and services.
- B) when resource costs for a private producer do not reflect the full cost to society.
- C) to stabilize the economy.
- D) all of the above

Answer: D

Diff: 1

Topic: Economic Systems

Skill: Fact

## 2 True/False

- 1) A laissez-faire economy is one in which individual people and firms pursue their own self-interest without any central direction or regulation.

Answer: TRUE

Diff: 1

Topic: Economic Systems

Skill: Definition

- 2) A command economy is one in which a central government sets output targets, incomes and prices.

Answer: TRUE

Diff: 1

Topic: Economic Systems

Skill: Definition

- 3) A command economy eliminates markets.

Answer: FALSE

Diff: 2

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

4) Price is the coordinating mechanism in a planned economy.

Answer: FALSE

*Diff: 1*

*Topic: Economic Systems*

*Skill: Definition*

5) The notion that buyers determine what will be produced by choosing what they purchase is called consumer sovereignty.

Answer: TRUE

*Diff: 1*

*Topic: Economic Systems*

*Skill: Definition*



# Chapter 3 Demand, Supply, and Market Equilibrium

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## 3.1 Firms and Households: The Basic Decision Making Units

### 1 Multiple Choice

- 1) Michael Dell was the first individual who sold computers by mail order. The company founded by Dell is now one of the largest and most successful computer companies in the United States. Michael Dell would be classified as a(n)
- A) entrepreneur.      B) opportunist.      C) monopolist.      D) socialist.

Answer: A

Diff: 1

Topic: Firms and Households

Skill: Conceptual

- 2) Firms are organizations that
- A) take advantage of the public.      B) transform resources into products.  
C) transform outputs into inputs.      D) consumer outputs.

Answer: B

Diff: 1

Topic: Firms and Households

Skill: Definition

- 3) An entrepreneur is a person who does all of the following EXCEPT
- A) assumes the risk of a firm.  
B) organizes and manages a firm.  
C) turns a new idea or product into a business.  
D) always makes a profit.

Answer: D

Diff: 1

Topic: Firms and Households

Skill: Definition

- 4) Why do firms engage in the activity of production?
- A) to help society advance technologically      B) to participate in the circular flow  
C) to acquire profits      D) to develop a supply schedule

Answer: C

Diff: 1

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

### 2 True/False

- 1) Economists would classify the Boston Symphony Orchestra as a firm.

Answer: TRUE

Diff: 2

Topic: Firms and Households

Skill: Conceptual

AACSB: Reflective Thinking

2) Households are the consuming units of the economy.

Answer: TRUE

Diff: 1

Topic: Firms and Households

Skill: Definition

3) Entrepreneurs are unnecessary in a market economy and their profit is unearned.

Answer: FALSE

Diff: 1

Topic: Firms and Households

Skill: Conceptual

## 3.2 Input Markets and Output Markets: The Circular Flow

### 1 Multiple Choice

1) In input or factor markets

A) consumers purchase products.

C) households supply resources

B) firms supply goods.

D) households demand goods.

Answer: C

Diff: 1

Topic: Input Markets and Output Markets

Skill: Conceptual

2) A factor market is

A) where goods are exchanged.

C) where goods are made.

B) where resources are exchanged.

D) organized by government.

Answer: B

Diff: 1

Topic: Input Markets and Output Markets

Skill: Definition

3) In an output market

A) consumers purchase products.

B) firms purchase resources.

C) households earn income.

D) land, labor and capital may be exchanged.

Answer: A

Diff: 2

Topic: Input Markets and Output Markets

Skill: Conceptual

4) Among the factors of production are

A) capital.

C) income.

B) wages.

D) all of the above

Answer: A

Diff: 2

Topic: Input Markets and Output Markets

Skill: Fact

## 2 True/False

- 1) Factors of production are traded in the product market.

Answer: FALSE

Diff: 1

Topic: *Input Markets and Output Markets*

Skill: *Conceptual*

- 2) Households are paid income for the resources they supply in an input market.

Answer: TRUE

Diff: 1

Topic: *Input Markets and Output Markets*

Skill: *Conceptual*

- 3) Labor is demanded by firms in an output market.

Answer: FALSE

Diff: 1

Topic: *Input Markets and Output Markets*

Skill: *Conceptual*

## 3.3 Demand in Product / Output Markets

### 1 Multiple Choice

- 1) Which of the following is held constant along the demand curve?

A) price of the good

B) quantity

C) income

D) both A and B

Answer: C

Diff: 1

Topic: *Demand in Product / Output Markets*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) Which of the following will NOT cause a shift in the demand curve for compact discs?

A) a change in income

B) a change in wealth

C) a change in the price of downloadable online music

D) a change in the price of compact discs

Answer: D

Diff: 1

Topic: *Demand in Product / Output Markets*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 3) The "law of demand" implies that

A) as prices fall, demand increases.

B) as prices rise, demand increases.

C) as prices fall, quantity demanded increases.

D) as prices rise, quantity demanded increases.

Answer: C

Diff: 2

Topic: *Demand in Product / Output Markets*

Skill: *Definition*

- 4) According to the law of demand, as prices rise, ceteris paribus
- A) demand increases.
  - B) demand decreases.
  - C) quantity demanded decreases.
  - D) quantity demanded increases.

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Definition

- 5) According to the law of demand there is \_\_\_\_\_ relationship between price and quantity demanded.
- A) a positive
  - B) a negative
  - C) either a positive or negative
  - D) a constantly changing

Answer: B

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Conceptual

- 6) As an individual consumes more of a product within a given period of time, it is likely that each additional unit consumed will yield
- A) successively less satisfaction.
  - B) successively more satisfaction.
  - C) the same amount of satisfaction.
  - D) less satisfaction for a while and then start to add more satisfaction.

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in the Figure below to answer the questions that follow.

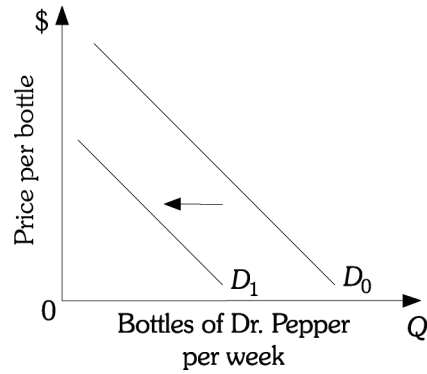


Figure 3.1

- 7) Refer to Figure 3.1. Which of the following would be most likely to cause the demand for Dr. Pepper to shift from  $D_0$  to  $D_1$ ?
- A) a decrease in income, assuming that Dr. Pepper is a normal good
  - B) an increase in the price of 7-UP, assuming 7-UP is a substitute for Dr. Pepper
  - C) a decrease in the price of Dr. Pepper
  - D) a reduction in the price of sugar used to make Dr. Pepper

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in the Figure below to answer the questions that follow.

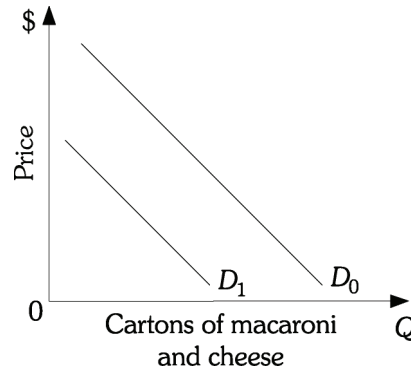


Figure 3.2

- 8) Refer to Figure 3.2. Which of the following would be most likely to cause the demand for macaroni and cheese to shift from  $D_1$  to  $D_0$ ?
- A) an increase in the price of macaroni and cheese
  - B) an increase in the price of flour used to make macaroni and cheese
  - C) an increase in income, assuming macaroni and cheese is a normal good
  - D) an increase in the quantity demanded for macaroni and cheese

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 9) If the demand for coffee decreases as income decreases, coffee is a(n)
- A) normal good.
  - B) inferior good.
  - C) substitute good.
  - D) complementary good.

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 10) If the demand for sardines increases as income decreases, sardines are a(n)
- A) normal good.
  - B) inferior good.
  - C) substitute good.
  - D) complementary good.

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.3 below to answer the questions that follow.

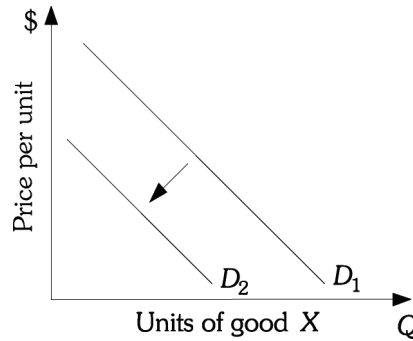


Figure 3.3

- 11) Refer to Figure 3.3. As your income increased, the demand for X shifted from  $D_1$  to  $D_2$ . Good X is
- A) an inferior good.
  - B) a normal good.
  - C) a luxury good.
  - D) an income-neutral good.

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 3.4 below to answer the questions that follow.

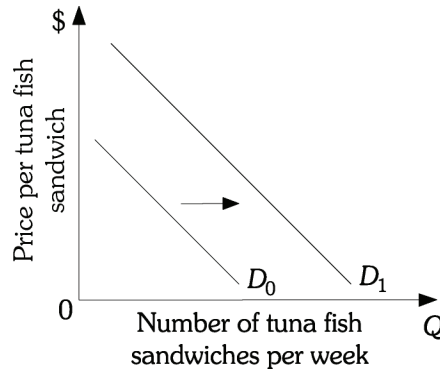


Figure 3.4

- 12) Refer to Figure 3.4. If consumer income falls, the demand for tuna fish sandwiches shifts from  $D_0$  to  $D_1$ . This implies that tuna fish sandwiches are a(n)
- A) normal good.
  - B) inferior good.
  - C) substitute good.
  - D) complementary good.

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 3.5 below to answer the questions that follow.

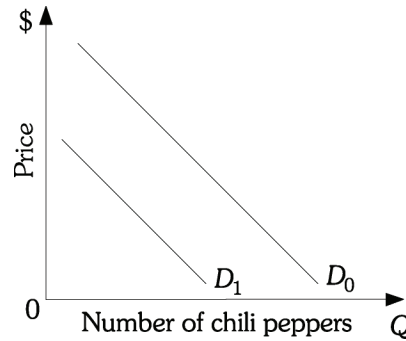


Figure 3.5

13) Refer to Figure 3.5. If consumer income increases, the demand for chili peppers shifts from  $D_0$  to  $D_1$ . This implies that chili peppers are a(n)

- A) normal good.
- B) inferior good.
- C) substitute good.
- D) complementary good.

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

14) Suppose the demand for books goes down when the price of video games goes down. We can say that these two goods are

- A) complements.
- B) substitutes.
- C) unrelated goods.
- D) perfect substitutes.

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

15) During an economic downturn when consumer income falls, the demand for tacos increases and the demand for sushi decreases. This implies that tacos

- A) and sushi are complements.
- B) are a normal good and sushi is an inferior good.
- C) are an inferior good and sushi is a normal good.
- D) are an economic bad and sushi is an economic good.

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking



- 16) A good whose demand is inversely related to income is a(n)  
A) normal good.      B) inferior good.      C) regular good.      D) new good.

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Definition

- 17) In college you practically existed on instant noodles, but now you earn \$95,000 a year. You never want to see instant noodles again. We can safely conclude that you consider instant noodles to be a(n)

- A) normal good.      B) complementary good.  
C) luxury.      D) inferior good.

Answer: D

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 18) For inferior goods, an increase in income will cause the

- A) quantity demanded to fall.      B) demand to increase.  
C) demand to fall.      D) quantity demanded to increase.

Answer: C

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Definition

- 19) A decrease in demand for cameras would likely be caused by

- A) an increase in the price of a substitute good.  
B) an increase in the price of cameras.  
C) an increase in the price of a complementary good.  
D) a decrease in the price of cameras.

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 20) When the decrease in the price of one good causes the demand for another good to decrease, the goods are

- A) normal.      B) inferior.      C) substitutes.      D) complements.

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Definition

- 21) Demand for one item goes down when the price of another item goes up. These items must be

- A) substitutes.      B) complements.      C) normal goods.      D) inferior goods.

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Definition

- 22) In response to news reports that taking aspirin daily can reduce an individual's risk of a heart attack, there will most likely be a(n)
- A) increase in the supply of aspirin.
  - B) decrease in the supply of aspirin.
  - C) increase in the demand for aspirin.
  - D) increase in the quantity demanded of aspirin.

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 23) Demand curves are derived while holding constant
- A) income, tastes, and the price of the good.
  - B) only income and tastes.
  - C) income, tastes, and the prices of other goods.
  - D) only tastes and the price of other goods.

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

- 24) The quantity demanded of Pepsi has decreased. The best explanation for this is that
- A) the price of Coca-Cola has increased.
  - B) Pepsi's advertising is not as effective as in the past.
  - C) the price of Pepsi has increased.
  - D) Pepsi consumers had an increase in income.

Answer: C

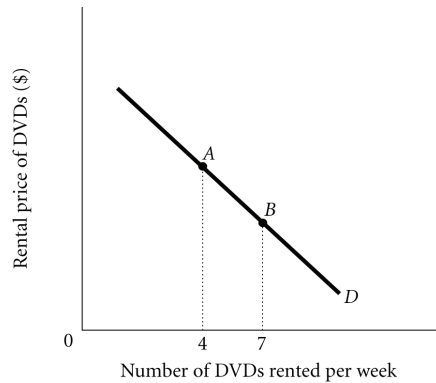
Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.6 below to answer the questions that follow.



**Figure 3.6**

- 25) Refer to Figure 3.6. The number of DVDs Isabel rents per week increases from 4 to 7. This is caused by
- A) an increase in income if DVDs are a normal good.
  - B) a decrease in the price of popcorn which is a complement to DVDs.
  - C) a decrease in the rental price of DVDs.
  - D) either A or B

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 26) A change in the price of a good or service leads to a \_\_\_\_\_ that leads to a \_\_\_\_\_.
- A) change in demand; movement along the demand curve
  - B) change in quantity demanded; movement along the demand curve
  - C) change in demand; shift in the demand curve
  - D) change in quantity demanded; shift of the demand curve

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 27) A change in income, preferences, or prices of other goods or services leads to a \_\_\_\_\_ that causes a \_\_\_\_\_.
- A) change in demand; movement along the demand curve
  - B) change in quantity demanded; movement along the demand curve
  - C) change in demand; shift of the demand curve
  - D) change in quantity demanded; shift of the demand curve

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.7 below to answer the following questions.

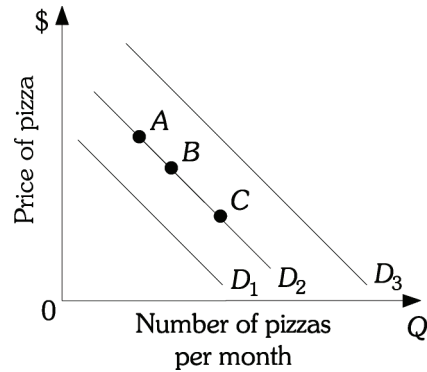


Figure 3.7

- 28) Refer to Figure 3.7. Assume the market is initially at Point B and that pizza is a normal good. A decrease in income would cause the market to move from Point B on demand curve  $D_2$  to
- A) demand curve  $D_1$ .
  - B) demand curve  $D_3$ .
  - C) Point A on demand curve  $D_2$ .
  - D) Point C on demand curve  $D_2$ .

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 29) Refer to Figure 3.7. If pizza and beer are complementary goods, a decrease in the price of beer will cause a movement from Point B on demand curve  $D_2$  to
- A) demand curve  $D_1$ .
  - B) demand curve  $D_3$ .
  - C) Point A on demand curve  $D_2$ .
  - D) Point C on demand curve  $D_2$ .

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 30) Refer to Figure 3.7. If pizza and hamburgers are substitutes, an increase in the price of hamburgers will cause a movement from Point B on demand curve  $D_2$  to
- A) demand curve  $D_1$ .
  - B) demand curve  $D_3$ .
  - C) Point A on demand curve  $D_2$ .
  - D) Point C on demand curve  $D_2$ .

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 31) Refer to Figure 3.7. A movement from Point C to Point B on demand curve  $D_2$  would be caused by a(n)
- A) decrease in income, assuming pizza is a normal good.
  - B) decrease in the price of hamburgers, assuming that pizza and hamburgers are substitutes.
  - C) decrease in the price of pizza.
  - D) increase in the price of pizza.

Answer: D

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 32) Refer to Figure 3.7. A decrease in demand is represented by the movement
- A) from  $D_2$  to  $D_1$ .
  - B) from  $D_2$  to  $D_3$ .
  - C) along  $D_2$  from Point B to Point A.
  - D) along  $D_2$  from Point B to Point C.

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 33) Refer to Figure 3.7. An increase in quantity demanded is represented by movement
- A) from  $D_2$  to  $D_1$ .
  - B) from  $D_2$  to  $D_3$ .
  - C) along  $D_2$  from Point B to point A.
  - D) along  $D_2$  from Point B to point C.

Answer: D

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.8 below to answer the following questions.

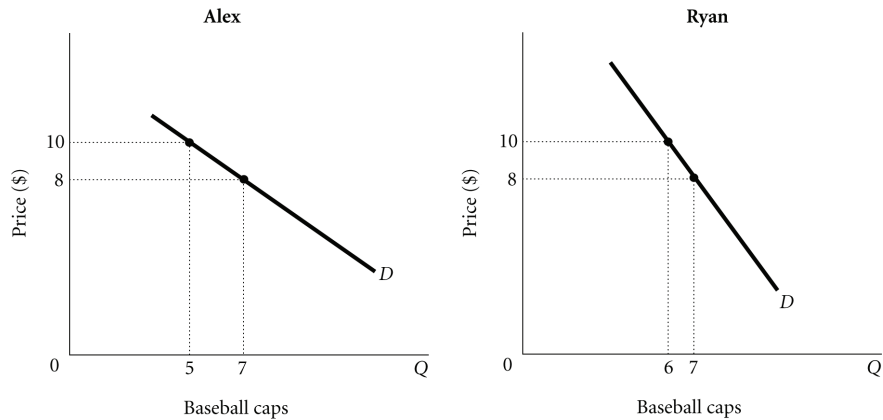


Figure 3.8

- 34) Refer to Figure 3.8. Assume that there are only two people in the market for baseball caps: Alex and Ryan. Along the market demand curve for baseball caps, at a price of \_\_\_\_\_, quantity demanded would be \_\_\_\_\_.
- A) \$10; 7                      B) \$10; 11                      C) \$8; 12                      D) \$8; 13

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 35) Refer to Figure 3.8. Assume there are only two people in the market for baseball caps: Alex and Ryan. Along the market demand curve for baseball caps, at a price of \_\_\_\_\_, quantity demanded would be \_\_\_\_\_.
- A) \$10; 6                      B) \$10; 12                      C) \$8; 14                      D) \$8; 25

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 3.9 below to answer the following questions.

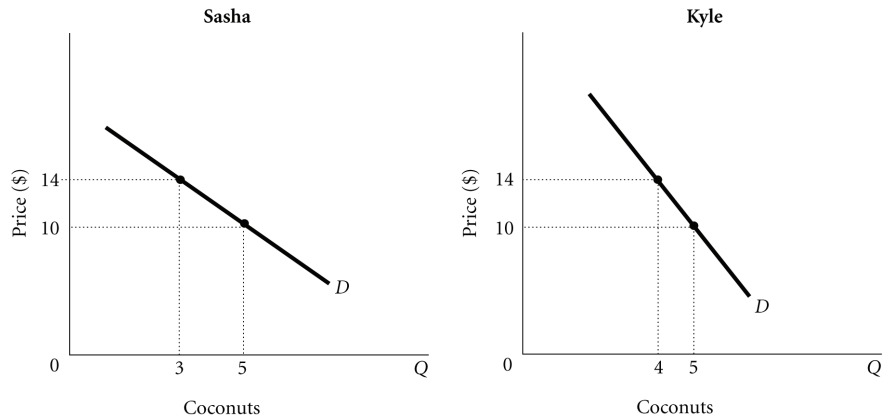


Figure 3.9

- 36) Refer to Figure 3.9. Assume that there are only two people in the market for coconuts: Sasha and Kyle. Along the market demand curve for coconuts, at a price of \_\_\_\_\_, quantity demanded would be \_\_\_\_\_.
- A) \$14; 7                      B) \$14; 9                      C) \$10; 9                      D) \$10; 8

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 37) Refer to Figure 3.9. Assume there are only two people in the market for coconuts: Sasha and Kyle. Along the market demand curve for coconuts, at a price of \_\_\_\_\_, quantity demanded would be \_\_\_\_\_.
- A) \$10; 9                      B) \$10; 10                      C) \$14; 9                      D) \$14; 8

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

*Refer to Scenario 3.1 below to answer the following questions.*

SCENARIO 3.1: Rented DVDs and movies shown in theaters are substitutes. Rented DVDs and plasma TVs are complements. Plasma TVs and movies shown in theaters are normal goods. People watch rented DVDs more often in the winter than in the summer.

- 38) Refer to Scenario 3.1. Most plasma TVs sold in the United States are imported from Japan. If the United States government reduces the number of plasma TVs that can be imported into the United States, *ceteris paribus*, what would happen?
- A) The price of plasma TVs and the rental price of DVDs would decrease.
  - B) The price of plasma TVs would decrease and the rental price of DVDs would increase.
  - C) The price of plasma TVs would increase and the rental price of DVDs would decrease.
  - D) The price of plasma TVs and the rental price of DVDs would increase.

Answer: C

Diff: 3

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 39) Refer to Scenario 3.1. To raise additional revenues, the government imposes an entertainment tax on movie tickets, but there are no new additional taxes levied on rented DVDs. This would lead to
- A) an increase in the price of movie tickets, but no change in the rental price of DVDs.
  - B) an increase in the price of movie tickets and the rental price of DVDs.
  - C) an increase in the price of a movie ticket and a decrease in the rental price of DVDs.
  - D) no change in the price of a movie ticket and an increase in the rental price of DVDs.

Answer: B

Diff: 3

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 40) Refer to Scenario 3.1. You observe that the rental price for DVDs is higher in the winter than in the summer. This would be explained by the fact that
- A) demand for rented DVDs is higher in the winter than in the summer.
  - B) the quantity demanded of rented DVDs is higher in the winter than in the summer.
  - C) there are more DVDs released into the rental market in the winter than in the summer.
  - D) consumer income tends to fall in the winter and increase in the summer.

Answer: A

Diff: 3

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking



- 41) Refer to Scenario 3.1. The number of stores renting DVDs is reduced by 25%, reducing the number of DVDs available. Which of the following would occur?
- A) The rental price of DVDs would increase, and the price of plasma TVs and movie tickets would decrease.
  - B) The rental price of DVDs would increase, but the price of plasma TVs and movie tickets would be unaffected.
  - C) The rental price of DVDs and movie tickets would decrease, but the price of plasma TVs would increase.
  - D) The rental price of DVDs and the price of movie tickets would increase, but the price of plasma TVs would decrease.

Answer: D

Diff: 3

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

- 1) Wealth is a flow measure.

Answer: FALSE

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Fact

- 2) A change in the price of a good or service leads to a change in quantity demanded of the good.

Answer: TRUE

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 3) Quantity demanded of a product is determined only by how much of that product consumers desire.

Answer: FALSE

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Conceptual

- 4) Inferior goods are always substandard.

Answer: FALSE

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Conceptual

- 5) If iPods and iTunes are complements, then a decrease in the price of iPods will result in a decrease in the demand for iTunes.

Answer: FALSE

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

### 3.4 Supply in Product / Output Markets

#### 1 Multiple Choice

- 1) According to the law of supply, there is a
- A) negative relationship between price and the quantity of a good supplied.
  - B) positive relationship between price and the quantity of a good supplied.
  - C) negative relationship between price and the change in supply.
  - D) positive relationship between price and the change in supply.

Answer: B

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Definition

- 2) The price of hard drives used in the manufacturing of laptop computers has risen. This will lead to \_\_\_\_\_ laptop computers.
- A) an increase in the supply of
  - B) a decrease in the supply of
  - C) an increase in the quantity supplied of
  - D) a decrease in the quantity supplied of

Answer: B

Diff: 3

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 3) If the price of chili increases, there will be \_\_\_\_\_ of chili cheese fries.
- A) an increase in the supply
  - B) a decrease in the supply
  - C) an increase in the quantity supplied
  - D) a decrease in the quantity supplied

Answer: B

Diff: 3

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 4) A frozen food manufacturer can produce either pizzas or calzones. As the result of an increase in the price of calzones, the firm produces more calzones and fewer pizzas. An economist would explain this by saying
- A) the supply of calzones increased and the supply of pizzas decreased.
  - B) there has been an increase in the quantity supplied of calzones and a decrease in the quantity supplied of pizzas.
  - C) there has been an increase in the quantity supplied of calzones and a decrease in the supply of pizza.
  - D) the supply of calzones increased and the quantity supplied of pizza decreased.

Answer: C

Diff: 3

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.14 below to answer the following questions.

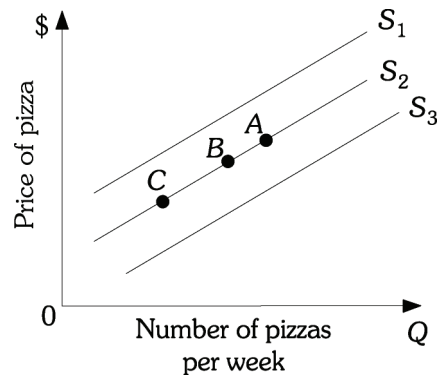


Figure 3.14

- 5) Refer to Figure 3.14. A decrease in the wage rate of pizza makers will cause a movement from Point B on supply curve  $S_2$  to
- A) Point A on supply curve  $S_2$ .
  - B) Point B on supply curve  $S_2$ .
  - C) supply curve  $S_3$ .
  - D) supply curve  $S_1$ .

Answer: C

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 6) Refer to Figure 3.14. An increase in supply is represented by the movement from
- A)  $S_2$  to  $S_3$ .
  - B)  $S_2$  to  $S_1$ .
  - C) Point B to Point A along supply curve  $S_2$ .
  - D) Point B to Point C along supply curve  $S_2$ .

Answer: A

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Figure 3.14. A decrease in quantity supplied is represented by a movement from
- A)  $S_2$  to  $S_3$ .
  - B)  $S_2$  to  $S_1$ .
  - C) Point B to Point A along supply curve  $S_2$ .
  - D) Point B to Point C along supply curve  $S_2$ .

Answer: D

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Figure 3.14. An increase in the price of pizza sauce will cause a movement from Point B on supply curve  $S_2$  to
- A) supply curve  $S_3$ .
  - B) supply curve  $S_1$ .
  - C) Point A on supply curve  $S_2$ .
  - D) Point C on supply curve  $S_2$ .

Answer: B

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 3.14. A movement from Point A to Point B on supply curve  $S_2$  would be caused by a(n)
- A) increase in the price of pizza.
  - B) decrease in the demand for pizza.
  - C) increase in the price of pizza dough.
  - D) increase in the price of hamburgers, assuming hamburgers are a substitute for pizza.

Answer: B

Diff: 3

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 3.15 below to answer the following questions.

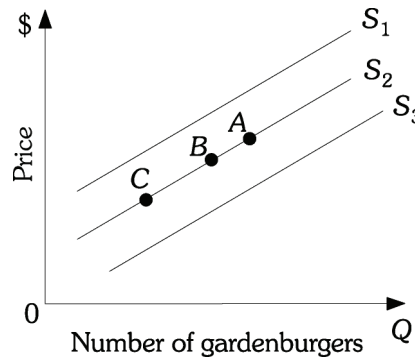


Figure 3.15

- 10) Refer to Figure 3.15. An increase in the wage rate of gardenburger makers will cause a movement from Point B on supply curve  $S_2$  to
- A) Point A on supply curve  $S_2$ .
  - B) Point B on supply curve  $S_2$ .
  - C) supply curve  $S_3$ .
  - D) supply curve  $S_1$ .

Answer: D

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Figure 3.15. A decrease in supply is represented by the movement from
- A)  $S_2$  to  $S_3$ .
  - B)  $S_2$  to  $S_1$ .
  - C) Point  $B$  to Point  $A$  along supply curve  $S_2$ .
  - D) Point  $B$  to Point  $C$  along supply curve  $S_2$ .

Answer: B

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Figure 3.15. An increase in quantity supplied is represented by a movement from
- A)  $S_2$  to  $S_1$ .
  - B)  $S_2$  to  $S_3$ .
  - C) Point  $B$  to Point  $A$  along supply curve  $S_2$ .
  - D) Point  $B$  to Point  $C$  along supply curve  $S_2$ .

Answer: C

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 13) Refer to Figure 3.15. A decrease in the price of mushrooms (an input for gardenburgers) will cause a movement from Point  $B$  on supply curve  $S_2$  to
- A) supply curve  $S_3$ .
  - B) supply curve  $S_1$ .
  - C) Point  $A$  on supply curve  $S_2$ .
  - D) Point  $C$  on supply curve  $S_2$ .

Answer: A

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 14) Refer to Figure 3.15. A movement from Point  $C$  to Point  $B$  on supply curve  $S_2$  would be caused by a(n)
- A) decrease in the price of gardenburgers.
  - B) increase in the demand for gardenburgers.
  - C) decrease in the price of mushrooms.
  - D) decrease in the price of hamburgers, assuming hamburgers are a substitute for pizza.

Answer: B

Diff: 3

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 15) The change in the price of a good leads to a change in \_\_\_\_\_, which leads to a \_\_\_\_\_.
- A) quantity supplied; movement along a supply curve
  - B) quantity supplied; shift of the supply curve
  - C) supply; movement along a supply curve
  - D) supply; shift of the supply curve

Answer: A

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.16 below to answer the questions that follow.

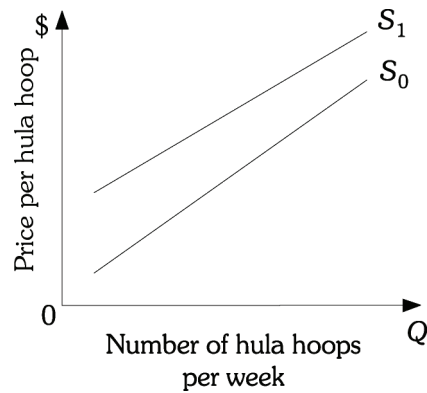


Figure 3.16

- 16) Refer to Figure 3.16. The supply curve for hula hoops shifts from  $S_0$  to  $S_1$ . This could be caused by
- A) an decrease in the price of hula hoops.
  - B) a decrease in the number of firms selling hula hoops.
  - C) a decrease in the demand for hula hoops.
  - D) either B or C

Answer: B

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.11 below to answer the questions that follow.

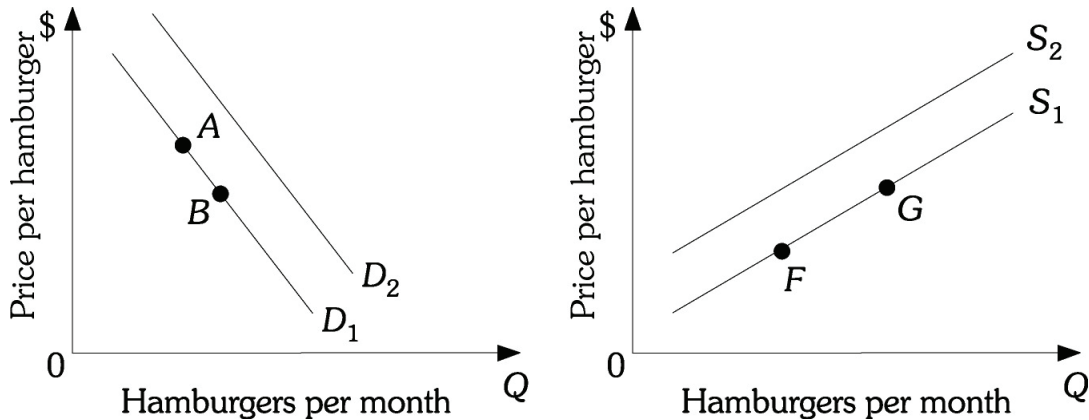


Figure 3.11

- 17) Refer to Figure 3.11. Assume hamburgers are a normal good. An increase in income will cause a movement from:
- A) Point A to Point B.
  - B) Point G to Point F.
  - C)  $D_1$  to  $D_2$ .
  - D)  $S_1$  to  $S_2$ .

Answer: C

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Figure 3.11. Assume hamburgers and hot dogs are substitutes. A decrease in the price of hot dogs will cause a movement from:
- A) Point A to Point B.
  - B) Point F to Point G.
  - C)  $D_2$  to  $D_1$ .
  - D)  $D_1$  to  $D_2$ .

Answer: C

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Figure 3.11. Assume hamburgers and french fries are complements. A decrease in the price of french fries will cause a movement from:
- A) Point A to Point B.
  - B) Point G to Point F.
  - C)  $D_1$  to  $D_2$ .
  - D)  $S_2$  to  $S_1$ .

Answer: C

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

20) Refer to Figure 3.11. An increase in the number of cattle ranchers will cause a movement from:

A) Point B to Point A.

B) Point G to Point F.

C)  $D_2$  to  $D_1$ .

D)  $S_2$  to  $S_1$ .

Answer: D

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

1) A shift of the supply curve is caused by a change in a good's own price.

Answer: FALSE

Diff: 1

Topic: Supply in Product / Output Markets

Skill: Conceptual

2) A technological advance in the production of MP3 players will cause the equilibrium selling price to increase.

Answer: FALSE

Diff: 1

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

3) An increase in the wage rate of steel workers will reduce the supply of steel.

Answer: TRUE

Diff: 1

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

4) Quantity supplied is determined by how much producers are willing and able to produce.

Answer: TRUE

Diff: 1

Topic: Supply in Product / Output Markets

Skill: Conceptual

## 3.5 Market Equilibrium

### 1 Multiple Choice

1) Equilibrium is the condition that exists

A) whenever there is no government intervention in the market.

B) when the demand curve intersects the price axis.

C) when quantity demanded equals quantity supplied.

D) when the demand curve intersects the quantity axis.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Definition



Refer to the information provided in Table 3.1 below to answer the questions that follow.

**Table 3.1**

Price per Pizza	Quantity Demanded (Pizzas per Month)	Quantity Supplied (Pizzas per Month)
\$3	1,200	600
6	1,000	700
9	800	800
12	600	900
15	400	1,000

- 2) Refer to Table 3.1. This market will be in equilibrium if the price per pizza is  
A) \$6.                                      B) \$9.                                      C) \$12.                                      D) \$15.

Answer: B

Diff: 1

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 3) Refer to Table 3.1. If the price per pizza is \$12, the price will  
A) remain constant because the market is in equilibrium.  
B) increase because there is an excess demand in the market.  
C) decrease because there is an excess demand in the market.  
D) decrease because there is an excess supply in the market.

Answer: D

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 4) Refer to Table 3.1. If the price per pizza is \$15, there is a(n)  
A) market equilibrium.                                      B) excess demand of 400 units.  
C) excess demand of 900 units.                                      D) excess supply of 600 units.

Answer: D

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 5) Refer to Table 3.1. If the price per pizza is \$6, there is an excess  
A) demand of 300 pizzas.                                      B) demand of 600 pizzas.  
C) supply of 700 pizzas.                                      D) supply of 1,000 pizzas.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 6) Refer to Table 3.1. In this market there will be an excess demand of 300 pizzas at a price of  
 A) \$6.                                      B) \$9.                                      C) \$12.                                      D) \$15.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Table 3.1. In this market there will be an excess supply of 300 pizzas at a price of  
 A) \$6.                                      B) \$9.                                      C) \$12.                                      D) \$15.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Table 3.1. If the price per pizza is \$3, the price will  
 A) remain constant because the market is in equilibrium.  
 B) increase because there is an excess demand in the market.  
 C) increase because there is an excess supply in the market.  
 D) decrease because there is an excess supply in the market.

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Table 3.2 below to answer the questions that follow.

**Table 3.2**

Price per Cheeseburger	Quantity Demanded (Cheeseburgers per Month)	Quantity Supplied (Cheeseburgers per Month)
\$5	1,500	500
6	1,200	700
7	900	900
8	600	1,100
9	300	1,300

- 9) Refer to Table 3.2. This market will be in equilibrium if the price per cheeseburger is  
 A) \$5.                                      B) \$6.                                      C) \$7.                                      D) \$8.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Table 3.2. If the price per cheeseburger is \$6, the price will
- A) remain constant because the market is in equilibrium.
  - B) decrease because there is an excess demand in the market.
  - C) increase because there is an excess demand in the market.
  - D) decrease because there is an excess supply in the market.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Table 3.2. If the price per cheeseburger is \$9, there is a(n)
- A) market equilibrium.
  - B) excess demand of 500 units.
  - C) excess demand of 300 units.
  - D) excess supply of 1,000 units.

Answer: D

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Table 3.2. If the price per cheeseburger is \$5, there is an excess
- A) demand of 300 cheeseburgers.
  - B) supply of 500 cheeseburgers.
  - C) demand of 1,000 cheeseburgers.
  - D) supply of 2,000 cheeseburgers.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 13) Refer to Table 3.2. In this market there will be an excess demand of 500 cheeseburgers at a price of
- A) \$5.
  - B) \$6.
  - C) \$7.
  - D) \$8.

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 14) Refer to Table 3.2. In this market there will be an excess supply of 500 cheeseburgers at a price of
- A) \$5.
  - B) \$6.
  - C) \$8.
  - D) \$9.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 15) Refer to Table 3.2. If the price per cheeseburger is \$7, the price will
- A) remain constant because the market is in equilibrium.
  - B) increase because there is an excess demand in the market.
  - C) increase because there is an excess supply in the market.
  - D) decrease because there is an excess supply in the market.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 16) When there is an excess supply of a product in an unregulated market, the tendency is for
- A) price to rise.
  - B) price to decrease.
  - C) quantity supplied to increase.
  - D) quantity demanded to decrease.

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.17 below to answer the questions that follow.

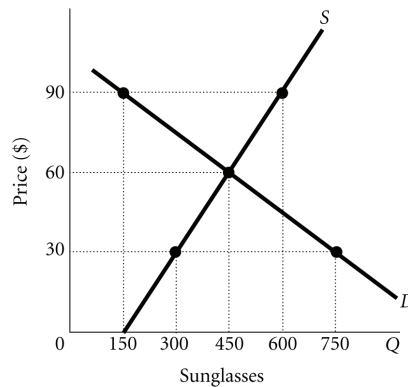


Figure 3.17

- 17) Refer to Figure 3.17. The market for sunglasses is in equilibrium at a price of \_\_\_\_\_ and a quantity of \_\_\_\_\_ sunglasses.
- A) \$30; 300
  - B) \$30; 600
  - C) \$60; 450
  - D) \$90; 300

Answer: C

Diff: 1

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Figure 3.17. At a price of \$30, there is an excess
- A) demand of 450 sunglasses.
  - B) demand of 750 sunglasses.
  - C) demand of 300 sunglasses.
  - D) supply of 300 sunglasses.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Figure 3.17. If this market is unregulated and the price is currently \$90, you would expect that the price
- A) of sunglasses would remain at \$90, because firms would not want to reduce the price.
  - B) of sunglasses would fall to \$30, so the firm could sell its excess supply.
  - C) of sunglasses would fall to \$60, where quantity demanded equals quantity supplied.
  - D) of sunglasses would fall, but the new price is indeterminate from the information provided.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 20) Refer to Figure 3.17. At a price of \$90, there is an excess
- A) demand of 150 sunglasses.
  - B) supply of 450 sunglasses.
  - C) demand of 600 sunglasses.
  - D) supply of 600 sunglasses.

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 21) When there is a shortage of a product in an unregulated market, there is a tendency for
- A) price to rise.
  - B) price to fall.
  - C) quantity demanded to increase.
  - D) quantity supplied to decrease.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 22) If the market for tires is unregulated and is presently characterized by excess supply, you can accurately predict that price will
- A) increase, the quantity demanded will fall, and the quantity supplied will rise.
  - B) increase, the quantity demanded will rise, and the quantity supplied will fall.
  - C) decrease, the quantity demanded will rise, and the quantity supplied will fall.
  - D) decrease, the quantity demanded will fall, and the quantity supplied will rise.

Answer: C

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 23) DVDs and DVD players are complements. An increase in the price of DVD players would cause which of the following in the market for DVDs?
- A) The equilibrium price and quantity of DVDs would increase.
  - B) The equilibrium price and quantity of DVDs would decrease.
  - C) The equilibrium price of DVDs would increase and the equilibrium quantity would decrease.
  - D) The equilibrium price of DVDs would decrease and the equilibrium quantity would increase.

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 24) Suppose that video game discs are a normal good. If the income of video game players increases, you predict that in the market for video games
- A) both equilibrium price and quantity will fall.
  - B) both equilibrium price and quantity will increase.
  - C) equilibrium price will increase and quantity will decrease.
  - D) equilibrium price will fall but quantity will increase.

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.18 below to answer the questions that follow.

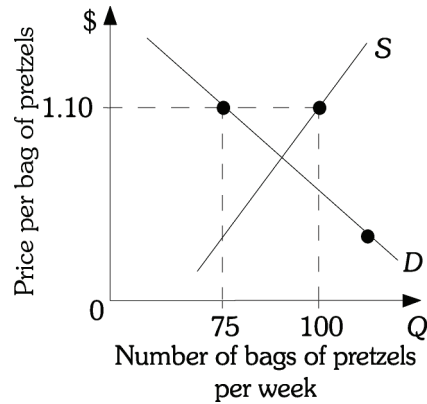


Figure 3.18

- 25) Refer to Figure 3.18. The current price of a bag of pretzels is \$1.10. You accurately predict that in this market
- A) price tends to remain constant and quantity supplied increases.
  - B) price, quantity demanded, and quantity supplied decrease.
  - C) price and quantity demanded increase and quantity supplied decreases.
  - D) price and quantity supplied decrease and quantity demanded increases.

Answer: D

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 26) When Hurricane Andrew passed through Louisiana in the summer of 1992, approximately a quarter of the sugar cane crop was destroyed. Ceteris paribus,
- A) the supply of sugar decreased and the price of sugar increased.
  - B) the supply of sugar decreased and the price of sugar decreased.
  - C) the demand for sugar increased and the price of sugar increased.
  - D) the demand for sugar decreased and the price of sugar decreased.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 27) The price of mozzarella cheese, which is used in making pizza, increases. In the market for pizza you would expect that
- A) the demand for pizza would increase and the price of pizza would increase.
  - B) the demand for pizza would decrease and the price of pizza would fall.
  - C) the supply of pizza would decrease and the price of pizza would increase.
  - D) the supply of pizza would increase and the price of pizza would decrease.

Answer: C

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 28) If improvements in technology have reduced the cost of producing personal computers, you accurately predict that in the market for personal computers, there will be a(n)
- A) increase in the quantity supplied of personal computers, a reduction in the price, and an increase in the quantity demanded.
  - B) increase in the supply of personal computers, a decrease in the price, and an increase in the quantity demanded.**
  - C) increase in the supply of personal computers, a reduction in the price, and an increase in the demand.
  - D) decrease in the supply of personal computers, an increase in the price, and a decrease in the demand.

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 29) Which of the following will definitely occur when there is a simultaneous decrease in demand and a decrease in supply?
- A) an increase in equilibrium price
  - B) a decrease in equilibrium price
  - C) an increase in equilibrium quantity
  - D) a decrease in equilibrium quantity

Answer: D

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 30) A movement along the demand curve to the left may be caused by a
- A) rise in income.
  - B) decrease in supply.
  - C) fall in the number of substitute goods.
  - D) fall in the price of inputs.

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 31) Which of the following will definitely occur when there is an increase in the supply of and decrease in demand for MP3 players?
- A) an increase in equilibrium price
  - B) a decrease in equilibrium price
  - C) an increase in equilibrium quantity
  - D) a decrease in equilibrium quantity

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking



- 32) Which of the following will definitely occur when there is an increase in demand for and a decrease in supply of milk?
- A) an increase in equilibrium price
  - B) a decrease in equilibrium price
  - C) an increase in equilibrium quantity
  - D) a decrease in equilibrium quantity

Answer: A

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 33) An insect that is resistant to currently used pesticides has infested the cotton crop, and this year's crop is only half of what was produced last year. You accurately predict that this
- A) will shift the supply curve of cotton to the right, the equilibrium price of cotton will increase, and the demand for cotton will fall.
  - B) will shift the supply curve of cotton to the right, the equilibrium price of cotton will increase, and the quantity demanded of cotton will decrease.
  - C) will shift the supply curve of cotton to the left, the equilibrium price of cotton will increase, and the quantity demanded of cotton will decrease.
  - D) will shift the supply curve of cotton to the left, the equilibrium price of cotton will increase, and the demand for cotton will fall.

Answer: C

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 34) Papayas and grapefruit are substitute goods. A drought in California destroyed a good portion of the grapefruit crop. *Ceteris paribus*,
- A) the price of both papayas and grapefruit will increase.
  - B) the price of both papayas and grapefruit will fall.
  - C) the price of grapefruit will increase and the price of papayas will fall.
  - D) the price of grapefruit will fall and the price of papayas will increase.

Answer: A

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.19 below to answer the questions that follow.

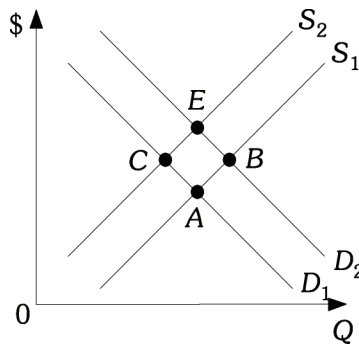


Figure 3.19

- 35) Refer to Figure 3.19. When the economy moves from Point A to Point B, there has been
- A) an increase in demand and an increase in supply.
  - B) an increase in demand and an increase in quantity supplied.
  - C) an increase in quantity demanded and an increase in quantity supplied.
  - D) an increase in quantity demanded and an increase in supply.

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 36) Refer to Figure 3.19. When the economy moves from Point A to Point C, there has been
- A) a decrease in supply and a decrease in quantity demanded.
  - B) a decrease in quantity supplied and a decrease in demand.
  - C) a decrease in supply and an increase in quantity demanded.
  - D) an increase in supply and a decrease in quantity demanded.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 37) Refer to Figure 3.19. When the economy moves from Point A to Point E, there has been
- A) an increase in demand and an increase in supply.
  - B) a decrease in demand and a decrease in supply.
  - C) an increase in demand and a decrease in supply.
  - D) an increase in quantity demanded and an increase in quantity supplied.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 38) Refer to Figure 3.19. When the economy moves from Point *E* to Point *B*, there has been
- A) an increase in supply and an increase in quantity demanded.
  - B) an increase in both supply and demand.
  - C) a decrease in supply and an increase in demand.
  - D) a decrease in supply and an increase in quantity demanded.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

*Refer to Scenario 3.2 below to answer the questions that follow.*

SCENARIO 3.2: Lettuce and spinach are substitutes. Lettuce and tomatoes are complements. Lettuce is a normal good. During the winter, about 20% of the lettuce crop was destroyed by flooding.

- 39) Refer to Scenario 3.2. As a result of the flooding during the winter, you would expect that
- A) the price of lettuce would increase, the supply of lettuce would increase, and the quantity demanded of lettuce would decrease.
  - B) the supply of lettuce would decrease, the price of lettuce would increase, and the quantity demanded of lettuce would decrease.
  - C) the price of lettuce would increase and both the quantity of lettuce supplied and the quantity of lettuce demanded would increase.
  - D) the supply of lettuce would decrease, the price of lettuce would increase, and the demand for lettuce would decrease.

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 40) Refer to Scenario 3.2. The floods that destroyed part of the lettuce crop would have caused the equilibrium price of spinach to \_\_\_\_\_ and the equilibrium quantity of spinach to \_\_\_\_\_.
- A) decrease; decrease
  - B) decrease; increase
  - C) increase; increase
  - D) increase; decrease

Answer: C

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 41) Refer to Scenario 3.2. The floods that destroyed part of the lettuce crop would have caused
- A) an increase in the demand for tomatoes.
  - B) a decrease in the demand for tomatoes.
  - C) an increase in the quantity demanded of tomatoes.
  - D) a decrease in the quantity demanded of tomatoes.

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 42) Refer to Scenario 3.2. If at the same time that part of the lettuce crop was destroyed, consumer income also decreased. Then, *ceteris paribus*, in the market for lettuce this would have caused
- A) both the equilibrium price and quantity to decrease.
  - B) the equilibrium price to increase and the equilibrium quantity to decrease.
  - C) the equilibrium price to decrease. The equilibrium quantity could have increased, decreased, or remained the same.
  - D) the equilibrium price to either increase, decrease, or remain the same and the equilibrium quantity to decrease.

Answer: D

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 43) Refer to Scenario 3.2. The government wants to protect consumers from rising food prices. Therefore, price restrictions are imposed on lettuce growers prohibiting them from raising the price of lettuce. This will cause

- A) an excess supply of lettuce.
- B) an excess demand for lettuce.
- C) an increase in the demand for lettuce.
- D) a decrease in the supply of lettuce.

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.10 below to answer the questions that follow.

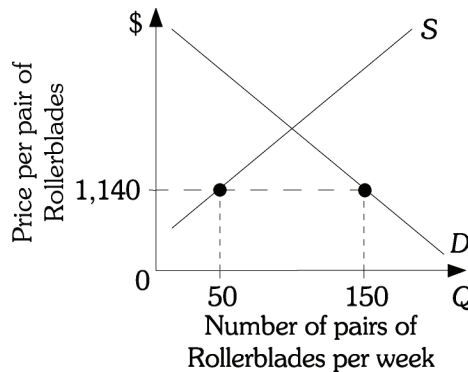


Figure 3.10

- 44) Refer to Figure 3.10. In the Rollerblade market, which is *not* government controlled, you accurately predict that price will
- A) increase, the quantity demanded will fall, and the quantity supplied will rise.
  - B) increase, the quantity demanded will rise, and the quantity supplied will fall.
  - C) decrease, the quantity demanded will fall, and the quantity supplied will fall.
  - D) decrease, the quantity demanded will rise, and the quantity supplied will fall.

Answer: A

Diff: 3

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 3.12 below to answer the questions that follow.

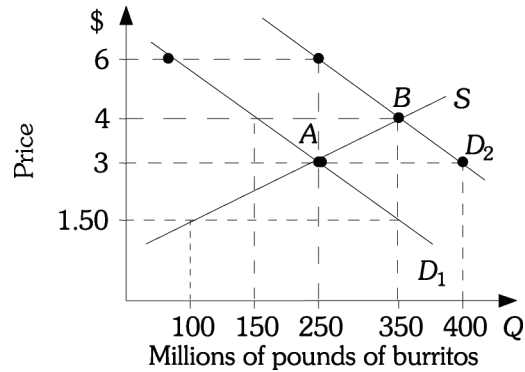


Figure 3.12

- 45) Refer to Figure 3.12. The market is initially in equilibrium at Point A. If demand shifts from  $D_1$  to  $D_2$  and the price of burritos remains constant at \$3.00, there will be
- A) an excess supply of 150 million pounds of burritos.
  - B) an excess demand of 150 million pounds of burritos.
  - C) an excess supply of 50 million pounds of burritos.
  - D) an excess demand of 100 million pounds of burritos.

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 46) Refer to Figure 3.12 The market is initially in equilibrium at Point B. If demand shifts from  $D_2$  to  $D_1$  and the price of burritos remains constant at \$4.00, there will be
- A) an excess supply of 200 million pounds of burritos.
  - B) an excess demand of 200 million pounds of burritos.
  - C) an excess supply of 100 million pounds of burritos.
  - D) an excess demand of 100 million pounds of burritos.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 47) Refer to Figure 3.12 The market is initially in equilibrium at Point A. If demand shifts from  $D_1$  to  $D_2$ , the new equilibrium price will be \_\_\_\_\_ and the new equilibrium quantity will be \_\_\_\_\_.

- A) \$3.00; 250
- B) \$6.00; 250
- C) \$4.00; 350
- D) \$4.00; 150

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 48) Refer to Figure 3.12. The market is initially in equilibrium at Point B. If demand shifts from  $D_2$  to  $D_1$ , the new equilibrium price will be \_\_\_\_\_ and the new equilibrium quantity will be \_\_\_\_\_.
- A) \$4.00; 350                      B) \$3.00; 250                      C) \$3.00; 400                      D) \$4.00; 150

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 3.13 below to answer the questions that follow.

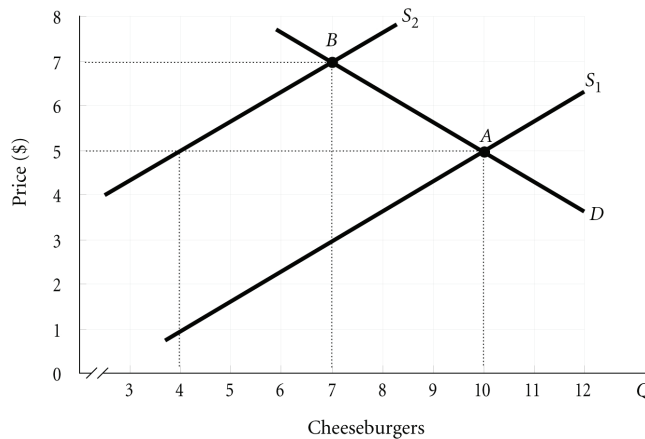


Figure 3.13

- 49) Refer to Figure 3.13. The market is initially in equilibrium at Point A. If supply shifts from  $S_1$  to  $S_2$  and the price of cheeseburgers remains constant at \$5.00, there will be
- A) an excess supply of 6 cheeseburgers.                      B) an excess demand of 6 cheeseburgers.  
 C) an excess supply of 3 cheeseburgers.                      D) an excess demand of 4 cheeseburgers.

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 50) Refer to Figure 3.13. The market is initially in equilibrium at Point A. If supply shifts from  $S_1$  to  $S_2$ , the new equilibrium price will be \_\_\_\_\_ and the new equilibrium quantity will be \_\_\_\_\_.
- A) \$5.00; 4                      B) \$5.00; 10                      C) \$7.00; 6                      D) \$7.00; 7

Answer: D

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

51) Refer to Figure 3.13. The market is initially in equilibrium at Point B. If supply shifts from  $S_2$  to  $S_1$ , the new equilibrium price will be \_\_\_\_\_ and the new equilibrium quantity will be \_\_\_\_\_.

- A) \$5.00; 4                      B) \$5.00; 10                      C) \$7.00; 6                      D) \$7.00; 7

Answer: B

Diff: 1

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

52) Related to the *Economics in Practice* on p. 67: Bad weather that reduces the supply of oranges would most likely shift the supply curve for oranges to the \_\_\_\_\_ and lead to a(n) \_\_\_\_\_ in the price of producing orange juice.

- A) left; increase                      B) left; decrease                      C) right; increase                      D) right; decrease

Answer: A

Diff: 3

Topic: Market Equilibrium: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

53) Related to the *Economics in Practice* on p. 67: The freezing weather in California decreased the supply of oranges. This would increase the demand for apple juice, assuming apple juice is considered

- A) a substitute for orange juice.                      B) a complement to orange juice.  
C) a normal good.                      D) an inferior good.

Answer: A

Diff: 3

Topic: Market Equilibrium: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

54) Related to the *Economics in Practice* on p. 69: One explanation for the increase in the price of the Baltimore newspaper is the increase in the cost of newsprint. This would cause the \_\_\_\_\_ of Baltimore newspapers to \_\_\_\_\_.

- A) supply; increase                      B) quantity supplied; increase  
C) supply; decrease                      D) quantity supplied; decrease

Answer: C

Diff: 3

Topic: Market Equilibrium: Economics in Practice

Skill: Analytic

AACSB: Analytic Skills

55) Related to the *Economics in Practice* on p. 69: Assuming the demand for Baltimore newspapers \_\_\_\_\_ while the supply of Baltimore newspapers \_\_\_\_\_, the equilibrium price will definitely increase.

- A) increases; increases                      B) decreases; increases  
C) increases; decreases                      D) decreases; decreases

Answer: C

Diff: 3

Topic: Market Equilibrium: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

- 1) A decrease in demand for a product will cause the price of the product to fall and supply of the product to decrease.

Answer: FALSE

Diff: 1

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 2) A simultaneous decrease in both the supply of and the demand for silk boxer shorts would cause a decrease in the equilibrium quantity of silk boxer shorts.

Answer: TRUE

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 3) If price is above the equilibrium, then quantity supplied will be greater than quantity demanded putting downward pressure on price.

Answer: TRUE

Diff: 1

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking



# Chapter 4 Demand and Supply Applications

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## 4.1 The Price System: Rationing and Allocating Resources

### 1 Multiple Choice

- 1) In the short run, it is necessary to non-price ration a good whenever \_\_\_\_\_ exists.
- A) excess demand
  - B) excess supply
  - C) a surplus
  - D) market equilibrium

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) Among the methods of nonprice rationing are
- A) coupons.
  - B) favored customers.
  - C) waiting in line.
  - D) all of the above

Answer: D

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

- 3) The price system
- A) automatically distributes scarce goods.
  - B) is inefficient.
  - C) requires government help to allocate goods.
  - D) is the only way to allocate goods.

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) Attempts to bypass price rationing in the market
- A) are efficient.
  - B) are easily administered.
  - C) are costly.
  - D) always fail.

Answer: C

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 5) Favored customers are customers who receive special treatment from dealers during periods of
- A) excess demand.
  - B) excess supply.
  - C) price above equilibrium.
  - D) equilibrium.

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

- 6) In a "black market"
- A) suppliers take advantage of buyers.
  - B) price is illegally below market price.
  - C) illegal trading at market prices takes place.
  - D) only illegal goods and services are traded.

Answer: C

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

- 7) When supply is fixed or the product is unique, then price is
- A) supply determined.
  - B) demand determined.
  - C) government determined.
  - D) indeterminate.

Answer: B

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 8) If the government imposes a maximum price that is above the equilibrium price,
- A) this maximum price will have no economic impact.
  - B) quantity demanded will be less than quantity supplied.
  - C) demand will be greater than supply.
  - D) the available supply will have to be rationed with a nonprice rationing mechanism.

Answer: A

Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 9) People scalping tickets for a jazz festival will be successful at selling the tickets for a profit
- A) any time the jazz festival is popular.
  - B) when the price set by the festival organizers is less than the market equilibrium price.
  - C) when prices are too high.
  - D) only when there is excess supply.

Answer: B

Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 10) People scalping tickets for the Super Bowl will be successful at selling the tickets for a profit
- A) any time the Super Bowl is popular.
  - B) when prices are too high.
  - C) when the price set by the National Football League is less than the market equilibrium price.
  - D) only when there is excess supply.

Answer: C

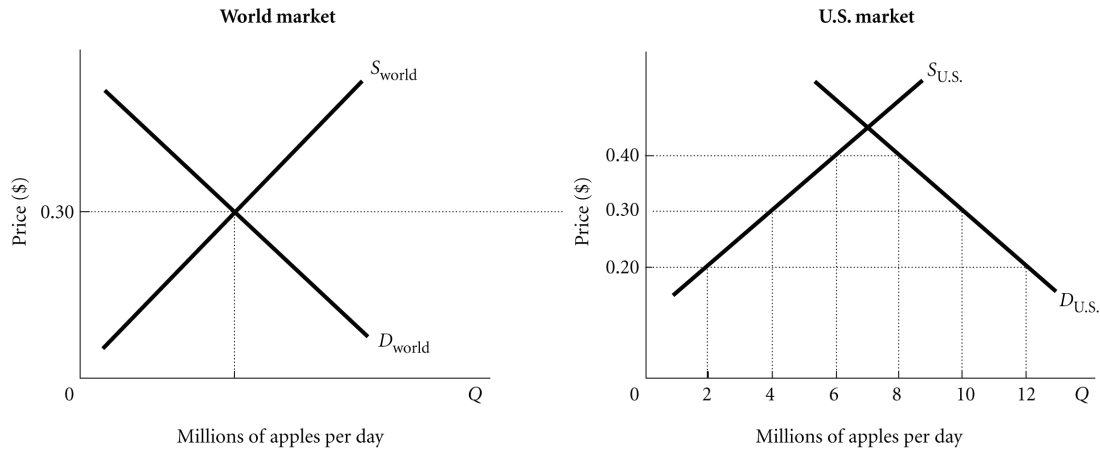
Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

Refer to the information provided in Figure 4.1 below to answer the questions that follow.



**Figure 4.1**

- 11) Refer to Figure 4.1. At the world price of 30 cents per apple the United States imports \_\_\_\_\_ million apples per day.

A) 2                                      B) 4                                      C) 6                                      D) 10

Answer: C

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Figure 4.1. If a 10-cent-per-apple tax is levied on imported apples, the United States will

A) import 2 million apples per day.                                      B) import 4 million apples per day.  
C) import 6 million apples per day.                                      D) import 8 million apples per day.

Answer: A

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 13) Refer to Figure 4.1. If the United States levies no taxes on apples, the price of apples in the United States would fall to \_\_\_\_\_, and the United States would import \_\_\_\_\_.

A) 20 cents per apple; 10 million apples per day  
B) 30 cents per apple; 6 million apples per day  
C) 40 cents per apple; 2 million apples per day  
D) The price of apples in the United States after the U.S. government eliminated all taxes on imported apples cannot be determined from this information.

Answer: B

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 14) Refer to Figure 4.1. Assume that initially there is free trade. If the United States then imposes a 10-cent tax per apple,
- A) the quantity demanded of apples will be reduced by 4 million apples per day.
  - B) the quantity of apples supplied by U.S. firms will increase by 6 million apples per day.
  - C) the price of apples in the United States will increase to 40 cents per apple.
  - D) U.S. imports of apples will increase by 6 million per day.

Answer: C

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 15) Refer to Figure 4.1. Assume that initially there is free trade. If the United States then imposes a 10-cent tax per apple,
- A) the quantity demanded of apples will be reduced by 2 million apples per day.
  - B) the quantity of apples supplied by U.S. firms will increase by 2 million apples per day.
  - C) the price of apples in the United States will increase to 40 cents per apple.
  - D) all of the above

Answer: D

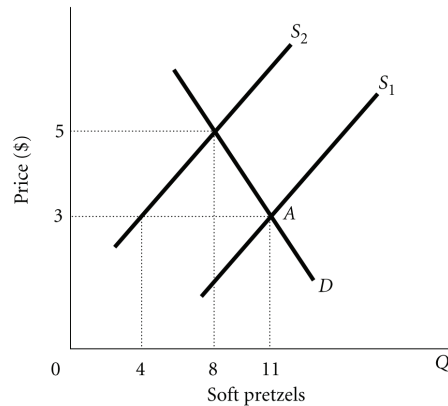
Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Figure 4.2 below to answer the questions that follow.



**Figure 4.2**

- 16) Refer to Figure 4.2. The market is initially in equilibrium at Point A and supply shifts from  $S_1$  to  $S_2$ . Which of the following statements is TRUE?
- A) Price will still serve as a rationing device causing quantity supplied to rise from 8 to 15 soft pretzels.
  - B) There is no need for price to serve as a rationing device in this case because the new equilibrium quantity is higher than the original equilibrium quantity.
  - C) Price will still serve as a rationing device causing quantity demanded to fall from 11 to 8 soft pretzels.
  - D) The market cannot move to a new equilibrium until there is also a change in supply.

Answer: C

Diff: 1

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 17) An example of an ineffective price ceiling would be the government setting the price of wheat at \_\_\_\_\_ per bushel when the market price is at \$5.00 per bushel.
- A) \$2.25
  - B) \$3.00
  - C) \$4.75
  - D) \$6.00

Answer: D

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Conceptual

AACSB: Reflective Thinking

- 18) If the equilibrium price of gasoline is \$4.00 per gallon and the government will not allow oil companies to charge more than \$3.00 per gallon of gasoline, which of the following will happen?
- A) Demand must eventually decrease so that the market will come into equilibrium at a price of \$3.00.
  - B) Supply must eventually increase so that the market will come into equilibrium at a price of \$3.00.
  - C) A nonprice rationing system such as ration coupons must be used to ration the available supply of gasoline.
  - D) The market will be in equilibrium at a price of \$3.00.

Answer: C

Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 19) An example of a price ceiling would be the government setting the price of sugar
- A) above the equilibrium market price.
  - B) at the equilibrium market price.
  - C) below the equilibrium market price.
  - D) none of the above

Answer: C

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 20) If the market price of coffee is \$3.00 per pound but the government will not allow coffee growers to charge more than \$2.00 per pound of coffee, which of the following will happen?
- A) Demand must eventually decrease so that the market will come into equilibrium at a price of \$2.50.
  - B) There will be a shortage of coffee.
  - C) Supply must eventually increase so that the market will come into equilibrium at a price of \$2.50.
  - D) The market will be in equilibrium at a price of \$2.00.

Answer: B

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 21) It is necessary to ration a good whenever \_\_\_\_\_ exists.
- A) excess demand
  - B) excess supply
  - C) a surplus
  - D) market equilibrium

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 22) The adjustment of \_\_\_\_\_ is the rationing mechanism in market economies.  
A) quantity                      B) price                      C) supply                      D) demand

Answer: B

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

- 23) A price ceiling is  
A) a minimum price set by government that sellers must charge for a good.  
B) a maximum price set by government that sellers may charge for a good.  
C) the difference between the initial equilibrium price and the equilibrium price after a decrease in supply.  
D) the minimum price that consumers are willing to pay for a good.

Answer: B

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

- 24) A price floor is  
A) a minimum price set by government that sellers must charge for a good.  
B) a maximum price set by government that sellers may charge for a good.  
C) the difference between the initial equilibrium price and the equilibrium price after a decrease in supply.  
D) the minimum price that consumers are willing to pay for a good.

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

- 25) A maximum price, set by the government, that sellers may charge for a good is known as  
A) a price floor.    B) a price rationing mechanism.  
C) a price ceiling.    D) a subsidy.

Answer: C

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

- 26) A minimum price, set by the government, that sellers may charge for a good is known as  
A) a price floor.    B) a price rationing mechanism.  
C) a price ceiling.    D) a subsidy.

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

Refer to the information provided in Figure 4.3 below to answer the questions that follow.

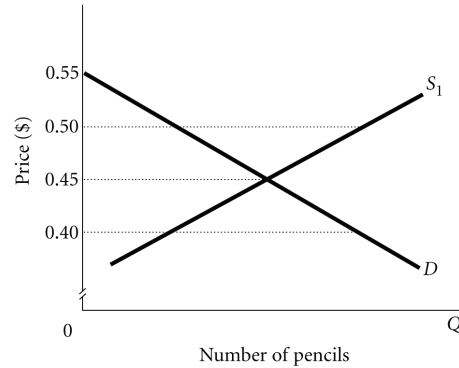


Figure 4.3

27) Refer to Figure 4.3. An example of an effective price ceiling would be government setting the price of pencils at

- A) \$0.40.                      B) \$0.45.                      C) \$0.50.                      D) \$0.55.

Answer: A

Diff: 1

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

28) Refer to Figure 4.3. An example of an effective price floor would be the government setting the price of pencils at

- A) \$0.00.                      B) \$0.40.                      C) \$0.45.                      D) \$0.50.

Answer: D

Diff: 1

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

29) Refer to Figure 4.3. At an effective price ceiling for pencils,

- A) quantity demanded is greater than quantity supplied.  
B) quantity demanded is less than quantity supplied.  
C) quantity demanded is equal to quantity supplied.  
D) price is above equilibrium.

Answer: A

Diff: 1

Topic: The Price System: Rationing and Allocating Resources

Skill: Conceptual

AACSB: Reflective Thinking



- 30) Refer to Figure 4.3. If the government will not allow the retailers to charge more than \$0.40 for a pencil, which of the following will happen?
- A) Demand must eventually decrease so that the market will come into equilibrium at a price of \$0.40.
  - B) Supply must eventually increase so that the market will come into equilibrium at a price of \$0.40.
  - C) A nonprice rationing system such as queuing must be used to ration the available supply of pencils.
  - D) The market will be in equilibrium at a price of \$0.40.

Answer: C

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 31) Refer to Figure 4.3. If the government will not allow retailers to charge less than \$0.50 for a pencil, which of the following will happen?
- A) Demand must eventually increase so that the market will come into equilibrium at a price of \$0.50.
  - B) Supply must eventually decrease so that the market will come into equilibrium at a price of \$0.50.
  - C) Retailers will have an excess supply of pencils.
  - D) The market will be in equilibrium at a price of \$0.50.

Answer: C

Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Analytic*

AACSB: *Reflective Thinking*

- 32) If the price ceiling is set below the equilibrium price,
- A) quantity demanded will equal quantity supplied.
  - B) there will be a surplus.
  - C) there will be a shortage.
  - D) demand will be less than supply.

Answer: C

Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 33) If the price floor is set below the equilibrium price,
- A) quantity demanded will be less than quantity supplied.
  - B) there will be a surplus.
  - C) there will be a shortage.
  - D) the floor will be ineffective.

Answer: D

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 34) If the price ceiling is set above the equilibrium price,  
A) quantity demanded will equal quantity supplied.  
B) there will be a surplus.  
C) there will be a shortage.  
D) demand will be less than supply.

Answer: A

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 35) If the price floor is set above the equilibrium price,  
A) quantity demanded will equal quantity supplied.  
B) there will be a surplus.  
C) there will be a shortage.  
D) the floor will be ineffective.

Answer: B

Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 36) The government imposes a maximum price on apartments that is ABOVE the equilibrium price. You accurately predict that  
A) the law will have no economic impact.  
B) the law will create a surplus of apartments.  
C) renters will find that landlords start offering to furnish the apartments.  
D) landlords are less likely to do routine maintenance work in the apartments.

Answer: A

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 37) The type of non-price rationing that most closely approaches the market outcome is  
A) coupon rationing with coupons that can be resold.  
B) coupon rationing with coupons that cannot be resold.  
C) first-come, first-served basis or queuing.  
D) favored customer rationing.

Answer: A

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 38) The government imposes a price ceiling on gasoline that is below the market price. You are asked to suggest a rationing scheme that will minimize the misallocation of resources. You suggest
- A) using rationing coupons that can be resold.
  - B) using rationing coupons that cannot be resold.
  - C) using rationing on a first-come, first-served basis.
  - D) using rationing only on weekdays.

Answer: A

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 39) The government imposes a price ceiling on sugar that is above the market price. You are asked to suggest a rationing scheme that will minimize the misallocation of resources. You suggest
- A) using rationing coupons that cannot be resold.
  - B) using rationing on a first-come, first-served basis.
  - C) using rationing coupons that can be resold.
  - D) that no rationing system will be necessary.

Answer: D

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 40) People scalping tickets for a rock concert can sell their tickets for at least a normal profit
- A) any time the rock group is popular.
  - B) when the price set by the concert hall is less than the market equilibrium price.
  - C) when prices are too high.
  - D) only when there is excess supply.

Answer: B

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 41) Related to the *Economics in Practice* on p. 79: When acquiring a ticket for a play takes a significant amount of time, the true economic cost of that ticket would include all of the following factors EXCEPT:
- A) the amount of time spent acquiring the ticket
  - B) the utility provided by seeing the play
  - C) the earning power of the person acquiring the ticket
  - D) the purchase price of the ticket

Answer: B

Diff: 3

Topic: *The Price System: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 42) Related to the *Economics in Practice* on p. 79: Which of the following best explains why the people who wait for hours to acquire tickets to free performances earn less on average than the people who actually see those performances?
- A) The value of time spent waiting in line is less for people who earn less money.
  - B) People who earn more money are less likely to be aware of the opportunity to acquire free tickets.
  - C) High-wage individuals are more likely to have schedule conflicts that prevent them from using their tickets.
  - D) People interested in live performances are likely to have access to other forms of entertainment, such as television and radio.

Answer: A

Diff: 3

Topic: *The Price System: Economics in Practice*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

- 1) Goods are allocated in a market system by price rationing.

Answer: TRUE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) Nonprice rationing will happen whenever there is excess supply in a market.

Answer: FALSE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 3) When supply is fixed, price is supply determined.

Answer: FALSE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) With price rationing those who are both able and willing to pay for a product get it.

Answer: TRUE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 5) Queuing or waiting in line is an alternative rationing mechanism to price rationing.

Answer: TRUE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

6) A shortage is when there is an excess supply in a market.

Answer: FALSE

Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

7) In a "black market" goods are traded at market determined prices.

Answer: TRUE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

8) Favored customers receive special treatment from dealers during periods of excess demand.

Answer: TRUE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

9) Ration coupons are tickets or coupons that give someone a right to purchase a certain amount of a product each time period such as a month.

Answer: TRUE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

## 4.2 Supply and Demand Analysis

### 1 Multiple Choice

Refer to the information provided in Figure 4.4 below to answer the questions that follow.

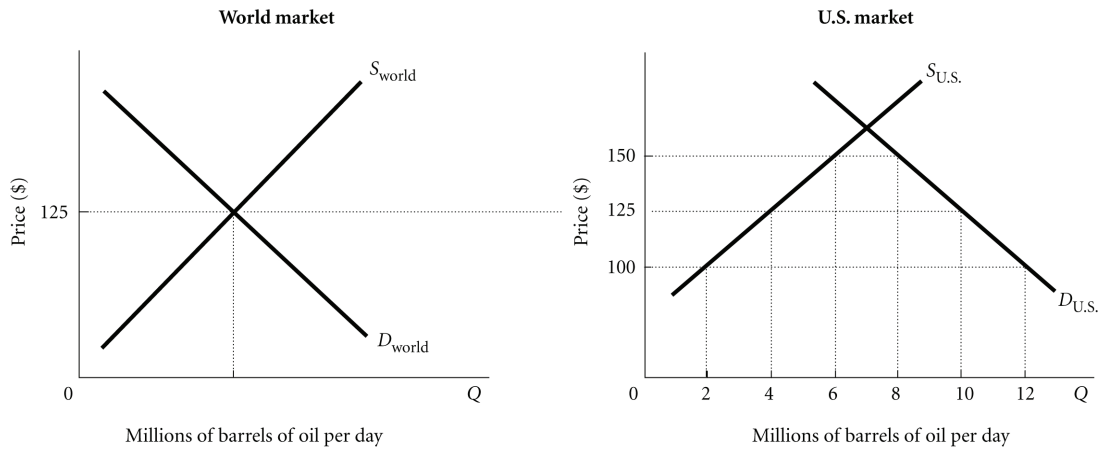


Figure 4.4

- 1) Refer to Figure 4.4. At the world price of \$125 per barrel of oil, the United States imports \_\_\_\_\_ million barrels of oil per day.

A) 4                      B) 6                      C) 8                      D) 10

Answer: B

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

- 2) Refer to Figure 4.4. If a \$25 per barrel tax is levied on imported oil, the United States will
- A) import 2 million barrels of oil per day.                      B) import 6 million barrels of oil per day.  
C) import 10 million barrels of oil per day.                      D) export 10 million barrels of oil per day.

Answer: A

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

- 3) Refer to Figure 4.4. If the United States levies no taxes on imported oil, which of the following would occur?
- A) The price of oil in the United States would fall to \$100 per barrel, and the United States would import 10 million barrels of oil per day.
  - B) The price of oil in the United States would be \$125 per barrel, and the United States would import 6 million barrels of oil per day.
  - C) The price of oil in the United States would be \$150 per barrel, and the United States would import 2 million barrels of oil per day.
  - D) The price of oil in the United States after the U.S. government eliminated all taxes on imported oil cannot be determined from this information.

Answer: B

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

- 4) Refer to Figure 4.4. Assume that initially there is free trade. If the United States then imposes a \$25 tax per barrel of imported oil,
- A) the quantity demanded of oil will be reduced by 4 million barrels per day.
  - B) the quantity of oil supplied by U.S. firms will increase by 8 million barrels per day.
  - C) U.S. imports of oil will increase by 4 million barrels per day.
  - D) the price of oil in the U.S. will increase to \$150 per barrel.

Answer: D

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

- 5) Refer to Figure 4.4. Assume that initially there is free trade. If the United States then imposes a \$25 tax per barrel of imported oil, the tax revenue generated will equal
- A) \$25 million per day.
  - B) \$50 million per day.
  - C) \$100 million per day.
  - D) \$125 million per day.

Answer: B

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

- 6) Refer to Figure 4.4. Assume that initially there is free trade. To reduce U.S. imports without a tax the U.S. could
- A) increase pollution control regulations.
  - B) allow drilling for oil in the Alaska National Wildlife Refuge.
  - C) increase safety regulations for oil refineries.
  - D) all of the above

Answer: B

Diff: 2

Topic: Supply and Demand Analysis

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 4.5 below to answer the questions that follow.

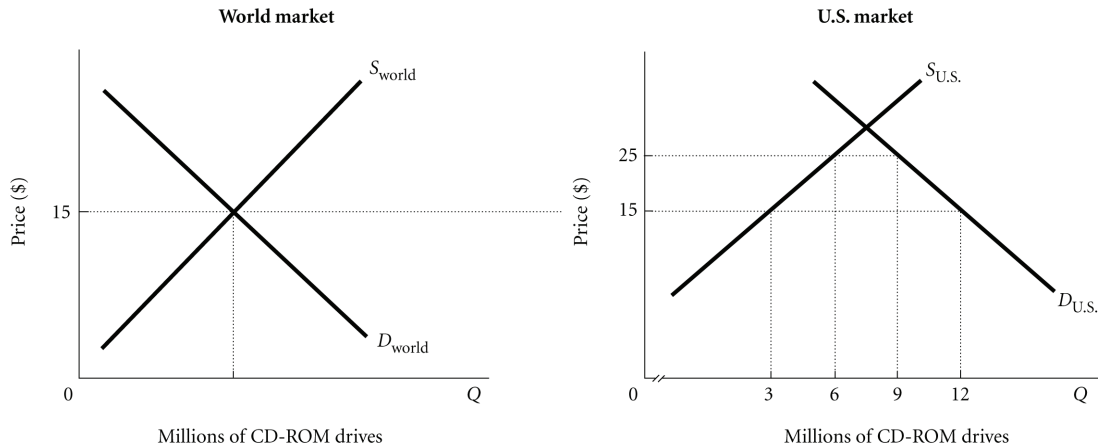


Figure 4.5

- 7) Refer to Figure 4.5. At the world price of \$15 per CD-Rom drive, the United States imports \_\_\_\_\_ million CD-Rom drives.
- A) 3    B) 6    C) 9    D) 12

Answer: C

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Figure 4.5. If a \$10.00 per CD-Rom drive tax is levied on imported CD-Rom drives, the United States will
- A) import 3 million CD-Rom drives.    B) import 6 million CD-Rom drives.  
C) import 9 million CD-Rom drives.    D) import 12 million CD-Rom drives.

Answer: A

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 4.5. If the United States eliminates all taxes on CD-Rom drives, which of the following would occur?
- A) The price of CD-Rom drives in the United States would be \$15 per CD-Rom drive, and the United States would import 3 million CD-Rom drives.  
B) The price of CD-Rom drives in the United States would be \$25 per CD-Rom drive, and the United States would import 3 million CD-Rom drives.  
C) The price of CD-Rom drives in the United States would be \$15 per CD-Rom drive, and the United States would import 9 million CD-Rom drives.  
D) The price of CD-Rom drives in the United States after the U.S. government eliminated all taxes on imported CD-Rom drives cannot be determined from this information.

Answer: C

Diff: 1

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills



- 10) Refer to Figure 4.5. Assume that initially there is free trade. If the United States then imposes a \$10.00 tax per CD-Rom drive on imported CD-Rom drives,
- A) the quantity demanded of CD-Rom drives will be reduced by 3 million CD-Rom drives.
  - B) the quantity of CD-Rom drives supplied by U.S. firms will increase by 3 million CD-Rom drives.
  - C) the price of CD-Rom drives in the United States will increase to \$25.
  - D) all of the above

Answer: D

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Figure 4.5. Assume that initially there is free trade. If the United States then imposes a \$10.00 tax per CD-Rom drive on imported CD-Rom drives,
- A) the quantity demanded of CD-Rom drives will be reduced by 6 million CD-Rom drives.
  - B) the quantity of CD-Rom drives supplied by U.S. firms will increase by 3 million CD-Rom drives.
  - C) the price of CD-Rom drives in the United States will decrease to \$5.
  - D) U.S. imports of CD-Rom drives will increase by 3 million CD-Rom drives.

Answer: B

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

- 1) A U.S. import fee on oil would reduce imports and raise the price of U.S. oil products.

Answer: TRUE

Diff: 2

Topic: Supply and Demand Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 2) A U.S. import fee on oil would reduce the domestic quantity demanded of oil.

Answer: TRUE

Diff: 2

Topic: Supply and Demand Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 3) A U.S. import fee on oil would reduce the domestic quantity supplied of oil.

Answer: FALSE

Diff: 2

Topic: Supply and Demand Analysis

Skill: Conceptual

AACSB: Reflective Thinking

## 4.3 Supply and Demand and Market Efficiency

### 1 Multiple Choice

- 1) Producer surplus is
- A) the difference between the maximum a person is willing to pay and current market price.
  - B) the difference between current market price and full costs of production for the firm.
  - C) the difference between willingness to sell and full costs of productions for the firm.
  - D) current market price.

Answer: B

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Definition

- 2) Consumer surplus is
- A) the difference between the maximum a person is willing to pay and current market price.
  - B) the difference between current market price and full costs of production for the firm.
  - C) the difference between the maximum a person is willing to pay and full costs of productions for the firm.
  - D) current market price.

Answer: A

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Definition

- 3) If the most someone is willing to pay for ticket to see their favorite team is \$100 and the market price of the ticket is \$35, then this buyer will get consumer surplus of
- A) 1 ticket.
  - B) \$35.
  - C) \$65.
  - D) \$100.

Answer: C

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Analytic

AACSB: Analytic Skills

- 4) The market price of a basketball is \$35 and the full cost of producing it is \$20, then a basketball producing firm gets producer surplus of
- A) 1 basketball.
  - B) \$35.
  - C) \$20.
  - D) \$15.

Answer: D

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 4.6 below to answer the questions that follow.  
Equilibrium in this market occurs at the intersection of curves S and D.

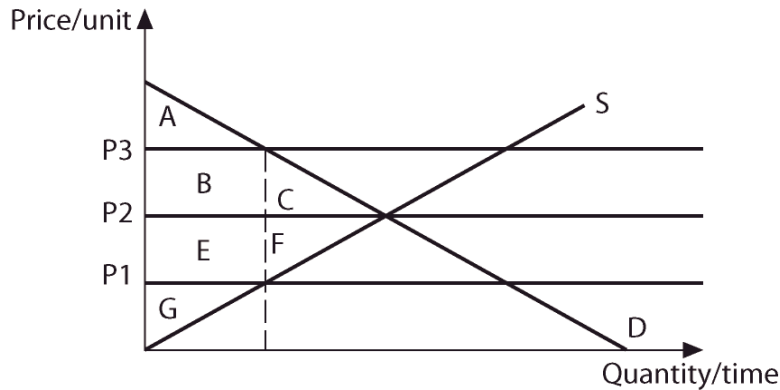


Figure 4.6

- 5) In figure 4.6 at equilibrium consumer surplus is area  
 A) A.                                      B) A+B+C.                                      C) G.                                      D) E+F+G.  
 Answer: B  
 Diff: 2  
 Topic: Supply and Demand and Market Efficiency  
 Skill: Analytic  
 AACSB: Analytic Skills
- 6) In figure 4.6 at equilibrium producer surplus is area  
 A) A.                                      B) A+B+C.                                      C) G.                                      D) E+F+G.  
 Answer: D  
 Diff: 2  
 Topic: Supply and Demand and Market Efficiency  
 Skill: Analytic  
 AACSB: Analytic Skills
- 7) In figure 4.6 if price is P1, consumer surplus is area  
 A) A.                                      B) A+B+E.                                      C) G.                                      D) B+C+E+F+G.  
 Answer: B  
 Diff: 2  
 Topic: Supply and Demand and Market Efficiency  
 Skill: Analytic  
 AACSB: Analytic Skills
- 8) In figure 4.6 if price is P1, producer surplus is area  
 A) A.                                      B) A+B+E.                                      C) G.                                      D) B++E+G.  
 Answer: C  
 Diff: 2  
 Topic: Supply and Demand and Market Efficiency  
 Skill: Analytic  
 AACSB: Analytic Skills

- 9) In figure 4.6 if price is  $P_1$ , the deadweight loss due to under production is area  
A) A+C.                      B) C+F                      C) E+G.                      D) F+G.

Answer: B

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Analytic

AACSB: Analytic Skills

- 10) In figure 4.6 if price goes from equilibrium to  $P_1$ , producer surplus changes by the area  
A) E-C.                      B) C+E                      C) E+F.                      D) B-F.

Answer: C

Diff: 3

Topic: Supply and Demand and Market Efficiency

Skill: Analytic

AACSB: Analytic Skills

- 11) In figure 4.6 if price goes from equilibrium to  $P_1$ , consumer surplus changes by the area  
A) E-C.                      B) C+E                      C) E+F.                      D) B-F.

Answer: A

Diff: 3

Topic: Supply and Demand and Market Efficiency

Skill: Analytic

AACSB: Analytic Skills

- 12) The total of consumer plus producer surplus is greatest  
A) when consumer surplus is maximized.                      B) when producer surplus is maximized.  
C) at the the market equilibrium.                      D) all of the above

Answer: C

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Conceptual

AACSB: Reflective Thinking

- 13) When there is over production in a market,  
A) market price is too low.  
B) there is excess quantity demanded.  
C) the total of consumer and producer surplus is maximized.  
D) there is a deadweight loss.

Answer: D

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

- 1) Consumer surplus is the difference between the most a person is willing to pay and market price.

Answer: TRUE

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Definition

- 2) Consumer surplus describes a situation in which there is excess quantity supplied.  
Answer: FALSE  
Diff: 2  
Topic: *Supply and Demand and Market Efficiency*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 3) If someone is willing to pay \$500 to go to the Super Bowl but can buy a ticket for \$300, they will get \$200 in consumer surplus.  
Answer: TRUE  
Diff: 2  
Topic: *Supply and Demand and Market Efficiency*  
Skill: *Analytic*  
AACSB: *Analytic Skills*
- 4) A firm that sells a car for \$30,000 gets producer surplus of \$30,000.  
Answer: FALSE  
Diff: 2  
Topic: *Supply and Demand and Market Efficiency*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 5) The total of consumer plus producer surplus is largest at the market equilibrium.  
Answer: TRUE  
Diff: 2  
Topic: *Supply and Demand and Market Efficiency*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 6) The total of producer and consumer surplus is maximized when there is underproduction.  
Answer: FALSE  
Diff: 2  
Topic: *Supply and Demand and Market Efficiency*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*

# Chapter 5 Elasticity

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## 5.1 Price Elasticity of Demand

### 1 Multiple Choice

Refer to the information provided in Figure 5.1 below to answer the questions that follow.

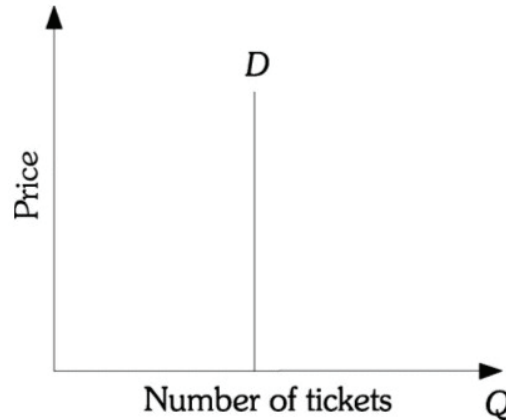


Figure 5.1

- 1) Refer to Figure 5.1. The demand for tickets is
- A) perfectly price elastic.
  - B) perfectly price inelastic.
  - C) unit price elastic.
  - D) perfectly income inelastic.

Answer: B

Diff: 1

Topic: Price Elasticity of Demand

Skill: Fact

- 2) Demand determines price entirely when
- A) demand is downward sloping.
  - B) demand is perfectly inelastic.
  - C) supply is perfectly inelastic.
  - D) supply is perfectly elastic.

Answer: C

Diff: 2

Topic: Price Elasticity of Demand

Skill: Definition

- 3) A perfectly price elastic demand curve will be a \_\_\_\_\_ line.
- A) horizontal
  - B) vertical
  - C) positively sloped
  - D) negatively sloped

Answer: A

Diff: 1

Topic: Price Elasticity of Demand

Skill: Fact

- 4) A perfectly price elastic supply curve is a \_\_\_\_\_ line.  
A) horizontal  
B) vertical  
C) positively sloped  
D) negatively sloped

Answer: B

Diff: 1

Topic: Price Elasticity of Demand

Skill: Fact

- 5) When the price of radios decreases 5%, quantity demanded increases 5%. The price elasticity of demand for radios is \_\_\_\_\_ and total revenue from radio sales will \_\_\_\_\_ .  
A) elastic; decrease  
B) elastic; increase  
C) inelastic; decrease  
D) unit elastic; not change

Answer: D

Diff: 2

Topic: Price Elasticity of Demand

Skill: Analytic

AACSB: Analytic Skills

- 6) When the price of fresh fish increases 10%, quantity demanded decreases 5%. The price elasticity of demand for fresh fish is \_\_\_\_\_ and total revenue from fresh fish sales will \_\_\_\_\_ .  
A) inelastic; increase  
B) inelastic; decrease  
C) elastic; decrease  
D) elastic; increase

Answer: A

Diff: 2

Topic: Price Elasticity of Demand

Skill: Definition

AACSB: Analytic Skills

- 7) When the price of fresh fish increases 10%, quantity demanded is unchanged. The price elasticity of demand for fresh fish is \_\_\_\_\_ .  
A) perfectly inelastic.  
B) elastic.  
C) inelastic.  
D) unitary elastic.

Answer: A

Diff: 2

Topic: Price Elasticity of Demand

Skill: Definition

AACSB: Analytic Skills

- 8) When the price of coffee increases 5%, quantity demanded decreases 10%. The price elasticity of demand for coffee is \_\_\_\_\_ and total revenue from coffee sales will \_\_\_\_\_ .  
A) inelastic; increase  
B) inelastic; decrease  
C) elastic; increase  
D) elastic; decrease

Answer: D

Diff: 2

Topic: Price Elasticity of Demand

Skill: Definition

AACSB: Analytic Skills

- 9) The ABC Computer Company wants to increase the quantity of computers it sells by 5%. If the price elasticity of demand is -2.5, the company must
- A) increase price by 2.0%                      B) decrease price by 2.0%.  
C) increase price by 0.5%                      D) decrease price by 0.5%.

Answer: B

Diff: 2

Topic: Price Elasticity of Demand

Skill: Analytic

AACSB: Analytic Skills

- 10) A government wants to reduce electricity consumption by 10%. The price elasticity of demand for electricity is -5. The government must \_\_\_\_\_ the price of electricity by \_\_\_\_\_.
- A) raise; 2.0%                      B) raise; 0.5%                      C) raise; 1.25%                      D) lower; 0.5%

Answer: A

Diff: 2

Topic: Price Elasticity of Demand

Skill: Analytic

AACSB: Analytic Skills

- 11) A government wants to reduce electricity consumption by 5%. The price elasticity of demand for electricity is -0.5. The government must \_\_\_\_\_ the price of electricity by \_\_\_\_\_.
- A) raise; 10.0%                      B) raise; 1.0%                      C) raise; 0.1%                      D) lower; 0.5%

Answer: A

Diff: 2

Topic: Price Elasticity of Demand

Skill: Analytic

AACSB: Analytic Skills

- 12) The price elasticity of demand for bottled water in Texas is -2, and the price elasticity of demand for bottled water in California is -0.5. In other words, demand in Texas is \_\_\_\_\_ and demand in California is \_\_\_\_\_.
- A) elastic; inelastic                      B) inelastic; elastic  
C) elastic; unit elastic                      D) inelastic; unit inelastic

Answer: A

Diff: 2

Topic: Price Elasticity of Demand

Skill: Conceptual

AACSB: Analytic Skills

- 13) The price elasticity of demand for heart transplants is perfectly inelastic. Thus, the price elasticity demand for heart transplants is
- A) 0.0.                      B) 1.0.                      C) -1.0.                      D) -100.0.

Answer: A

Diff: 2

Topic: Price Elasticity of Demand

Skill: Analytic

AACSB: Analytic Skills



## 2 True/False

1) Price elasticity of demand is calculated using the change in quantity demanded and the change in price.

Answer: FALSE

Diff: 2

Topic: *Price Elasticity of Demand*

Skill: *Definition*

2) The price elasticity of demand is generally negative to reflect the indirect relationship between the quantity demanded of a good and its price.

Answer: TRUE

Diff: 2

Topic: *Price Elasticity of Demand*

Skill: *Definition*

3) Perfectly inelastic demand is represented as a vertical line.

Answer: TRUE

Diff: 1

Topic: *Price Elasticity of Demand*

Skill: *Fact*

4) Perfectly elastic demand is represented as a horizontal line.

Answer: TRUE

Diff: 1

Topic: *Price Elasticity of Demand*

Skill: *Fact*

## 5.2 Calculating Elasticities

### 1 Multiple Choice

Refer to the information provided in Figure 5.2 below to answer the questions that follow.

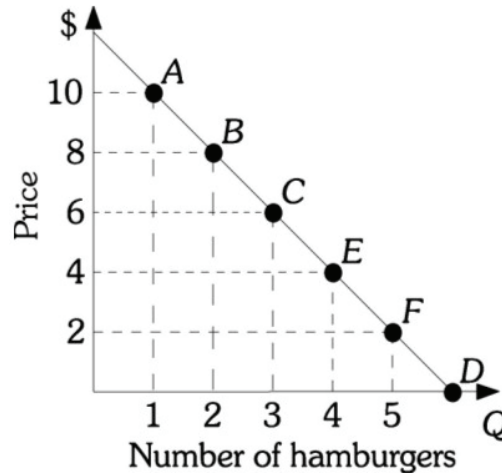


Figure 5.2

- 1) Refer to Figure 5.2. If the price of a hamburger is increased from \$8 to \$10, the price elasticity of demand equals \_\_\_\_\_. Use the midpoint formula.

A) -0.33                      B) -3.0                      C) -30.                      D) -300

Answer: B

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 2) Refer to Figure 5.2. If the price of a hamburger is increased from \$6 to \$8, the price elasticity of demand equals \_\_\_\_\_. Use the midpoint formula.

A) -0.24                      B) -1.0                      C) -1.4                      D) -2.0

Answer: C

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 3) Refer to Figure 5.2. If the price of a hamburger is increased from \$2 to \$4, the price elasticity of demand equals \_\_\_\_\_. Use the midpoint formula.

A) -0.33                      B) -2.0                      C) -3.0                      D) -5.0

Answer: A

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 4) Refer to Figure 5.2. At Point C the price elasticity of demand is -1. Along line segment EC of the demand curve, the demand is
- A) elastic.
  - B) unit elastic.
  - C) inelastic.
  - D) either elastic or inelastic, depending on whether price increases or decreases.

Answer: C

Diff: 2

Topic: Calculating Elasticities

Skill: Definition

AACSB: Analytic Skills

- 5) Refer to Figure 5.2. At Point C the price elasticity of demand is -1. Along line segment AB of the demand curve, the demand is
- A) elastic.
  - B) unit elastic.
  - C) inelastic.
  - D) either elastic or inelastic, depending on whether price increases or decreases.

Answer: A

Diff: 2

Topic: Calculating Elasticities

Skill: Definition

AACSB: Analytic Skills

Refer to the information provided in Figure 5.3 below to answer the questions that follow.

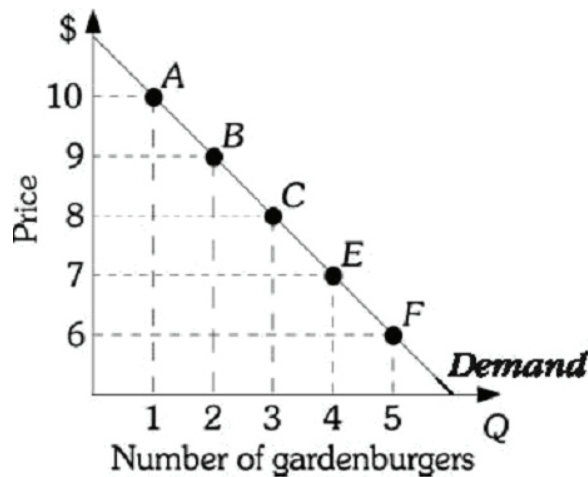


Figure 5.3

- 6) Refer to Figure 5.3. Use the midpoint formula. If the price of a gardenburger is increased from \$8 to \$10, the price elasticity of demand equals \_\_\_\_\_ and demand is \_\_\_\_\_.
- A) 4.5; elastic
  - B) -0.5; inelastic
  - C) -4.5; elastic
  - D) -9.0; inelastic

Answer: C

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Figure 5.3. Use the midpoint formula. If the price of a gardenburger is increased from \$6 to \$8, the price elasticity of demand equals \_\_\_\_\_ and demand is \_\_\_\_\_ .  
A) -0.57; inelastic      B) -1.75; elastic      C) -1.9; inelastic      D) -2.0; elastic

Answer: B

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Figure 5.3. Using the midpoint formula, if the price of a gardenburger is decreased from \$7 to \$6, the price elasticity of demand equals \_\_\_\_\_ and the decrease results in a(n) \_\_\_\_\_ in total revenue.  
A) -.13; decrease      B) -.69; increase      C) -1.44; increase      D) -13; increase

Answer: C

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 9) The owner of a local hot dog stand has estimated that if he lowers the price of hot dogs from \$2.00 to \$1.50, he will increase sales from 400 to 500 hot dogs per day. Using the midpoint formula, the demand for hot dogs is  
A) elastic.      B) inelastic.  
C) unit elastic.      D) perfectly elastic.

Answer: B

Diff: 2

Topic: Calculating Elasticities

Skill: Definition

AACSB: Analytic Skills

- 10) At a price of \$11, quantity demanded is 90; and at a price of \$9, quantity demanded is 110. Since total revenue \_\_\_\_\_ by the price decrease, demand must be \_\_\_\_\_ .  
A) is increased; elastic      B) is decreased; inelastic  
C) is unchanged; unit elastic      D) is unchanged; elastic

Answer: C

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 11) At a price of \$20, a store can sell 24 picture frames a day. At a price of \$18 the store can sell 33 picture frames a day. Since total revenue \_\_\_\_\_ by the price decrease, demand must be \_\_\_\_\_ .  
A) is increased; elastic      B) is increased; inelastic  
C) is increased; unit elastic      D) is decreased; elastic

Answer: A

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 12) Price and total revenue move in inverse directions when demand is
- A) price elastic.
  - B) price inelastic.
  - C) unit price elastic.
  - D) perfectly price inelastic.

Answer: A

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

AACSB: Analytic Skills

- 13) Price and total revenue are directly related when demand is
- A) price elastic.
  - B) price inelastic.
  - C) unit price elastic.
  - D) perfectly price elastic.

Answer: B

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

AACSB: Analytic Skills

- 14) Total revenue decreases if price \_\_\_\_\_ and demand is \_\_\_\_\_.
- A) falls; elastic
  - B) falls; inelastic
  - C) rises; inelastic
  - D) rises; unit elastic

Answer: B

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

AACSB: Analytic Skills

- 15) Total revenue increases if price \_\_\_\_\_ and demand is \_\_\_\_\_.
- A) falls; inelastic
  - B) falls; elastic
  - C) rises; elastic
  - D) rises; unit elastic

Answer: B

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

AACSB: Analytic Skills

Refer to the information provided in Figure 5.4 below to answer the questions that follow.

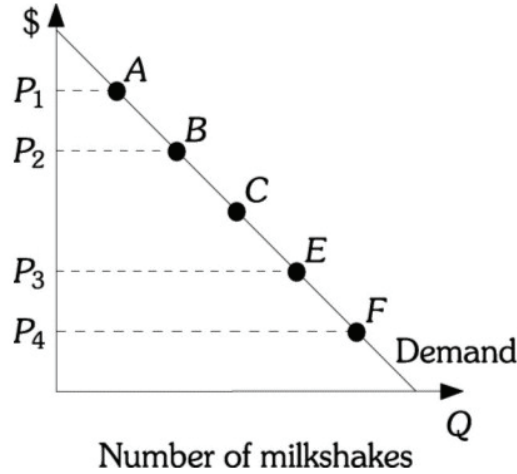


Figure 5.4

- 16) Refer to Figure 5.4. The demand for milkshakes is unit elastic at Point C. If a store reduces the price of a milkshake from  $P_3$  to  $P_4$ , its total revenue will
- A) increase.
  - B) decrease.
  - C) remain constant.
  - D) either increase or decrease.

Answer: B

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

AACSB: Analytic Skills

- 17) Refer to Figure 5.4. The demand for milkshakes is unit elastic at Point C. If the milkshake price falls from  $P_1$  to  $P_2$ , total revenue will
- A) increase.
  - B) decrease.
  - C) remain constant.
  - D) either increase or decrease.

Answer: A

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

AACSB: Analytic Skills

- 18) Refer to Figure 5.4. Along the given demand curve, which of the following is true?
- A) Demand is less elastic along the segment AB than the segment EF.
  - B) Demand is less elastic along the segment EF than the segment AB.
  - C) Since the demand curve is linear, the price elasticity of demand between each of the points (e.g. segment AB, segment BC, etc.) is the same.
  - D) It is impossible to tell with the given diagram.

Answer: B

Diff: 2

Topic: Calculating Elasticities

Skill: Fact

AACSB: Analytic Skills

- 19) A firm is currently producing in the inelastic portion of its demand curve. What course of action do you recommend for it assuming it wants to raise revenue?
- A) Continue producing at the current output level, because it maximizes its total revenue by producing in the inelastic portion of its demand curve.
  - B) Reduce price, because if it reduces price and demand is inelastic, total revenue will increase.
  - C) Increase price, because if it increases price and demand is inelastic, total revenue will increase.
  - D) Continue selling at the same price, but increase the amount it produces.

Answer: C

Diff: 2

Topic: Calculating Elasticities

Skill: Conceptual

AACSB: Analytic Skills

- 20) A firm is currently producing in the elastic portion of its demand curve. What course of action do you recommend for it assuming it wants to raise revenue?
- A) Continue producing at the current output level, because it maximizes its total revenue by producing in the elastic portion of its demand curve.
  - B) Reduce price, because if it reduces price and demand is elastic, total revenue will increase.
  - C) Increase price, because if it increases price and demand is elastic, total revenue will increase.
  - D) Continue selling at the same price, but increase the amount it produces.

Answer: B

Diff: 2

Topic: Calculating Elasticities

Skill: Conceptual

AACSB: Analytic Skills

## 2 True/False

- 1) When the slope of a demand curve is constant, price elasticity of demand is constant as well.

Answer: FALSE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

- 2) A demand curve with continuously changing slope over all quantity values can have a constant price elasticity of demand.

Answer: TRUE

Diff: 2

Topic: Calculating Elasticities

Skill: Fact

- 3) A demand curve with constant slope over all quantity values can have a continuously changing price elasticity of demand.

Answer: TRUE

Diff: 2

Topic: Calculating Elasticities

Skill: Fact

4) A tax on a good whose demand is price elastic will be effective in discouraging consumption of that good.

Answer: TRUE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

5) If government officials are mainly interested in generating tax revenue, then they should tax goods for which demand is price elastic.

Answer: FALSE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

6) How total revenue changes when a price changes can be predicted using price elasticity of demand.

Answer: TRUE

Diff: 2

Topic: Calculating Elasticities

Skill: Definition

7) When demand is elastic, an increase in price will result in an increase in total revenue.

Answer: FALSE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

8) When demand is elastic, a decrease in price will result in an increase in total revenue.

Answer: TRUE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

9) When demand is inelastic, an increase in price will result in an increase in total revenue.

Answer: TRUE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

10) When demand is inelastic, a decrease in price will result in an increase in total revenue.

Answer: FALSE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

11) When demand is unit elastic, an increase in price will result in an increase in total revenue.

Answer: FALSE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact



12) When demand is unit elastic, a decrease in price will result in no change in total revenue.

Answer: TRUE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

## 5.3 The Determinants of Demand Elasticity

### 1 Multiple Choice

- 1) When there are more substitutes for a product, the \_\_\_\_\_ for the product is \_\_\_\_\_.
- A) demand; less price elastic
  - B) demand; more price elastic
  - C) income elasticity; greater
  - D) income elasticity; smaller

Answer: B

Diff: 1

Topic: Determinants of Demand Elasticity

Skill: Fact

- 2) The more time that elapses, the
- A) less price elastic is the demand for the product.
  - B) more price elastic is the demand for the product.
  - C) greater the income elasticity of demand for a product.
  - D) smaller the income elasticity of demand for the product.

Answer: B

Diff: 1

Topic: Determinants of Demand Elasticity

Skill: Fact

- 3) The determinants of elasticity include
- A) availability of substitutes.
  - B) price relative to income.
  - C) time.
  - D) all of the above

Answer: D

Diff: 2

Topic: Determinants of Demand Elasticity

Skill: Definition

- 4) Related to the *Economics in Practice* on page 95: Which of the following, if true, would most effectively undermine the argument that raising cigarette taxes reduce the number of people who smoke cigarettes?
- A) The demand for cigarettes is relatively inelastic.
  - B) The demand for cigarettes is relatively elastic.
  - C) The supply for cigarettes is relatively inelastic.
  - D) The supply for cigarettes is relatively elastic.

Answer: A

Diff: 3

Topic: Determinants of Demand Elasticity: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

- 5) Related to the *Economics in Practice* on page 95: Which of the following, if true, would support the argument for raising cigarette taxes even if the price of cigarettes has relatively little impact on adults' cigarette consumption?
- A) The health risks of cigarette smoking are affected by the amount of nicotine in cigarettes as well as the number of cigarettes smoked.
  - B) When cigarette taxes vary between neighboring states, people have an incentive to buy cigarettes in the state with lower taxes.
  - C) Illness due to smoking is a significant cause of lost economic productivity.
  - D) The demand for cigarettes is more elastic for underage smokers as compared to that of adult smokers.

Answer: D

Diff: 3

Topic: *Determinants of Demand Elasticity: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 6) Related to the *Economics in Practice* on page 97: Which of the following best explains why demand is often more elastic in the long run than it is in the short run?
- A) When demand is elastic, price increases reduce revenue because a small price increase will lead to a large decrease in quantity demanded.
  - B) In the long run, consumers have greater access to substitutes.
  - C) Consumers tend to postpone making purchasing decisions as long as possible.
  - D) In the short run, prices can change rapidly, but in the long run they are more stable.

Answer: B

Diff: 3

Topic: *Determinants of Demand Elasticity: Economics in Practice*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 7) Related to the *Economics in Practice* on page 97: Frank runs a corner delicatessen and one day decides to raise his prices by 10 percent. Total revenue is likely to \_\_\_\_\_ at the end of the first month of the higher prices since demand is relatively elastic in the \_\_\_\_\_ term.
- A) rise; short                      B) fall; short                      C) rise; long                      D) fall; long

Answer: D

Diff: 2

Topic: *Determinants of Demand Elasticity: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 5.4 Other Important Elasticities

### 1 Multiple Choice

- 1) For perfectly price inelastic supply
- A) supply determines price solely.
  - B) demand determines price solely.
  - C) only a government can set the price.
  - D) either supply or demand may set the price.

Answer: B

Diff: 2

Topic: *Other Important Elasticities*

Skill: *Definition*

- 2) A perfectly price elastic supply curve will be a \_\_\_\_\_ line.
- A) horizontal
  - B) vertical
  - C) upward sloping
  - D) downward sloping

Answer: A

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

- 3) An increase in demand caused no change in the equilibrium price. Thus, supply must be
- A) perfectly inelastic.
  - B) inelastic.
  - C) elastic.
  - D) perfectly elastic.

Answer: D

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

- 4) If the supply of oranges is unit elastic, the price elasticity of supply of oranges is
- A) 0.0.
  - B) 1.0.
  - C) -1.0.
  - D) -100.0.

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 5) The income elasticity of demand
- A) measures the change in income necessary for a given change in quantity demanded.
  - B) measures the responsiveness of income to changes in quantity demanded.
  - C) measures the responsiveness of quantity demanded to changes in income.
  - D) is the ratio of the percentage change in income to the percentage change in quantity demanded.

Answer: C

Diff: 1

Topic: Other Important Elasticities

Skill: Definition

- 6) If income increases by 10% and, in response, the quantity of housing demanded increases by 7%, then the income elasticity of demand for housing is
- A) -0.7
  - B) -1
  - C) 0.7
  - D) 1.43

Answer: C

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 7) The income elasticity of demand for education is 3.5. Thus, a 4% increase in income will
- A) decrease the quantity of education demanded by 3.5%.
  - B) decrease the quantity of education demanded by 14%.
  - C) increase the quantity of education demanded by 4%.
  - D) increase the quantity of education demanded by 14%.

Answer: D

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 8) The income elasticity of demand for low-quality beef is  $-2$ . Thus, an 8% decrease in the quantity of low-quality beef demanded
- A) is the result of a decrease in income of 4%.
  - B) is the result of an increase in income of 0.25%.
  - C) is the result of an increase in income of 4%.
  - D) is unrelated to any change in income.

Answer: C

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 9) The ABC Computer Company spends a lot of money for advertising designed to convince you that their personal computers are superior to all other personal computers. If the ABC Company is successful, the demand for ABC personal computers
- A) and the demand for other firms' personal computers will become less price elastic.
  - B) and the demand for other firms' personal computers will become more price elastic.
  - C) will become more price elastic but the demand for other firms' personal computers will become less price elastic.
  - D) will become less price elastic but the demand for other firms' personal computers will become more price elastic.

Answer: D

Diff: 3

Topic: Other Important Elasticities

Skill: Conceptual

AACSB: Reflective Thinking

10) A government is considering levying an alcohol tax to raise revenue to finance health care benefits. People for the tax argue that alcohol demand is price inelastic. Which of the following statements is TRUE?

- A) The alcohol tax may not raise as much revenue as anticipated in the years to come because alcohol demand is more elastic the longer the period of time consumers have to adjust.
- B) This is a very good way to raise revenue both in the short term and in the long term because there are no close substitutes for alcohol.
- C) This tax will not raise much revenue either in the short term or the long term because demand is price inelastic.
- D) No tax revenue can be raised in this way because alcohol sellers will just lower their price by the amount of the tax and therefore the consumer price of alcohol will not change.

Answer: A

Diff: 3

Topic: Other Important Elasticities

Skill: Conceptual

AACSB: Reflective Thinking

11) In order to discourage consumers from eating unhealthy fast food, the government is considering placing a tax on all fast food sales. Which of the following statements is TRUE?

- A) Given the numerous alternatives, consumers' demand for fast food is relatively elastic and the tax will likely work to discourage fast food consumption.
- B) The tax on fast food will likely raise considerable revenue, but will be unlikely to reduce the consumption of fast food by consumers.
- C) The tax on fast food will likely increase the demand for homecooked meals.
- D) Both (A) and (C) are true.

Answer: D

Diff: 3

Topic: Other Important Elasticities

Skill: Conceptual

AACSB: Reflective Thinking

12) Suppose an increase of 10% in the price of steak reduces the consumption of steak by 30%. Such a price rise will induce households to spend

- A) less of their income on steak.
- B) more of their income on steak.
- C) the same amount on steak as before.
- D) more on products that are complementary with steak.

Answer: A

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

13) Cross-price elasticity of demand measures the response in the

- A) price of a good to a change in the quantity of another good demanded.
- B) income of consumers to the change in the price of goods.
- C) quantity of one good demanded when the quantity demanded of another good changes.
- D) quantity of one good demanded to a change in the price of another good.

Answer: D

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

- 14) If the quantity demanded of tea increases by 2% when the price of coffee increases by 6%, the cross-price elasticity of demand between tea and coffee is
- A) -3.                      B) 0.33.                      C) 3.                      D) 12.

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 15) If the quantity demanded of bagels decreases by 8% when the price of croissants decreases by 16%, the cross-price elasticity of demand between bagels and croissants is
- A) 0.5.                      B) -5.                      C) -2.                      D) 2.

Answer: A

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 16) If the quantity demanded of peanut butter increases by 4% when the price of jelly decreases by 2%, the cross-price elasticity of demand between peanut butter and jelly is
- A) -4.                      B) -2.                      C) -0.5.                      D) 2.

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 17) If the cross-price elasticity of demand between fish and chicken is 2, then a 2% increase in the price of fish will result in a \_\_\_\_\_ in the quantity of chicken demanded.
- A) 1% increase                      B) 4% increase                      C) 10% increase                      D) 20% decrease

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 18) The cross-price elasticity of demand between good X and good Y is -3. Given this information, which of the following statements is TRUE?

- A) The demand for goods X and Y is elastic.  
B) Goods X and Y are substitutes.  
C) Goods X and Y are complements.  
D) The demand for goods X and Y is income elastic.

Answer: C

Diff: 2

Topic: Other Important Elasticities

Skill: Conceptual

AACSB: Reflective Thinking

- 19) The cross-price elasticity of demand between good X and good Y is 0.5. Given this information, which of the following statements is TRUE?
- A) The demand for goods X and Y is inelastic.
  - B) Goods X and Y are substitutes.
  - C) Goods X and Y are complements.
  - D) The demand for goods X and Y is income inelastic.

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 5.5 below to answer the question that follows.

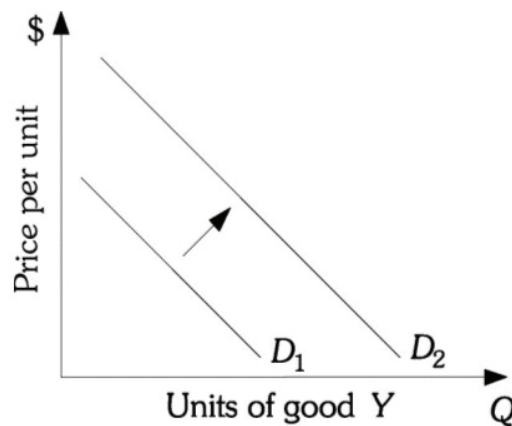


Figure 5.5

- 20) Refer to Figure 5.5. As the price of W increased, the demand for Y shifted from  $D_1$  to  $D_2$ . The cross-price elasticity of demand between W and Y is
- A) positive.
  - B) negative.
  - C) zero.
  - D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

- 21) In output markets, the elasticity of supply tends to be
- A) negative.
  - B) zero.
  - C) positive.
  - D) decreasing at an increasing rate.

Answer: C

Diff: 1

Topic: Other Important Elasticities

Skill: Conceptual

- 22) If the elasticity of labor supply is positive, the labor-supply curve would be  
 A) horizontal. B) vertical.  
 C) downward sloping. D) upward sloping.

Answer: D

Diff: 1

Topic: Other Important Elasticities

Skill: Fact

Refer to the information provided in Figure 5.6 below to answer the question that follows.

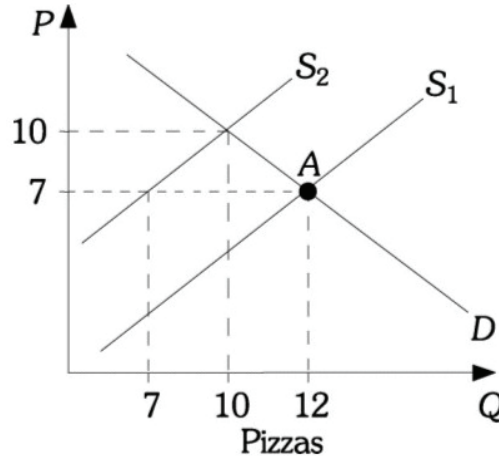


Figure 5.6

- 23) Refer to Figure 5.6. The market is initially in equilibrium at Point A (where price = \$7 and quantity = 12 thousand pizzas) and supply shifts from  $S_1$  to  $S_2$ . Which of the following statements is TRUE?  
 A) Price will still serve as a rationing device causing quantity supplied to exceed 12 thousand pizzas.  
 B) There is no need for price to serve as a rationing device in this case because the new equilibrium quantity exceeds the original equilibrium quantity.  
 C) Price will still serve as a rationing device causing quantity demanded to fall from 12 to 10 thousand pizzas.  
 D) The market cannot move to a new equilibrium until there is also a change in demand.

Answer: C

Diff: 1

Topic: Other Important Elasticities

Skill: Analytic

AACSB: Analytic Skills

- 24) At a price of \$4, quantity supplied is 100; and at a price of \$6, quantity supplied is 120. Using the midpoint formula, the price elasticity of supply is \_\_\_\_\_ and supply is \_\_\_\_\_.  
 A) 0.1; inelastic B) 0.45; inelastic C) 2.2; elastic D) 10; elastic

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

AACSB: Analytic Skills



25) A mass transit authority charges bus fares of \$1.25 during morning rush hours but only \$1.00 during late morning non-rush hours. Economists explain the fare difference by the fact that the demand for bus rides during the morning rush hours is \_\_\_\_\_ but during the late morning it is \_\_\_\_\_.

- A) more elastic; more inelastic
- C) more inelastic; more elastic

- B) perfectly elastic; perfectly inelastic
- D) unit elastic; relatively inelastic

Answer: C

Diff: 2

Topic: Other Important Elasticities

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

1) A positive cross-price elasticity between two goods implies that the two goods are substitutes.

Answer: TRUE

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

2) A positive cross-price elasticity between two goods implies that the two goods are compliments.

Answer: FALSE

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

3) Inferior goods will experience increasing demand when incomes increase.

Answer: FALSE

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

4) If a group has a negative elasticity of labor supply (above some income level), then continued increases in wages will result in decreases in the quantity of labor supplied.

Answer: TRUE

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

# Chapter 6 Household Behavior and Consumer Choice

---

## 6.1 Household Choice in Open Market

### 1 Multiple Choice

- 1) Jane has \$500 a week to spend on clothing and food. The price of clothing is \$25 and the price of food is \$10. The clothing and food pairs in Jane's choice set include \_\_\_\_\_ units of clothing and \_\_\_\_\_ units of food.

A) 50; 50                      B) 20; 50                      C) 15; 25                      D) 8; 30

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 2) Jane has \$500 a week to spend on clothing and food. The price of clothing is \$25 and the price of food is \$10. Jane spends her entire income when she purchases \_\_\_\_\_ units of clothing and \_\_\_\_\_ units of food.

A) 10; 10                      B) 25; 5                      C) 12; 20                      D) 16; 8

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 3) Jim has \$600 a week to spend on clothing and food. The price of clothing is \$30 and the price of food is \$5. The clothing and food pairs in Jim's choice set include \_\_\_\_\_ units of clothing and \_\_\_\_\_ units of food.

A) 20; 50                      B) 15; 70                      C) 10; 60                      D) 0; 200

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 4) Jane has \$500 a week to spend on clothing ( $c$ ) and food ( $f$ ). The price of clothing is \$25 and the price of food is \$10. What is the equation for Jane's budget constraint?

A)  $(\$25 \times \text{Clothing}) \times (\$10 \times \text{Food}) < \$500$                       B)  $\$25 \times \text{Clothing} + \$10 \times \text{Food} \geq \$500$   
C)  $(\$25 \times \text{Clothing}) / (\$10 \times \text{Food}) = \$500$                       D)  $\$25 \times \text{Clothing} + \$10 \times \text{Food} = \$500$

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 5) Ted has \$600 a week to spend on clothing ( $c$ ) and food ( $f$ ). The price of clothing is \$30 and the price of food is \$5. What is the equation for Ted's budget constraint?
- A)  $\$30 \times \text{Clothing} + \$5 \times \text{Food} < \$600$                       B)  $\$30 \times \text{Clothing} + \$5 \times \text{Food} \leq \$600$   
 C)  $\$30 \times \text{Clothing} + \$5 \times \text{Food} > \$600$                       D)  $\$30 \times \text{Clothing} + \$5 \times \text{Food} = \$600$

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 6.1 below to answer the questions that follow.

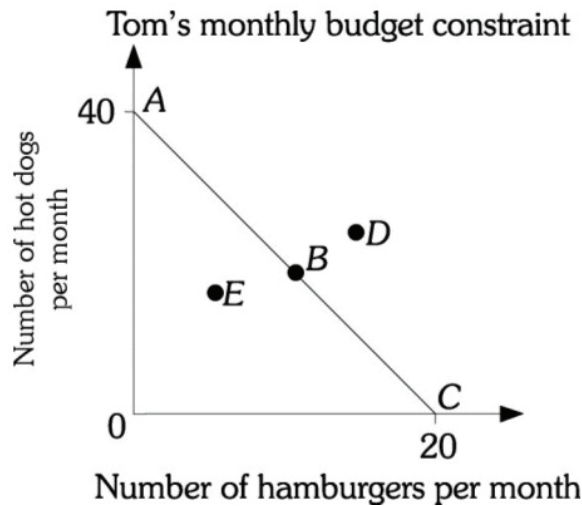


Figure 6.1

- 6) Refer to Figure 6.1. Assume Tom is on budget constraint  $AC$  and the price of a hamburger is \$4.00. Tom's monthly income is
- A) \$20.                      B) \$60.                      C) \$80.                      D) \$100.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Figure 6.1. Assume Tom is on budget constraint  $AC$  and the price of a hot dog is \$2.00. Tom's monthly income is
- A) \$40.                      B) \$60.                      C) \$80.                      D) \$100.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Figure 6.1. The slope of budget constraint  $AC$  is
- A) -5.0.
  - B) -2.0.
  - C) -0.5.
  - D) indeterminate from this information because prices are not given.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 6.1. Assume Tom's budget constraint is  $AC$ . He does not spend his entire income at point
- A) A.
  - B) B.
  - C) D.
  - D) E.

Answer: D

Diff: 1

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Figure 6.1. Assume Tom's budget constraint is  $AC$ . Given his current monthly income he cannot purchase the bundle of goods at point
- A) A.
  - B) B.
  - C) E.
  - D) D.

Answer: D

Diff: 1

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Figure 6.1. Assume Tom's budget constraint is  $AC$ . At which point does Tom consume only hot dogs?
- A) A.
  - B) B.
  - C) E.
  - D) D.

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Figure 6.1. Along budget constraint  $AC$ , the opportunity cost of one hamburger
- A) is 1/4 of a hot dog.
  - B) is 1/2 of a hot dog.
  - C) is 2 hot dogs.
  - D) changes as you move down along the budget constraint.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 13) Refer to Figure 6.1. Along budget constraint  $AC$ , the opportunity cost of one hot dog
- A) is  $1/4$  of a hamburger.
  - B) is  $1/2$  of a hamburger.
  - C) is 2 hamburgers.
  - D) changes as you move down along the budget constraint.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 14) Refer to Figure 6.1. Tom's budget constraint is  $AC$ . His choice set includes all points
- A) to the right of budget constraint  $AC$ .
  - B) bounded by the area  $OAC$ .
  - C) along budget constraint  $AC$ .
  - D) along the vertical and horizontal axes.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 15) Refer to Figure 6.1.  $AC$  represents Tom's budget constraint. Point  $D$  then represents a point that is
- A) an available option, as Tom is just spending all of his income.
  - B) available, but at which he does not spend all his income.
  - C) not available because it represents a combination of hamburgers and hot dogs that he cannot purchase with his income.
  - D) in his opportunity set but not on his budget constraint.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 6.2 below to answer the questions that follow.

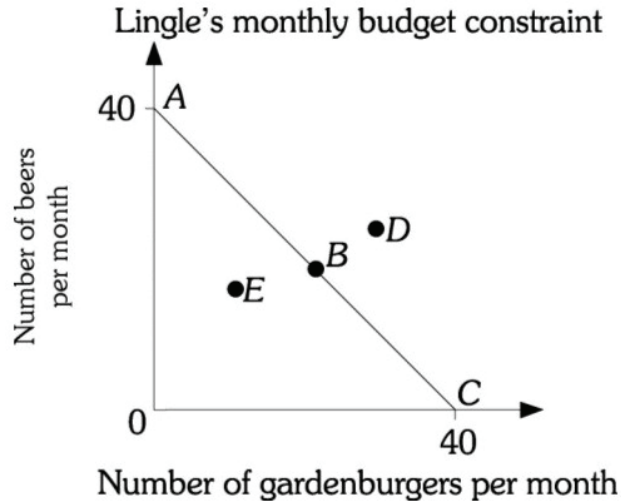


Figure 6.2

- 16) Refer to Figure 6.2. Assume Mr. Lingle is on budget constraint  $AC$ . If the price of a gardenburger is \$6, Mr. Lingle's monthly income is
- A) \$24.                      B) \$60.                      C) \$200.                      D) \$240.

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 17) Refer to Figure 6.2. Assume Mr. Lingle is on budget constraint  $AC$ . If the price of a beer is \$5, Mr. Lingle's monthly income is
- A) \$40.                      B) \$80.                      C) \$100.                      D) \$200.

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Figure 6.2. The slope of budget constraint  $AC$  is
- A)  $-1/2$ .  
 B)  $-1$ .  
 C)  $-2$ .  
 D) indeterminate from this information because prices are not given.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

19) Refer to Figure 6.2. Assume Mr. Lingle's budget constraint is  $AC$ . He will not spend his entire income at point

- A)  $A$ .                      B)  $B$ .                      C)  $D$ .                      D)  $E$ .

Answer:  $D$

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

20) Refer to Figure 6.2. Assume Mr. Lingle's budget is  $AC$ . Given his current monthly income he cannot purchase the quantities of the two goods at point

- A)  $A$ .                      B)  $B$ .                      C)  $D$ .                      D)  $E$ .

Answer:  $C$

Diff: 1

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

21) Refer to Figure 6.2. Assume Mr. Lingle's budget is  $AC$ . At which point does Mr. Lingle spend exactly his income?

- A)  $A$ .  
B)  $D$ .  
C)  $E$ .  
D) The answer cannot be determined with the given information.

Answer:  $A$

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

22) Refer to Figure 6.2. Along budget constraint  $AC$ , the opportunity cost of one gardenburger is

- A) 1/4 of a beer.  
B) a beer.  
C) 2 beers.  
D) changing as Mr. Lingle moves down his budget constraint.

Answer:  $B$

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

23) Refer to Figure 6.2. Along budget constraint  $AC$ , the opportunity cost of one beer is

- A) 1/4 of a gardenburger.  
B) 1 gardenburger.  
C) 2 gardenburgers.  
D) changing as Mr. Lingle moves down his budget constraint.

Answer:  $B$

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 24) Refer to Figure 6.2. Mr. Lingle's budget constraint is  $AC$ . His choice set is all points
- A) in the area bounded by  $OAC$ .
  - B) to the right of budget constraint  $AC$ .
  - C) along budget constraint  $AC$ .
  - D) along the vertical and horizontal axes.

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 25) Refer to Figure 6.2. Mr. Lingle's budget constraint is  $AC$ . Point  $E$  is
- A) an available option and Mr. Lingle exactly spends all of his income.
  - B) an available option and Mr. Lingle does not spend all of his income.
  - C) not in Mr. Lingle's opportunity set but is on his budget constraint.
  - D) not available because it represents a combination of gardenburgers and beer that Mr. Lingle cannot purchase with his current income.

Answer: B

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

AACSB: Analytic Skills

- 26) Refer to Figure 6.2. Mr. Lingle's budget constraint is  $AC$ . Point  $C$  is
- A) an available option and Mr. Lingle exactly spends all of his income.
  - B) an available option and Mr. Lingle does not spend all of his income.
  - C) not in Mr. Lingle's opportunity set but is on his budget constraint.
  - D) not available because it represents a combination of gardenburgers and beer that Mr. Lingle cannot purchase with his current income.

Answer: A

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

AACSB: Analytic Skills



Refer to the information provided in Figure 6.3 below to answer the questions that follow.

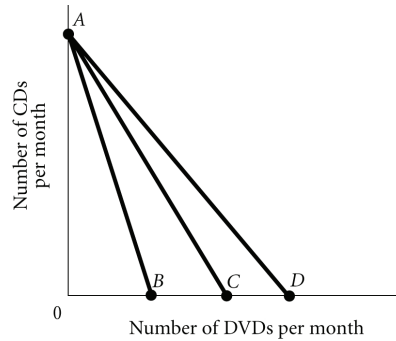


Figure 6.3

- 27) Refer to Figure 6.3. Molly's budget constraint is  $AC$ . It would swivel to  $AD$  if the price of
- A) DVDs increased.
  - B) DVDs decreased.
  - C) CDs increased.
  - D) CDs decreased.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 28) Refer to Figure 6.3. Molly's budget constraint is  $AC$ . It would swivel to  $AB$  if the price of
- A) DVDs increased.
  - B) DVDs decreased.
  - C) CDs increased.
  - D) CDs decreased.

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 29) Refer to Figure 6.3. Molly's budget constraint is  $AC$ . Molly can purchase
- A) none of the points along  $AD$ .
  - B) all of the points along  $AB$ .
  - C) all of the points along  $BD$ .
  - D) None of the points along  $AC$ .

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 6.4 below to answer the questions that follow.

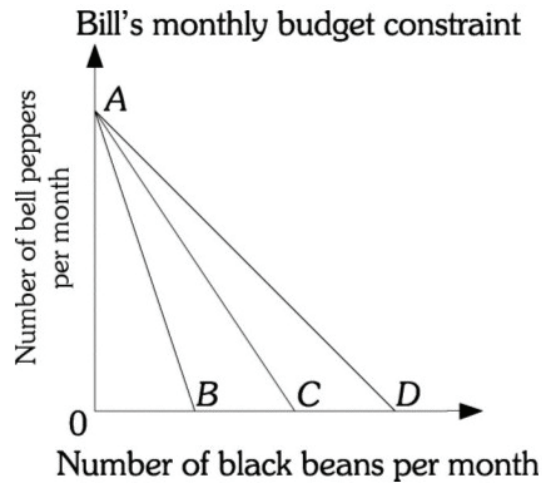


Figure 6.4

- 30) Refer to Figure 6.4. Bill's budget constraint is  $AC$ . If the black bean price decreases, Bill's budget constraint will be
- A)  $AO$ .                      B)  $AB$ .                      C)  $AC$ .                      D)  $AD$ .

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 31) Refer to Figure 6.4. Bill's budget constraint is  $AC$ . If the bell peppers price increases, Bill's budget constraint will be
- A)  $AB$ .  
B)  $AC$ .  
C)  $AD$ .  
D) The budget constraint is not depicted on the diagram.

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 32) Refer to Figure 6.4. Bill's budget constraint is  $AC$ . His budget constraint would shift to  $AB$  if the price of
- A) black beans increased.                      B) black beans decreased.  
C) bell peppers increased.                      D) bell peppers decreased.

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 33) If a household's income doubles, its budget constraint will
- A) shift out parallel to the old one.                      B) pivot at the Y-intercept.  
 C) shift in parallel to the old one.                      D) be unaffected.

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Definition

- 34) If a household's income falls by 10%, its budget constraint will
- A) shift out parallel to the old one.                      B) pivot at the Y-intercept.  
 C) shift in parallel to the old one.                      D) be unaffected.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Definition

Refer to the information provided in Figure 6.5 below to answer the questions that follow.

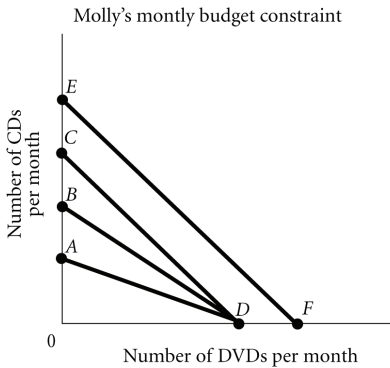


Figure 6.5

- 35) Refer to Figure 6.5. Molly's budget constraint is  $BD$ . If the price of CDs decreases, her new budget constraint becomes
- A)  $AD$ .                      B)  $AO$ .                      C)  $CD$ .                      D)  $EF$ .

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 36) Refer to Figure 6.5. Molly's budget constraint is  $BD$ . If the price of CDs increases, her new budget constraint becomes
- A)  $AD$ .                      B)  $BD$ .                      C)  $CD$ .                      D)  $EF$ .

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 37) Refer to Figure 6.5. Molly's budget constraint is  $CD$ . If her income increases, her new budget constraint is
- A)  $AD$ .  
B)  $BD$ .  
C)  $EF$ .  
D) not shown on this graph.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 38) Refer to Figure 6.5. Molly's budget constraint is  $EF$ . If her income decreases while the price of the goods are unchanged, her new budget constraint could be
- A)  $AD$ .  
B)  $BD$ .  
C)  $CD$ .  
D) not shown on this graph.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 39) Refer to Figure 6.5. Molly's budget constraint is  $EF$ . If her income decreases and the price of CDs increases, her new budget constraint could be
- A)  $CD$ .  
B)  $BD$ .  
C)  $AD$ .  
D) Both (B) or (C) are correct.

Answer: D

Diff: 3

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 40) Refer to Figure 6.5. Molly's budget constraint is  $BD$ . Molly's income is \$400, the price of a DVD is \$15 and the price of a CD is \$20. At point  $B$  the consumer is buying \_\_\_\_\_ DVDs and \_\_\_\_\_ CDs.
- A) 0;20  
B) 20;0  
C) 20; 15  
D) 40; 30

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 41) Refer to Figure 6.5. Molly's budget constraint is  $BD$ . Molly's income is \$375, the price of a DVD is \$15 and the price of a CD is \$25. At point  $D$  the consumer is buying \_\_\_\_\_ DVDs and \_\_\_\_\_ CDs.
- A) 0;15  
B) 25;0  
C) 25; 15  
D) 50; 30

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 6.6 below to answer the questions that follow.

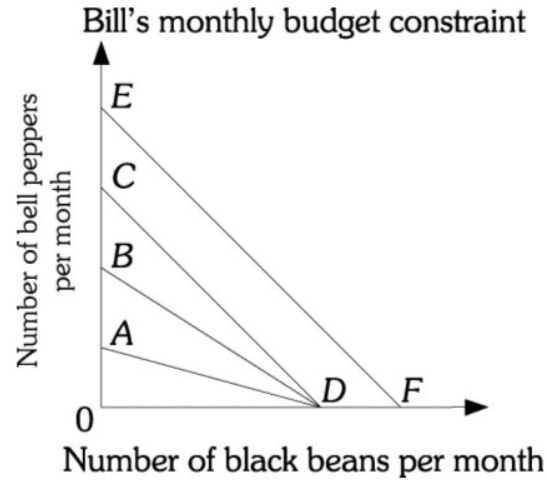


Figure 6.6

- 42) Refer to Figure 6.6. Bill's budget constraint was originally  $CD$ . If his new budget constraint is  $EF$ , then his income
- A) increased.
  - B) decreased.
  - C) did not change but the price of black beans decreased.
  - D) did not change but the price of bell peppers decreased.

Answer: A

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

AACSB: Analytic Skills

- 43) Refer to Figure 6.6. Bill's budget constraint was originally  $AD$ . If his new budget constraint is  $EF$ , then his income
- A) increased.
  - B) decreased.
  - C) increased and the price of black beans price increased.
  - D) decreased and the price of bell peppers increased.

Answer: C

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

AACSB: Analytic Skills

- 44) Refer to Figure 6.6. Bill's budget constraint is  $BD$ . If the price of bell peppers increases, Bill's new budget constraint is
- A)  $AD$ .
  - B)  $AO$ .
  - C)  $CD$ .
  - D)  $EF$ .

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

45) Refer to Figure 6.6. Bill's budget constraint is  $BD$ . Bill's income is \$800, the price of a bell pepper is \$1, and the price of a bag of black beans is \$1. At point B Bill is buying \_\_\_\_\_ bell peppers and \_\_\_\_\_ bags of black beans.

- A) 0; 800                      B) 800; 0                      C) 400; 400                      D) 600; 200

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

AACSB: Analytic Skills

46) Michael can buy either pizzas or submarine sandwiches. If the prices of pizza and submarine sandwiches double and so does Michael's money income, we can conclude that Michael's budget constraint will

- A) shift in but remain parallel to the old one.  
B) shift out but remain parallel to the old one.  
C) swivel in so that the slope of the budget constraint is doubled.  
D) remain unchanged.

Answer: D

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

AACSB: Analytic Skills

47) Michael can buy either pizzas or submarine sandwiches. If the prices of pizza and submarine sandwiches double and Michael's money income triples, we can conclude that Michael's budget constraint will

- A) shift in but remain parallel to the old one.  
B) shift out but remain parallel to the old one.  
C) swivel in so that the slope of the budget constraint is doubled.  
D) remain unchanged.

Answer: B

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

AACSB: Analytic Skills

48) Price decreases will \_\_\_\_\_ a household's choice set.

- A) increase  
B) decrease  
C) not change  
D) sometimes increase and other times decrease

Answer: A

Diff: 1

Topic: Household Choices in Output Markets

Skill: Fact

- 49) A car's real cost is its opportunity cost. Opportunity cost is determined by
- A) the price of the car.
  - B) relative prices.
  - C) wealth.
  - D) the prices of the goods that are compliments to a car.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 6.7 below to answer the questions that follow.

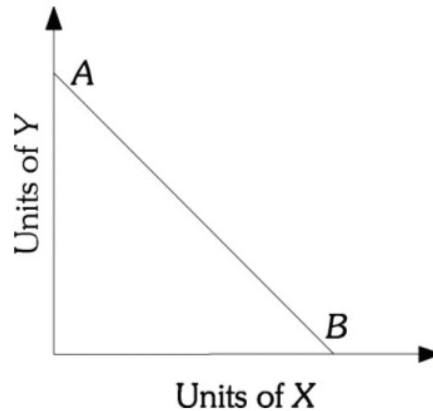


Figure 6.7

- 50) Refer to Figure 6.7. Along budget constraint AB, the price of good X is \$10 and the price of good Y is \$12. If the price of X increases to \$15, the budget constraint will
- A) pivot in at point B.
  - B) pivot out at point A.
  - C) shift in parallel to AB.
  - D) pivot in at point A.

Answer: A

Diff: 2

Topic: Household Choice in Input Markets

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

- 1) When the price of a good increases, the budget constraint does not change.

Answer: FALSE

Diff: 1

Topic: Household Choices in Output Markets

Skill: Fact

- 2) When the price of a good decreases, the budget constraint shifts out parallel to the original budget constraint.

Answer: FALSE

Diff: 1

Topic: Household Choices in Output Markets

Skill: Fact

- 3) Assuming a perfectly competitive market implies that households have perfect knowledge of qualities and prices of everything available in the market.

Answer: TRUE

Diff: 1

Topic: Household Choices in Output Markets

Skill: Fact

- 4) Homogeneous products are distinguishable from each other.

Answer: FALSE

Diff: 2

Topic: Household Choices in Output Markets

Skill: Definition

- 5) Price increases cause a decrease in a household's choice set.

Answer: TRUE

Diff: 2

Topic: Household Choices in Output Markets

Skill: Fact

- 6) Income increases cause an increase in a household's choice set.

Answer: TRUE

Diff: 2

Topic: Household Choices in Output Markets

Skill: Fact

## 6.2 The Basis of Choice: Utility

### 1 Multiple Choice

- 1) Marginal utility is the \_\_\_\_\_ satisfaction gained by consuming \_\_\_\_\_ of a good.

A) total; all units

B) total; one more unit

C) additional; all units

D) additional; one more unit

Answer: D

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Definition

- 2) Kathy eats five slices of pizza on a Saturday night but admits each slice of pizza doesn't taste as good as the previous one. This suggests that for Kathy the

A) marginal utility of a slice of pizza is positive but decreasing.

B) marginal utility of a slice of pizza is negative.

C) total utility of slices of pizza is declining.

D) total utility of slices of pizza is increasing by larger and larger increments.

Answer: A

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Conceptual



Refer to the information provided in Figure 6.8 below to answer the questions that follow.

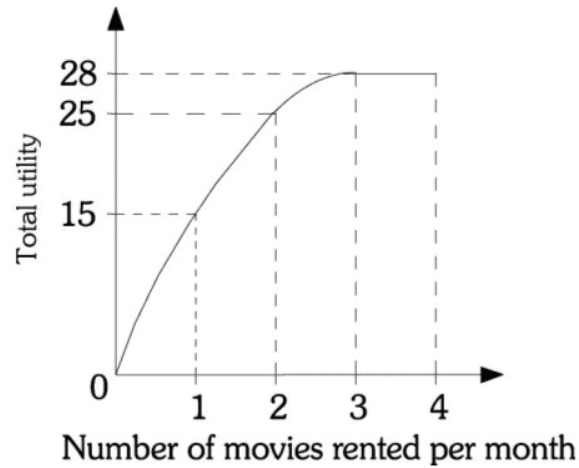


Figure 6.8

- 3) Refer to Figure 6.8. The marginal utility of the first movie rental is  
 A) 0.                                      B) 15.                                      C) 25.                                      D) 40.

Answer: B

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

- 4) Refer to Figure 6.8. The marginal utility of the fourth movie rental is  
 A) 0.                                      B) 3.                                      C) 25.                                      D) 28.

Answer: A

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

- 5) Refer to Figure 6.8. The \_\_\_\_\_ movie rental has a marginal utility of zero.  
 A) first                                      B) second                                      C) third                                      D) fourth

Answer: D

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

- 6) Refer to Figure 6.8. The total utility of the three movies is \_\_\_\_\_ and the marginal utility of the third movie is \_\_\_\_\_.  
 A) 15; 0                                      B) 25; 10                                      C) 28; 3                                      D) 0; 0

Answer: C

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 6.9 below to answer the questions that follow.

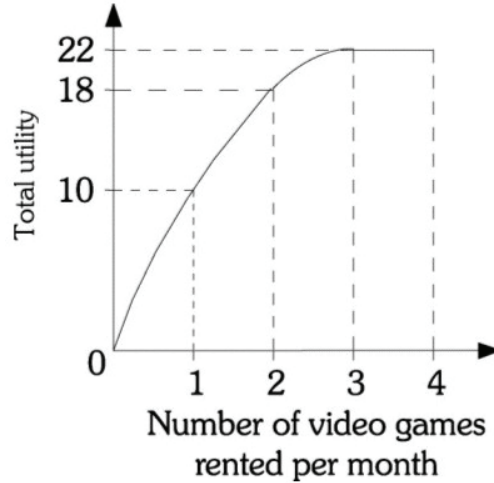


Figure 6.9

- 7) Refer to Figure 6.9. The marginal utility of the second video game rental is
- A) 8.                                  B) 10.                                  C) 25.                                  D) 40.

Answer: A

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Figure 6.9. The marginal utility of the fourth video game rental is
- A) 0.                                  B) 4.                                  C) 8.                                  D) 22.

Answer: A

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 6.9. The \_\_\_\_\_ video game rental has a marginal utility of zero.
- A) first                                  B) second                                  C) third                                  D) fourth

Answer: D

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Table 6.1 below to answer the questions that follow.

Table 6.1

Number of Hamburgers per Day	Total Utility	Marginal Utility
1	30	
2	52	
3	67	
4	76	
5		4
Number of Sodas per Day	Total Utility	Marginal Utility
1	20	
2	35	
3	47	
4	57	
5		7

- 10) Refer to Table 6.1. The marginal utility of the second hamburger per day is  
 A) 10.                                      B) 15.                                      C) 22.                                      D) 52.

Answer: C

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Table 6.1. The marginal utility of the third hamburger per day is  
 A) 5.    B) 15.    C) 22.    D) 67.

Answer: B

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Table 6.1. Diminishing marginal utility sets in after the \_\_\_\_\_ soda per day.  
 A) first    B) second    C) third    D) fourth

Answer: A

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

- 13) Refer to Table 6.1. The total utility of five hamburgers per day is  
 A) 76.    B) 80.  
 C) 96.    D) indeterminate from this information.

Answer: B

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

- 14) Refer to Table 6.1. The total utility of five sodas per day is
- A) 35.
  - B) 64.
  - C) 92.
  - D) indeterminate from this information.

Answer: B

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 15) Refer to Table 6.1. If the price of a soda is \$2, the price of a hamburger is \$6, and George has \$14 of income, George's utility maximizing combination of sodas and hamburgers per day is
- A) 1 soda and 2 hamburgers.
  - B) 4 sodas and 1 hamburger.
  - C) 3 sodas and 1.5 hamburgers.
  - D) indeterminate from this information.

Answer: B

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 16) Refer to Table 6.1. Assume that a store is giving hamburgers and sodas away for free. Consumers can have as many sodas and hamburgers as they want, but the food has to be consumed one unit at a time. If George has already had one soda and two hamburgers, then George should
- A) next consume a soda to maximize his utility.
  - B) next consume a hamburger to maximize his utility.
  - C) be indifferent between consuming the second soda or the third hamburger.
  - D) consume neither another soda nor another hamburger to maximize his utility.

Answer: C

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

Refer to the information provided in Table 6.2 below to answer the questions that follow.

Table 6.2

Number of Candy Bars per Day	Total Utility	Marginal Utility
1	40	
2	75	
3	100	
4	115	
5		5
Number of Hot Dogs per Day	Total Utility	Marginal Utility
1	30	
2	54	
3	72	
4	84	
5		6

- 17) Refer to Table 6.2. The marginal utility of the second candy bar per day is  
 A) 10.                                      B) 15.                                      C) 35.                                      D) 55.

Answer: C

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Table 6.2. Diminishing marginal utility sets in after the \_\_\_\_\_ candy bar per day.  
 A) first                                      B) second                                      C) third                                      D) fourth

Answer: A

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Table 6.2. The total utility of five candy bars per day is  
 A) 115.                                      B) 120.  
 C) 130.                                      D) indeterminate from this information.

Answer: B

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

AACSB: Analytic Skills

- 20) Refer to Table 6.2. If the price of a candy bar is \$1, the price of a hot dog is \$2, and Aaron has \$6 of income, Aaron's utility maximizing combination of sodas and hamburgers per day is
- A) 1 candy bar and 2 hot dogs.
  - B) 4 candy bars and 1 hot dog.
  - C) 2 candy bars and 1.5 hot dogs.
  - D) indeterminate from this information.

Answer: B

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 21) Richard is consuming X and Y so that he is spending his entire income and  $MU_x/P_x = 6$  and  $MU_y/P_y = 10$ . To maximize utility, he should
- A) continue to consume the same amount of X and Y since he is already maximizing utility.
  - B) consume less of both X and Y.
  - C) consume more X and less Y.
  - D) consume less X and more Y.

Answer: D

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 22) Jon is consuming X and Y so that he is spending his entire income and  $MU_x/P_x = 8$  and  $MU_y/P_y = 4$ . To maximize utility, he should consume
- A) the same amount of X and Y since he is already maximizing utility.
  - B) less of both X and Y.
  - C) more X and less Y.
  - D) less X and more Y.

Answer: C

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 23) Jon is consuming X and Y so that he is spending his entire income and  $MU_x/P_x = 4$  and  $MU_y/P_y = 4$ . To maximize utility, he should consume
- A) the same amount of X and Y since he is already maximizing utility.
  - B) less of both X and Y.
  - C) more X and less Y.
  - D) less X and more Y.

Answer: A

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Analytic*

AACSB: *Analytic Skills*

24) If  $MU_x/P_x < MU_y/P_y$ , then

- A) spending a dollar less on Y and a dollar more on X increases utility.
- B) spending a dollar less on X and a dollar more on Y increases utility.
- C) X is more expensive than Y.
- D) Y is more expensive than X.

Answer: B

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Definition*

25) Sue is maximizing her utility. Her  $MU_x/P_x=10$  and  $MU_y=40$ . Then the price of Y must be

- A) \$1.
- B) \$4.
- C) \$10.
- D) \$40.

Answer: B

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

AACSB: *Analytic Skills*

26) Ellen is spending her entire income on goods X and Y. Her marginal utility from the last units of X and Y that she consumes is 25. Ellen's utility is only maximized if

- A) the prices of X and Y are the same.
- B) the price of good X is twice that of good Y.
- C) the price of good Y is twice that of good X.
- D) We cannot determine whether Ellen is maximizing her utility.

Answer: A

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

AACSB: *Analytic Skills*

27) Ellie is spending her entire income on goods X and Y. Her marginal utility from the last unit of X is 100 and the marginal utility from the last unit of Y that she consumes is 50. Ellie's utility is only maximized if

- A) the prices of X and Y are the same.
- B) the price of good X is twice that of good Y.
- C) the price of good Y is twice that of good X.
- D) We cannot determine whether Ellie is maximizing her utility.

Answer: B

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

AACSB: *Analytic Skills*

Refer to the information provided in Figure 6.10 below to answer the questions that follow.

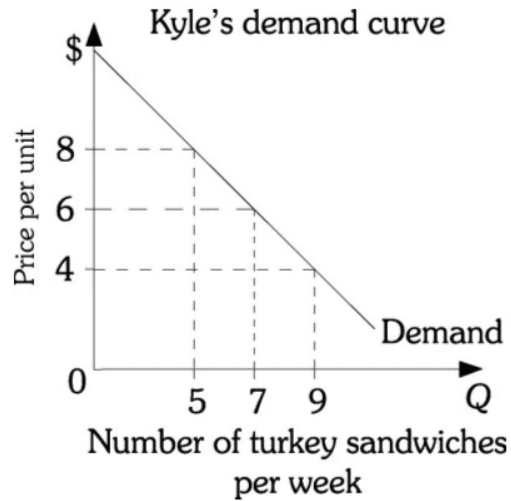


Figure 6.10

- 28) Refer to Figure 6.10. The current price of a turkey sandwich is \$6. If Kyle is currently buying five turkey sandwiches a week, he \_\_\_\_\_ maximizing utility because the marginal utility \_\_\_\_\_ than its price.
- A) is; from the fifth sandwich is greater
  - B) is; from the fifth sandwich is less
  - C) is not; gained from the fifth sandwich is less
  - D) is not; gained from the fifth sandwich is greater

Answer: D

Diff: 3

Topic: The Basis of Choice: Utility

Skill: Conceptual

AACSB: Analytic Skills

- 29) Refer to Figure 6.10. The current price of a turkey sandwich is \$6. If Kyle is currently buying nine turkey sandwiches a week, he \_\_\_\_\_ maximizing utility because the marginal utility \_\_\_\_\_ than its price.
- A) is; from the ninth sandwich is greater
  - B) is; from the ninth sandwich is less
  - C) is not; gained from the ninth sandwich is less
  - D) is not; gained from the ninth sandwich is greater

Answer: C

Diff: 3

Topic: The Basis of Choice: Utility

Skill: Conceptual

AACSB: Analytic Skills



- 30) Refer to Figure 6.10. Kyle would increase his consumption of turkey sandwiches from 7 to 9 per week if their price fell from \$6 to \$4. This illustrates the idea of
- A) consumer surplus.
  - B) the law of diminishing marginal utility.
  - C) cross-price elasticity of demand.
  - D) technical efficiency.

Answer: B

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 31) The marginal utility of the first cup of coffee that Tom drinks in the morning is worth \$2.00. The marginal utility of the 9th cup of coffee he drinks is positive while the marginal utility of the 10th cup of coffee he drinks in the morning is worth \$0. This implies that at a price of \$0, Tom would drink
- A) zero cups of coffee per morning.
  - B) at most 10 cups of coffee per morning.
  - C) more than 10 cups of coffee per morning, but the actual number is indeterminate from this information.
  - D) an infinite number of cups of coffee each morning.

Answer: B

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 32) For Matthew, the marginal utility of the 9th soda in a day is positive and the marginal utility of the 10th soda in a day is zero. This
- A) implies that Matthew's demand curve for sodas per day will become upward sloping at 10 sodas per day.
  - B) is impossible because each additional unit of consumption of any good must provide positive marginal utility.
  - C) implies that at a zero price Matthew's demand curve will intersect the quantity axis at 10.
  - D) implies that Matthew maximizes utility by consuming 9 sodas per day.

Answer: C

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Definition*

AACSB: *Analytic Skills*

- 33) Total utility is
- A) the total amount of satisfaction yielded by the consumption of a good or service.
  - B) the additional satisfaction gained by consuming one more unit of something.
  - C) used to compare different people's likes and dislikes.
  - D) relatively easy to measure.

Answer: A

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Definition*

- 34) The law of diminishing marginal utility refers to
- A) a consumer's decrease in total satisfaction as she consumes more units of a good.
  - B) a consumer's decrease in additional satisfaction as she consumes more and more units of a good.
  - C) the idea that total utility is negative.
  - D) the idea that marginal utility is negative.

Answer: B

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Definition*

- 35) We can state the utility-maximizing rule in words in the following way: A person maximizes utility when she equalizes the \_\_\_\_\_ across products.
- A) total utility
  - B) total utility per dollar spent
  - C) marginal utility
  - D) marginal utility per dollar spent

Answer: D

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

- 36) A utility-maximizing consumer buys so as to make \_\_\_\_\_ for all pairs of goods.
- A)  $P_x(MU_x) = P_y(MU_y)$
  - B)  $TU_x/P_x = TU_y/P_y$
  - C)  $MU_x/MU_y = P_x/P_y$
  - D)  $MU_x = MU_y$

Answer: C

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 37) The ratio of the marginal utility of coffee to the marginal utility of donuts is four for an individual maximizing utility. This implies that
- A) a donut is four times more valuable than a cup of coffee.
  - B) the coffee to donuts price ratio is one to four.
  - C) the coffee to donuts price ratio is four to one.
  - D) this person always eats donuts with coffee.

Answer: C

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 38) Kathleen likes avocado and crab dip. After eating avocado and crab dip with four crackers, she switches to cheese with crackers. We can conclude that
- A) the avocado and crab dip cannot have tasted that good.
  - B) the avocado and crab dip with crackers now has a marginal utility of zero.
  - C) at this point cheese and crackers have a higher marginal utility per dollar spent than that of avocado and crab dip with crackers.
  - D) Kathleen is no longer maximizing her utility.

Answer: C

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 39) The law of diminishing marginal utility implies that
- A) demand curves always slope downward and to the right.
  - B) supply curves always slope upward and to the right.
  - C) a consumer will always buy positive amounts of all goods.
  - D) total utility will always increase by an increasing amount as consumption increases.

Answer: A

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Definition*

- 40) The diamond/water paradox states that things with the \_\_\_\_\_ value in use frequently have \_\_\_\_\_ value in exchange.
- A) least; the least
  - B) least; little or no
  - C) greatest; little or no
  - D) greatest; the greatest

Answer: C

Diff: 1

Topic: *The Basis of Choice: Utility*

Skill: *Definition*

## 2 True/False

- 1) The law of diminishing marginal utility implies that as a household consumes more of a product, its total utility will increase by smaller amounts -assuming marginal utility remains positive.

Answer: TRUE

Diff: 1

Topic: *The Basis of Choice: Utility*

Skill: *Fact*

- 2) The law of diminishing marginal utility implies that total utility never reaches a maximum.

Answer: FALSE

Diff: 1

Topic: *The Basis of Choice: Utility*

Skill: *Fact*

- 3) When consumers maximize utility, they are equating the ratio of marginal utility to price across all goods consumed.  
 Answer: TRUE  
 Diff: 1  
 Topic: *The Basis of Choice: Utility*  
 Skill: *Fact*
- 4) A negative marginal utility implies negative total utility.  
 Answer: FALSE  
 Diff: 1  
 Topic: *The Basis of Choice: Utility*  
 Skill: *Fact*
- 5) If  $MU_x/P_x$  exceeds  $MU_y/P_y$ , then a household can increase its utility by spending more on X and less on Y.  
 Answer: TRUE  
 Diff: 1  
 Topic: *The Basis of Choice: Utility*  
 Skill: *Fact*
- 6) When marginal utility is zero, total utility is at a minimum.  
 Answer: FALSE  
 Diff: 2  
 Topic: *The Basis of Choice: Utility*  
 Skill: *Fact*
- 7) The diamond/water paradox helps to illustrate the concept of marginal value.  
 Answer: TRUE  
 Diff: 1  
 Topic: *The Basis of Choice: Utility*  
 Skill: *Fact*

## 6.3 Income and Substitution Effects

### 1 Multiple Choice

- 1) A rise in the price of Pepsi that causes a household to shift its purchasing pattern toward Coke and away from Pepsi is the \_\_\_\_\_ effect of a price change.
- |                  |                                 |
|------------------|---------------------------------|
| A) income        | B) substitution                 |
| C) complementary | D) diminishing marginal utility |

Answer: B  
 Diff: 1  
 Topic: *Income and Substitution Effects*  
 Skill: *Fact*

- 2) For normal goods, the substitution and income effects of a price decrease will
- A) both decrease the quantity of the good demanded.
  - B) both increase the quantity of the good demanded.
  - C) the substitution effect will increase the quantity of the good demanded while the income effect will decrease the quantity of the good demanded.
  - D) the substitution effect will decrease the quantity of the good demanded while the income effect will increase the quantity of the good demanded.

Answer: B

Diff: 2

Topic: *Income and Substitution Effects*

Skill: *Definition*

- 3) For inferior goods, the substitution and income effects of a price increase will
- A) both decrease the quantity of the good demanded.
  - B) both increase the quantity of the good demanded.
  - C) the substitution effect will increase the quantity of the good demanded while the income effect will decrease the quantity of the good demanded.
  - D) the substitution effect will decrease the quantity of the good demanded while the income effect will increase the quantity of the good demanded.

Answer: D

Diff: 2

Topic: *Income and Substitution Effects*

Skill: *Definition*

- 4) A price change would have the largest income effect on a
- A) magazine.
  - B) desktop computer.
  - C) piece of clothing.
  - D) car.

Answer: D

Diff: 3

Topic: *Income and Substitution Effects*

Skill: *Conceptual*

- 5) Assuming that charitable giving is a normal good, the income effect of a decrease in personal tax rates would lead to
- A) less giving because giving to charity would become more expensive relative to other goods.
  - B) more giving because giving to charity would become less expensive relative to other goods.
  - C) more giving because households would have more disposable income.
  - D) less giving because households would spend that money on luxury goods.

Answer: C

Diff: 3

Topic: *Income and Substitution Effects*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 6) Related to the *Economics in Practice* on page 118: Cheap Foods claims that you will pay less for groceries by shopping at their stores. As evidence, Cheap Foods points out that the total price of the bundle of goods that a particular shopper purchased at Cheap Foods was lower than the total price of the same bundle of goods purchased at other stores. Which of the following point out a flaw in the grocery store's argument?
- A) Cheap Foods has not proven that their stores offer the lowest prices on non-grocery items.
  - B) It ignores the possibility that Cheap Foods used to charge higher prices than their competitors.
  - C) It fails to demonstrate that Cheap Foods offers the highest quality groceries.
  - D) Prices on the day the bundle was purchased may not be representative of prices on a typical day.

Answer: A

Diff: 3

Topic: *Income and Substitution Effects: Economics in Practice*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

- 1) Ignoring income effects, an increase in the wage rate will cause an increase in the quantity of labor supplied.

Answer: TRUE

Diff: 1

Topic: *Income and Substitution Effects*

Skill: *Fact*

## 6.4 Household Choice in Input Markets

### 1 Multiple Choice

Refer to the information provided in Figure 6.11 below to answer the question that follows.

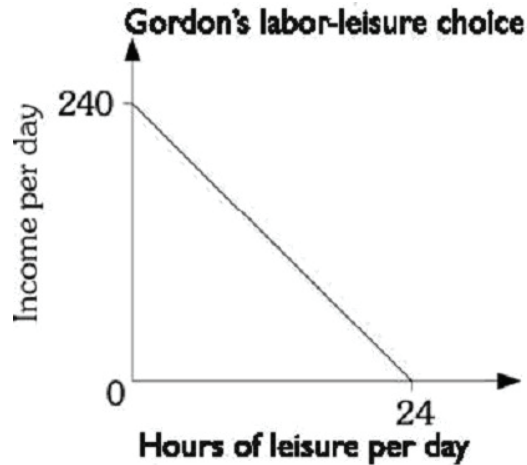


Figure 6.11

- 1) Refer to Figure 6.11. Gordon's opportunity cost of one hour of leisure is
- A) \$10.
  - B) \$24.
  - C) \$240.
  - D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Household Choice in Input Markets

Skill: Analytic

AACSB: Analytic Skills

- 2) Assume leisure is a normal good. The substitution effect of a wage decrease implies a \_\_\_\_\_ demand for leisure and a \_\_\_\_\_ labor supply.
- A) lower; higher
  - B) higher; lower
  - C) higher; higher
  - D) lower; lower

Answer: B

Diff: 3

Topic: Household Choice in Input Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 3) If the substitution effect of a wage change outweighs the income effect of a wage change, the labor-supply curve is
- A) upward sloping.
  - B) horizontal.
  - C) vertical.
  - D) backward bending.

Answer: A

Diff: 3

Topic: Household Choice in Input Markets

Skill: Conceptual

- 4) Assume leisure is an inferior good instead of a normal good. The income effect of a wage increase will lead to a \_\_\_\_\_ demand for leisure and a \_\_\_\_\_ labor supply.  
A) higher; higher      B) higher; lower      C) lower; higher      D) lower; lower

Answer: C

Diff: 3

Topic: Household Choice in Input Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 5) Assuming that leisure is a normal good, if an individual's labor supply curve is backward bending, then the  
A) income effect outweighs the substitution effect at higher wages.  
B) substitution effect outweighs the income effect at higher wages.  
C) income effect and the substitution effects are equal.  
D) income effect is zero.

Answer: A

Diff: 2

Topic: Household Choice in Input Markets

Skill: Fact

- 6) Related to the *Economics in Practice* on page 121: Google is famous for offering its employees extraordinary benefits, such as on-site oil changes and haircuts, free medical checkups, and free workout facilities. Which of the following best explains why offering these benefits provides Google with an important economic advantage?  
A) These benefits reduce the marginal utility of leisure time and therefore make people more willing to work longer hours.  
B) These benefits increase the expectations of the employees, making it difficult to reduce them without damaging employee morale.  
C) Encouraging activities such as purchasing a hybrid vehicle has a variety of benefits for the natural environment.  
D) Many of Google's benefits are available to all workers, and so they encourage even weak performers to stay with the company.

Answer: A

Diff: 3

Topic: Household Choice in Input Markets: Economics in Practice

Skill: Analytic

AACSB: Analytic Skills



## 6.5 Appendix

### 1 Multiple Choice

- 1) Harry tells you that he prefers Pepsi to Coke, Coke to 7-UP, and 7-UP to Pepsi. This violates what assumption made when analyzing consumer preferences?
- A) That more is better.
  - B) That there is a diminishing marginal rate of substitution.
  - C) That consumers are rational.
  - D) That consumers are able to choose among all the combinations of goods and services available.

Answer: C

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Conceptual

AACSB: Reflective Thinking

- 2) A consumer satisfies the condition \_\_\_\_\_ when her indifference curve is just tangent to her budget constraint.
- A)  $MU_x = MU_y$
  - B)  $TU_x = TU_y$
  - C)  $MU_x/P_x = MU_y/P_y$
  - D)  $TU_x/P_x = TU_y/P_y$

Answer: C

Diff: 1

Topic: Appendix: Indifference Curves

Skill: Fact

- 3) Assume Sally is initially in equilibrium and that X and Y are normal goods for her. Then the price of X rises. For Sally to move to a new equilibrium point her consumption of
- A) X must remain constant, but her consumption of Y must increase.
  - B) X must decrease.
  - C) X must increase.
  - D) both X and Y must increase.

Answer: B

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

AACSB: Analytic Skills

- 4) An assumption underlying indifference curve analysis is that  $MU_x/MU_y$  \_\_\_\_\_ as more of X and less of Y is consumed.
- A) increases
  - B) decreases
  - C) remains constant
  - D) always equals one

Answer: B

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 6.13 below to answer the question that follows.

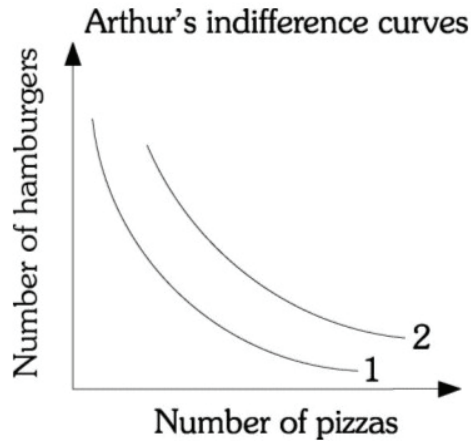


Figure 6.13

- 5) Refer to Figure 6.13. If Arthur moves from indifference curve 1 to indifference curve 2, then Arthur's
- A) marginal utility increases.
  - B) total utility increases.
  - C) total income decreases.
  - D) prices of the goods increase.

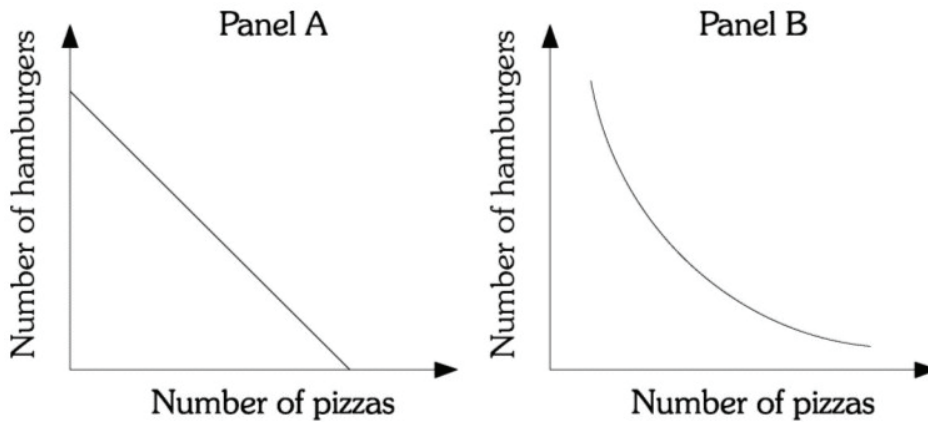
Answer: B

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Definition

Refer to the information provided in Figure 6.14 below to answer the questions that follow.



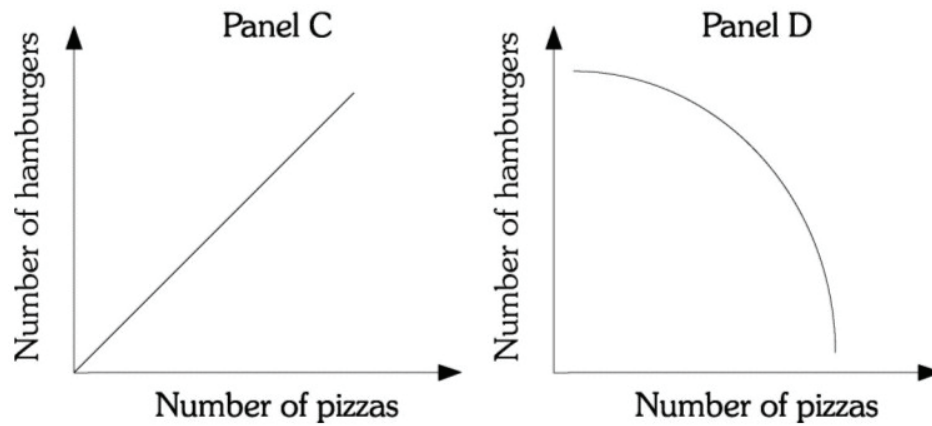


Figure 6.14

- 6) Refer to Figure 6.14. Assume Ellen has two products available, pizza and hamburgers. Ellen is always willing to trade one pizza for one hamburger regardless of how many pizzas and hamburgers she has. The curve in Panel \_\_\_\_\_ represents her indifference curve.
- A) A                      B) B                      C) C                      D) D

Answer: A

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Conceptual

AACSB: Reflective Thinking

- 7) Refer to Figure 6.14. Assume Ellen has two products available, pizza and hamburgers. Ellen must be compensated with more pizzas as she gives up more burgers. The curve in Panel \_\_\_\_\_ represents her indifference curve.
- A) A                      B) B                      C) C                      D) D

Answer: B

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Conceptual

AACSB: Reflective Thinking

- 8) As you move up an indifference curve, the absolute value of the slope
- A) increases.                      B) decreases.  
 C) remains constant.                      D) initially increases and then decreases.

Answer: A

Diff: 1

Topic: Appendix: Indifference Curves

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 6.15 below to answer the questions that follow.

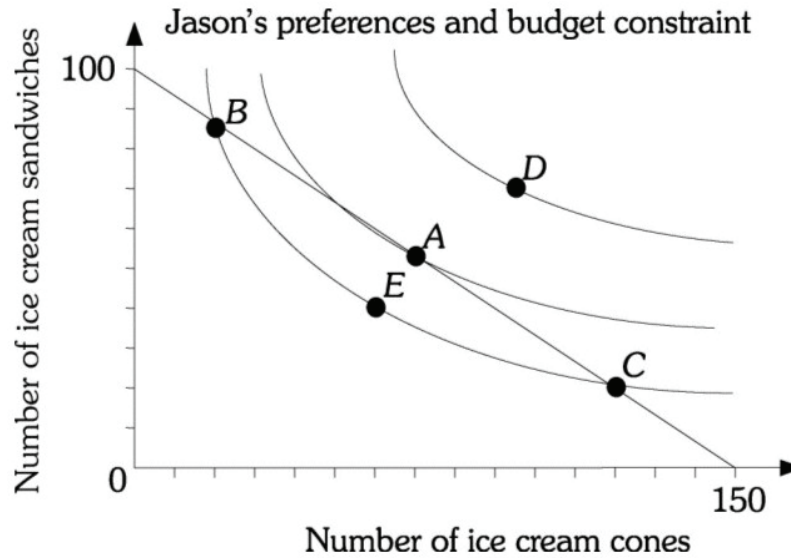


Figure 6.15

- 9) Refer to Figure 6.15. If the price of an ice cream cone is \$2, Jason's income is
- A) \$75.
  - B) \$250.
  - C) \$300.
  - D) indeterminate because the price of ice cream sandwiches is not given.

Answer: C

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Figure 6.15. Jason maximizes utility at point
- A) A.
  - B) B.
  - C) C.
  - D) D.

Answer: A

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Figure 6.15. The slope of the indifference curve is the ratio of the
- A) marginal utility of ice cream cones to the marginal utility of ice cream sandwiches.
  - B) marginal utility of ice cream sandwiches to the marginal utility of ice cream cones.
  - C) total utility of ice cream cones to the total utility of ice cream sandwiches.
  - D) total utility of ice cream sandwiches to the total utility of ice cream cones.

Answer: A

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Definition

12) Refer to Figure 6.15. At point *A*, the slope of the indifference curve is

- A) -0.67.
- B) -1.5.
- C) -3.0.
- D) indeterminate because the marginal utilities are unknown.

Answer: A

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

AACSB: Analytic Skills

13) Refer to Figure 6.15. If the price of an ice cream cone is \$2, the price of ice cream sandwiches is

- A) \$2.
- B) \$3.
- C) \$50.
- D) \$100.

Answer: B

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 6.16 below to answer the question that follows.

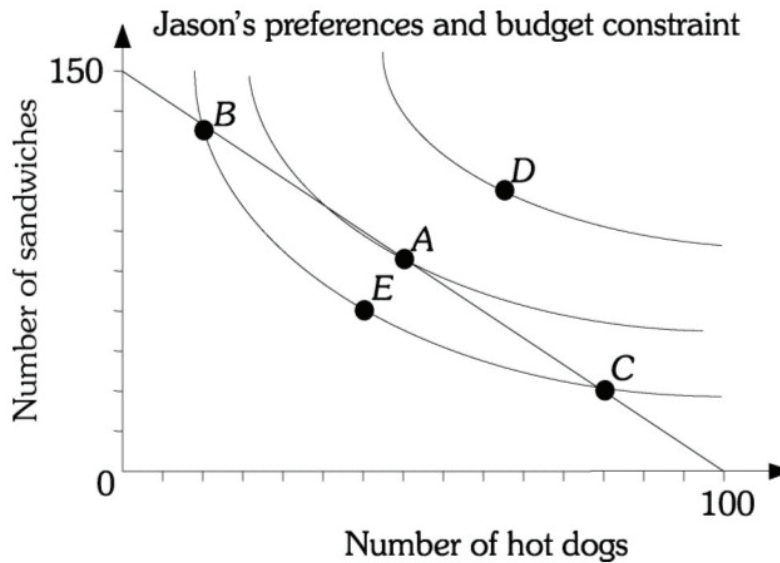


Figure 6.16

14) Refer to Figure 6.16. If the price of a hot dog is \$2, Jason's income is

- A) \$25.
- B) \$200.
- C) \$300.
- D) indeterminate because the price of sandwiches is not given.

Answer: B

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

AACSB: Analytic Skills

- 15) Refer to Figure 6.16. Why was Jason NOT maximizing his utility at point C?
- A) He is not spending his entire budget.
  - B) His marginal utility per dollar spent on the last sandwich is greater than his marginal utility per dollar spent on his last hot dog.
  - C) His marginal utility per dollar spent on the last sandwich is less than his marginal utility per dollar spent on his last hot dog.
  - D) He is maximizing his utility at point C.

Answer: B

Diff: 3

Topic: Appendix: Indifference Curves

Skill: Conceptual

AACSB: Reflective Thinking

- 16) Refer to Figure 6.16. The highest indifference curve depicted is the one on which point D lies. Why is Jason NOT maximizing his utility at point D?
- A) He cannot afford point D.
  - B) His marginal utility per dollar spent on the last sandwich is greater than his marginal utility per dollar spent on his last hot dog.
  - C) His marginal utility per dollar spent on the last sandwich is less than his marginal utility per dollar spent on his last hot dog.
  - D) He is maximizing his utility at point C.

Answer: A

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Conceptual

AACSB: Reflective Thinking

- 17) We derive the demand curve for X from indifference curves and a budget constraint by changing the
- A) level of income.
  - B) price of X.
  - C) price of Y.
  - D) consumers' preferences.

Answer: B

Diff: 3

Topic: Appendix: Indifference Curves

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

- 1) Assuming the properties of normal indifference curves, a consumer will maximize his utility where his indifference curve is just tangent to his budget constraint.

Answer: TRUE

Diff: 1

Topic: Appendix: Indifference Curves

Skill: Fact

# Chapter 7 The Production Process: The Behavior of Profit-Maximizing Firms

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## 7.1 The Behavior of Profit-Maximizing Firms

### 1 Multiple Choice

- 1) Total revenue minus total cost is equal to
- A) the rate of return.
  - B) marginal revenue.
  - C) profit.
  - D) net cost.

Answer: C

Diff: 1

Topic: Behavior of Profit-Maximizing Firms

Skill: Fact

Refer to the information provided in Figure 7.1 below to answer the following questions.

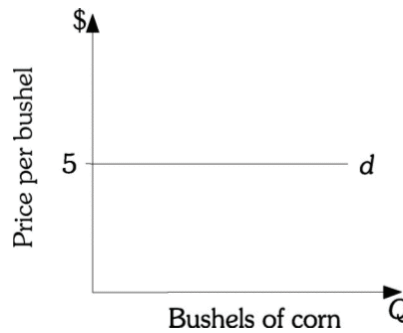


Figure 7.1

- 2) Refer to Figure 7.1. This corn producer produces 100 bushels of corn and sells each bushel at \$5. The cost of producing each bushel is \$2. This corn producer's total revenue is \_\_\_\_\_ and profit is \_\_\_\_\_.

- A) \$200; \$300.
- B) \$300; \$200
- C) \$500; \$200
- D) \$500; \$300

Answer: D

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 3) Refer to Figure 7.1. This corn producer earns a total revenue of \$900. Each bushel of corn is sold for \$5. This corn producer must be selling \_\_\_\_\_ bushels of corn.

- A) 180
- B) 450
- C) 900
- D) 4,500

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

4) Refer to Figure 7.1. A corn producer's profit is \$200 and is producing 100 bushels of corn. Then he must have a cost per unit of \_\_\_\_\_ .

- A) \$1                      B) \$2                      C) \$3                      D) \$4

Answer: C

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

5) The Wax Works sells 400 candles at a price of \$10 per candle. The Wax Works' total costs for producing 400 candles are \$500. The Wax Works' economic profit is

- A) -\$100.                      B) \$3,500.  
C) \$4,500.                      D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

6) The Wax Works sells 400 candles at a price of \$6 per candle. The Wax Works' total costs for producing 400 candles are \$2500. The Wax Works' economic profit is

- A) -\$100.                      B) \$0.                      C) \$2,400.                      D) \$2,500.

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

7) Perfectly competitive firms must make all of the following decisions EXCEPT

- A) how much output to supply.                      B) which production technology to use.  
C) how much of each input to demand.                      D) what price to charge for its output.

Answer: D

Diff: 1

Topic: Behavior of Profit-Maximizing Firms

Skill: Fact

8) Economic costs

- A) include both a normal rate of return on investment and the opportunity cost of each factor of production.  
B) are equal to the direct costs of hiring all factors of production.  
C) are the opportunity cost of each factor of production minus any interest charges paid on borrowed funds.  
D) are equal to total revenue minus accounting profit.

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition



- 9) The Sweet Success Bakery sells 400 cakes at a price of \$10 per cake. Its total economic costs for producing 400 cakes are \$500. The Sweet Success Bakery's economic profits are
- A) \$100.
  - B) \$3,500.
  - C) \$4,500.
  - D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 10) The Oh So Humble Bakery sells 300 muffins at a price of \$1 per muffin. Its explicit costs for producing 300 muffins are \$250. The Oh So Humble Bakery's economic profits are
- A) \$35.
  - B) \$50.
  - C) \$250.
  - D) indeterminate from this information.

Answer: D

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 11) The Oh So Humble Bakery sells 300 muffins at a price of \$1 per muffin. Its explicit costs for producing 300 muffins are \$250. If the bakery is earning a normal rate of return, then implicit costs must be
- A) \$50.
  - B) \$100.
  - C) \$250.
  - D) \$350

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 12) If economic profit is zero, a firm
- A) earns a negative rate of return.
  - B) will leave the industry.
  - C) earns a positive but below normal rate of return.
  - D) earns exactly a normal rate of return.

Answer: D

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

- 13) You own a building that has four possible uses: a cafe, a craft store, a hardware store, and a bookstore. The value of the building in each use is \$2,000; \$3,000; \$4,000; and \$5,000, respectively. You decide to open a hardware store. The opportunity cost of using this building for a hardware store is
- A) \$2,000, the value if the building is used as a cafe.
  - B) \$3,000, the value if the building is used as a craft store.
  - C) \$10,000, the sum of the values if the building is used for a cafe, a craft store, or a bookstore.
  - D) \$5,000, the value if the building is used for a bookstore.

Answer: D

Diff: 3

Topic: Behavior of Profit-Maximizing Firms

Skill: Conceptual

AACSB: Analytic Skills

**Refer to Scenario 7.1 below to answer the questions that follow.**

SCENARIO 7.1: You are the owner and only employee of a company that writes computer software that is used by gamblers to collect sports data. Last year you earned a total revenue of \$90,000. Your costs for equipment, rent, and supplies were \$60,000. To start this business you invested an amount of your own capital that could pay you a return of \$40,000 a year.

- 14) Refer to Scenario 7.1. During the year your economic costs were
- A) \$40,000.
  - B) \$60,000.
  - C) \$100,000.
  - D) \$130,000.

Answer: C

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 15) Refer to Scenario 7.1. A yearly normal rate of return for your computer software firm would be
- A) \$20,000.
  - B) \$40,000.
  - C) \$60,000.
  - D) \$100,000.

Answer: B

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 16) Refer to Scenario 7.1. Your accounting profit last year was
- A) \$10,000.
  - B) \$30,000.
  - C) \$50,000.
  - D) \$60,000.

Answer: B

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 17) Refer to Scenario 7.1. Your economic profit last year was  
A) -\$40,000.                      B) -\$10,000.                      C) \$10,000.                      D) \$30,000.

Answer: B

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

**Refer to the Scenario 7.2 below to answer the questions that follow.**

SCENARIO 7.2: You are the owner and only employee of a company that sets odds for sporting events. Last year you earned a total revenue of \$100,000. Your costs for rent and supplies were \$50,000. To start this business you invested an amount of your own capital that could pay you a return of \$20,000 a year.

- 18) Refer to Scenario 7.2. During the year your economic costs were  
A) \$70,000.                      B) \$60,000.                      C) \$50,000.                      D) \$20,000.

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Scenario 7.2. A yearly normal profit for your company is  
A) \$20,000.                      B) \$40,000.                      C) \$60,000.                      D) \$100,000.

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 20) Refer to Scenario 7.2. Your accounting profit last year was  
A) \$10,000.                      B) \$30,000.                      C) \$50,000.                      D) \$60,000.

Answer: C

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 21) Refer to Scenario 7.2. Your economic profit last year was  
A) -\$40,000.                      B) -\$10,000.                      C) \$10,000.                      D) \$30,000.

Answer: D

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

Refer to Scenario 7.3 below to answer the questions that follow.

SCENARIO 7.3: Upon graduating with an accounting degree, you open your own accounting firm of which you are the sole employee. To start the firm you passed on a job offer with a large accounting firm that offered you a salary of \$60,000 annually. Last year you earned a total revenue of \$100,000. Rent and supplies last year were \$50,000.

- 22) Refer to Scenario 7.3. Your annual economic costs are  
A) \$0.                                      B) \$50,000.                                      C) \$60,000.                                      D) \$110,000.

Answer: D

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 23) Refer to Scenario 7.3. Your annual economic profit is  
A) -\$10,000.                                      B) \$40,000.                                      C) \$50,000.                                      D) \$100,000.

Answer: D

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 24) Refer to Scenario 7.3. Your annual operating profit is  
A) -\$10,000.                                      B) \$40,000.                                      C) \$50,000.                                      D) \$100,000.

Answer: C

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

AACSB: Analytic Skills

- 25) There are 100 dog kennels in Atlanta. An economist studying the pricing behavior of dog kennels tells you that she is limiting her analysis to a time period that does not allow for any new dog kennels to enter the industry or for any established dog kennels to leave the industry. The time period this economist referred to is the  
A) market period.                                      B) industry run.  
C) long run.                                      D) short run.

Answer: D

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Conceptual

- 26) In the long run,  
A) a firm can shut down, but it cannot exit the industry.  
B) there are no fixed factors of production.  
C) a firm can vary all inputs, but it cannot change the mix of inputs it uses.  
D) all firms must make economic profits.

Answer: B

Diff: 3

Topic: Behavior of Profit-Maximizing Firms

Skill: Conceptual

- 27) In the short run, a firm
- A) has at least one fixed factor of production.
  - B) can enter an industry where positive profits are being earned.
  - C) can exit an industry and all of its factors of production are variable..
  - D) both (B) and (C) are correct.

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Conceptual

## 2 True/False

- 1) If Harold runs a grocery store and is making a normal rate of return, we can infer that he is also making an economic profit.

Answer: FALSE

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

- 2) If a firm makes an economic profit, it is making at least a normal rate of return.

Answer: FALSE

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

- 3) In the short run, firms can enter an industry but not exit an industry.

Answer: FALSE

Diff: 1

Topic: Behavior of Profit-Maximizing Firms

Skill: Fact

- 4) For economic analysis, the short run is considered less than one year.

Answer: FALSE

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

- 5) For economic analysis, the long run is any period in which all inputs are variable (regardless of the length of time involved).

Answer: TRUE

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

- 6) Deciding to invest in capital is a short-run decision.

Answer: FALSE

Diff: 1

Topic: Behavior of Profit-Maximizing Firms

Skill: Fact

## 7.2 The Production Process

### 1 Multiple Choice

- 1) To determine the optimal method of production for a good or service, a perfectly competitive firm needs to know all of the following EXCEPT:
- A) the market price of output.
  - B) the technologies of production that are available to the firm.
  - C) the prices of inputs.
  - D) the prices charged by its rivals.

Answer: D

Diff: 3

Topic: The Production Process

Skill: Conceptual

- 2) The optimal method of production is the one that
- A) maximizes output regardless of cost.
  - B) maximizes inputs.
  - C) minimizes cost.
  - D) minimizes the normal rate of return.

Answer: C

Diff: 3

Topic: The Production Process

Skill: Conceptual

- 3) An act of production, as economists use the term, is demonstrated by which of the following?
- A) A worker placing money in a pension fund
  - B) A local nonprofessional theater company performing a play
  - C) An individual buying municipal bonds to avoid taxes
  - D) A firm buys a pre-existing building in order to expand its operations.

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

Use the information provided in Table 7.1 below to answer the questions that follow.

**Table 7.1**  
**Inputs Required to Produce a Product Using Alternative Technologies**

Technology	Units of Capital	Number of Employees
A	4	18
B	6	12
C	8	8
D	12	6

- 4) Refer to Table 7.1 above. Which technology is the most labor intensive?  
A) A                                      B) B                                      C) C                                      D) D

Answer: A

Diff: 1

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 5) Refer to Table 7.1 above. Which technology is the most capital intensive?  
A) A                                      B) B                                      C) C                                      D) D

Answer: D

Diff: 1

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 6) Refer to Table 7.1. If the hourly wage rate is \$7 and the hourly price of capital is \$10, which production technology should be selected?  
A) A                                      B) B                                      C) C                                      D) D

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Table 7.1. If the hourly wage rate is \$10 and the hourly price of capital is \$25, which production technology should be selected?  
A) A                                      B) B                                      C) C                                      D) D

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

Use the information provided in Table 7.2 below to answer the questions that follow.

**Table 7.2**  
**Inputs Required to Produce a Product Using Alternative Technologies**

Technology	Units of Capital	Number of Employees
A	16	8
B	12	12
C	8	20
D	6	24

8) Refer to Table 7.2. Which technology is the most capital intensive?

- A) A                      B) B                      C) C                      D) D

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

9) Refer to Table 7.2. If the hourly wage rate is \$10 and the hourly price of capital is \$50, which production technology should be selected?

- A) A                      B) B                      C) C                      D) D

Answer: D

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

10) Refer to Table 7.2. If the hourly price of labor is \$10 and the hourly price of capital is \$1, which production technology should be selected?

- A) A                      B) B                      C) C                      D) D

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

11) Refer to Table 7.2. Which technology is the most labor intensive?

- A) A                      B) B                      C) C                      D) D

Answer: D

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills



Refer to the information provided in Figure 7.2 below to answer the questions that follow.

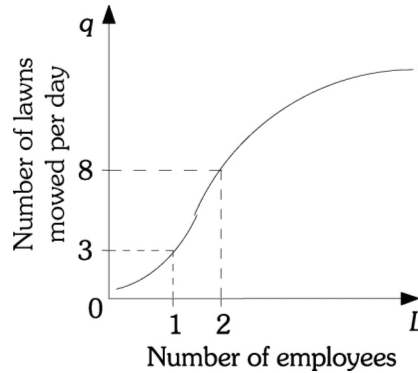


Figure 7.2

- 12) Refer to Figure 7.2. The marginal product of the second worker is \_\_\_\_\_ lawns moved.  
 A) 3                                      B) 5                                      C) 8                                      D) 11

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 13) Refer to Figure 7.2. The average product of the second worker is \_\_\_\_\_ lawns moved.  
 A) 4                                      B) 5                                      C) 5.5                                      D) 11

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

Refer to Scenario 7.4 below to answer the questions that follow.

SCENARIO 7.4: A lawn service company has the following production possibilities. With one, two, three, and four workers, the company can mow 4, 9, 12, and 14 lawns per day, respectively.

- 14) Refer to Scenario 4. The marginal product of the second worker is \_\_\_\_\_ lawns moved.  
 A) 3                                      B) 4                                      C) 5                                      D) 9

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 15) Refer to Scenario 7.4. The marginal product of the third worker is \_\_\_\_\_ lawns moved.  
 A) 2                                      B) 3                                      C) 4                                      D) 12

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 16) Refer to Scenario 7.4. The marginal product of the fourth worker is  
A) 2                                      B) 3                                      C) 12                                      D) 14

Answer: A

Diff: 2

Topic: *The Production Process*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 17) Refer to Scenario 7.4. Diminishing returns to labor set in with the \_\_\_\_\_ worker.  
A) first                                      B) second                                      C) third                                      D) fourth

Answer: C

Diff: 2

Topic: *The Production Process*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 18) Refer to Scenario 7.4. The average product of labor with three workers is  
A) 3                                      B) 3.5                                      C) 4                                      D) 12

Answer: C

Diff: 2

Topic: *The Production Process*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 19) Refer to Scenario 7.4. The average product of labor with four workers is  
A) 3                                      B) 3.5                                      C) 4                                      D) 14

Answer: B

Diff: 2

Topic: *The Production Process*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Figure 7.3 below to answer the questions that follow.

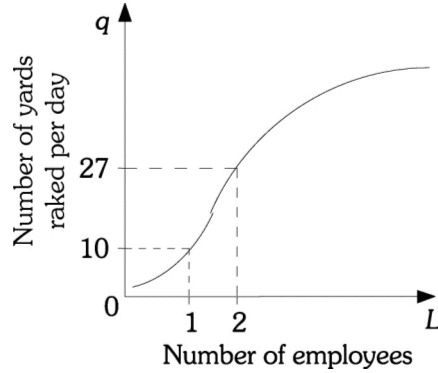


Figure 7.3

- 20) Refer to Figure 7.3. The marginal product of the second worker is \_\_\_\_\_ yards raked.  
 A) 2                                      B) 13.5                                      C) 17                                      D) 27

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 21) Refer to Figure 7.3. The average product of the second worker is \_\_\_\_\_ yards raked.  
 A) 4                                      B) 13.5                                      C) 14                                      D) 27

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 22) When Burger Barn hires one worker, 20 customers can be served in an hour. When Burger Barn hires two workers, 50 customers can be served in an hour. The marginal product of the second worker is \_\_\_\_\_ customers served per hour.  
 A) 15                                      B) 30                                      C) 40                                      D) 67.5

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 23) The marginal products of the first, second, and third workers are 20, 12, and 8, respectively. If four workers can produce 45 units of output, then the marginal product of the fourth worker is \_\_\_\_\_.  
 A) 4                                      B) 5                                      C) 40                                      D) 45

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

24) At the Pampered Pet Salon the marginal products of the first, second, and third workers are 20, 16, and 10 dogs washed, respectively. The total product (number of dogs washed) of the two worker is

- A) 16.                                      B) 20.                                      C) 36.                                      D) 46.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

25) At the Pampered Pet Salon the marginal products of the first, second, and third workers are 20, 16, and 10 dogs washed, respectively. The total product (number of dogs washed) of the three worker is

- A) 15.33.                                      B) 30.                                      C) 46.                                      D) 138.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

26) At the Larson Bakery the marginal products of the first, second, and third salesclerks are 20, 17, and 11 customers served, respectively. The total product (number of customers served) of the two salesclerks is

- A) 3.    B) 17.    C) 37.    D) 48.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

27) At the Larson Bakery the marginal products of the first, second, and third salesclerks are 20, 17, and 11 customers served, respectively. The total product (number of customers served) of the three salesclerks is

- A) 11.    B) 40.    C) 46.    D) 48.

Answer: D

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 7.4 below to answer the questions that follow.

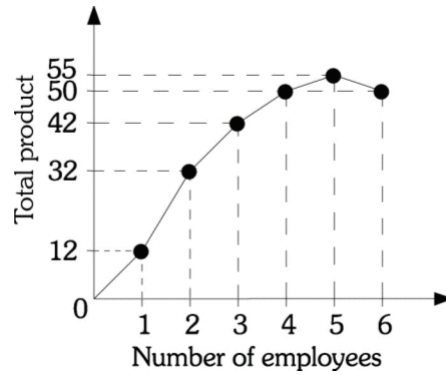


Figure 7.4

28) Refer to Figure 7.4. The marginal product of the second worker is

- A) 10.                      B) 16.                      C) 20.                      D) 32.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

29) Refer to Figure 7.4. The marginal product of the fourth worker is

- A) 8.                      B) 12.5.                      C) 48.                      D) 92.

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

30) Refer to Figure 7.4. The marginal product of the sixth worker is

- A) -50.                      B) -5.                      C) 5.                      D) 8.33.

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

31) Refer to Figure 7.4. The average product of the third worker is

- A) 10.                      B) 14.                      C) 30.                      D) 126.

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 32) Refer to Figure 7.4. The average product of the fifth worker is  
A) 1.                                      B) 2.5.                                      C) 5.                                      D) 11.

Answer: D

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 33) Refer to Figure 7.4. The average product of the sixth worker is  
A) -8.33.                                      B) -5.                                      C) 5.                                      D) 8.33.

Answer: D

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 34) Refer to Figure 7.4. Diminishing marginal returns begin when the \_\_\_\_\_ worker is hired.  
A) first                                      B) second                                      C) third                                      D) fifth

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 35) If diminishing marginal returns have already set in for The Picture Perfect Framing Store and the marginal product of the fifth picture framer is 20, then the marginal product of the sixth picture framer must be  
A) negative.                                      B) zero.  
C) less than 20.                                      D) greater than 20.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Definition

- 36) If labor is a variable input in production, the law of diminishing marginal returns implies that in the short run  
A) labor's marginal product is constant.  
B) labor's marginal product decreases after a certain point.  
C) total product is negative.  
D) total product is negative after a certain point has been reached.

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 7.5 below to answer the questions that follow.

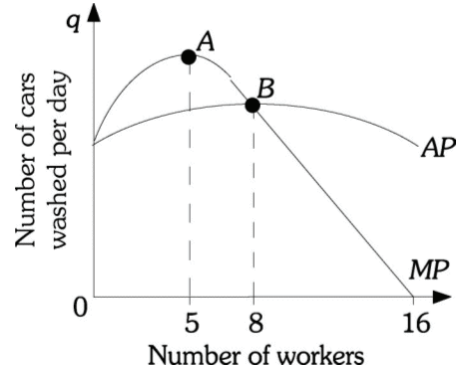


Figure 7.5

- 37) Refer to Figure 7.5. Diminishing marginal returns set in after the \_\_\_\_\_ worker is hired.  
 A) first                      B) fifth                      C) eighth                      D) sixteenth

Answer: B

Diff: 2

Topic: The Production Process

Skill: Definition

- 38) If the marginal product of labor is less than the average product of labor, then the  
 A) marginal product must be increasing.                      B) average product must be decreasing.  
 C) marginal product must be decreasing.                      D) Both B and C

Answer: D

Diff: 2

Topic: The Production Process

Skill: Definition

- 39) The version of the law of diminishing returns that applies to production  
 A) implies that as we add more workers our output decreases.  
 B) applies only in the short run.  
 C) is true only when all inputs are variable.  
 D) applies in the short and long run.

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in the table below to answer the following question.

L	0	1	2	3	4	5
Q	0	10	20	30	40	50

- 40) Refer to the table above. Suppose output varies, ceteris paribus, with labor input in the following manner displayed above. After how many units of labor do diminishing returns set in?
- A) 3  
B) 4  
C) 5  
D) They do not set in.

Answer: D

Diff: 1

Topic: The Production Process

Skill: Fact

- 41) When total product is maximized, marginal product
- A) and average product are zero.  
B) is positive but average product is zero.  
C) is zero but average product is positive.  
D) and average product are positive.

Answer: C

Diff: 1

Topic: The Production Process

Skill: Fact

- 42) At the point where total product is maximized, marginal product
- A) is zero, but average product is still positive.  
B) and average product are negative.  
C) is positive, but average product is negative.  
D) and average product are positive.

Answer: A

Diff: 1

Topic: The Production Process

Skill: Fact

- 43) If marginal product is greater than average product, then
- A) average product must be decreasing.  
B) marginal product must be decreasing.  
C) marginal product must be increasing.  
D) marginal product could either be increasing or decreasing.

Answer: D

Diff: 1

Topic: The Production Process

Skill: Fact



- 44) If we assume that labor is the only variable input, the slope of the total product curve in the short run
- A) has no economic significance.
  - B) measures the average product of labor.
  - C) measures the marginal product of labor.
  - D) measures both the marginal and average product at all points on the total product curve.

Answer: C

Diff: 1

Topic: *The Production Process*

Skill: *Fact*

- 45) You own a business that answers telephone calls for physicians after their offices close. You have an incentive to substitute capital for labor if the
- A) price of capital increases.
  - B) price of labor decreases.
  - C) price of capital decreases.
  - D) marginal product of labor increases.

Answer: C

Diff: 2

Topic: *The Production Process*

Skill: *Definition*

- 46) Firms have an incentive to substitute labor for capital as the
- A) price of capital increases.
  - B) price of capital decreases.
  - C) price of labor increases.
  - D) marginal product of labor decreases.

Answer: A

Diff: 1

Topic: *The Production Process*

Skill: *Fact*

Refer to the information provided in Figure 7.6 below to answer the questions that follow.

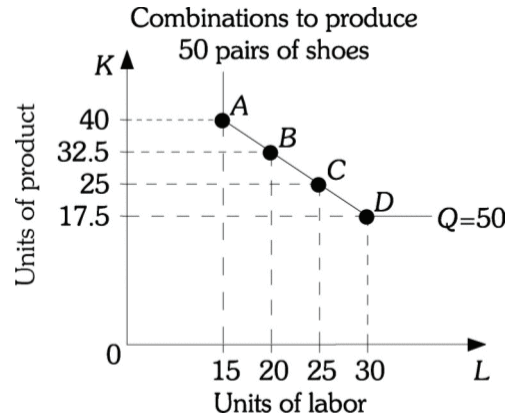


Figure 7.6

- 47) Refer to Figure 7.6. The shoe manufacturer currently produces 50 units of output. If this shoe manufacturer increases labor from 15 to 20, the marginal product of the 20th worker
- A) is zero, as the total number of shoes produced remains at 50.
  - B) is 8.5, as capital can be reduced by 8.5 units when the 20th worker is hired.
  - C) cannot be determined because output remains constant.
  - D) cannot be determined because both capital and labor have been increased.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

- 48) Refer to Figure 7.6. If the price of capital is \$10 and the price of labor is \$20, the optimal product technique is
- A) A.
  - B) B.
  - C) C.
  - D) D.

Answer: A

Diff: 3

Topic: The Production Process

Skill: Conceptual

AACSB: Analytic Skills

- 49) Assume that the price of labor and capital have remained the same, but that the average educational level of workers has increased and therefore the productivity of labor has increased. This would lead a firm to
- A) use a more capital-intensive production technology.
  - B) use a more labor-intensive technology.
  - C) not change its production technology, but to produce fewer units of output.
  - D) use only labor to produce the product.

Answer: B

Diff: 1

Topic: The Production Process

Skill: Fact

- 50) Assume that capital and labor are complementary inputs. If the firm increases the amount of capital it employs, this would
- A) cause the firm to move down along the MP schedule for labor.
  - B) cause the firm to move up along its MP schedule for labor.
  - C) shift the firm's MP schedule for labor to the left.
  - D) shift the firm's MP schedule for labor to the right.

Answer: D

Diff: 2

Topic: The Production Process

Skill: Definition

- 51) The cost minimizing equilibrium condition can be written as
- A)  $MPL = MPK$ .
  - B)  $PL = PK$ .
  - C)  $(MPL)(PL) = (MPK)(PK)$ .
  - D)  $MPL/PL = MPK/PK$ .

Answer: D

Diff: 3

Topic: The Production Process

Skill: Conceptual

- 52) A firm is operating such that the marginal product of labor is 10 and the marginal product of capital is 20. The firm is minimizing its costs only if
- A) the wage is half the rental rate.
  - B) the rental rate is half the wage.
  - C) since capital is more productive than labor, the firm must be minimizing cost.
  - D) Given this information the firm can't be minimizing cost under any circumstances.

Answer: A

Diff: 3

Topic: The Production Process

Skill: Conceptual

- 53) A firm produces 5 units of output from the last dollar it spends on labor and 10 units from the last dollar spent on capital. The firm should
- A) employ more labor and less capital.
  - B) employ more capital and less labor.
  - C) employ more capital and labor.
  - D) employ less capital and labor.

Answer: B

Diff: 2

Topic: The Production Process

Skill: Conceptual

- 54) If the product derived from the last dollar spent on labor is greater than the product derived from the last dollar spent on capital, then the firm
- A) is minimizing costs.
  - B) should use more labor and less capital to minimize costs.
  - C) should use less labor and more capital to minimize costs.
  - D) should increase the price paid to labor and decrease the price paid to capital to minimize costs.

Answer: B

Diff: 2

Topic: The Production Process

Skill: Conceptual

AACSB: Reflective Thinking

- 55) If the product derived from the last dollar spent on labor is less than the product derived from the last dollar spent on capital, then the firm
- A) is minimizing costs.
  - B) should use more labor and less capital to minimize costs.
  - C) should use less labor and more capital to minimize costs.
  - D) should increase the price paid to labor and decrease the price paid to capital to minimize costs.

Answer: C

Diff: 3

Topic: *The Production Process*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 56) If Microsoft is earning a rate of return greater than the return necessary for the business to continue operations in the long run, then
- A) total costs exceed total revenue.
  - B) total costs exceed a normal rate of return.
  - C) the normal rate of return is zero.
  - D) the firm is earning an economic profit.

Answer: D

Diff: 1

Topic: *The Production Process*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 57) If Pets.com is earning a rate of return less than necessary for the business to continue operations, then
- A) total revenue exceeds economic costs.
  - B) economic costs exceed total revenue.
  - C) normal profit is zero.
  - D) economic profit is zero.

Answer: B

Diff: 1

Topic: *The Production Process*

Skill: *Fact*

- 58) You are certain that a normal rate of return is 18% for the computer industry. What do you expect for a normal rate of return in the computer software industry, which is considered to be much riskier than the computer industry?
- A) 18%
  - B) Less than 18%
  - C) Above 18%
  - D) The rate on government bonds

Answer: C

Diff: 1

Topic: *The Production Process*

Skill: *Fact*

- 59) The formula for the marginal product of labor is
- A)  $L/q$ .
  - B)  $(\Delta L)(\Delta q)$ .
  - C)  $q/L$ .
  - D)  $\Delta q/\Delta L$ .

Answer: D

Diff: 2

Topic: *The Production Process*

Skill: *Analytic*

AACSB: *Analytic Skills*

60) Assume the total product of two workers is 100 and the total product of three workers is 120. The average product of the third worker is \_\_\_\_\_, and the marginal product of the third worker is \_\_\_\_\_.

- A) 40; 20                      B) 20; 100                      C) 13.33; 6.67                      D) 120; 100

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

61) Assume the total product of two workers is 130 and the total product of three workers is 150. The average product of the third worker is \_\_\_\_\_, and the marginal product of the third worker is \_\_\_\_\_.

- A) 40; 10                      B) 50; 20                      C) 13.33; 6.67                      D) 120; 100

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

62) Assume the total product of two workers is 80 and the total product of three workers is 90. The average product of the third worker is \_\_\_\_\_, and the marginal product of the third worker is \_\_\_\_\_.

- A) 10; 45                      B) 30; 10                      C) 10; 13.33                      D) 160; 270

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

63) Assume the total product of three workers is 120 and the total product of four workers is 160. The average product of the third worker is \_\_\_\_\_, and the marginal product of the fourth worker is \_\_\_\_\_.

- A) 10; 40                      B) 30; 10                      C) 40; 40                      D) 160; 40

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

AACSB: Analytic Skills

64) When Burning Bob's Salsa House hires one worker, 30 customers can be served in an hour. When Burning Bob's Salsa House hires two workers, 50 customers can be served in an hour. The marginal product of the second worker is \_\_\_\_\_ customers served per hour.

- A) 20                      B) 30                      C) 50                      D) 67.5

Answer: A

Diff: 1

Topic: The Production Process

Skill: Fact

65) What is the formula for the average product of labor?

- A)  $\Delta q/\Delta L$                       B)  $\Delta L/\Delta q$                       C)  $q/L$                       D)  $L/q$

Answer: C

Diff: 2

Topic: *The Production Process*

Skill: *Definition*

66) If the marginal product of labor equals the average product of labor, then the

- A) average product is maximized.                      B) marginal product is maximized.  
C) marginal product is still increasing.                      D) average product is still increasing.

Answer: A

Diff: 3

Topic: *The Production Process*

Skill: *Conceptual*

67) As a firm's expenditures for capital and labor increase, its isocost line

- A) shifts out parallel to the original isocost line.  
B) shifts in parallel to the original isocost line.  
C) rotates outward on the Y-intercept.  
D) rotates outward on the X-intercept.

Answer: A

Diff: 2

Topic: *The Production Process*

Skill: *Analytic*

AACSB: *Analytic Skills*

68) As a firm's expenditures for capital and labor decrease, its isocost line

- A) shifts out parallel to the original isocost line.  
B) shifts in parallel to the original isocost line.  
C) rotates outward on the Y-intercept.  
D) rotates outward on the X-intercept.

Answer: B

Diff: 2

Topic: *The Production Process*

Skill: *Analytic*

AACSB: *Analytic Skills*

69) Related to the *Economics in Practice* on page 144: All of the following are elements of the production function at UPS EXCEPT:

- A) software that allows UPS to instantly locate any package that enters its system  
B) a distribution center with miles of high-speed conveyors  
C) increased expectations of UPS customers with respect to delivery options  
D) a fleet of airplanes

Answer: C

Diff: 3

Topic: *The Production Process: Economics in Practice*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

- 1) If the first worker produces five custom picture frames a day, and the second worker produces five additional custom picture frames a day, it is clear that diminishing marginal returns have not yet set in.

Answer: TRUE

Diff: 1

Topic: *The Production Process*

Skill: *Fact*

- 2) One worker produces 5 rocking chairs. To produce 10 rocking chairs it will be necessary to hire more than two workers, if diminishing returns have set in.

Answer: TRUE

Diff: 1

Topic: *The Production Process*

Skill: *Fact*

- 3) A production function shows the least amount that a firm will produce given the amount of labor input.

Answer: FALSE

Diff: 1

Topic: *The Production Process*

Skill: *Fact*

- 4) If the marginal product of labor is less than the average product of labor, then the average product of labor is increasing.

Answer: FALSE

Diff: 2

Topic: *The Production Process*

Skill: *Conceptual*

## 7.3 Choice of Technology

### 1 Multiple Choice

- 1) Costs of production are determined
- A) only by the technologies that are available.
  - B) only by the input prices that are available.
  - C) by the technologies that are available and by input prices.
  - D) by the technologies that are available and by the demand for the output.

Answer: C

Diff: 1

Topic: *Choice of Technology*

Skill: *Fact*

- 2) Related to the *Economics in Practice* on page 146: Which of the following is the best analysis of the question of how fast delivery truck drivers should drive in order to reduce costs?
- A) They should drive as quickly as possible in order to make more deliveries per day.
  - B) They should drive at the most fuel-efficient rate in order to reduce fuel consumption costs.
  - C) They should balance the concerns of speed and fuel efficiency and drive at a speed that minimizes total expenses.
  - D) They should drive as close to the legal speed limit as possible.

Answer: C

Diff: 3

Topic: *Choice of Technology: Economics in Practice*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 3) Related to the *Economics in Practice* on page 146: Which of the following would be most likely to make it more efficient for delivery trucks to drive more quickly?
- A) an increase in the hourly wage of truck drivers and a decrease in the cost of gasoline
  - B) an increase in the hourly wage of truck drivers and an increase in the cost of gasoline
  - C) a decrease in the hourly wage of truck drivers and a decrease in the cost of gasoline
  - D) a decrease in the hourly wage of truck drivers and an increase in the cost of gasoline

Answer: A

Diff: 3

Topic: *Choice of Technology: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 7.4 Appendix

### 1 Multiple Choice

- 1) A graph showing all the combinations of capital and labor that can be used to produce a given amount of output is a(n)
- A) indifference curve.
  - B) isoquant.
  - C) isocost line.
  - D) production function.

Answer: B

Diff: 1

Topic: *Appendix: Isoquants and Isocosts*

Skill: *Fact*



Use the information provided in the Figure 7.7 below to answer the questions that follow.

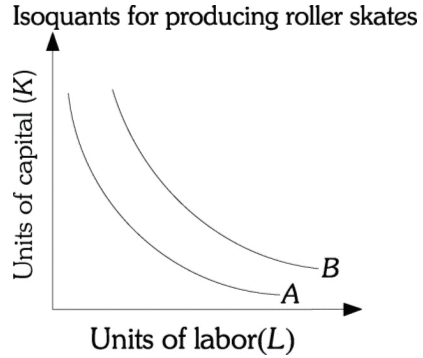


Figure 7.7

- 2) Refer to Figure 7.7 above. If Roller Skates Unlimited moves from isoquant A to isoquant B, the number of roller skates produced
- A) decreases.
  - B) increases.
  - C) remains constant, but Roller Skates Unlimited uses more capital and more labor.
  - D) remains constant, but input prices have risen.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

Use the information provided in the Figure 7.8 below to answer the questions that follow.

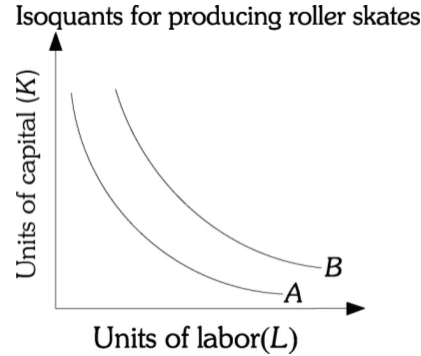


Figure 7.8

- 3) Refer to Figure 7.8 above. If Roller Skates Unlimited moves from isoquant B to isoquant A, the number of roller skates produced
- A) decreases.
  - B) increases.
  - C) remains constant, but Roller Skates Unlimited uses more capital and more labor.
  - D) remains constant, but input prices have risen.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Definition

- 4) Isoquants are downward sloping because
- A) as more units of an input are used to produce a product, total cost increases.
  - B) as more units of an input are used to produce a product, the firm's marginal productivity increases.
  - C) if more of one input is used, then less of the other input must be used to keep output constant.
  - D) Both B and C

Answer: C

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 5) A graph showing all the combinations of capital and labor available for a given total cost is the
- A) isocost line.
  - B) isoquant.
  - C) budget constraint.
  - D) expenditure set.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 7.9 below to answer the questions that follow.

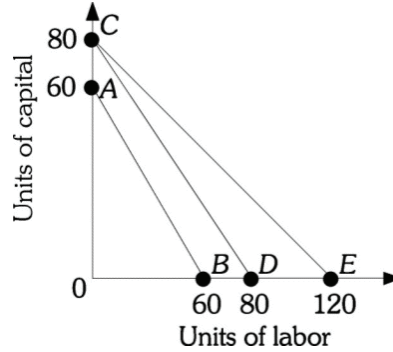


Figure 7.9

- 6) Refer to Figure 7.9. If the price of capital is \$20, then along isocost line AB total cost is
- A) \$300.
  - B) \$1200.
  - C) \$2400.
  - D) indeterminate from this information, as the price of labor is not given.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Figure 7.9. The firm is currently along isocost CD. If the price of capital is \$10, then the price of labor is
- A) \$10.
  - B) \$20.
  - C) \$80.
  - D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Figure 7.9. The firm is currently along isocost CE. If the price of capital is \$12, then the price of labor is
- A) \$8.
  - B) \$12.
  - C) \$80.
  - D) \$120.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 7.9. The firm's isocost line would shift from CD to CE if
- A) the price of capital fell.
  - B) the firm's total expenditure on inputs increased.
  - C) the price of labor fell.
  - D) either the price of labor fell or the firm's total expenditure on inputs increased.

Answer: C

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Figure 7.9. The slope of isocost AB is
- A) -1.
  - B) 0.
  - C) 1.
  - D) indeterminate from this information, as the prices of capital and labor are not given.

Answer: A

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 11) Refer to Figure 7.9. The slope of isocost CD is
- A) -1.
  - B)  $-2/3$ .
  - C) 0.
  - D) indeterminate from this information, as the prices of capital and labor are not given.

Answer: A

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 12) Refer to Figure 7.9. The slope of isocost CE is
- A) -1.
  - B)  $-2/3$ .
  - C) 0.
  - D) indeterminate from this information, as the prices of capital and labor are not given.

Answer: B

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 13) Refer to Figure 7.9 The firm's isocost line could shift from CD to AB if
- A) the price of capital increased.
  - B) the firm's total expenditures increased by 25%.
  - C) the price of capital and labor each increased by 25%.
  - D) the firm's total expenditures decreased by 25% or the price of capital and labor each increased by 33%.

Answer: D

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 14) Refer to Figure 7.9 The firm's isocost line could shift from  $AB$  to  $CD$  if
- A) the price of capital decreased.
  - B) the firm's total expenditures decreased by 33%.
  - C) the price of capital and labor each decreased by 25%.
  - D) the firm's total expenditures increased by 33% or the price of capital and labor each decreased by 25%.

Answer: D

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 15) Refer to Figure 7.9. The general formula for the slope of any of the isocost lines is
- A)  $-PK/PL$ .
  - B)  $-PL/PK$ .
  - C)  $TC/PL$ .
  - D)  $TC/PK$ .

Answer: B

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 16) Refer to Figure 7.9. If the price of capital is \$40, then along isocost line  $AB$  total cost is
- A) \$300.
  - B) \$1,200.
  - C) \$2,400.
  - D) indeterminate from this information, as the price of labor is not given.

Answer: C

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

Refer to the information provided in Figure 7.10 below to answer the questions that follow.

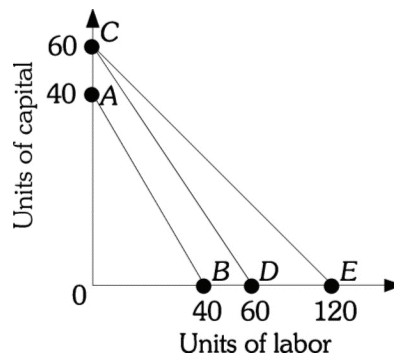


Figure 7.10

- 17) Refer to Figure 7.10. The firm is currently along isocost  $CD$ . If the price of capital is \$30, then the price of labor is
- A) \$4.
  - B) \$30.
  - C) \$180.
  - D) indeterminate from this information.

Answer: B

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 18) Refer to Figure 7.10. The firm's isocost line would shift from CE to CD if
- A) the price of capital rises.
  - B) the firm's total expenditure on inputs decreased.
  - C) the price of labor rises.
  - D) either the price of labor fell or the firm's total expenditure on inputs decreased.

Answer: C

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

- 19) Refer to Figure 7.10. The slope of isocost AB is
- A) -1.
  - B) 0.
  - C) 1.
  - D) indeterminate from this information, as the prices of capital and labor are not given.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 20) Refer to Figure 7.10. The slope of isocost CE is
- A)  $-1/2$ .
  - B) -1.
  - C) -2.
  - D) indeterminate from this information, as the prices of capital and labor are not given.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 21) Refer to Figure 7.10. The firm's isocost line could shift from AB to CD if
- A) the price of capital decreased.
  - B) the firm's total expenditures increased by 50%.
  - C) the price of capital and labor each decreased by 50%.
  - D) Either B or C

Answer: D

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 7.11 below to answer the questions that follow.

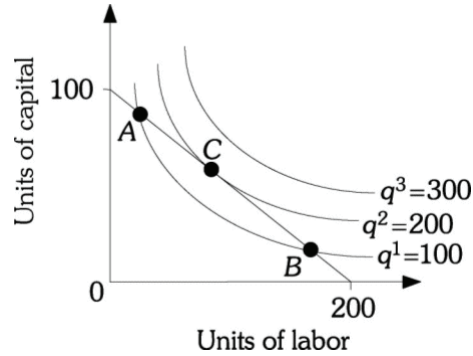


Figure 7.11

- 22) Refer to Figure 7.11. If this firm's cost of capital is \$20 per unit and its cost of labor is \$10 per unit, the isocost line represents a total cost of

A) \$2,000.                      B) \$3,000.                      C) \$4,000.                      D) \$8,000.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 23) Refer to Figure 7.11. The slope of the isocost line is

A) -2.                                      B) -1/2.                                      C) 1/2.                                      D) 2.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 24) Refer to Figure 7.11. At Point C the absolute value of the slope of  $q_2 = 200$  is

A) less than 2.                                      B) exactly equal to 2.  
C) greater than 2.                                      D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 25) Refer to Figure 7.11. At Point C the slope of  $q_2 = 200$  is

A) -2.                                      B) -1/2.  
C) -1.                                      D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 26) Refer to Figure 7.11. If the firm's level of total cost is represented by the isocost line given, the firm's optimal combination of capital and labor is given by Point  
A) A. B) B.  
C) C. D) 50 units of capital and 50 of labor.

Answer: C

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 27) Refer to Figure 7.11. The firm's level of total cost is represented by the isocost line given. At the optimal combination of capital and labor, the firm produces \_\_\_\_\_ units of output.  
A) 100. B) 200.  
C) 300. D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 7.12 below to answer the questions that follow.

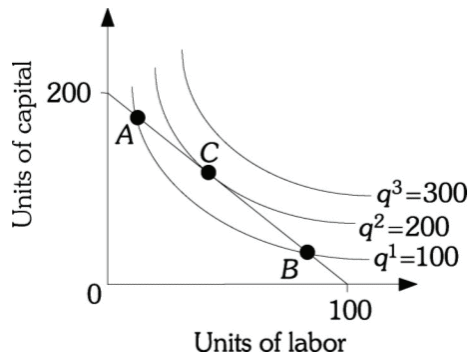


Figure 7.12

- 28) Refer to Figure 7.12. If the firm's cost of capital is \$30 per unit and its cost of labor is \$60 per unit, the isocost line represents a total cost of  
A) \$2,000. B) \$3,000. C) \$6,000. D) \$8,000.

Answer: C

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills

- 29) Refer to Figure 7.12. The slope of the isocost line is  
A) -2. B) -1/2. C) 1/2. D) 2.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

AACSB: Analytic Skills



- 30) Refer to Figure 7.12. At Point C the slope of isoquant  $q_2 = 200$  is
- A) -2.
  - B)  $-1/2$ .
  - C) -1.
  - D) indeterminate from this information.

Answer: A

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 31) Refer to Figure 7.12. If the firm's level of total cost is represented by the isocost line given, the firm's optimal combination of capital and labor is given by Point
- A) A.
  - B) B.
  - C) C.
  - D) 50 units of capital and 50 of labor.

Answer: C

Diff: 3

Topic: Appendix: Isoquants and Isocosts

Skill: Conceptual

- 32) The least costly way to produce any given level of output is indicated by
- A) the point of intersection between the isoquant corresponding to that level of output and the Y-axis.
  - B) the point of intersection between the isoquant corresponding to that level of output and the X-axis.
  - C) the point of tangency between an isocost line and the isoquant corresponding to that level of output.
  - D) the isocost line corresponding to that level of output.

Answer: C

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 33) The point of tangency between an isocost line and an isoquant is necessarily
- A) the profit-maximizing combination of inputs that should be hired to produce that output level.
  - B) the least costly combination of inputs that can be hired to produce the output level.
  - C) both the profit-maximizing and least costly combination of inputs that can be used to produce the output level.
  - D) the minimum amount of output that can be attained for that level of expenditure.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 34) The total cost curve for a firm can be derived from isoquants and isocost lines by
- A) varying the prices of capital and labor and keeping total expenditure constant.
  - B) varying production technologies, but keeping input prices and expenditure levels constant.
  - C) varying total expenditures while keeping input prices and production technology constant.
  - D) varying the price of either capital or labor while keeping total expenditures and production technology constant.

Answer: C

Diff: 3

Topic: Appendix: Isoquants and Isocosts

Skill: Conceptual

AACSB: Reflective Thinking

- 35) The slope of the isoquant is
- A)  $-MP_L/MP_K$ .
  - B) the marginal rate of technical substitution.
  - C) negative.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Definition

# Chapter 8 Short-Run Costs and Output Decisions

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## 8.1 Costs in the Short Run

### 1 Multiple Choice

- 1) In the short run
- A) existing firms do NOT face limits imposed by a fixed input.
  - B) all firms have costs that they must bear regardless of their output.
  - C) new firms can enter an industry.
  - D) existing firms can exit an industry.

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 2) Which statement is TRUE? Fixed costs
- A) do NOT exist in the long run.
  - B) depend on the firm's level of output.
  - C) are zero if the firm is producing nothing.
  - D) are the difference between total costs and average variable costs.

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 3) Which statement is NOT true? Variable costs
- A) are equal to total costs in the long run.
  - B) are zero if output is zero.
  - C) are equal to the difference between total cost and total fixed cost.
  - D) remain constant as output goes up.

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 4) Economists usually assume that \_\_\_\_\_ is a fixed input in the \_\_\_\_\_ run.
- A) labor; short
  - B) capital; short
  - C) labor; long
  - D) capital; long

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 5) Economists usually assume that labor is \_\_\_\_\_ input in the \_\_\_\_\_ run.
- A) a fixed; short
  - B) a fixed; long
  - C) a variable; short
  - D) part fixed and part variable; long

Answer: C

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

6) The formula for total fixed cost is

A)  $TFC = TC + TVC$ .

C)  $TFC = TC/TVC$ .

B)  $TFC = TVC - TC$ .

D)  $TFC = TC - TVC$ .

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

7) Total cost is calculated as

A) the sum of total fixed cost and total variable cost.

B) the product of average total cost and price.

C) the sum of all the firm's explicit costs.

D) the sum of average fixed cost and average variable cost.

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

8) The Lawn Ranger, a landscaping company, has total costs of \$4,000 and total variable costs of \$1,000. The Lawn Ranger's total fixed costs are

A) \$0.

B) \$3,000.

C) \$5,000.

D) indeterminate because the firm's output level is not known.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

9) The Lawn Ranger, a landscaping company, has total costs of \$5,000 and total fixed costs of \$3,000. The Lawn Ranger's total variable costs are

A) \$2000.

B) \$3,000.

C) \$5,000.

D) indeterminate because the firm's output level is not known.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 10) The Farley Farm, a dairy company, has total costs of \$15,000 and total variable costs of \$2,000. The Farley Farm's total fixed costs are
- A) \$0.
  - B) \$13,000.
  - C) \$17,000.
  - D) indeterminate because the firm's output level is not known.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 11) Wilbur's Widgets, a widget company, produces 100 widgets. Its average fixed cost is \$5 and its total variable cost is \$300. What is the total cost of producing 100 widgets?
- A) \$300.
  - B) \$305.
  - C) \$500.
  - D) \$800.

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 12) Amy spends \$5,000 on remodeling a storefront that she then opens as a take-out deli. Business has not been very successful, and she needs an additional \$1,000 to keep the deli open. Which of the following is TRUE?
- A) The \$5,000 Amy spent on remodeling represents a part of the total variable cost of her business.
  - B) The \$5,000 Amy spent is a fixed cost of her business.
  - C) The \$1,000 represents her marginal costs of production.
  - D) The \$1,000 Amy needs to keep the deli open represents her total fixed costs.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 13) Dana spends \$10,000 on remodeling a storefront that she then opens as a shoe store. The business has not been very successful, and she needs an additional \$3,000 to keep the shoe store open. Which of the following is TRUE?
- A) The \$10,000 Dana spent on remodeling represents a part of the total variable cost of her business.
  - B) The \$3,000 represents her marginal costs of production.
  - C) The \$10,000 Dana spent on remodeling is a fixed cost of her business.
  - D) The \$3,000 Dana needs to keep the deli open represents her total fixed costs.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 14) Firms have \_\_\_\_\_ over their \_\_\_\_\_ costs in the short run.
- A) control; fixed  
B) no control; fixed  
C) control; overhead  
D) no control; variable

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 15) The formula for average fixed costs is
- A)  $TFC - q$ .      B)  $TFC/q$ .      C)  $q/TFC$ .      D)  $\Delta q/\Delta TFC$ .

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 16) Average fixed costs
- A) are the costs associated with producing an additional unit of output.  
B) provide a per unit measure of costs.  
C) fall as output rises.  
D) reach their minimum at the output level where the average fixed cost curve is intersected by the marginal cost curve.

Answer: C

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

Refer to the information provided in Figure 8.1 below to answer the questions that follow.

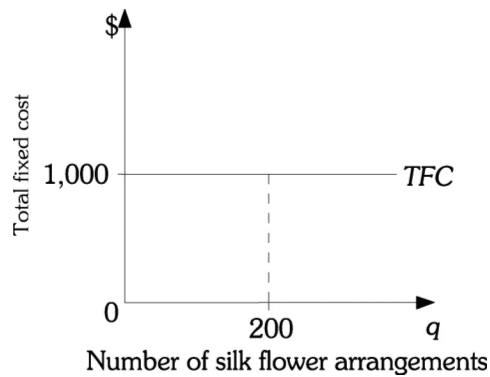


Figure 8.1

- 17) Refer to Figure 8.1 above. The total fixed costs for Cyndy's Floral Arrangements are \$1,000. If Cyndy's Floral Arrangements produces 200 silk flower arrangements, the average fixed costs are
- A) \$0.20.      B) \$5.      C) \$20.      D) \$200.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 8.2 below to answer the questions that follow.

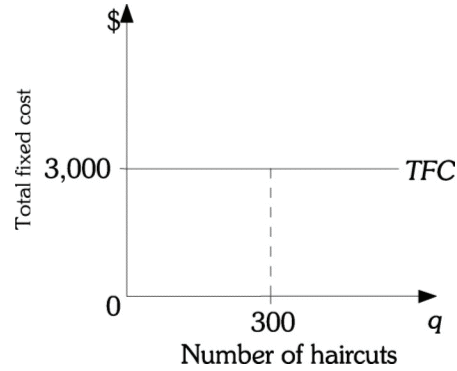


Figure 8.2

- 18) Refer to Figure 8.2 above. The total fixed costs for The Barber Shop are \$3,000. If The Barber Shop produces 300 hair cuts, the average fixed costs are

A) \$0.20.                      B) \$5.                      C) \$10.                      D) \$100.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 19) As output increases, average fixed costs

A) decrease.                      B) initially decrease and then increase.  
C) remain constant.                      D) increase.

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 20) Both Kate and John own saltwater taffy factories. Kate's factory has low fixed costs and high variable costs. John's factory has high fixed costs and low variable costs. Currently, each factory is producing 1,000 boxes of taffy at the same total cost. Complete the following statement with the correct answer. If each produces

A) less, their costs will be equal.  
B) more, their costs will be equal.  
C) more, the costs of Kate's factory will exceed those of John's factory.  
D) less, the costs of Kate's factory will exceed those of John's factory.

Answer: C

Diff: 3

Topic: Costs in the Short Run

Skill: Conceptual

AACSB: Reflective Thinking

21) Short-run costs that depend on the level of output are

- A) total fixed cost only.
- B) total variable costs only.
- C) total costs only.
- D) both total variable costs and total costs.

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

22) Which statement is NOT true regarding the total variable cost curve?

- A) increases as output increases.
- B) shows the variable cost of production given current factor prices.
- C) starts at the origin.
- D) is a horizontal line.

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

23) A point on a total variable cost curve shows the \_\_\_\_\_ variable cost a firm will bear to produce a certain output.

- A) highest
- B) lowest
- C) change in
- D) average

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

24) Which of the following is most likely to be a variable cost for a firm?

- A) The interest payments made on loans
- B) The franchiser's fee that a restaurant must pay to the national restaurant chain
- C) The monthly rent on office space that it leased for a year
- D) The payroll taxes that are paid on employee wages

Answer: D

Diff: 3

Topic: Costs in the Short Run

Skill: Conceptual

25) \_\_\_\_\_ are likely a fixed cost of a firm.

- A) Wages paid to employees
- B) The payments for supplies
- C) Lease payments for office space
- D) Travel expenses to meet with clients

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Conceptual



Refer to the information provided in Table 8.1 below to answer the questions that follow.

Produce	Using Techniques	Units of Variable K	Inputs L
1 unit of output	A	8	8
	B	4	12
2 units of output	A	14	12
	B	8	20
3 units of output	A	16	12
	B	12	22

- 26) Refer to Table 8.1. Assuming the price of labor ( $L$ ) is \$5 per unit and the price of capital ( $K$ ) is \$10 per unit, what production technique should this firm use to produce 2 units of output?
- A) Production technique A
  - B) Production technique B
  - C) The firm is indifferent between production technique A and production technique B.
  - D) It is impossible to determine if the firm should select production technique A or B because total fixed costs are not given.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 27) Refer to Table 8.1. Assume the price of labor ( $L$ ) is \$5 per unit, the price of capital ( $K$ ) is \$10 per unit, and that firms attempt to minimize costs. The total variable cost of producing one unit of output is
- A) \$16.
  - B) \$100.
  - C) \$120.
  - D) \$220.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 28) Refer to Table 8.1. In the short run, if the price of labor ( $L$ ) is \$5 per unit, the price of capital ( $K$ ) is \$10 per unit, and firms attempt to minimize costs, then this firm's total cost of producing one unit of output is
- A) \$100.
  - B) \$120.
  - C) \$220.
  - D) indeterminate from this information.

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

29) Refer to Table 8.1. Assume that the relevant time period is the short run. Assuming the price of labor ( $L$ ) is \$5 per unit and the price of capital ( $K$ ) is \$10 per unit, the average variable cost of producing two unit of output is

- A) \$20.                      B) \$40.                      C) \$90.                      D) \$100.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

30) Refer to Table 8.1. Assume the price of labor ( $L$ ) is \$5 per unit, the price of capital ( $K$ ) is \$10 per unit, and that firms attempt to minimize costs. The marginal cost of producing the third unit of output is

- A) \$30.    B) \$40.  
C) \$50.    D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

31) Refer to Table 8.1. Assuming the price of labor ( $L$ ) is \$5 per unit and the price of capital ( $K$ ) is \$10 per unit, which of the following statements is TRUE?

- A) The firm will use production technique A to produce all three units of output.  
B) The firm will use production technique B to produce all three units of output.  
C) The firm will use production technique B to produce the first two units of output and production technique A to produce the third unit of output.  
D) The firm will use production technique A to produce the first unit and production technique B to produce the second and third units of output.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

32) Marginal cost

- A) is the increase in total cost resulting from producing one more unit.  
B) is the average cost of production divided by output.  
C) equals the increase in  $AVC$  resulting from producing one more unit.  
D) always equals average cost.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Definition

33) A firm will begin to experience diminishing returns at the point where

- A) marginal cost increases.                      B) marginal cost decreases.  
C) marginal product increases.                      D) Both B and C

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Definition

- 34) Diminishing marginal returns implies
- A) decreasing average variable costs.
  - B) decreasing marginal costs.
  - C) increasing marginal costs.
  - D) decreasing average fixed costs.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Definition

- 35) Marginal cost is \_\_\_\_\_ average variable cost when \_\_\_\_\_.
- A) equal to; average total cost is minimized
  - B) less than; total cost is maximized
  - C) greater than; average fixed cost is minimized
  - D) equal to; average variable cost is minimized.

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Conceptual

- 36) The explanation for why marginal cost is positive and rising in the short run is \_\_\_\_\_ marginal product of labor in the production process.
- A) a zero
  - B) a constant
  - C) an increasing
  - D) a diminishing

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 37) In the short run when the marginal product of labor \_\_\_\_\_, the marginal cost of an additional unit of output \_\_\_\_\_.
- A) rises; rises
  - B) falls; falls
  - C) rises; falls
  - D) falls; doesn't change

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Fact

- 38) Total variable costs
- A) initially increase as output increases and then decrease.
  - B) always decrease with output.
  - C) always increase with output.
  - D) initially decrease and then increase with output.

Answer: C

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 39) The formula for MC is
- A)  $TVC/q$ .
  - B)  $q/TVC$ .
  - C)  $\Delta TVC/q$ .
  - D)  $\Delta TVC/\Delta q$ .

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 40) The formula for  $AVC$  is  
A)  $q/TVC$ . B)  $TVC/q$ . C)  $\Delta TVC/\Delta q$ . D)  $\Delta q/\Delta TVC$ .

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 41) In the short run, as output increases,  
A) the difference between average total cost and average variable cost decreases.  
B) the difference between total cost and average variable cost decreases.  
C) marginal cost eventually decreases.  
D) All of the above are correct.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Conceptual

- 42) Because marginal cost is always \_\_\_\_\_ in the short run, total variable cost always \_\_\_\_\_ when output increases.  
A) positive; increases B) positive; decreases  
C) negative; increases D) negative; decreases

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Conceptual

- 43) In the short run where total variable cost is \_\_\_\_\_ at a(n) \_\_\_\_\_ rate, marginal cost is positive and decreasing.  
A) increasing; increasing B) increasing; decreasing  
C) decreasing; increasing D) decreasing; decreasing

Answer: B

Diff: 3

Topic: Costs in the Short Run

Skill: Conceptual

- 44) In the short run where total variable cost is \_\_\_\_\_ at a(n) \_\_\_\_\_ rate, marginal cost is positive and increasing.  
A) increasing; increasing B) increasing; decreasing  
C) decreasing; increasing D) decreasing; decreasing

Answer: A

Diff: 3

Topic: Costs in the Short Run

Skill: Conceptual

Refer to the information provided in Figure 8.3 below to answer the questions that follow.

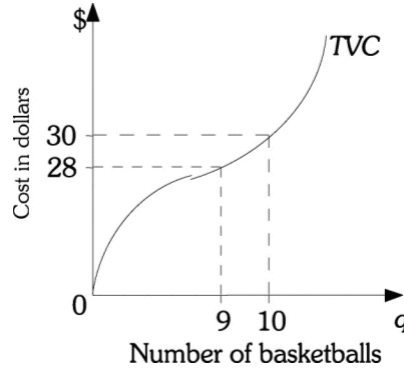


Figure 8.3

- 45) Refer to Figure 8.3. The marginal cost of the 10th basketball is  
 A) \$2.                                      B) \$3.                                      C) \$3.05.                                      D) \$5.80.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 46) Refer to Figure 8.3. If the total fixed cost is \$50, then average total cost of producing 10 basketballs is  
 A) \$3.                                      B) \$5.                                      C) \$8.                                      D) \$80.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 47) Refer to Figure 8.3. The marginal cost of the ninth basketball is  
 A) less than \$2.                                      B) \$2.  
 C) \$3.                                      D) greater than \$3.

Answer: A

Diff: 3

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 48) For Elliot's dog-walking service, the only variable input is labor. Elliot's labor costs are \$300 a day and his service walks 30 dogs per day. To walk 31 dogs per day, his labor costs increase to \$305 a day. The marginal cost of walking that 31st dog is
- A) \$5.
  - B) \$9.83.
  - C) \$19.52.
  - D) indeterminate from the information given.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Table 8.2 below to answer the questions that follow.

Number of Earrings	TVC	MC	AVC	TFC	TC	AFC	ATC
0					100		
1		50					
2							95
3			46.67				
4					300		
5	270						

- 49) Refer to Table 8.2. If Sherry produces zero earrings, her total fixed costs are
- A) \$0.
  - B) \$50.
  - C) \$100.
  - D) indeterminate from this information.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 50) Refer to Table 8.2. If Sherry produces one pair of earrings, her total variable costs are
- A) \$50.
  - B) \$100.
  - C) \$150.
  - D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 51) Refer to Table 8.2. If Sherry produces two pairs of earrings, her marginal cost is
- A) \$40.
  - B) \$45.
  - C) \$72.50.
  - D) \$122.50.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 52) Refer to Table 8.2. If Sherry produces three pairs of earrings, her total variable costs are  
A) \$26.67.                      B) \$140.                      C) \$175.                      D) \$225.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 53) Refer to Table 8.2. If Sherry produces five pairs of earrings, her total costs are  
A) \$320.                      B) \$360.                      C) \$370.                      D) \$400.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 54) Refer to Table 8.2. If Sherry produces four pairs of earrings, her average fixed costs are  
A) \$4.                      B) \$20.                      C) \$25.                      D) \$100.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 55) Refer to Table 8.2. Assume that Sherry's Earrings is producing in a perfectly competitive market and the market price for earrings is \$60. To maximize profits Sherry should produce \_\_\_\_\_ pairs of earrings.  
A) two                      B) three                      C) four                      D) five

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Table 8.3 below to answer the questions that follow.

**Table 8.3**

Number of Earrings	TVC	MC	AVC	TFC	TC	AFC	ATC
0							
1	20						
2		10			30		
3					110		
4			20				
5					180		

- 56) Refer to Table 8.3. What is the total cost of producing zero units of output?
- A) \$0
  - B) \$30
  - C) \$60
  - D) indeterminate from the given information

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Conceptual

AACSB: Analytic Skills

- 57) Refer to Table 8.3. The marginal cost of the fourth unit is \_\_\_\_\_ and the average total cost of the fourth unit is \_\_\_\_\_.
- A) \$10; \$30
  - B) \$20; \$45
  - C) \$30; \$35
  - D) indeterminate from the given information

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 58) Refer to Table 8.3. From the information in the given table,
- A) the firm is in the long run.
  - B) the firm experiences diminishing returns to its variable input.
  - C) the marginal cost curve intersects the average total cost curve between 3 and 4 units of output.
  - D) the difference between total cost and total variable cost decreases as output increases.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills



- 59) Refer to Table 8.3. If the firm is in a perfectly competitive industry with a market price of \$30 per unit, the firm will produce \_\_\_\_\_ units and earn a profit of \_\_\_\_\_ .  
A) three; \$20                      B) four; \$20                      C) four; -\$20                      D) five; \$30

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 60) If we know average total cost and the amount of output, then we can always calculate total cost by  
A) adding average total cost and the amount of output.  
B) subtracting the amount of output from average total cost.  
C) multiplying average total cost by the amount of output.  
D) dividing average total cost by the amount of output.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 61) If marginal cost is above average variable cost, then  
A) average variable cost is increasing.                      B) marginal cost must be decreasing.  
C) average variable cost is constant.                      D) average variable cost is decreasing.

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 62) The marginal cost curve intersects the \_\_\_\_\_ at its minimum.  
A) average variable cost curve                      B) average total cost curve  
C) average fixed cost curve                      D) (A) and (B) are both correct.

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Fact

- 63) If the marginal cost curve is below the average variable cost curve, then  
A) average variable costs are increasing.  
B) average variable costs are decreasing.  
C) marginal cost must be decreasing.  
D) average variable costs could either be increasing or decreasing.

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 64) If the average variable cost curve is above the marginal cost curve, then
- A) marginal costs must be decreasing.
  - B) average variable costs must be increasing.
  - C) marginal costs must be increasing.
  - D) marginal costs can be either increasing or decreasing.

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 65) If marginal cost is between average variable cost and average total cost, then
- A) both average variable cost and average total cost are increasing.
  - B) both average variable cost and average total cost are decreasing.
  - C) average variable cost is increasing and average total cost is decreasing.
  - D) average variable cost is decreasing and average total cost is increasing.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Conceptual

- 66) The marginal cost curve intersects the average variable cost curve at the \_\_\_\_\_ value of the average variable cost curve.
- A) maximum
  - B) minimum
  - C) zero
  - D) average

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Conceptual

- 67) Twenty-five students in a class take a test for which the average grade is 75. Then a twenty-sixth student enters the class, takes the test, and scores 80. The test average calculated with 26 students will \_\_\_\_\_.
- A) rise above 75
  - B) fall below 75
  - C) change from 75 but the direction is unclear
  - D) still equal 75

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Conceptual

AACSB: Analytic Skills

- 68) If a firm's total costs are \$80 when 10 units of output are produced and \$90 when 11 units of output are produced, the marginal cost of the 11th unit is
- A) \$1.
  - B) \$5.
  - C) \$8.09.
  - D) \$10.

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 69) If a firm's total costs are \$100 when 10 units of output are produced and \$103 when 11 units of output are produced, the marginal cost of the 11th unit is
- A) \$1.                              B) \$3.                              C) \$5.                              D) \$9.36.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 70) If the average variable cost of the fifth hat is \$30, then the total variable cost of five hats is
- A) \$6.    B) \$150.  
 C) \$1800.    D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 8.4 below to answer the questions that follow.

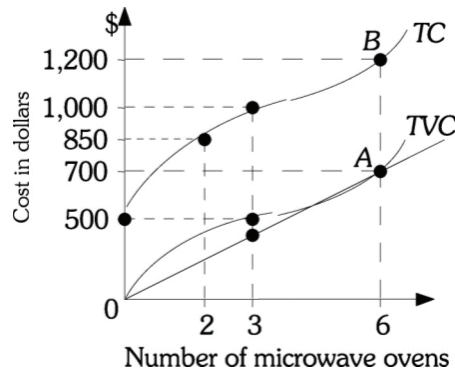


Figure 8.4

- 71) Refer to Figure 8.4. Micro Oven's average fixed costs of producing two units of output are
- A) \$250.    B) \$425.  
 C) \$500.    D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 72) Refer to Figure 8.4. If two microwave ovens are produced, Micro Oven's total variable costs are
- A) \$350.    B) \$500.  
 C) \$850.    D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 73) Refer to Figure 8.4. If three microwave ovens are produced, average variable costs are  
A) \$166.67.                      B) \$333.33.                      C) \$500.                      D) \$1,500.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 74) Refer to Figure 8.4. The marginal cost of the third microwave oven is  
A) \$133.33.                      B) \$150.  
C) \$350.                      D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 75) Refer to Figure 8.4. Up to Point A  
A) marginal costs are decreasing.                      B) marginal costs are increasing.  
C) average variable costs are decreasing.                      D) average variable costs are increasing.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 76) Refer to Figure 8.4. After Point A  
A) average total costs are increasing.                      B) marginal costs are decreasing.  
C) average variable costs are decreasing.                      D) average variable costs are increasing.

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 77) Refer to Figure 8.4. Marginal costs will equal average variable costs at  
A) two microwave ovens.  
B) three microwave ovens.  
C) six microwave ovens.  
D) an indeterminate level of output from this information.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 78) Refer to Figure 8.4. If six microwave ovens are produced, Micro Oven's average total costs are  
A) \$33.33.                      B) \$83.33.                      C) \$116.67.                      D) \$200.00.

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 79) Refer to Figure 8.4. The marginal cost of the sixth microwave oven is  
A) \$83.33.                      B) \$116.67.                      C) \$200.                      D) \$1200.

Answer: B

Diff: 3

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 80) Refer to Figure 8.4. Average variable costs are minimized at an output level  
A) of 2.  
B) of 3.  
C) of 6.  
D) that is indeterminate from this information.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 81) Refer to Figure 8.4. If six microwave ovens are produced, Micro Oven's average fixed costs are  
A) \$33.33.                      B) \$83.33.  
C) \$116.67.                      D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 82) Refer to Figure 8.4. Average total costs will be minimized at  
A) six microwave ovens.  
B) an output level between three and six microwave ovens.  
C) two microwave ovens.  
D) an output level greater than six microwave ovens.

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 83) Refer to Figure 8.4. The vertical distance AB represents
- A) total fixed costs.
  - B) marginal costs.
  - C) average fixed costs.
  - D) average total costs.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 8.5 below to answer the questions that follow.

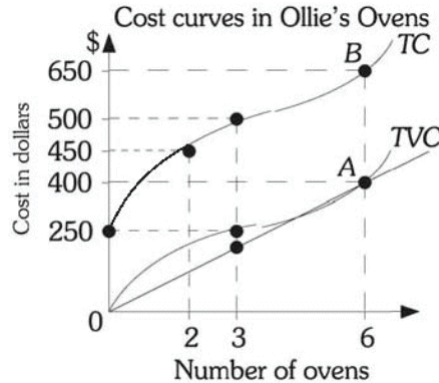


Figure 8.5

- 84) Refer to Figure 8.5. The total fixed costs for Ollie's Ovens are
- A) \$0.
  - B) \$250.
  - C) \$300.
  - D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 85) Refer to Figure 8.5. If two ovens are produced, average variable costs are
- A) \$100.
  - B) \$200.
  - C) \$225.
  - D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 86) Refer to Figure 8.5. If three ovens are produced, average variable costs are
- A) \$166.67.
  - B) \$83.33.
  - C) \$500.
  - D) \$1,500.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 87) Refer to Figure 8.5. The marginal cost of the third oven is
- A) \$50.
  - B) \$100.
  - C) \$150.
  - D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 88) Refer to Figure 8.5. The marginal cost is equal to average variable cost when \_\_\_\_\_ ovens are produced.
- A) two
  - B) three
  - C) six
  - D) indeterminate from this information.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 89) Refer to Figure 8.5. The average total costs are minimized when \_\_\_\_\_ ovens are produced.
- A) exactly six
  - B) more than six
  - C) less than six
  - D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 90) Refer to Figure 8.5. The marginal cost of the sixth oven is
- A) \$50.00.
  - B) \$66.67.
  - C) \$108.33.
  - D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 91) A short run total cost schedule is a \_\_\_\_\_ cost schedule shifted upward by the amount of \_\_\_\_\_ cost.
- A) total fixed; marginal
  - B) marginal; total variable
  - C) total variable; total fixed
  - D) total variable; marginal

Answer: C

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 92) In the short run, \_\_\_\_\_ costs exceed \_\_\_\_\_ costs.
- A) total fixed; total
  - B) average variable; average total
  - C) total variable; total
  - D) average total; average variable

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Conceptual

- 93) Total cost is
- A)  $TFC - TVC$ .
  - B)  $TFC/TVC$ .
  - C)  $TFC + TVC$ .
  - D)  $AFC + AVC$ .

Answer: C

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 94) Total cost refers to
- A) the full economic costs of production.
  - B) the sum of average fixed cost and average variable cost.
  - C) the fixed costs of production.
  - D) the explicit costs of production.

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Definition

- 95) ATC is
- A)  $TC/q$ .
  - B)  $q/TC$ .
  - C)  $AFC - AVC$ .
  - D)  $\Delta TC - \Delta q$ .

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 96) Average total cost
- A) measures the spread of overhead across output.
  - B) is the average cost of producing each unit of output.
  - C) is always increasing.
  - D) the sum of fixed cost and average variable cost.

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact



- 97) The Framing Gallery frames posters. The Framing Gallery has total fixed costs of \$500. The Framing Gallery's average variable cost is \$20 and its average total cost is \$25. The Framing Gallery is currently framing
- A) 5 posters.
  - B) 25 posters.
  - C) 100 posters.
  - D) a number of posters that is indeterminate from this information.

Answer: C

Diff: 2

Topic: *Costs in the Short Run*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 98) The average variable cost of producing ice cream sundaes are minimized when 100 sundaes are produced. The total cost of producing 100 sundaes is \$500. If fixed cost of production is \$200, what is the marginal cost of producing the 100th sundae?
- A) \$2
  - B) \$3
  - C) \$5
  - D) indeterminate from the given information.

Answer: B

Diff: 3

Topic: *Costs in the Short Run*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 99) Average variable cost and average total costs get closer together as output increases because
- A) diminishing returns set in.
  - B) average fixed costs decrease as output increases.
  - C) marginal costs decrease as output increases.
  - D) economies of scale become apparent.

Answer: B

Diff: 2

Topic: *Costs in the Short Run*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Figure 8.6 below to answer the questions that follow.

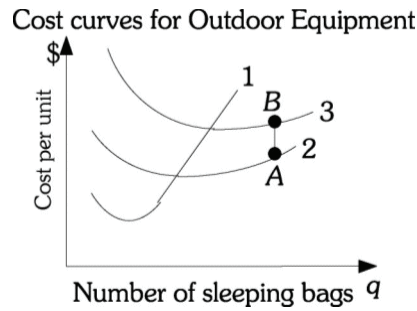


Figure 8.6

- 100) Refer to Figure 8.6. Curve 1 is Outdoor Equipment's
- |                              |                                 |
|------------------------------|---------------------------------|
| A) marginal cost curve.      | B) average variable cost curve. |
| C) average total cost curve. | D) average fixed cost curve.    |

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 101) Refer to Figure 8.6. Outdoor Equipment's average variable costs are minimized at the output level
- |  |
|--|
| A) where Curves 1 and 2 intersect.                                 |
| B) where Curves 1 and 3 intersect.                                 |
| C) between the intersections of Curves 1 and 2 and Curves 1 and 3. |
| D) indeterminate with the given information.                       |

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 102) Refer to Figure 8.6. Curve 2 is Outdoor Equipment's
- |                              |                                 |
|------------------------------|---------------------------------|
| A) marginal cost curve.      | B) average variable cost curve. |
| C) average total cost curve. | D) average fixed cost curve.    |

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 103) Refer to Figure 8.6. Curve 3 is Outdoor Equipment's
- |                              |                                 |
|------------------------------|---------------------------------|
| A) marginal cost curve.      | B) average variable cost curve. |
| C) average total cost curve. | D) average fixed cost curve.    |

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 104) Refer to Figure 8.6. The vertical distance  $AB$  is Outdoor Equipment's
- A) marginal cost.
  - B) average fixed cost.
  - C) total fixed cost.
  - D) total cost.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Definition

- 105) If marginal cost is below average total cost, average total cost will
- A) be maximized.
  - B) be decreasing.
  - C) be increasing.
  - D) remain constant.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 106) If marginal cost equals average total cost, average total cost will
- A) be maximized.
  - B) decrease.
  - C) increase.
  - D) be minimized.

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

- 107) The short-run average total cost curve eventually begins to increase at an increasing rate because of
- A) economies of scale.
  - B) the constraint that the firm cannot change production technologies.
  - C) diminishing returns.
  - D) increasing returns to scale.

Answer: C

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 108) The law of diminishing marginal returns
- A) results in average variable cost ( $AVC$ ), average total cost ( $ATC$ ), and marginal cost ( $MC$ ) curves eventually increasing at an increasing rate.
  - B) results in  $MC$  but not  $ATC$  curves eventually increasing at an increasing rate.
  - C) causes average fixed costs to decline continuously as output increases.
  - D) causes the difference between average total cost and average variable cost to shrink as output increases.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Definition

109) In the short run a firm's lowest cost level of output is the minimum point on its \_\_\_\_\_ cost curve.

- A) average total      B) total variable      C) average fixed      D) marginal

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Fact

110) A firm is producing output less than the output associated with the minimum point on the firm's short run average variable cost curve. At this level of output the firm uses its fixed capital input \_\_\_\_\_ and its variable labor input \_\_\_\_\_.

- A) at the lowest average cost; at the lowest average cost  
B) at the lowest average cost; at a higher than the lowest average cost  
C) at a higher than the lowest average cost; at the lowest average cost  
D) at a higher than the lowest average cost; at a higher than the lowest average cost

Answer: D

Diff: 3

Topic: Costs in the Short Run

Skill: Conceptual

111) Consider an output beyond the minimum point of a firm's short run average total cost curve. At this level of output the firm can use its \_\_\_\_\_ input at a lower average cost but only by using its \_\_\_\_\_ input at a higher average cost.

- A) fixed capital; variable labor      B) variable labor; fixed capital  
C) variable capital; fixed labor      D) fixed labor; variable capital

Answer: A

Diff: 3

Topic: Costs in the Short Run

Skill: Analytic

AACSB: Analytic Skills

112) Related to the *Economics in Practice* on page 166.: When considering expanding its student body a college should

- A) compare the marginal cost of educating an additional student to the tuition that student pays.  
B) compare the average total cost of educating an additional student to the tuition that student pays.  
C) definitely expand because education is very important and should be made available to as many people as possible.  
D) only consider doing so if they have sufficient housing.

Answer: A

Diff: 3

Topic: Costs in the Short Run: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

- 113) Related to the *Economics in Practice* on page 166: A college has an annual operating budget of \$120 million. It educates and houses 1,500 students, for an average cost of \$80,000 per student per year. Revenues per student from tuition, room, and board are considerably less than \$80,000. Which of the following, if true, would strengthen the claim that increasing the number of students educated per year will result in a net financial gain for the college?
- A) Other colleges spend more than \$80,000 per student per year.
  - B) The vast majority of the operating budget is composed of fixed costs.
  - C) Spending more than it earns will force the college to either borrow or use some of its endowment to make up the difference.
  - D) The college expects that it will be able to maintain its academic standards even if it increases enrollment.

Answer: B

Diff: 3

Topic: *Costs in the Short Run: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 2 True/False

- 1) Average fixed costs rise continuously as quantity of output rises.

Answer: FALSE

Diff: 1

Topic: *Costs in the Short Run*

Skill: *Fact*

- 2) The increase in total cost that results from producing one more unit of output is the marginal cost.

Answer: TRUE

Diff: 2

Topic: *Costs in the Short Run*

Skill: *Definition*

- 3) The best combination of inputs at one level of production may not be best at other levels.

Answer: TRUE

Diff: 1

Topic: *Costs in the Short Run*

Skill: *Fact*

- 4) If marginal cost is increasing, then average variable cost must be increasing simultaneously.

Answer: FALSE

Diff: 1

Topic: *Costs in the Short Run*

Skill: *Fact*

- 5) Average total cost and average variable cost are minimized at the same level of output.

Answer: FALSE

Diff: 1

Topic: *Costs in the Short Run*

Skill: *Conceptual*

6) When marginal cost is between average variable cost and average total cost, marginal cost is increasing.

Answer: TRUE

Diff: 2

Topic: Costs in the Short Run

Skill: Conceptual

7) Average total cost of producing 100 units of output is \$5. If the marginal cost of producing the 101st unit is \$4, then average total cost of 101 units is less than \$5.

Answer: TRUE

Diff: 2

Topic: Costs in the Short Run

Skill: Conceptual

8) Marginal cost is total variable cost divided by output.

Answer: FALSE

Diff: 1

Topic: Costs in the Short Run

Skill: Definition

## 8.2 Output Decisions: Revenues, Costs, and Profit Maximization

### 1 Multiple Choice

1) Marginal revenue (MR) is

A)  $TR/q$

B)  $\Delta TR/\Delta q$ .

C)  $P^*q$

D)  $P/q$

Answer: B

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

2) The main decision for a profit maximizing perfectly competitive firm is not what \_\_\_\_\_ but what \_\_\_\_\_.

A) level of output to produce; price to charge

B) price to charge; level of output to produce

C) level of output to produce; total revenue to achieve

D) price to charge; total cost to achieve

Answer: B

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

3) If an individual perfectly competitive firm charges a price above the industry equilibrium price, it will

A) sell all that it can produce and gain equal revenue with competitors.

B) sell all that it can produce and gain more revenue than competitors.

C) sell part of what it can produce and gain less revenue than competitors will.

D) not sell any of what it produces.

Answer: D

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 4) If an individual perfectly competitive firm charges a price below the industry equilibrium price, it will
- A) not sell anything.
  - B) sell part of what it produces.
  - C) sell all that it produces and gain more revenue than competing firms will.
  - D) sell all that it produces but gain less revenue than competing firms will.

Answer: D

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 5) Any firm's total revenue equals
- A)  $MR \times q$ .
  - B)  $P \times q$ .
  - C)  $P/q$ .
  - D)  $MR/q$ .

Answer: B

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 6) The added revenue that a firm takes in when it increases output by one additional unit is \_\_\_\_\_ revenue.
- A) total
  - B) marginal
  - C) variable
  - D) fixed

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 7) Marginal revenue is the
- A) ratio of total revenue to quantity.
  - B) difference between total revenue and total costs.
  - C) added revenue that a firm takes in when it increases output by one additional unit.
  - D) additional profit the firm earns when it sells an additional unit of output.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

- 8) Marginal revenue for a perfectly competitive firm is
- A) downward sloping.
  - B) upward sloping.
  - C) horizontal.
  - D) vertical.

Answer: C

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

- 9) In perfect competition, the marginal revenue curve
- A) and the demand curve facing the firm are identical.
  - B) is always above the demand curve facing the firm.
  - C) is always below the demand curve facing the firm.
  - D) intersects the demand curve when marginal revenue is minimized.

Answer: A

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 10) The relationship between the price that a perfectly competitive firm can charge buyers and the firm's marginal revenue is that the price is \_\_\_\_\_ marginal revenue over all output.
- A) above
  - B) below
  - C) equal to
  - D) sometimes above and sometimes below

Answer: C

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 11) Profit-maximizing firms want to maximize the difference between
- A) total revenue and marginal cost.
  - B) total revenue and total cost.
  - C) marginal revenue and marginal cost.
  - D) marginal revenue and average cost.

Answer: B

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 12) Assume Dell Computer Company operates in a perfectly competitive market producing 5,000 computers per day. At this output level, price exceeds this firm's marginal cost. It follows that producing one more computer will cause this firm's
- A) total cost to decrease.
  - B) profits to increase.
  - C) profits to decrease.
  - D) profits to remain unchanged.

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 13) Assume Dell Computer Company operates in a perfectly competitive market producing 5,000 computers per day. At this output level, price exceeds this firm's marginal cost. To maximize profits, Dell should
- A) make no adjustments as they are already maximizing their profits.
  - B) increase their output.
  - C) decrease their output.
  - D) stop producing since it is earning a loss.

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills



- 14) Assume Dell Computer Company operates in a perfectly competitive market producing 5,000 computers per day. At this output level, marginal cost exceeds this firm's price. To maximize profits, Dell should
- A) make no adjustments as they are already maximizing their profits.
  - B) increase their output.
  - C) decrease their output.
  - D) stop producing since it is earning a loss.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 15) Assume Dell Computer Company operates in a perfectly competitive market producing 5,000 computers per day. At this output level, price equals this firm's marginal cost. To maximize profits, Dell should
- A) make no adjustments as they are already maximizing their profits.
  - B) increase their output.
  - C) decrease their output.
  - D) stop producing since it is earning a loss.

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Table 8.5 below to answer the following questions.

Table 8.5

Number of Fruit Baskets	TFC	TVC	TC	MC
0	\$50	\$0	\$50	--
1	50	10	60	10
2	50	15	65	5
3	50	21	71	6
4	50	31	81	10
5	50	46	96	15
6	50	68	118	22

- 16) Refer to Table 8.5. Assume that fruit baskets are sold in a perfectly competitive market. The market price of a fruit basket is \$22. To maximize profits, Exotic Fruit should sell \_\_\_\_\_ fruit basket(s) and their profit is \_\_\_\_\_.
- A) three; \$5
  - B) four; \$7
  - C) five; \$14
  - D) six; \$14

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

17) Refer to Table 8.5. Assume that fruit baskets are sold in a perfectly competitive market. The market price of a fruit basket is \$15. To maximize profits, Exotic Fruit should sell \_\_\_\_\_ fruit basket(s) and their profit is \_\_\_\_\_.

- A) zero; \$0                      B) two; -\$35                      C) three; -\$26                      D) five; -\$21

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

18) If a firm's demand curve is perfectly elastic, then at the profit maximizing level of output

- A)  $P = MR = MC$ .                      B)  $P > MR > MC$ .  
C)  $P < MR < MC$ .                      D)  $P > 0$  and  $MR = 0$ .

Answer: A

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

19) If a profit maximizing firm is currently producing where  $MR = MC$ , it should

- A) increase output so that marginal revenue is less than marginal cost.  
B) decrease output so that marginal revenue will be greater than marginal cost and the firm's profit will increase.  
C) not change because it is already maximizing profit.  
D) exit the industry.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

20) If a firm is producing where  $MR > MC$ ,

- A) the revenue gained by producing one more unit of output exceeds the cost incurred by doing so.  
B) the revenue gained by producing one more unit of output equals the cost incurred by doing so.  
C) the revenue gained by producing one more unit of output is less than the cost incurred by doing so.  
D) the firm is already maximizing profits because revenue is being increased by more than costs.

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 21) Joe's Butcher Shop is producing where  $MR = MC$ , Joe's Butcher Shop must be
- A) earning a zero economic profit.
  - B) incurring a loss.
  - C) maximizing profits.
  - D) maximizing revenue but not maximizing profits.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 22) The profit-maximizing level for all firms, regardless of industry structure, is the output level where
- A)  $TR = MC$ .
  - B)  $P = MC$ .
  - C)  $ATC = P$ .
  - D)  $MC = MR$ .

Answer: D

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

Refer to the information provided in Figure 8.7 below to answer the questions that follow.

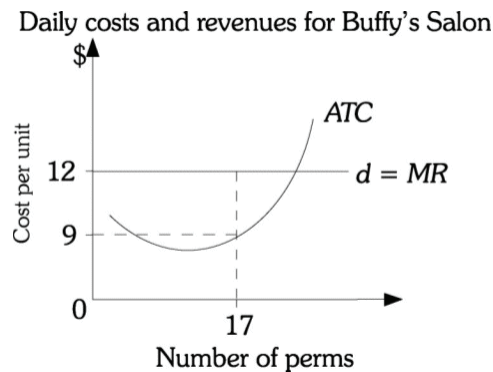


Figure 8.7

- 23) Refer to Figure 8.7. If Buffy gives 17 perms per day, her daily profit is
- A) \$3.
  - B) \$51.
  - C) \$153.
  - D) \$204.

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 24) A firm in a perfectly competitive industry is producing 50 units, its profit-maximizing quantity. Industry price is \$2, total fixed costs are \$25, and total variable costs are \$40. The firm's economic profit is
- A) \$15.
  - B) \$30.
  - C) \$35.
  - D) \$60.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

25) Wheat is produced in a perfectly competitive market. Market demand for wheat increases. This will cause the individual wheat farmer's marginal revenue to \_\_\_\_\_ and their profit maximizing level of output to \_\_\_\_\_.

- A) increase; increase
- B) increase; decrease
- C) decrease; increase
- D) decrease; decrease

Answer: A

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

AACSB: Analytic Skills

26) Corn is produced in a perfectly competitive market. The demand for ethanol increases. This will cause the individual corn farmer's marginal revenue to \_\_\_\_\_ and their profit maximizing level of output to \_\_\_\_\_.

- A) increase; increase
- B) increase; decrease
- C) decrease; increase
- D) decrease; decrease

Answer: A

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

AACSB: Analytic Skills

27) Strawberries are produced in a perfectly competitive market. Average consumer incomes decrease. This will cause the individual strawberry farmer's marginal revenue to \_\_\_\_\_ and their profit maximizing level of output to \_\_\_\_\_.

- A) increase; increase
- B) increase; decrease
- C) decrease; increase
- D) decrease; decrease

Answer: D

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

AACSB: Analytic Skills

28) Assume soybeans are produced in a perfectly competitive market. A soybean farmer is currently maximizing his profits. If the market price of soybeans falls, after the farmer adjusts to the new price, he will be producing \_\_\_\_\_ bushels of soybeans and his profit will be \_\_\_\_\_.

- A) fewer; the same
- B) fewer; lower
- C) more; the same
- D) the same number of; the same

Answer: B

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Figure 8.8 below to answer the questions that follow.

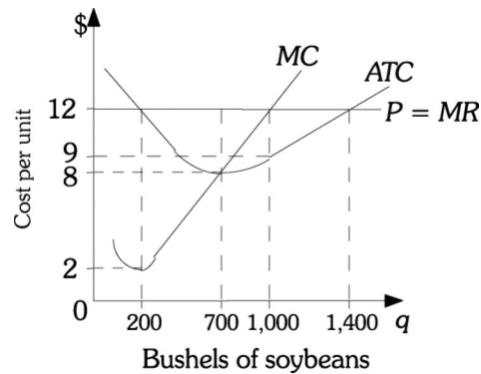


Figure 8.8

- 29) Refer to Figure 8.8. This farmer's profit-maximizing level of output is \_\_\_\_\_ units of output.  
 A) 200                                      B) 700                                      C) 1,000                                      D) 1,400

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 30) Refer to Figure 8.8. If this farmer is producing the profit-maximizing level of output, her profit is  
 A) \$0.                                      B) \$2,800.                                      C) \$3,000.                                      D) \$12,000.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 31) Refer to Figure 8.8. What is the total cost of producing the profit maximizing level of output?  
 A) \$9                                      B) \$1,000.                                      C) \$5,600                                      D) \$9,000

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 32) Refer to Figure 8.8. If the market price of soybeans falls to \$8, then to maximize profits this farmer should produce  
 A) 200 bushels of soybeans.  
 B) 700 bushels of soybeans.  
 C) 1,000 bushels of soybeans.  
 D) a level of output that is indeterminate from this information.

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 33) Refer to Figure 8.8. At the market price of \$8 per bushel, if this farmer produces the profit maximizing level of soybeans, the total revenue would be  
 A) \$1,200.                      B) \$2,800.                      C) \$5,600.                      D) \$8,400.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 34) Refer to Figure 8.8. At the market price of \$8 per bushel, if this farmer produces the profit maximizing level of soybeans, the profit would be  
 A) \$0.                              B) \$2,800.                      C) \$5,600.                      D) \$8,000.

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 8.9 below to answer the questions that follow.

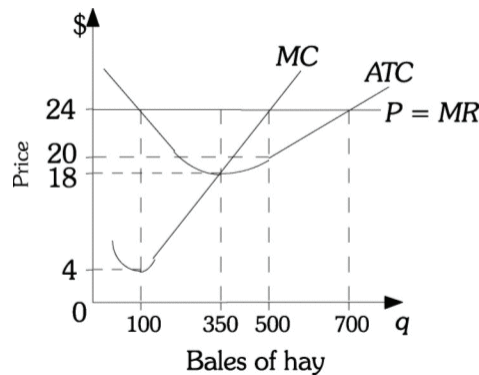


Figure 8.9

- 35) Refer to Figure 8.9. This farmer's profit-maximizing level of output is \_\_\_\_\_ units of output.  
 A) 100                              B) 350                              C) 500                              D) 700

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 36) Refer to Figure 8.9. If this farmer is producing the profit maximizing level of output, her profit is  
 A) \$0.                              B) \$1,000.                      C) \$2,000.                      D) \$3,000.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 37) Refer to Figure 8.9. If the market price of hay falls to \$18, then to maximize profits this farmer should produce
- A) 350 bales of hay.
  - B) 500 bales of hay.
  - C) 750 bales of hay.
  - D) a level of output that is indeterminate from this information.

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 38) Refer to Figure 8.9. At the market price of \$18 per bale, if this farmer produces the profit maximizing level of hay, the total revenue would be
- A) \$1,200.
  - B) \$2,800.
  - C) \$5,600.
  - D) \$6,300.

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 39) Refer to Figure 8.9. At the market price of \$18, if this farmer produces the profit maximizing quantity, what profit will he make?
- A) \$0
  - B) \$2,000
  - C) \$700
  - D) indeterminate from this information

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 40) A perfectly competitive firm will earn positive economic profits in the range of output for which the firm's price is \_\_\_\_\_ its minimum average total cost.
- A) below
  - B) above
  - C) equal to
  - D) below its marginal cost and

Answer: B

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 41) If a perfectly competitive firm's average total cost curve is above its demand schedule at every level of output, then the firm will earn \_\_\_\_\_ profits.
- A) positive
  - B) breakeven
  - C) negative
  - D) zero

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 42) A perfectly competitive firm breaks even at the level of output where  
A)  $P > ATC$                       B)  $P < ATC$                       C)  $P = ATC$                       D)  $P = MC$

Answer: C

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 43) If  $P = MC$  and  $MC > ATC$ , then a perfectly competitive firm will earn \_\_\_\_\_ profits.  
A) positive                      B) zero                      C) negative                      D) breakeven

Answer: A

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 44) If a perfectly competitive firm is currently producing where  $P = MC$  and  $MC = ATC$ , then the firm will earn \_\_\_\_\_ profits.  
A) positive                      B) zero                      C) negative                      D) above normal

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 45) If an industry supply curve increases while the industry demand curve remains the same, then an individual firm in a perfectly competitive industry currently earning positive profits will see its profits \_\_\_\_\_.  
A) increase                      B) not change  
C) decrease                      D) impossible to determine

Answer: C

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

- 46) If an industry supply curve decreases while the industry demand curve remains the same, then an individual firm in a perfectly competitive industry currently earning losses will see its losses \_\_\_\_\_.  
A) increase                      B) not change  
C) decrease                      D) impossible to determine

Answer: C

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills



- 47) Perfectly competitive firms
- A) sell homogeneous products.
  - B) are price takers.
  - C) are small relative to the size of the market.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

- 48) The rising part of a perfectly competitive firm's \_\_\_\_\_ cost curve is the firm's short run \_\_\_\_\_ curve.
- A) average total; supply
  - B) average variable; demand
  - C) average fixed; demand
  - D) marginal; supply

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

- 49) The law of supply holds for perfectly competitive firms assuming that each firm tries to
- A) maximize profits.
  - B) minimize total costs
  - C) maximize revenue
  - D) minimize variable costs

Answer: A

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

Refer to the information provided in Figure 8.10 below to answer the questions that follow.

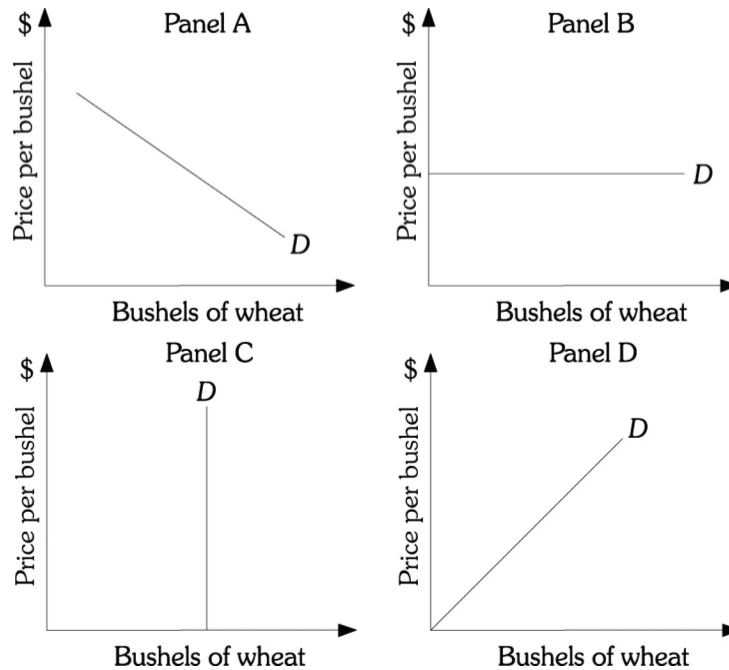


Figure 8.10

50) Refer to Figure 8.10. Panel \_\_\_\_\_ represents the demand curve facing a perfectly competitive producer of wheat.

- A) A                      B) B                      C) C                      D) D

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

AACSB: Analytic Skills

51) Jerry sells cherry sno-cones along the boardwalk in New Jersey. During the summer this is a perfectly competitive business, and Jerry faces a perfectly elastic demand curve. If he wants to try to increase revenues he should

- A) raise the price of his sno-cones to make more per sale.  
 B) lower the price of his sno-cones to try to sell more.  
 C) keep the price the same but produce more to increase sales.  
 D) do nothing; there is nothing he can do to increase revenue.

Answer: C

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

AACSB: Analytic Skills

- 52) A firm in a perfectly competitive market has no control over price because
- A) the government imposes price ceilings on the products produced in perfectly competitive industries.
  - B) there is free entry and exit from the industry.
  - C) every firm's product is a perfect substitute for every other firm's product.
  - D) the market demand for products produced in perfectly competitive industries is perfectly elastic.

Answer: C

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 53) The closest example of a perfectly competitive market is
- A) fast foods.
  - B) beer.
  - C) gasoline stations.
  - D) soybeans.

Answer: D

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

Refer to the information provided in Figure 8.11 below to answer the questions that follow.

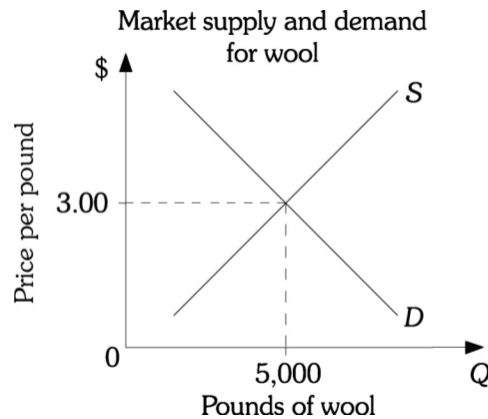


Figure 8.11

- 54) Refer to the Figure 8.11. Assuming wool is a perfectly competitive industry, the demand curve faced by each wool producer is \_\_\_\_\_ starting at \$3.00 per pound.
- A) downward sloping
  - B) upward sloping
  - C) vertical
  - D) horizontal

Answer: D

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 55) A market demand curve is \_\_\_\_\_.
- A) downward sloping
  - B) upward sloping
  - C) perfectly elastic
  - D) perfectly inelastic

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

- 56) If a firm in a perfectly competitive industry raises price above market price,
- A) total revenue for the firm will increase.
  - B) profit will increase.
  - C) sales will drop to zero.
  - D) demand curves will become downward sloping.

Answer: C

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

- 57) A perfectly elastic demand curve implies that, ceteris paribus,
- A) a firm can sell more by lowering its price.
  - B) if a firm raises its price above the market price, quantity demanded will equal zero.
  - C) the price a firm charges is irrelevant, as it will sell the same amount regardless of the price charged.
  - D) a firm can raise its price and not lose all its customers.

Answer: B

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 58) Assume the wool industry is perfectly competitive. Why is it difficult for a wool producer to make excess profits in the long run?
- A) The fact that wool producers are "price takers."
  - B) The assumption that wool producers in the industry do not "differentiate" their products.
  - C) The fact that the demand curve facing each wool producer is perfectly elastic.
  - D) There is free entry into the wool industry.

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

- 59) Assume the wool industry is perfectly competitive. The market demand curve for wool is \_\_\_\_\_ and each individual wool producer's demand curve is \_\_\_\_\_.
- A) downward sloping; horizontal
  - B) horizontal; downward sloping
  - C) horizontal; horizontal
  - D) downward sloping; downward sloping

Answer: A

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

- 60) Free entry implies that
- A) a perfectly competitive firm can never earn a profit.
  - B) if firms in an industry are making excessively high profits, new firms are likely to enter the industry.
  - C) the government regulates the number of firms that are allowed in an industry.
  - D) firms will always earn a profit, as new firms can enter the industry at any time they like.

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

- 61) The fast-food industry is not considered perfectly competitive because:
- A) entry and exit are strictly regulated by the government.
  - B) the firm's products are not homogeneous.
  - C) there are a small number of dominant firms.
  - D) there are a very large number of firms.

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

- 62) Related to the Economics in Practice on page 170. Janice owns an ice cream shop. Monthly revenue is \$12,000. Her fixed cost of operation include rent, electricity, interest on a loan, etc. and come to \$3,500 per month. Her variable costs include wages for her workers and ice cream supplies which are \$4,000 per month. Janice is trying to decide whether to stay in business or return to her previous occupation as an elementary school teacher. Janice should return to teaching only if she earns more than \_\_\_\_\_ a month as a teacher.
- A) \$4,500
  - B) \$8,000
  - C) \$8,500
  - D) She should return to teaching regardless of her salary because education is the most important career anyone can have.

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization: Economics in Practice

Skill: Analytic

AACSB: Analytic Skills

- 63) Related to the Economics in Practice on page 170. You are the owner of an ice cream shop. You normally close at 8pm, but are considering staying open an additional hour. You
- A) should definitely stay open as your profits will increase as your sales increase.
  - B) should only stay open if the additional revenue you generate exceeds the average total cost of operation.
  - C) should only stay open if the additional revenue you generate exceeds the marginal cost of operating an additional hour.
  - D) already work too hard -- don't stay open any later.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization: Economics in Practice

Skill: Conceptual

AACSB: Analytic Skills

## 2 True/False

- 1) Perfectly competitive industries are characterized by a homogeneous product.  
Answer: TRUE  
Diff: 1  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Fact*
- 2) Demand for the product of an industry in perfect competition is assumed to be inelastic.  
Answer: FALSE  
Diff: 1  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Fact*
- 3) The total revenue curve for a perfectly competitive firm will be a straight line with positive slope.  
Answer: TRUE  
Diff: 1  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Fact*
- 4) The marginal revenue curve for a perfectly competitive firm will be downward sloping.  
Answer: FALSE  
Diff: 1  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Fact*
- 5) Marginal costs reflect changes in variable costs.  
Answer: TRUE  
Diff: 1  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Fact*
- 6) The short-run is a period of less than one year.  
Answer: FALSE  
Diff: 2  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Definition*
- 7) The production decision is a short-run decision.  
Answer: TRUE  
Diff: 2  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Definition*
- 8) If demand in a perfectly competitive market increases, then an individual firm in that industry will see its profits fall.  
Answer: FALSE  
Diff: 2  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Conceptual*

9) For a perfectly competitive firm, when  $P=MC=ATC$  the most profit the firm can earn is zero.

Answer: TRUE

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

10) Firms maximize their profits by producing the output level where  $MR=MC$ .

Answer: TRUE

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

11) Perfectly competitive firms maximize their profit by producing the output level where  $P=MR=AVC$ .

Answer: FALSE

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

12) The upward sloping portion of the perfectly competitive firm's average total cost curve is the firm's short run supply curve.

Answer: FALSE

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

13) Perfectly competitive firms sell homogeneous products.

Answer: TRUE

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

14) Perfectly competitive firms are price setters.

Answer: FALSE

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

# Chapter 9 Long-Run Costs and Output Decisions

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## 9.1 Short-Run Conditions and Long-Run Directions

### 1 Multiple Choice

- 1) Assume firms break even in an industry. New firms \_\_\_\_\_ attracted to the industry and current ones \_\_\_\_\_ exiting it.
- A) are not; are not  
B) are not; are  
C) are; are not  
D) are; are

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 2) Firms that are "breaking even" are
- A) earning zero economic profits.  
B) earning less than a normal rate of return.  
C) shutting down in the short run.  
D) All of the above are correct.

Answer: A

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Definition

- 3) In the short run, firms earning a profit will want to \_\_\_\_\_ their profits while firms suffering losses will want to \_\_\_\_\_ their losses.
- A) maximize; maximize  
B) maximize; minimize  
C) minimize; maximize  
D) minimize; minimize

Answer: B

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 4) In the short run,
- A) all firms that earn a loss will shut down.  
B) if current firms are earning a profit, new firms will enter the industry.  
C) firms act to minimize losses or maximize profits.  
D) All of the above are correct.

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual



*Refer to Scenario 9.1 to answer the following questions.*

SCENARIO 9.1: Amy borrowed \$20,000 from her parents to open a bagel shop. She pays her parents a 5% yearly return on the money they lent her. Her other yearly fixed costs equal \$9,000. Her variable costs equal \$30,000. In her first year, Amy sold 40,000 dozen at a price of \$1.50 per dozen.

- 5) Refer to Scenario 9.1. Amy's total fixed costs equal  
A) \$1,000.                      B) \$9,000.                      C) \$10,000.                      D) \$21,000.

Answer: C

Diff: 2

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 6) Refer to Scenario 9.1. Amy's total costs equal  
A) \$39,000.                      B) \$40,000.                      C) \$50,000.                      D) \$59,000.

Answer: B

Diff: 2

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 7) Refer to Scenario 9.1. Amy's profit is  
A) \$0.                              B) \$20,000.                      C) \$30,000.                      D) \$50,000.

Answer: B

Diff: 2

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Analytic*

AACSB: *Analytic Skills*

*Refer to Scenario 9.2 below to answer the following questions.*

SCENARIO 9.2: Tom borrowed \$40,000 from his parents to open a donut stand. He agrees to pay his parents a 5% yearly return on the money they lent him. His other yearly fixed costs equal \$10,000. His variable costs equal \$25,000. He sold 40,000 dozen donuts during the year at a price of \$2.00 per dozen.

- 8) Refer to Scenario 9.2. Tom's total fixed costs equal  
A) \$1,000.                      B) \$10,000.                      C) \$12,000.                      D) \$21,000.

Answer: C

Diff: 2

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 9) Refer to Scenario 9.2. Tom's total costs equal  
A) \$37,000.                      B) \$40,000.                      C) \$50,000.                      D) \$59,000.

Answer: A

Diff: 2

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 10) Refer to Scenario 9.2. Tom's total revenue was  
A) \$30,000.                      B) \$40,000.                      C) \$45,000.                      D) \$80,000.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Scenario 9.2. Tom's profit is  
A) \$0.                                B) \$26,000.                      C) \$30,000.                      D) \$43,000.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

**Refer to Scenario 9.3 to answer the following questions.**

SCENARIO 9.3: Investors put up \$520,000 to construct a building and purchase all equipment for a new restaurant. The investors expect to earn a minimum return of 10 per cent on their investment. The restaurant is open 52 weeks per year and serves 900 meals per week. The fixed costs are spread over the 52 weeks (i.e. prorated weekly). Included in the fixed costs is the 10% return to the investors and \$1000 per week in other fixed costs. Variable costs include \$1000 in weekly wages and \$600 per week for materials, electricity, etc. The restaurant charges \$5 on average per meal.

- 12) Refer to Scenario 9.3. The normal return to the investors on a weekly basis is  
A) \$600                                B) \$1,000                            C) \$3,600                            D) \$4,500

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 13) Refer to Scenario 9.3. Total fixed costs per week are  
A) \$1,000                                B) \$2,000                            C) \$3,000                            D) \$4,500

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 14) Refer to Scenario 9.3. Total variable costs per week are  
A) \$600                                B) \$1,000                            C) \$1,600                            D) \$2,000

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 15) Refer to Scenario 9.3. Total cost per week is  
A) \$1,000                      B) \$1,600                      C) \$2,000                      D) \$3,600  
Answer: D  
Diff: 2  
Topic: Short-Run Conditions and Long-Run Directions  
Skill: Analytic  
AACSB: Analytic Skills
- 16) Refer to Scenario 9.3. Total revenue per week is  
A) \$3,000                      B) \$4,000                      C) \$4,500                      D) \$8,100  
Answer: C  
Diff: 2  
Topic: Short-Run Conditions and Long-Run Directions  
Skill: Analytic  
AACSB: Analytic Skills
- 17) Refer to Scenario 9.3. Economic profit per week is  
A) -\$400                      B) \$0                      C) \$600                      D) \$900  
Answer: D  
Diff: 2  
Topic: Short-Run Conditions and Long-Run Directions  
Skill: Analytic  
AACSB: Analytic Skills
- 18) Refer to Scenario 9.3. The restaurant is making \_\_\_\_\_ economic profits per week.  
A) positive                      B) zero                      C) negative                      D) break even  
Answer: A  
Diff: 2  
Topic: Short-Run Conditions and Long-Run Directions  
Skill: Analytic  
AACSB: Analytic Skills
- 19) Refer to Scenario 9.3. If the restaurant were to shut down, losses per week would be  
A) \$1,000                      B) \$1,600                      C) \$2,000                      D) \$3,600  
Answer: C  
Diff: 2  
Topic: Short-Run Conditions and Long-Run Directions  
Skill: Analytic  
AACSB: Analytic Skills
- 20) Refer to Scenario 9.3. The operating profit per week of the restaurant is  
A) \$0                      B) \$900                      C) \$2,900                      D) \$3,600  
Answer: C  
Diff: 2  
Topic: Short-Run Conditions and Long-Run Directions  
Skill: Analytic  
AACSB: Analytic Skills

*Refer to Scenario 9.4 to answer the following questions.*

SCENARIO 9.4: Sponsors invest \$100,000 in a new deli on the promise that they will earn a return of 10% per year on their investment. The deli sells 52,000 sandwiches per year. The deli's fixed costs include the return to investors and \$42,000 in other fixed costs. Variable costs consist of wages (\$1000 per week) plus materials, electricity, etc. (\$2000 per week). The deli is open 52 weeks per year.

- 21) Refer to Scenario 9.4. The annual fixed cost of the deli are \_\_\_\_\_.
- A) \$10,000                      B) \$42,000                      C) \$52,000                      D) \$156,000

Answer: C

Diff: 2

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 22) Refer to Scenario 9.4. The annual total cost of the deli are \_\_\_\_\_.
- A) \$42,000                      B) \$52,000                      C) \$156,000                      D) \$208,000

Answer: D

Diff: 2

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 23) Refer to Scenario 9.4. What must the average price per sandwich be for the deli to earn a normal return?
- A) \$1                              B) \$3                              C) \$4                              D) \$5.92

Answer: C

Diff: 2

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 24) Refer to Scenario 9.4. Suppose the average price per sandwich is \$5.50. What is the annual profit of the deli?
- A) -\$22,000                      B) \$78,000                      C) \$130,000                      D) \$244,000

Answer: B

Diff: 2

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Figure 9.1 below to answer the questions that follow.

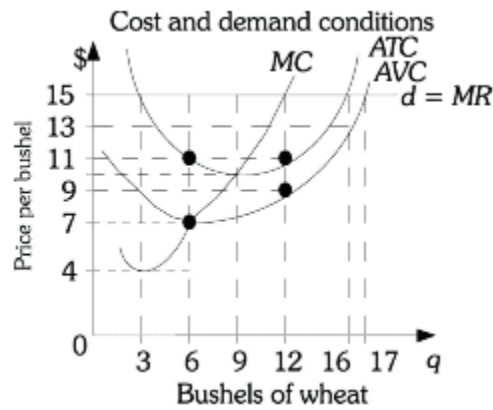


Figure 9.1

25) Refer to Figure 9.1. For this farmer to maximize profits he should produce \_\_\_\_\_ bushels of wheat.

- A) 6                                      B) 9                                      C) 12                                      D) 16

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

26) Refer to Figure 9.1. If this farmer is maximizing profits, his total costs will be

- A) \$11.                                      B) \$66.                                      C) \$90.                                      D) \$132.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

27) Refer to Figure 9.1. If this farmer is maximizing his profits, his TVC is

- A) \$24.                                      B) \$42.                                      C) \$108.                                      D) \$255.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

28) Refer to Figure 9.1. This farmer's fixed costs are

- A) \$0.  
 B) \$24.  
 C) \$45.  
 D) indeterminate unless we know the level of output the firm is producing.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 29) Refer to Figure 9.1. If this farmer is maximizing profits, his total revenue will be  
A) \$90.                      B) \$135.                      C) \$180.                      D) \$240.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 30) Refer to Figure 9.1. If this farmer is maximizing profits, his profit will be  
A) -\$24.                      B) \$45.                      C) \$48.                      D) \$72.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 31) Refer to Figure 9.1. If this farmer is maximizing profit, his operating profit (or loss) is  
A) -\$24.                      B) \$48.                      C) \$72.                      D) \$156.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 32) Refer to Figure 9.1. This farmer would earn a zero operating profit if price was  
A) \$7.                      B) \$9.                      C) \$10.                      D) \$11.

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 33) Refer to Figure 9.1. This farmer would earn a zero economic profit if price was  
A) \$7.                      B) \$9.                      C) \$10.                      D) \$11.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 34) Refer to Figure 9.1. This farmer's shutdown point is at a price of  
A) \$0.                      B) \$4.                      C) \$7.                      D) \$10.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 9.7 below to answer the questions that

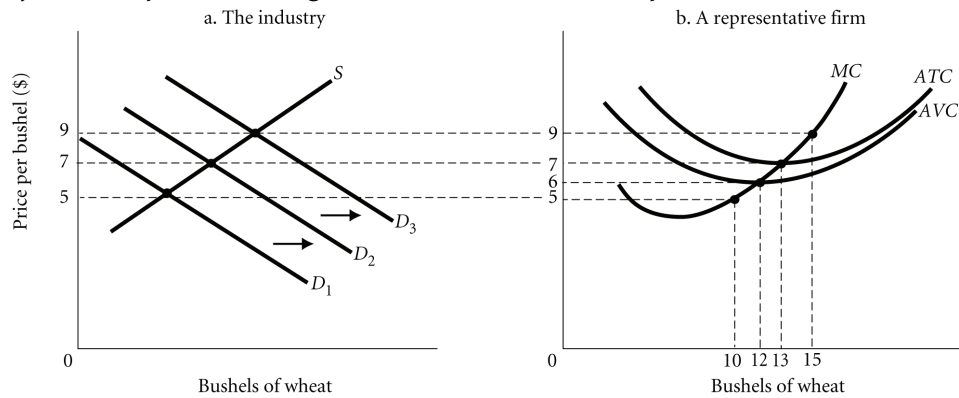


Figure 9.7

35) Refer to Figure 9.7. In which of the following price ranges will the firm continue to operate but at a loss?

- A) \$5-\$6                      B) \$6-\$7                      C) \$7-\$8                      D) \$8-\$9

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

36) Refer to Figure 9.7. The firm's shut down point is at a price of

- A) \$5                      B) \$6                      C) \$7                      D) \$8

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

37) Refer to Figure 9.7. Suppose demand for wheat is initially D2. If consumer incomes increase, then demand for wheat will shift to \_\_\_\_\_. This will \_\_\_\_\_ the equilibrium price of wheat and individual profit maximizing firms will produce \_\_\_\_\_ bushels of wheat.

- A) D3; increase; 15                      B) D1; increase; 10  
C) D3; decrease; 7                      D) D1; decrease; 0

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

38) Refer to Figure 9.7. Suppose demand for wheat is initially D2. If the price of rice (a substitute for wheat) falls, then demand for wheat will shift to \_\_\_\_\_. This will \_\_\_\_\_ the equilibrium price of wheat and individual profit maximizing firms will produce \_\_\_\_\_ bushels of wheat.

- A) D3; increase; 15
- C) D3; decrease; 10

- B) D1; increase; 13
- D) D1; decrease; 0

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

39) Refer to Figure 9.7. If demand for wheat is D2, then a profit maximizing firm will produce \_\_\_\_\_ units and earn a profit of \_\_\_\_\_.

A) 13; \$0

B) 7; \$0

C) 13; \$91

D) 15; \$30

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

40) Refer to Figure 9.7. If demand for wheat is D3, then a profit maximizing firm will produce \_\_\_\_\_ units and earn \_\_\_\_\_.

A) 15; positive profits

B) 9; positive profits

C) 12; negative profits

D) 13; exactly a normal return

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

41) Refer to Figure 9.7. If demand for wheat is D3, then in the long run

A) the firm will shut down.

B) the firm will exit the industry.

C) new firms will enter the industry and the current firms will expand production.

D) None of the above is correct.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

42) Refer to Figure 9.7. If demand for wheat is D1, then a profit maximizing firm will produce \_\_\_\_\_ units and earn \_\_\_\_\_.

A) 0; negative profits

B) 5; zero profits

C) 10; negative profits

D) 12; positive profits

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills



- 43) Refer to Figure 9.7. If demand for wheat is  $D_1$ , then in the long run
- A) the firm will increase its price and output.
  - B) the firm will exit the industry.
  - C) new firms will enter the industry and the current firms will expand production.
  - D) firms will increase their output so that their average fixed cost per unit falls.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 44) Operating profit is
- A)  $TR - TC$ .
  - B)  $TR - TFC$ .
  - C)  $TR - TVC$ .
  - D)  $TVC - TFC$ .

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 45) Economic profit is
- A)  $TR - TC$ .
  - B)  $TR - TFC$ .
  - C)  $TR - TVC$ .
  - D)  $TVC - TFC$ .

Answer: A

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 46) A firm earns an operating profit if
- A) revenues exceed variable costs of production.
  - B) revenues equal fixed costs.
  - C) price is less than average variable costs of production.
  - D) price equals marginal cost.

Answer: A

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 47) A firm suffers operating losses if
- A) price exceeds average variable cost but is less than average total cost.
  - B) price exceeds marginal cost.
  - C) revenues are smaller than variable costs of production.
  - D) revenues are greater than variable costs of production but less than total costs.

Answer: C

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 48) The Reliable Auto Repair Shop is earning a total revenue of \$7,000. Its total fixed costs are \$700, and its total variable costs are \$2,500. The Reliable Auto Repair Shop's operating profit is
- A) -\$1,800.                      B) \$3,800.                      C) \$4,500.                      D) \$6,300.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 49) If a firm's operating profit is \$0, then it must be true that
- A) TR equals TC.                      B) TR equals TVC.  
C) TR equals TFC.                      D) TFC is zero.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 50) If a firm's economic profit is \$0, then it must be true that
- A) TR equals TC.                      B) TR equals TVC.  
C) TR equals TFC.                      D) TFC is zero.

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 51) A profit-maximizing strategy becomes a loss minimization strategy when a firm in a perfectly competitive industry is producing where
- A)  $AVC < P < ATC$ .                      B)  $P > ATC$ .  
C)  $P = ATC$ .                      D)  $MR = MC < P$ .

Answer: A

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 52) A firm will choose to operate rather than shut down as long as
- A) price is greater than or equal to AFC.                      B) AFC is greater than AVC.  
C) price is greater than or equal to AVC.                      D) AVC is greater than MC.

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 53) Economic profit is
- A)  $(P-ATC)q$ .                      B)  $(P+ATC)q$ .                      C)  $P(q-ATC)$ .                      D)  $Pq/ATC$ .

Answer: A

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 54) A firm suffering economic losses decides whether or not to produce in the short run on the basis of whether
- A) revenues cover variable costs.
  - B) revenues from operating are sufficient to cover fixed costs.
  - C) revenues from operating are sufficient to cover fixed plus variable costs.
  - D) Firms suffering economic losses will always shut down.

Answer: A

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 55) You are hired as an economic consultant to The Pampered Pet Shop. The Pampered Pet Shop operates in a perfectly competitive industry. This firm is currently producing at a point where market price equals its marginal cost. The Shop's total revenue exceeds its total variable cost, but is less than its total cost. You should advise the firm to
- A) cease production immediately because it is incurring a loss.
  - B) lower its price so that it can sell more units of output.
  - C) produce in the short run to minimize its loss, but exit the industry in the long run.
  - D) raise its price until it breaks even.

Answer: C

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

AACSB: Reflective Thinking

- 56) You are hired as an economic consultant to The Pampered Pet Shop. The Pampered Pet Shop operates in a perfectly competitive industry. This firm is currently producing at a point where market price equals its marginal cost. The market price is less than its average variable cost. You should advise the firm to
- A) cease production immediately because it is not covering its variable costs of production.
  - B) lower its price so that it can sell more units of output.
  - C) produce in the short run to minimize its loss, but exit the industry in the long run.
  - D) raise its price until it breaks even.

Answer: A

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

AACSB: Reflective Thinking

- 57) A firm will shut down in the short run if
- A) it is suffering a loss.
  - B) fixed costs exceed revenues.
  - C) variable costs exceed revenues.
  - D) total costs exceed revenues.

Answer: C

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 58) The shutdown point for a perfectly competitive firm is the
- A) lowest point on the *ATC* curve.
  - B) point at which a firm's long-run supply curve ends.
  - C) lowest point on the *AVC* curve.
  - D) lowest point on the marginal cost curve.

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 59) A firm that is earning positive profits in the short run has an incentive to \_\_\_\_\_ its scale of operation in the long run.
- A) expand
  - B) contract
  - C) not change
  - D) encourage another firm to expand

Answer: A

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 60) If revenues exceed \_\_\_\_\_, operating profit is \_\_\_\_\_.
- A) total cost; negative
  - B) fixed cost; positive
  - C) variable cost; negative
  - D) variable cost; positive

Answer: D

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 61) If revenues exceed \_\_\_\_\_, economic profit is \_\_\_\_\_.
- A) total cost; negative
  - B) total cost; positive
  - C) variable cost; negative
  - D) variable cost; positive

Answer: B

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 62) If a firm shuts down in the short run, then
- A) its economic profits are zero.
  - B) its losses are equal to its fixed costs.
  - C) its operating profits are negative.
  - D) it must be the case that its revenues from operating were less than its total costs.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 63) A firm can minimize its losses by shutting down when \_\_\_\_\_ are less than \_\_\_\_\_ costs.
- A) variable costs; fixed
  - B) fixed costs; variable
  - C) revenues; variable
  - D) operating profits; sunk

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 64) As long as price is sufficient to cover \_\_\_\_\_, the firm is better off by operating rather than by shutting down.
- A) marginal cost
  - B) average fixed cost
  - C) average variable cost
  - D) marginal revenue

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 65) The Taste Freeze Ice Cream Company is a perfectly competitive firm producing where  $MR = MC$ . The current market price of an ice cream sandwich is \$5.00. Taste Freeze sells 200 ice cream sandwiches. Its  $AVC$  is \$8.00 and its  $AFC$  is \$3.00. What should Taste Freeze do?
- A) Continue to produce because price exceeds  $AFC$
  - B) Shut down and produce zero sandwiches because price is less than  $AVC$
  - C) Decrease production so that  $AVC$  will decrease
  - D) Increase production so that  $AFC$  will decrease

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 66) The Taste Freeze Ice Cream Company is a perfectly competitive firm producing where  $MR = MC$ . The current market price of an ice cream sandwich is \$5.00. Taste Freeze sells 200 ice cream sandwiches. Its  $AVC$  is \$4.00 and its  $AFC$  is \$3.00. What should Taste Freeze do?
- A) Continue to produce because price exceeds  $AVC$
  - B) Shut down and produce zero sandwiches because price is less than  $ATC$
  - C) Decrease production so that  $AVC$  will decrease
  - D) Increase production so that  $AFC$  will decrease

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 67) The Speedy Typesetting Company, a perfectly competitive firm, is currently producing where  $P = MC$  and is earning a normal profit. The firm mainly employs minimum wage workers and the government just increased the minimum wage from \$5.85 to \$6.55 per hour. In the short run, this firm will most likely
- A) reduce the amount of output it produces because its cost curves have shifted up and to the left.
  - B) continue to produce the same amount of output because only its fixed costs have increased.
  - C) produce more units of output to increase revenue to cover the additional fixed costs.
  - D) shut down because it will no longer be earning a normal profit.

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

*Refer to Scenario 9.5 to answer the following questions.*

SCENARIO 9.5: Investors put up \$520,000 to construct a building and purchase all equipment for a new restaurant. The investors expect to earn a minimum return of 10 per cent on their investment. The restaurant is open 52 weeks per year and serves 900 meals per week. The fixed costs are spread over the 52 weeks (i.e. prorated weekly). Included in the fixed costs is the 10% return to the investors and \$1000 per week in other fixed costs. Variable costs include \$1000 in weekly wages and \$600 per week for materials, electricity, etc. The restaurant charges \$3 on average per meal.

- 68) Refer to Scenario 9.5. Weekly total revenue is
- A) \$1,600
  - B) \$2,000
  - C) \$2,700
  - D) \$3,600

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 69) Refer to Scenario 9.5. The restaurant's weekly economic profit is
- A) positive
  - B) negative
  - C) zero
  - D) break even

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 70) Refer to Scenario 9.5. The weekly economic profit is
- A) \$1,000
  - B) \$0
  - C) -\$900
  - D) -\$3,600

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

71) Refer to Scenario 9.5. In the long run, the restaurant will want to

- A) operate and expand.
- B) operate but not expand.
- C) shut down but don't go out of business.
- D) go out of business.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

72) Refer to Scenario 9.5. In the short run, if the restaurant shuts down, it \_\_\_\_\_ variable costs and \_\_\_\_\_ revenue.

- A) has; earns
- B) has; earns no
- C) has no; earns
- D) has no; earns no

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

73) Refer to Scenario 9.5. In the short run, if the restaurant shuts down, its losses will equal its \_\_\_\_\_ costs of \$\_\_\_\_\_.

- A) variable; 1,600
- B) total; 3,600
- C) fixed; 1,000
- D) fixed; 2,000

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

74) Refer to Scenario 9.5. In the short run, if the restaurant decides to stay open, it will make operating profits of

- A) -\$1,100
- B) \$0
- C) \$1,100
- D) \$2,700

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

Refer to the data provided in Table 9.1 below to answer the questions that follow.

**Table 9.1**

q	TFC	TVC	TC	MC	AVC	ATC
0	\$50	\$0	\$50	--	--	--
1	50	20	70	20	20	70
2	50	30	80	10	15	40
3	50	45	95	15	15	31.67
4	50	62	112	17	15.50	28
5	50	90	140	28	18	28
6	50	132	182	42	22	30.33
7	50	186	236	54	26.57	33.71

75) Refer to Table 9.1. If the market price is \$10, then for this firm to maximize profits it should produce \_\_\_\_\_ units of output.

- A) zero                                      B) one                                      C) two                                      D) three

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

76) Refer to Table 9.1. If the market price is \$42, then for this firm to maximize profits it should produce \_\_\_\_\_ units of output and its profits will be \_\_\_\_\_ .

- A) five; \$70                                      B) six; \$70                                      C) six; \$120                                      D) seven; \$58

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

77) Refer to Table 9.1. If the market price is \$42, then in the long run the firm will

- A) operate and expand.                                      B) operate but not expand.  
C) shut down, but not go out of business.                                      D) go out of business.

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

78) Refer to Table 9.1. If the market price is \$17, then in the long run the firm will

- A) operate and expand.                                      B) operate but not expand.  
C) shut down, but not go out of business.                                      D) go out of business.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills



- 79) Refer to Table 9.1. If the market price is \$17, then in the short run the firm will
- A) operate and expand.
  - B) operate but not expand.
  - C) shut down, but not go out of business.
  - D) go out of business.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 80) Refer to Table 9.1. If the market price is \$15, this firm should produce \_\_\_\_\_ units of output to maximize profits.

- A) three
- B) four
- C) five
- D) six

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 81) Refer to Table 9.1. The shutdown point for this firm is a price of

- A) \$0.
- B) \$10.
- C) \$15.
- D) \$28.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 82) Refer to Table 9.1. The lowest output this firm would produce before shutting down is \_\_\_\_\_ units.

- A) 1
- B) 2
- C) 3
- D) 4

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 83) Refer to Table 9.1. In the long run, if cost conditions do not change, this firm will earn a zero economic profit if price is

- A) \$10.
- B) \$15.
- C) \$20.
- D) \$28.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 84) A firm stands to gain by operating instead of shutting down as long as \_\_\_\_\_ sufficiently covers \_\_\_\_\_.

- A) price; average variable cost
- B) price; average fixed cost
- C) total revenue; total fixed costs
- D) operating profit; economic profit

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 85) The rising part of a perfectly competitive firm's marginal cost curve that is equal to or above points on its average variable cost curve is the firm's
- A) normal profit curve.
  - B) operating profit curve.
  - C) short run supply curve.
  - D) long run supply curve.

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 86) If  $TR > TC$ , a firm would \_\_\_\_\_ in the short run and \_\_\_\_\_ in the long run.
- A) operate; expand
  - B) operate; contract
  - C) shut down; expand
  - D) shut down; contract

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 87) If  $TR < TC$ , a firm would \_\_\_\_\_ in the short run and \_\_\_\_\_ in the long run.
- A) indeterminate; contract
  - B) operate; contract
  - C) shut down; expand
  - D) shut down; contract

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 88) If  $TR > TVC$  but  $TR < TC$ , a firm would \_\_\_\_\_ in the short run and \_\_\_\_\_ in the long run.
- A) operate; expand
  - B) operate; exit the industry
  - C) shut down; expand
  - D) shutdown; exit the industry

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 89) If  $TR < TVC$ , a firm would \_\_\_\_\_ in the short run and \_\_\_\_\_ in the long run.
- A) operate; expand
  - B) operate; exit the industry
  - C) not operate; expand
  - D) shut down; exit the industry

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

90) If a perfectly competitive firm operates in the short run and expands in the long run, then the firm's short run condition is

- A)  $TR > TC$ .  
 B)  $TR > TVC$  and  $TR < TC$ .  
 C)  $TR < TVC$ .  
 D)  $TR < TFC$ .

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

91) If a perfectly competitive firm operates in the short run but exits the industry in the long run, then the firm's short run condition is

- A)  $TR > TC$ .  
 B)  $TR > TVC$  and  $TR < TC$ .  
 C)  $TR < TVC$ .  
 D)  $TR < TFC$ .

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

92) If a perfectly competitive firm shuts down in the short run and exits the industry in the long run, the firm's short run condition is

- A)  $TR > TC$ .  
 B)  $TR > TVC$  and  $TR < TC$ .  
 C)  $TR < TVC$ .  
 D)  $TR < TFC$ .

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

Refer to the data provided in Table 9.2 below to answer the questions that follow.

Table 9.2

q	TFC	TVC	TC	MC	AVC	ATC
0	\$50	\$0	\$50	--	--	--
1	50	20	70	20	20	70
2	50	30	80	10	15	40
3	50	45	95	15	15	31.67
4	50	62	112	17	15.50	28
5	50	90	140	28	18	28
6	50	132	182	42	22	30.33
7	50	186	236	54	26.57	33.71

93) Refer to Table 9.2. If the market price is \$17 and the firm produces 4 units of output, then its profit would be \_\_\_\_\_.

- A) -\$50  
 B) -\$44  
 C) \$0  
 D) \$18

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

94) Refer to Table 9.2. If the market price is \$28 and the firm produces 5 units of output, then its profit would be

- A) -\$50.                      B) -\$44.                      C) \$0.                      D) \$18.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

95) Refer to Table 9.2. The market price is \$42 and this firm is producing four units of output. Which of the following would you recommend to this firm?

- A) Continue producing four units of output, because the firm is able to make an economic profit.  
B) Increase output to six units, so that marginal cost equals marginal revenue.  
C) Reduce price to \$17, so that marginal cost will equal marginal revenue at 4 units of output.  
D) Increase output to seven units so that price is less than marginal cost.

Answer: B

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

AACSB: Analytic Skills

96) Refer to Table 9.2. At a market price of \$28, the best this firm can do is to produce \_\_\_\_\_ units of output and earn an economic profit of \_\_\_\_\_.

- A) 0; -\$50                      B) 4;\$0  
C) 5;\$0                      D) either 4 or 5; \$0

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

97) Refer to Table 9.2. If the market price is \$20, then to maximize profits this firm should produce

- A) zero units of output.                      B) one unit of output.  
C) two units of output.                      D) an output level of about four.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

98) The short-run supply curve of a competitive firm is the portion of

- A) the average variable cost curve that lies above its marginal cost curve.  
B) its marginal cost curve that lies above its average variable cost curve.  
C) its marginal cost curve that lies above its average total cost curve.  
D) its average total cost curve that lies above its marginal cost curve.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Definition

Refer to the information provided in Figure 9.2 below to answer the questions that follow.

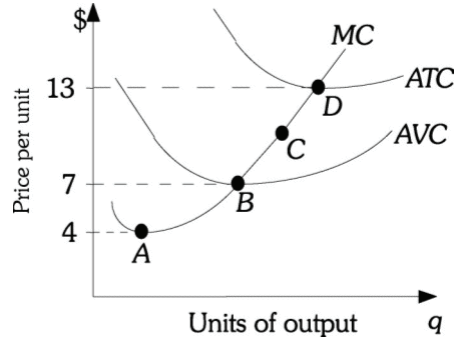


Figure 9.2

- 99) Refer to Figure 9.2. This firm's shutdown point corresponds to Point  
A) A.                                      B) B.                                      C) C.                                      D) D.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 100) Refer to Figure 9.2. This firm's short-run supply curve is the firm's  
A) AVC curve to the right of Point B.                                      B) marginal cost curve above Point A.  
C) marginal cost curve above Point B.                                      D) marginal cost curve above Point D.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 101) Refer to Figure 9.2. This firm will earn an operating profit, but incur an economic loss if price is  
A) between \$0 and \$4.                                      B) between \$4 and \$7.  
C) between \$7 and \$13.                                      D) above \$13.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 102) Refer to Figure 9.2. This firm will earn a zero economic profit if price is  
A) \$0.                                      B) \$4.                                      C) \$7.                                      D) \$13.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

103) The best explanation for the shape of a short run marginal cost schedule is

- A) increasing returns to scale.
- B) decreasing returns to scale.
- C) there is no fixed factor of production.
- D) a fixed factor causes diminishing returns to other factors.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

104) A perfectly competitive firm will be operating at its shutdown point if it operates

- A) where  $P = MC$ .
- B) at the minimum point on its average variable cost curve.
- C) at the minimum point on its average total cost curve.
- D) at the minimum point on its marginal cost curve.

Answer: B

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

105) The short-run industry supply curve for a perfectly competitive industry is the

- A) horizontal sum of the individual firms' marginal cost curves above *AVC*.
- B) vertical sum of the individual firms' marginal cost curves above *AVC*.
- C) horizontal sum of the individual firms' marginal cost curves above *ATC*.
- D) vertical sum of the individual firms' marginal cost curves above *ATC*.

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Definition

106) Which of the following will shift the short-run industry supply curve of a perfectly competitive industry?

- A) A decrease in the price of an input
- B) An increase in consumer income
- C) An increase in the price of the product
- D) An increase in demand for the product

Answer: A

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

107) If the price of an input decreases, each individual firm's marginal cost curve shifts \_\_\_\_\_ and the industry supply curve \_\_\_\_\_.

- A) downward; shifts to the left
- B) downward; shifts to the right
- C) up; does not change
- D) up; shifts to the left

Answer: B

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 108) If the price of an input increases, each individual firm's marginal cost curve shifts \_\_\_\_\_ and the industry supply curve \_\_\_\_\_.
- A) downward; shifts to the left  
 B) downward; shifts to the right  
 C) up; does not change  
 D) up; shifts to the left

Answer: D

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

Refer to the information provided in Figure 9.3 below to answer the questions that follow.

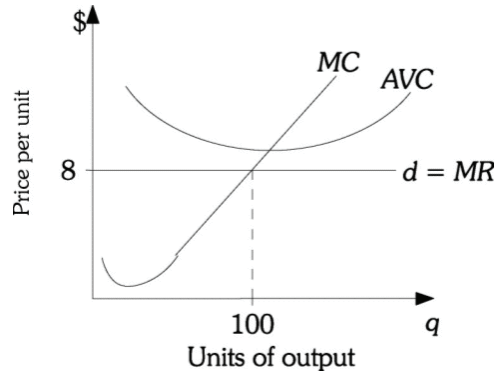


Figure 9.3

- 109) Refer to Figure 9.3. In the short run this firm should \_\_\_\_\_ and in the long run this firm should \_\_\_\_\_, if economic conditions do not change.
- A) shut down; exit the industry  
 B) exit the industry; shut down  
 C) continue to produce where  $MC = MR$ ; expand  
 D) continue to produce where  $MC = MR$ ; shut down

Answer: A

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

Refer to the information provided in Figure 9.4 below to answer the question that follows.

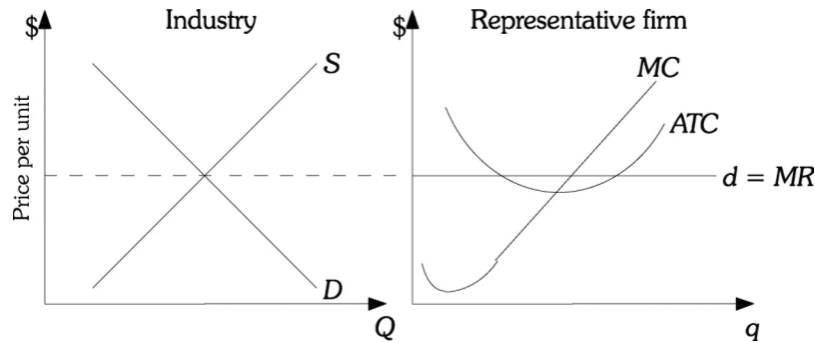


Figure 9.4

- 110) Refer to Figure 9.4. From the diagram, existing firms in this industry make \_\_\_\_\_ economic profits, and as long as this continues \_\_\_\_\_ .
- A) negative; new firms will not enter it and existing firms will leave it.
  - B) zero; new firms will not enter it and existing firms will not leave it either.
  - C) positive; new firms will enter the industry and existing firms will not leave it.
  - D) positive; the industry supply curve will shift to the left.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

AACSB: Analytic Skills

- 111) If a firm is incurring an operating loss, in the short run the firm should \_\_\_\_\_ and in the long run the firm should \_\_\_\_\_.
- A) produce where  $MC = MR$ ; exit the industry
  - B) shut down; exit the industry
  - C) produce where  $MC = MR$ ; expand
  - D) shut down; expand

Answer: B

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 112) Billy Bob's Fertilizer Engineers, a perfectly competitive firm, is incurring a loss but still earning an operating profit. Then in the short run this firm should \_\_\_\_\_ and in the long run, if there is no change in economic conditions, this firm should \_\_\_\_\_.
- A) shut down; exit the industry
  - B) shut down; expand
  - C) produce where  $MR = MC$ ; exit the industry
  - D) produce where  $MR = MC$ ; expand

Answer: C

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual



- 113) A firm is earning an economic profit. In the short run the firm should \_\_\_\_\_. In the long run the firm should probably \_\_\_\_\_.
- A) shut down; expand
  - B) produce where  $MC = MR$ ; leave the industry
  - C) produce where  $MC = MR$ ; expand
  - D) shut down; exit the industry

Answer: C

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 114) The owner of Tie-Dyed T-shirts, a perfectly competitive firm, has hired you to give him some economic advice. He has told you that the market price for his shirts is \$20 and that he is currently producing 200 shirts at an  $AVC$  of \$15 and an  $ATC$  of \$25. What would you recommend to him?
- A) To continue producing in the short run, as his loss from production is less than his fixed costs, but to exit the industry in the long run if there are no changes in economic conditions.
  - B) To shut down in the short run, as he is incurring a loss, and to leave the industry in the long run, if there are no changes in economic conditions.
  - C) To continue to produce in the short run, even though he is earning a loss, and to expand in the future with the hope of increasing market share and total revenue.
  - D) You tell him you cannot make any recommendations until you know what his fixed costs are.

Answer: A

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

AACSB: Reflective Thinking

- 115) The owner of Tie-Dyed T-shirts, a perfectly competitive firm, has hired you to give him some economic advice. He has told you that the market price for his shirts is \$20 and that he is currently producing 200 shirts at an  $AVC$  of \$15 and an  $ATC$  of \$25. You tell him he should continue to operate in the short run because
- A) he is earning positive economic profits of \$4,000.
  - B) his loss from operating is only \$2,000 which is less than his loss if he shuts down.
  - C) he has to pay his fixed costs of \$2,000 if he shuts down which is greater than his loss when he operates.
  - D) In fact you do not tell him to operate -- he should shut down since he has a loss.

Answer: C

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 116) Which of the following refers to a short run phenomenon?
- A) economies of scale
  - B) constant returns to scale
  - C) diseconomies of scale
  - D) diminishing returns

Answer: D

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Definition

## 2 True/False

- 1) Input prices fall as entry occurs in an increasing-cost industry.

Answer: FALSE

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 2) Input prices fall as entry occurs in an decreasing-cost industry.

Answer: TRUE

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 3) Entry of new firms in an increasing-cost industry leads to an upward shift of the LRAC curve.

Answer: TRUE

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 4) Entry of new firms in an decreasing-cost industry leads to an upward shift of the LRAC curve.

Answer: FALSE

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 5) Information on MC of production is all that is necessary to obtain the long run industry supply curve, because  $P = MC$  is the profit-maximization condition for all firms.

Answer: FALSE

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Definition

- 6) The long run industry supply curve is made up of the zero-profit equilibrium levels of output as the industry expands due to entry of new firms.

Answer: TRUE

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 7) When price is sufficient to cover average variable costs, firms suffering short-run losses will continue to operate rather than shut down.

Answer: TRUE

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 8) In the short run, firms suffering losses should always shut down.

Answer: FALSE

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

9) At all prices below the shutdown point, optimal short-run output is zero.

Answer: TRUE

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

10) The horizontal sum of marginal cost curves (above  $AVC$ ) of all the firms in an industry is the short-run industry supply curve.

Answer: TRUE

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Definition

11) The marginal cost curve of a firm above  $AVC$  is also its short-run supply curve.

Answer: TRUE

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

## 9.2 Long-Run Cost Economies and Diseconomies of Scale

### 1 Multiple Choice

1) In the short run average costs eventually increase because of \_\_\_\_\_, and in the long run average costs eventually increase because of \_\_\_\_\_.

A) diminishing returns; diseconomies of scale

B) diseconomies of scale; diminishing returns

C) constant returns to scale; decreasing returns to scale

D) increasing returns to scale; diseconomies of scale

Answer: A

Diff: 3

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual

2) Engineers for the Off Road Skateboard Company have determined that a 10% increase in all inputs will cause output to increase by 5%. Assuming that input prices remain constant, you correctly deduce that such a change will cause \_\_\_\_\_ as output increases.

A) total cost to decrease

B) average costs to increase

C) average costs to decrease

D) average fixed costs to increase

Answer: B

Diff: 3

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual



- 8) When a decrease in the scale of production leads to higher average costs, the industry exhibits
- A) diminishing returns.
  - B) increasing returns to scale.
  - C) decreasing returns to scale.
  - D) constant returns to scale.

Answer: B

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

- 9) Which of the following is an example of economies of scale?
- A) As the computer industry has expanded, the number of professionally trained computer programmers has also increased, which has caused the salaries of computer programmers to increase.
  - B) To attract firms to locate in its state, the state government reduced the tax rate that businesses must pay on its profits, thus lowering the costs to firms who locate in the state.
  - C) A firm increases in size and is therefore able to lower its health insurance costs because as the size of the group insured increases, the premium per person decreases substantially.
  - D) As the demand for calculators increased, the price of calculators actually fell.

Answer: C

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

- 10) Which of the following is an example of diseconomies of scale?
- A) As the computer industry has expanded, demand for professionally trained computer programmers has also increased, which has caused the salaries of computer programmers to increase.
  - B) As a firm hires additional workers each worker adds less to total output than the previous worker.
  - C) A firm increases in size and is therefore able to lower its health insurance costs because as the size of the group insured increases, the premium per person decreases substantially.
  - D) As the demand for calculators decreased, the price of calculators actually rose.

Answer: A

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

- 11) On the downward sloping portion of a firm's long run average cost curve, it is experiencing
- A) economies of scale
  - B) constant returns to scale
  - C) diseconomies of scale
  - D) diminishing marginal returns

Answer: A

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual

- 12) On the upward sloping portion of a firm's long run average cost curve, it is experiencing
- A) economies of scale
  - B) constant returns to scale
  - C) diseconomies of scale
  - D) diminishing marginal returns

Answer: C

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual

- 13) The Supply Room, a mail-order school supply store, grew rapidly. As a result of achieving a much larger size, the Supply Room is able to realize (1) volume discounts when buying from its suppliers, and (2) lower transportation costs by shipping in bulk. The best explanation of this is that the Supply Room seems to be experiencing
- A) increasing returns to scale.
  - B) constant returns to scale.
  - C) decreasing returns to scale.
  - D) ways to get around the law of diminishing marginal returns.

Answer: A

Diff: 3

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual

- 14) Every point on a U-shaped long-run average cost curve represents
- A) the minimum cost at which the associated output level can be produced when the scale of plant can be changed.
  - B) the minimum point of the associated short-run average cost curve.
  - C) the minimum cost at which the associated output level can be produced when the scale of plant cannot be changed.
  - D) Both A and B

Answer: A

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

- 15) Suppose Heidi's Ice Cream experiences economies of scale up to a certain point and diseconomies of scale beyond that point. Its long-run average cost curve is most likely to be
- A) upward sloping to the right.
  - B) downward sloping to the right.
  - C) horizontal.
  - D) U-shaped.

Answer: D

Diff: 3

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual

- 16) Internal economies of scale occur at the \_\_\_\_\_ level(s).
- A) plant and firm
  - B) plant and industry
  - C) firm and industry
  - D) plant, firm, and industry

Answer: A

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

17) For constant returns to scale, a(n) \_\_\_\_\_ in a firm's scale of production leads to \_\_\_\_\_ average total cost.

A) increase; lower

B) increase; higher

C) decrease; a change in

D) decrease; no change in

Answer: D

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Analytic

AACSB: Analytic Skills

18) The smallest size plant size at which the long run average cost curve is at its minimum is called the

A) envelope.

B) profit maximizing scale of production.

C) minimum efficient scale.

D) shut down point.

Answer: C

Diff: 1

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

19) Over all levels of output, if a firm's long-run average cost curve declines as output increases, then

A) small firms and large firms will have identical average costs.

B) there should be a large number of firms in the industry.

C) small firms would have lower average costs of production than large firms.

D) there should be only one firm in the industry.

Answer: D

Diff: 3

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual

Refer to the information provided in Figure 9.5 below to answer the questions that follow.

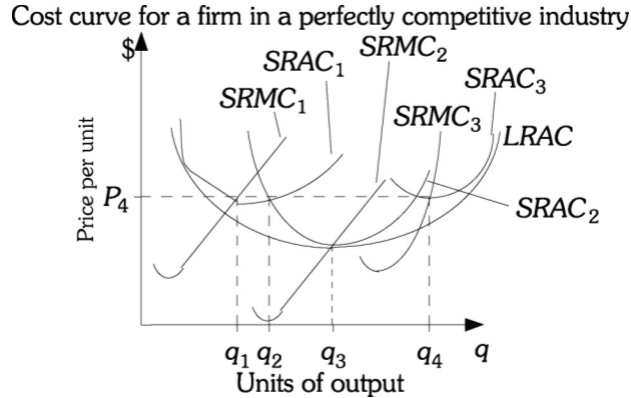


Figure 9.5

20) Refer to Figure 9.5. For this firm, diseconomies of scale set in after \_\_\_\_\_ units of output.

- A)  $q_1$     B)  $q_2$     C)  $q_3$     D)  $q_4$

Answer: C

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Analytic

AACSB: Analytic Skills

21) Refer to Figure 9.5. Assume this firm is in a constant-cost industry. For this firm to be in long-run equilibrium, the firm must be producing

- A)  $q_1$  units of output.  
 B)  $q_2$  units of output.  
 C)  $q_3$  units of output.  
 D) an amount that is indeterminate from this information.

Answer: C

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Analytic

AACSB: Analytic Skills

22) Related to the Economics in Practice on page 187. Florida Blood Services and the Northwest Florida Blood Center merged

- A) in an attempt to gain market power.  
 B) to take advantage of economies of scale in blood testing and complying with government regulations.  
 C) to drive all other blood banks in the area out of the market.  
 D) to avoid diminishing marginal returns.

Answer: B

Diff: 1

Topic: Economics in Practice

Skill: Fact



## 2 True/False

- 1) When an increase of a firm's scale of production leads to higher average costs per unit produced, there is an increasing return to scale.  
Answer: FALSE  
Diff: 2  
Topic: Long-Run Costs: Economies and Diseconomies of Scale  
Skill: Definition
- 2) Economies of scale cannot be due only to the sheer size of a firm's operation.  
Answer: FALSE  
Diff: 1  
Topic: Long-Run Costs: Economies and Diseconomies of Scale  
Skill: Fact
- 3) Across different output levels, a firm can experience both economies and diseconomies of scale.  
Answer: TRUE  
Diff: 1  
Topic: Long-Run Costs: Economies and Diseconomies of Scale  
Skill: Definition
- 4) A firm's long run average cost curve represents the minimum cost of producing each level of output when the scale of production can be adjusted.  
Answer: TRUE  
Diff: 1  
Topic: Long-Run Costs: Economies and Diseconomies of Scale  
Skill: Definition
- 5) A firm that has increasing returns to scale in the long run does not experience diminishing marginal returns in the short run.  
Answer: FALSE  
Diff: 2  
Topic: Long-Run Costs: Economies and Diseconomies of Scale  
Skill: Definition

## 9.3 Long-Run Adjustments to Short-Run Conditions

### 1 Multiple Choice

- 1) Industries in which firms are suffering losses are likely to \_\_\_\_\_ in the long-run.
  - A) expand
  - B) contract
  - C) neither expand nor contract, as firms must earn an economic profit to stay in business
  - D) expand or contract depending on the normal rate of returnAnswer: B  
Diff: 3  
Topic: Long-Run Adjustments to Short-Run Conditions  
Skill: Conceptual

- 2) Industries in which firms are enjoying positive profits are likely to \_\_\_\_\_ in the long-run.
- A) expand
  - B) contract
  - C) neither expand nor contract, as firms must earn an economic profit to stay in business
  - D) expand or contract depending on the normal rate of return

Answer: A

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 3) For a perfectly competitive industry, an improvement in technology will cause
- A) a movement up the short-run industry supply curve.
  - B) a movement down the short-run industry supply curve.
  - C) the industry short-run supply curve to shift to the right.
  - D) the industry short-run supply curve to shift to the left.

Answer: C

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 4) Which of the following is the set of conditions necessary for long-run equilibrium for a perfectly competitive firm?
- A)  $P = SRMC < SRAC = LRAC$
  - B)  $P > SRMC = SRAC = LRAC$
  - C)  $P = SRMC = SRAC > LRAC$
  - D)  $P = SRMC = SRAC = LRAC$

Answer: D

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 5) Assume the peanut industry, a perfectly competitive industry, is in long-run equilibrium with a market price of \$5. If demand for peanuts increases and this industry is a decreasing-cost industry, long-run equilibrium will be reestablished at a price
- A) greater than \$5.
  - B) less than \$5.
  - C) equal to \$5.
  - D) either greater than or less than \$5, depending on the number of firms that enter the industry.

Answer: B

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 6) Assume a perfectly competitive industry is in long-run equilibrium at a price of \$20. If this industry is a constant-cost industry and the demand for the product decreases, long-run equilibrium will be reestablished at a price
- A) greater than \$20.
  - B) less than \$20.
  - C) of \$20.
  - D) either greater than or less than \$20 depending on the magnitude of the decrease in demand.

Answer: C

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Analytic

AACSB: Analytic Skills

- 7) Assume a perfectly competitive industry is in long-run equilibrium at a price of \$30. If this industry is an increasing-cost industry and the demand for the product increases, long-run equilibrium will be reestablished at a price
- A) greater than \$30.
  - B) of \$30.
  - C) less than \$30.
  - D) either greater than or less than \$30 depending on the magnitude of the decrease in demand.

Answer: A

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 9.6 below to answer the questions that follow.

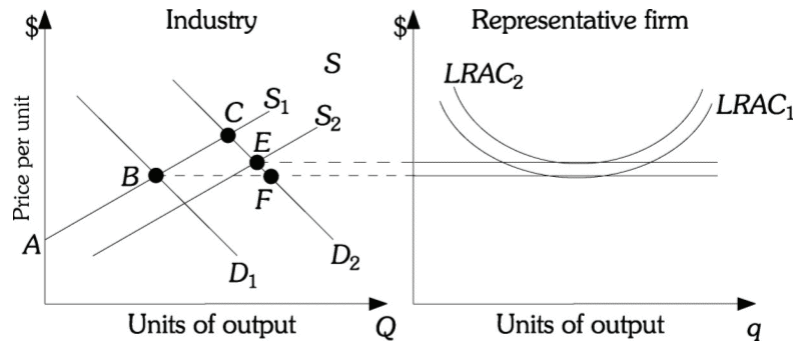


Figure 9.6

- 8) Refer to Figure 9.6. Industry demand is initially  $D_1$  and industry supply is initially  $S_1$  in this increasing cost industry. If demand increases to  $D_2$ , then in the long run the industry will
- A) stay at Point B.
  - B) move to Point C.
  - C) move to Point E.
  - D) move to Point F.

Answer: C

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 9.6. This increasing cost industry's long-run supply curve would be found by drawing a line from
- A) Points A to E.
  - B) Points B to F.
  - C) Points B to C.
  - D) Points B to E.

Answer: D

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Figure 9.6. The type of industry depicted in this situation is
- A) an increasing-cost industry.
  - B) a decreasing-cost industry.
  - C) a constant-cost industry.
  - D) impossible to determine from this information.

Answer: A

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 11) An industry is in \_\_\_\_\_ if firms have an incentive to enter or exit in the \_\_\_\_\_ run.
- A) disequilibrium; short
  - B) disequilibrium; long
  - C) equilibrium; short
  - D) equilibrium; long

Answer: B

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Analytic

AACSB: Analytic Skills

- 12) In the long run firms will expand as long as there are more \_\_\_\_\_ and new firms will enter the industry as long as they earn \_\_\_\_\_.
- A) economies of scale; zero profits
  - B) economies of scale; positive economic profits
  - C) diseconomies of scale; zero profits
  - D) diseconomies of scale; positive economic profits

Answer: B

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 13) In long run equilibrium for a perfectly competitive industry, firms earn \_\_\_\_\_ economic profits and produce \_\_\_\_\_.
- A) zero; efficiently
  - B) zero; inefficiently
  - C) positive; efficiently
  - D) positive; inefficiently

Answer: A

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 14) Assume the market for beef is perfectly competitive. Beef producers are currently earning a zero economic profit. If consumers switch from beef to chicken, which of the following is most likely to occur?
- A) Beef producers will now incur economic losses in both the short run and the long run.
  - B) Beef producers will incur economic losses in the short run. Some producers will exit the industry until those remaining are earning a zero economic profit.
  - C) Beef producers will incur economic losses in the short run. Some producers will exit the industry until those remaining are earning an economic profit.
  - D) Beef producers will now earn economic profits in the short run and there will be no additional adjustments in the long run.

Answer: B

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

AACSB: Reflective Thinking

- 15) Assume the market for beef is perfectly competitive. Beef producers are currently earning a zero economic profit. If consumers switch to beef from chicken, which of the following is most likely to occur?
- A) Beef producers will now incur economic profits in both the short run and the long run.
  - B) Beef producers will incur economic profits in the short run. Some producers will enter the industry until all firms in the industry are earning a zero economic profit.
  - C) Beef producers will incur economic profits in the short run. Some producers will enter the industry as long as all firms in the industry are earning an economic profit.
  - D) Beef producers will now earn economic losses in the short run and there will be no additional adjustments in the long run.

Answer: B

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

AACSB: Reflective Thinking

- 16) As long as economic profits are being earned in an industry, firms will \_\_\_\_\_ the industry and the supply curve will shift to the \_\_\_\_\_.
- A) enter; right
  - B) enter; left
  - C) exit; left
  - D) exit; right

Answer: A

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 17) As long as economic losses are being earned in an industry, firms will \_\_\_\_\_ the industry and the supply curve will shift to the \_\_\_\_\_.
- A) enter; right
  - B) enter; left
  - C) exit; left
  - D) exit; right

Answer: C

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 18) As new firms enter a decreasing-cost industry,
- A) the LRAC curve shifts down.
  - B) the LRAC curve shifts up.
  - C) the position of the LRAC curve doesn't change, but firms move down their LRAC curve.
  - D) the position of the LRAC curve doesn't change, but firms move up their LRAC curve.

Answer: A

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 19) As new firms enter an increasing-cost industry,
- A) the LRAC curve shifts down.
  - B) the LRAC curve shifts up.
  - C) the position of the LRAC curve doesn't change, but firms move down their LRAC curve.
  - D) the position of the LRAC curve doesn't change, but firms move up their LRAC curve.

Answer: B

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 20) Assume the tennis ball industry, a perfectly competitive, decreasing-cost industry, is in long-run equilibrium with a market price of \$5. If the demand for tennis balls DECREASES, long-run equilibrium will be reestablished at a price
- A) greater than \$5.
  - B) less than \$5.
  - C) equal to \$5.
  - D) either greater than or less than \$5, depending on the number of firms that enter the industry.

Answer: A

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 21) Assume the tennis ball industry, a perfectly competitive, increasing-cost industry, is in long-run equilibrium with a market price of \$5. If the demand for tennis balls DECREASES, long-run equilibrium will be reestablished at a price
- A) greater than \$5.
  - B) less than \$5.
  - C) equal to \$5.
  - D) either greater than or less than \$5, depending on the number of firms that enter the industry.

Answer: B

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 22) Firms are making profits in an increasing-cost industry. Which of the following statements describes what will happen in the long run?
- A) More firms will enter this industry, causing the industry supply schedule to shift to the right and the LRAC curve facing firms to shift down.
  - B) More firms will enter this industry, causing the industry supply schedule to shift to the right and the LRAC curve facing firms to shift up.
  - C) Firms will exit this industry, causing the industry supply schedule to shift to the right and the LRAC curve to shift down.
  - D) Firms will exit this industry, causing the industry supply schedule to shift to the left and the LRAC curve to shift down.

Answer: B

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 23) An industry with a positive sloping long-run supply curve is called a(n) \_\_\_\_\_ industry.
- A) constant-cost
  - B) decreasing-cost
  - C) increasing-cost
  - D) decreasing-profit

Answer: C

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Definition

- 24) An industry with a horizontal long-run supply curve is called a(n) \_\_\_\_\_ industry.
- A) constant-cost
  - B) decreasing-cost
  - C) increasing-cost
  - D) decreasing-profit

Answer: A

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Definition

- 25) In efficient markets \_\_\_\_\_ flows toward \_\_\_\_\_ opportunities.
- A) investment capital; consumption
  - B) investment capital; profit
  - C) consumption; profit
  - D) consumption; investment

Answer: B

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 26) Related to the *Economics in Practice* on page 190: If the long-run average cost curve in an industry is flat, which of the following must be true?
- A) There are no economies of scale in the industry.
  - B) Small firms have higher average costs than large firms.
  - C) Existing firms have no incentive to expand.
  - D) There would be no difference between the industry's short-run average cost curve and its long-run average cost curve.

Answer: A

Diff: 3

Topic: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

- 27) Related to the *Economics in Practice* on page 194: The price of hot dogs sold from a cart in New York's Central Park is much higher than the standard price elsewhere in New York. Which of the following, if true, would provide the best explanation for this difference?
- A) Only licensed vendors may sell hot dogs from a cart, and the price of that license is higher for sales in Central Park than it is for sales elsewhere in New York.
  - B) The standard price of hot dogs in New York is higher than the standard price of hot dogs in other cities.
  - C) In Central Park, prices for hamburgers and other foods are typically higher than they are outside of Central Park.
  - D) Almost all hot dog vendors sell essentially the same product: a standard quality-certified hot dog and two varieties of mustard.

Answer: A

Diff: 1

Topic: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking



## 2 True/False

- 1) If a firm earns short run losses, it exits in the long run.

Answer: TRUE

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 2) Profits in the short run attract resources to industries in the long run allowing them to expand.

Answer: TRUE

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

## 9.4 Appendix: External Economies and Diseconomies and the Long-Run Industry Supply Curve

### 1 Multiple Choice

- 1) Sources of external economies of scale include

- A) larger plant size that allows the plant to take advantage of technology.
- B) larger firm size that result in volume discounts.
- C) larger industry size results in lower production costs.
- D) All of the above are correct.

Answer: C

Diff: 1

Topic: Appendix: External Economies and Diseconomies and the Long-Run Industry Supply Curve

Skill: Definition

# Chapter 10 Input Demand: The Labor and Land Markets

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## 10.1 Input Markets: Basic Concepts

### 1 Multiple Choice

- 1) The idea that the demand for autoworkers stems from the demand for automobiles is
- A) the value of the marginal product of autoworkers.
  - B) derived demand.
  - C) indirect demand.
  - D) output demand.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 2) Demand for the services of Derek Jeter is
- A) horizontal.
  - B) unrelated to his true productivity.
  - C) an output demand.
  - D) derived from the demand for Yankee's tickets when Jeter plays.

Answer: D

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 3) Salaries of NFL quarterbacks, like Tom Brady, are
- A) too high.
  - B) related to the additional revenues team owners expect to enjoy as a result of having them on the team roster.
  - C) the result of perfectly competitive markets.
  - D) All of the above are correct.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 4) A decrease in the wage rate will change
- A) only the amount of labor hired.
  - B) the amount of labor employed, and it may also change the amount of other inputs employed.
  - C) the price the firm charges for the product, but it will not affect the demand for any of the inputs.
  - D) the firm's profit-maximizing level output, but not its usage of inputs.

Answer: B

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 5) When a large amount of output is produced per unit of the input, the input is said to exhibit
- A) high productivity.
  - B) low productivity.
  - C) marginal productivity.
  - D) derived productivity.

Answer: A

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 6) The demand for \_\_\_\_\_ is a "derived demand."
- A) ice cream cones on a hot day
  - B) tax-free municipal bonds
  - C) a hair stylist by a salon owner
  - D) a birthday cake for your brother

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 7) The demand for inputs is a derived demand because
- A) it does not come from competitive markets.
  - B) it depends on the demand for outputs.
  - C) it is derived from nature.
  - D) it is derived from production.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 8) A car manufacturing company adopts a new technology that, *ceteris paribus*, increases the productivity of capital. At the same time, workers unionize and demand higher wages. Assume that for this firm capital and labor are substitutable. Which of the following is most likely to occur?
- A) Capital will be substituted for labor.
  - B) Labor will be substituted for capital.
  - C) Output increases as do the prices of capital and labor.
  - D) Output decreases as does the price of cars.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 9) Factors of production that can be used together to enhance the other's productivity are
- A) substitutable inputs.
  - B) complementary inputs.
  - C) duplicate inputs.
  - D) proportionate inputs.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Definition

- 10) Labor and capital are substitutes in production. If labor becomes more educated, then, *ceteris paribus*,
- A) capital is substituted for labor.
  - B) labor is substituted for capital.
  - C) output decreases as does the rental rate.
  - D) output increases as does the price of the output.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 11) If labor and capital are complementary in production and a technological advance increases the productivity of capital, then, *ceteris paribus*,
- A) labor productivity is likely to fall.
  - B) labor productivity is likely to rise.
  - C) wages are likely to fall.
  - D) Both (A) and (C) are correct.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 12) The marginal revenue product
- A) is the product of the marginal product of labor and the price of the output.
  - B) eventually increases as labor input increases.
  - C) measures the benefit to the firm from hiring an additional unit of labor.
  - D) Both (A) and (C) are correct.

Answer: D

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 13) If a pet grooming salon hires an additional groomer, that worker can groom 4 additional pets per day. The average grooming fee is \$25. The most the salon would be willing to pay that groomer is
- A) \$4 per day.
  - B) \$25 per day.
  - C) \$100 per day.
  - D) indeterminate with the given information.

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 14) The marginal revenue product of labor is
- A) the additional revenue a firm earns by employing one additional unit of labor.
  - B) the additional profit a firm earns by employing one additional unit of labor.
  - C) the marginal product of capital times the price of labor.
  - D) the additional revenue the firm makes by selling one unit of labor.

Answer: A

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Definition

- 15) If the marginal product of a worker for a calculator manufacturer is 10 calculators, and the price of a calculator is \$10, the firm's marginal revenue product is
- A) \$1.00.
  - B) \$10.00.
  - C) \$100.00.
  - D) \$1,000.00.

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills



20) Refer to Table 10.1. If the payment to labor per day is \$100, this T-shirt manufacturer is maximizing profits if he will hire \_\_\_\_\_ employees.

- A) one                      B) two                      C) four                      D) five

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

21) Refer to Table 10.1. The maximum payment to labor per day that this profit-maximizing T-shirt manufacturer would be willing to pay to hire three workers per day is

- A) \$15.                      B) \$75.                      C) \$125.                      D) \$200.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

22) If the price of the product produced by labor increases, the marginal revenue product of labor curve will

- A) be unaffected because productivity of labor has not changed.  
B) shift to the left.  
C) shift to the right.  
D) become more elastic.

Answer: C

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

23) The formula for the marginal revenue product of labor (L is for labor, X is the output) is

- A)  $MP_L/P_X$ .                      B)  $P_X/MP_L$ .  
C)  $(MP_L)(MR_X)$ .                      D)  $MP_L + P_X$ .

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Definition

Refer to the data provided in Table 10.2 below to answer the following questions.

Total Labor Units (employees)	Total Product (frames per day)	Price per Frame
0	0	\$10
1	10	\$10
2	30	\$10
3	55	\$10
4	70	\$10
5	82	\$10

- 24) Refer to Table 10.2. Diminishing returns to labor start with the \_\_\_\_\_ worker.  
 A) second                      B) third                      C) fourth                      D) fifth

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 25) Refer to Table 10.2. Marginal revenue product of the \_\_\_\_\_ worker is \$250.  
 A) second                      B) third                      C) fourth                      D) fifth

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 26) Refer to Table 10.2. Marginal revenue product of the \_\_\_\_\_ worker is \$120.  
 A) second                      B) third                      C) fourth                      D) fifth

Answer: D

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 27) Refer to Table 10.2. If workers are paid \$150 per day, then the firm is profit maximizing when it hires \_\_\_\_\_ workers.  
 A) two                      B) three                      C) four                      D) five

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 28) Refer to Table 10.2. The most firms would be willing to pay per worker and hire three total workers is  
 A) \$120                      B) \$150                      C) \$200                      D) \$250

Answer: D

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills



- 29) Refer to Table 10.2. The firm currently employs 4 workers at the market wage of \$120 per worker per day. If the firm wants to maximize its profits, it should
- A) hire fewer workers
  - B) hire more workers.
  - C) make no adjustments as it is already employing the profit maximizing number of workers.
  - D) shut down since it is incurring a loss.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 10.1 below to answer the questions that follow.



Figure 10.1

- 30) Refer to Figure 10.1. This firm is currently hiring 16 workers and paying a wage of \$10. This firm should
- A) do nothing because it is maximizing profits.
  - B) reduce employment to 15 workers to increase profits.
  - C) reduce employment to 14 workers to increase profits.
  - D) increase employment to 17 workers to increase profits.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Analytic Skills

- 31) A firm will continue hiring labor as long as the MRP of labor \_\_\_\_\_ the market wage rate.
- A) is greater than or equal to
  - B) is less than
  - C) is equal to
  - D) determines

Answer: A

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 32) The marginal cost of a unit of labor in a perfectly competitive labor market is
- A) its average *MRP*.
  - B) equal to product price.
  - C) the market wage rate.
  - D) equal to *MRP*.

Answer: C

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 33) Tony's Lawn Service uses only one variable input, fertilizer. The firm's demand curve for fertilizer in the short run is the input's
- A) total product curve.
  - B) marginal product curve.
  - C) marginal revenue product curve.
  - D) total cost curve.

Answer: C

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Definition

- 34) Sally's Sandwiches produces sandwiches using one variable input -- labor. Sally's Sandwiches is a \_\_\_\_\_ in the labor market and a \_\_\_\_\_ in the sandwich market.
- A) producer; consumer
  - B) consumer; producer
  - C) consumer; consumer
  - D) producer; producer

Answer: B

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Definition

- 35) You have been hired by a data processing firm to provide economic advice. The owner of the firm tells you that the firm's only variable input is the number of data-entry operators. The hourly wage for data-entry operators is \$15.00. The marginal revenue product curve for data-entry operators reaches its maximum at three workers with a marginal revenue product of \$12.00. What advice would you give this firm?
- A) Hire three data-entry operators so as to minimize the amount of money the firm will lose.
  - B) Shut down immediately, as the firm is not able to cover all of its variable costs.
  - C) Increase the wage rate paid to data-entry operators so that their marginal revenue product will increase.
  - D) Produce as much as possible so as to maximize the difference between the wage paid to data-entry operators and their marginal revenue product.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 36) You have been hired by a data processing firm to provide economic advice. The owner of the firm tells you that the firm's only variable input is the number of data-entry operators. The hourly wage for data-entry operators is \$10.00. The marginal revenue product curve for data-entry operators reaches its maximum at three workers with a marginal revenue product of \$12.00. What advice would you give this firm?
- A) Hire three data-entry operators so as to maximize profits.
  - B) Shut down immediately, as the firm is not able to cover all of its variable costs.
  - C) Decrease the wage rate paid to data-entry operators so that their marginal revenue product will decrease.
  - D) Hire data-entry operators until the marginal revenue product is equal to the wage -- which will occur when more than three operators are employed.

Answer: D

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 37) Firms will employ an input up to the point where
- A) the wage rate equals the productivity of capital.
  - B) its marginal cost equals its marginal product.
  - C) the input's price equals its marginal revenue product.
  - D) the input's price equals its marginal product.

Answer: C

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 38) Liu's Potato Chips is a perfectly competitive firm currently employing 30 workers. The marginal revenue product of the 30th worker is \$7.00 per hour. The wage rate is \$8.00 per hour. To increase profits, this firm should
- A) decrease employment until the *MRP* of labor equals \$8.00.
  - B) increase employment until the *MRP* of labor equals \$8.00.
  - C) continue hiring 30 workers because the firm earns a surplus of \$1.00 on each worker hired.
  - D) increase the price of potato chips so that the marginal revenue product increases to \$8.00 per hour.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 39) If the supply of labor decreases, which of the following events will occur?
- A) The wage rate will fall and firms will increase employment up until the point where *MRP* equals the new wage rate.
  - B) The wage rate will fall and firms will decrease employment to the point where *MRP* equals the new wage rate.
  - C) The wage rate will increase and firms will decrease employment to the point where *MRP* equals the new wage rate.
  - D) The wage rate will increase and firms will increase employment up until the point where *MRP* equals the new wage rate.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 40) If the supply of labor increases, which of the following events will occur?
- A) The wage rate will fall and firms will increase employment up until the point where *MRP* equals the new wage rate.
  - B) The wage rate will fall and firms will decrease employment to the point where *MRP* equals the new wage rate.
  - C) The wage rate will increase and firms will decrease employment to the point where *MRP* equals the new wage rate.
  - D) The wage rate will increase and firms will increase employment up until the point where *MRP* equals the new wage rate.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 41) If Tie-Dyed T-Shirts is currently employing labor so that the wage is less than the marginal revenue product of labor, it must also be true that
- A) total revenues would be greater than total costs.
  - B) the wage is greater than marginal cost.
  - C) the price of the product must be less than marginal cost.
  - D) the price of the product must be greater than marginal cost.

Answer: D

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 42) Assume that labor is the only variable input and that the payment made to labor is denoted as *W*. The marginal product of labor can be stated as
- A)  $(W) \times (MC)$ .
  - B)  $W/MC$ .
  - C)  $MC/W$ .
  - D)  $TC/W$ .

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Definition

- 43) If the wage rate is less than the marginal revenue product of labor, the firm should \_\_\_\_\_ to maximize profits.
- A) hire less labor and produce less output
  - B) hire less labor and produce more output
  - C) hire more labor and produce less output
  - D) hire more labor and produce more output

Answer: D

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 10.2 below to answer the questions that follow.

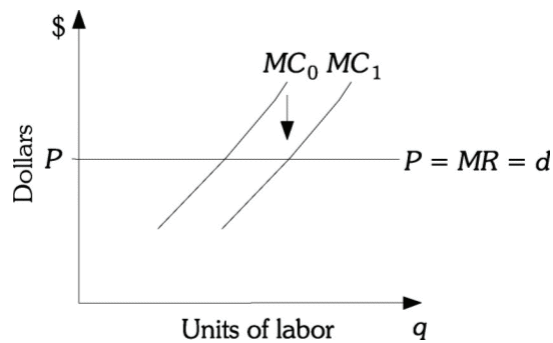


Figure 10.2

- 44) Refer to Figure 10.2. This firm's marginal cost curve has shifted from  $MC_0$  to  $MC_1$ . A likely explanation for this is that
- A) the productivity of a variable input declined.
  - B) the price of a variable input decreased.
  - C) the demand for the firm's product decreased.
  - D) the supply of a variable input decreased.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 45) Refer to Figure 10.2. This firm's marginal cost curve has shifted from  $MC_0$  to  $MC_1$ . A profit-maximizing firm should \_\_\_\_\_ the amount of output produced and \_\_\_\_\_ its demand for labor.

- A) increase; increase
- B) increase; decrease
- C) decrease; decrease
- D) keep constant; increase

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 46) If capital and labor are complementary inputs and the firm increases the amount of capital employed in production, the marginal revenue product of labor will
- A) decrease.
  - B) increase.
  - C) remain constant because the amount of labor was not changed.
  - D) either increase, decrease or remain constant depending on how complementary labor and capital are in production.

Answer: B

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

Refer to the information provided in Figure 10.3 below to answer the questions that follow.

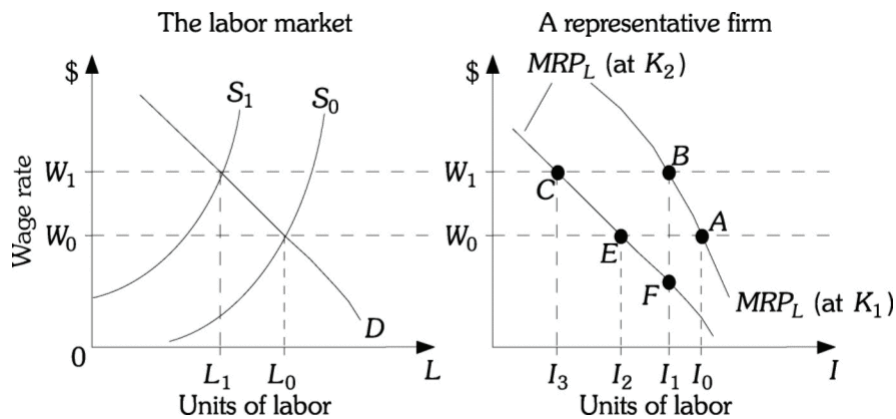


Figure 10.3

- 47) Refer to Figure 10.3. If labor supply is given by  $S_0$  and the firm is using  $K_1$  units of capital, this firm should hire \_\_\_\_\_ units of labor to maximize profit.
- A)  $I_0$
  - B)  $I_1$
  - C)  $I_2$
  - D)  $I_3$

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 48) Refer to Figure 10.3. The market wage is initially  $W_0$  and the firm is initially at Point A. Labor supply decreases from  $S_0$  to  $S_1$ , if the firm does not change the amount of capital it employs, the firm will move to Point \_\_\_\_\_ to maximize profits.
- A) B
  - B) C
  - C) E
  - D) F

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

49) Refer to Figure 10.3. The market wage is initially  $W_0$  and the firm is initially at Point A. Labor supply decreases from  $S_0$  to  $S_1$ . The firm's  $MRP_L$  curve will shift from  $MRP_L$  at  $K_1$  to  $MRP_L$  at  $K_2$  because

- A) the factor substitution effect will cause the firm to substitute capital for the higher-priced labor.
- B) the supply of labor decreased and therefore the productivity of labor decreased.
- C) the output effect led to a decrease in the demand for capital, which in turn decreased the productivity of labor.
- D) the firm is no longer maximizing profits.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

50) Refer to Figure 10.3. The market wage is initially  $W_0$  and the firm is initially at Point A. Labor supply decreases from  $S_0$  to  $S_1$ ; after the firm is fully able to adjust all inputs, the firm will hire \_\_\_\_\_ units of labor to maximize profits.

- A) I0
- B) I1
- C) I2
- D) I3

Answer: D

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 10.4 below to answer the questions that follow.

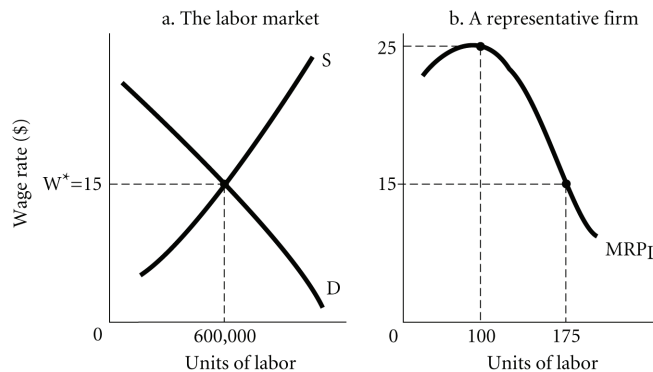


Figure 10.4

51) Refer to Figure 10.4. Firms will

- A) hire 175 units of labor at a market wage of \$15.
- B) hire 100 units of labor at a market wage of \$15 and have a surplus of \$5 per unit of labor.
- C) hire 100 workers at a wage of \$25.
- D) indeterminate from the given information.

Answer: A

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 52) The demand for any factor of production in a competitive industry depends on
- A) its productivity and upon the value of its output in the marketplace.
  - B) its productivity and the productivity of all other inputs.
  - C) the productivity of all the other inputs and how these inputs are valued in the marketplace.
  - D) the amount of the factor that is used and the amounts of all the other factors that are used.

Answer: A

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 53) A wheat farmer sells wheat in a perfectly competitive market and hires labor in a perfectly competitive market. The market price of wheat is \$2 a bushel, the wage rate is \$10, the farmer employs five workers and the marginal product of the fifth worker is 10 bushels. What would you advise this farmer to do?
- A) Do nothing because the wage rate and the marginal product of the last worker hired are equal.
  - B) Reduce employment because the wage paid is less than the marginal revenue product.
  - C) Increase employment because the wage paid is less than the marginal revenue product.
  - D) Reduce the product price so that the wage and marginal revenue product will be equal.

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 54) A wheat farmer sells wheat in a perfectly competitive market and hires labor in a perfectly competitive market. The market price of wheat is \$2 a bushel, the wage rate is \$10, the farmer employs five workers and the marginal product of the fifth worker is 3 bushels. What would you advise this farmer to do?
- A) Do nothing because the wage rate and the marginal product of the last worker hired are equal.
  - B) Reduce employment because the wage paid is more than the marginal revenue product.
  - C) Increase employment because the wage paid is less than the marginal revenue product.
  - D) Reduce the product price so that the wage and marginal revenue product will be equal.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills



- 55) A wheat farmer sells wheat in a perfectly competitive market and hires labor in a perfectly competitive market. The market price of wheat is \$2 a bushel, the wage rate is \$10, and the farmer employs five workers. If the farmer is maximizing his profits, then the marginal product of the fifth worker is \_\_\_\_\_.
- A) 0.2 bushels
  - B) 5 bushels
  - C) 20 bushels
  - D) indeterminate from the given information.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 56) The law of \_\_\_\_\_ explains why a marginal revenue product schedule eventually declines.
- A) diminishing marginal opportunity costs
  - B) increasing marginal returns
  - C) increasing marginal opportunity costs
  - D) diminishing marginal returns

Answer: D

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 57) An increase in technology will cause a marginal revenue product of labor curve to
- A) be unaffected because the productivity of labor has not changed.
  - B) shift to the left.
  - C) shift to the right
  - D) become more inelastic.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 58) A firm competing in a perfectly competitive labor market desires to maximize \_\_\_\_\_.
- A) marginal profit, not total profit
  - B) total profit, not marginal profit
  - C) marginal profit, not average profit
  - D) average profit, not marginal profit

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 59) To get a profit maximizing firm in a perfectly competitive labor market to hire another worker, the firm will need to
- A) lower the wage rate paid to that last worker hired and also to all previous workers hired.
  - B) raise the wage rate paid to that last worker hired and also to all previous workers hired.
  - C) lower the wage rate paid to the last worker hired only.
  - D) raise the wage rate paid to the last worker hired only.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 60) Suppose the supply of labor schedule increases in a perfectly competitive labor market while the market demand schedule remains unchanged. A profit maximizing representative firm will
- A) hire more workers.
  - B) hire less workers.
  - C) hire the same number of workers.
  - D) substitute capital for labor.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 61) A firm's marginal cost curve in a perfectly competitive product market is the same as its \_\_\_\_\_ curve. Similarly, a firm's marginal revenue product curve in a perfectly competitive labor market is the same as its \_\_\_\_\_ curve.
- A) demand; supply
  - B) supply; demand
  - C) demand; demand
  - D) supply; supply

Answer: B

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 62) In the product market, changes in technology affect the marginal \_\_\_\_\_ of a unit of output. In the labor market, changes in technology affect the marginal \_\_\_\_\_ of a unit of labor input.
- A) cost; cost
  - B) revenue; revenue
  - C) revenue product; cost
  - D) cost; revenue product

Answer: D

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

63) MPL multiplied by PX is the \_\_\_\_\_ while the wage rate is the \_\_\_\_\_, where L denotes labor and X denotes output.

- A) cost of a marginal unit of labor; value of labor's marginal product
- B) value of labor's marginal product; cost of a marginal unit of labor
- C) marginal revenue of a unit of output; marginal cost of a unit of output
- D) marginal cost of a unit of output; marginal revenue of a unit of output

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

64) Assuming that labor is the only variable input if society values a good \_\_\_\_\_ it costs firms to hire the workers to produce that good, the good \_\_\_\_\_ be produced.

- A) more than; will
- B) less than; will
- C) more than; will not
- D) equal to what; will not

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

65) A soybean farmer sells soybeans in a perfectly competitive market and hires labor in a perfectly competitive market. The market price of soybeans is \$1 a bushel, the wage rate is \$12, the farmer employs six workers and the marginal product of the sixth worker is 10. What would you advise this farmer to do?

- A) Do nothing because the wage rate and the marginal product of the last worker hired are equal.
- B) Reduce employment because the wage paid is greater than the marginal revenue product.
- C) Increase employment because the wage paid is less than the marginal revenue product.
- D) Reduce the product price so that the wage and marginal revenue product will be equal.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

66) The price of a good will be demand determined if

- A) the demand for the good is unit elastic.
- B) the demand for the good is perfectly inelastic.
- C) the supply of the good is perfectly elastic.
- D) the supply of the good is perfectly inelastic.

Answer: D

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 67) The return to any factor of production that is in fixed supply is
- A) pure profit.
  - B) pure rent.
  - C) producer surplus.
  - D) factor surplus.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Definition

- 68) If a firm could increase profits by hiring less labor and more capital, then
- A) the last dollar spent on labor must yield a smaller increase in output than the last dollar spent on capital.
  - B) the last dollar spent on labor must yield a larger increase in output than the last dollar spent on capital.
  - C) the price of labor exceeds the price of capital.
  - D) the optimal production technique must be capital intensive.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 69) At its current level of production and input employment, a firm's marginal products of labor and capital are 5 units of output. The market wage is \$10 per unit of labor and the price per unit of capital is \$25. The firm could increase its profits by
- A) hiring more labor and less capital.
  - B) hiring more capital and less labor.
  - C) hire less capital and less labor.
  - D) making no changes since it is already employing the profit maximizing combination of inputs.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 70) If a product's demand decreases as its supply simultaneously increases, the marginal revenue product curve will
- A) shift to the right.
  - B) shift to the left.
  - C) remain unchanged.
  - D) either shift to the left, shift to the right, or remain unchanged depending upon what happens to product price.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

71) The marginal revenue product curve of labor will always shift to the right if

- A) the wage rate rises.
- B) product demand decreases and product price decreases.
- C) product demand increases and product price increases.
- D) the price of capital rises.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

72) If product demand increases and product price increases,

- A) the marginal revenue product curve will shift to the right.
- B) the marginal revenue product curve will shift to the left.
- C) the firm will move up the marginal revenue product curve and hire fewer units of the input.
- D) the firm will move down the marginal revenue product curve and hire more units of the input.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

73) Assume that automobiles are a normal good. An increase in income will

- A) shift the marginal revenue product curve of autoworkers to the left.
- B) move a firm down the marginal revenue product curve of autoworkers.
- C) shift the marginal revenue product curve of autoworkers to the right.
- D) have no effect on the marginal revenue product curve of autoworkers.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

1) Productivity of an input is the amount of output produced per unit of input.

Answer: TRUE

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Definition

2) Households will supply labor as long as the wage they receive is less than the value of their leisure time.

Answer: FALSE

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 3) The price of any factor of production in a competitive market depends on the value of the final product it is used to produce.

Answer: TRUE

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 4) Input demand is derived demand in the sense that it is dependent upon the productivity of the input.

Answer: FALSE

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Definition

## 10.2 Labor Markets

### 1 Multiple Choice

- 1) To produce one unit of output, a firm can use either one unit of capital or one unit of labor. In this case, capital and labor are
- A) complementary inputs.
  - B) substitutable inputs.
  - C) both complementary and substitutable inputs.
  - D) unrelated inputs.

Answer: B

Diff: 1

Topic: Labor Markets

Skill: Fact

- 2) Assuming labor is the only variable factor of production, production of a good will occur
- A) as long as the marginal revenue product of labor is positive.
  - B) if society values a good more than it costs firms to hire the workers to produce the good.
  - C) as long as the product's price is greater than the marginal revenue product of labor.
  - D) if the marginal cost of a unit of output equals the marginal revenue product of labor.

Answer: B

Diff: 3

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 3) When a firm substitutes away from a factor whose price has risen and toward a factor whose price has fallen, it is an example of the
- A) output effect of a factor price decrease.
  - B) factor substitution effect.
  - C) factor complementary effect.
  - D) output substitution effect.

Answer: B

Diff: 2

Topic: Labor Markets

Skill: Definition

- 4) According to the output effect of a factor price increase, the demand for
- A) the factor whose price has increased will decrease, but the demand for the other factors will increase.
  - B) all factors decreases.
  - C) all factors increases.
  - D) the factor whose price has increased will increase, but the demand for the other factors will decrease.

Answer: B

Diff: 1

Topic: Labor Markets

Skill: Fact

- 5) The owner of Instant Printing, a firm that prints business cards, tells you that as a result of an increase in the wage rate of printer operators he has reduced the amount of output he produces and the amount of capital he uses. How would you respond to this?
- A) You should tell him that this doesn't make any economic sense because according to the factor substitution effect he should have substituted toward capital and away from labor.
  - B) This seems logical, because the output effect of a factor price increase would cause a firm to demand less of all inputs, not just the input whose price increased.
  - C) You should tell him that instead of reducing output and the demand for all factors of production, he should increase output and the demand for all factors of production so that he can meet the higher labor costs by generating more revenue.
  - D) You tell him that capital must be an inferior input, because he reduced his use of capital when the price of labor increased.

Answer: B

Diff: 3

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 6) The demand curve for an input will slope downward because of
- A) the factor substitution effect.
  - B) the output effect.
  - C) decreasing returns to scale.
  - D) Both A and B

Answer: D

Diff: 1

Topic: Labor Markets

Skill: Fact

- 7) If the price of labor falls,
- A) we can conclude that the demand for capital will always decrease because only the factor substitution effect is relevant.
  - B) we can conclude that the demand for capital will always increase because only the output effect is relevant.
  - C) the change in the demand for capital cannot be predicted because the factor substitution effect and output effect work in opposite directions.
  - D) the demand for capital will be unaffected, because only a change in the price of capital would change the demand for capital.

Answer: C

Diff: 1

Topic: Labor Markets

Skill: Fact

- 8) Which of the following situations is most likely to generate the largest output effect from a decrease in the price of one of a firm's inputs?
- A) The demand for a firm's product is inelastic.
  - B) The demand for a firm's product is elastic.
  - C) The inputs used in production are highly substitutable.
  - D) The inputs used in production are highly complementary.

Answer: B

Diff: 3

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 9) Assume that Creative Ceramics can vary both capital and labor. An increase in the amount of capital will
- A) have no impact on the productivity of labor.
  - B) cause the firm to move down along the marginal revenue product of labor curve and hire more labor.
  - C) cause the marginal revenue product of labor curve to be more inelastic.
  - D) shift the marginal revenue product curve of labor out to the right.

Answer: D

Diff: 3

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 10) An increase in the productivity of a factor of production will
- A) shift its marginal revenue product curve to the right.
  - B) shift its marginal revenue product curve to the left.
  - C) cause a firm to move down the marginal revenue product curve.
  - D) cause a firm to move up the marginal revenue product curve.

Answer: A

Diff: 1

Topic: Labor Markets

Skill: Fact

- 11) An decrease in the productivity of a factor of production will
- A) shift its marginal revenue product curve to the right.
  - B) shift its marginal revenue product curve to the left.
  - C) cause a firm to move down the marginal revenue product curve.
  - D) cause a firm to move up the marginal revenue product curve.

Answer: B

Diff: 1

Topic: Labor Markets

Skill: Fact



- 12) The production and use of capital
- A) reduces the productivity of labor and decreases wages.
  - B) reduces the productivity of labor and drives up wages.
  - C) enhances the productivity of labor and drives up wages.
  - D) enhances the productivity of labor and decreases wages.

Answer: C

Diff: 1

Topic: Labor Markets

Skill: Fact

- 13) According to the output effect of a factor price change, if supply of labor increases, then once the firm fully adjust to the labor supply change it
- A) increases output and thus demand for all inputs increases.
  - B) decreases output and thus demand for all inputs decreases.
  - C) increases demand for labor alone and there is no change in its output level.
  - D) increases output and decreases demand for labor.

Answer: A

Diff: 1

Topic: Labor Markets

Skill: Definition

- 14) According to the output effect of a factor price change, if supply of labor decreases, then once the firm fully adjust to the labor supply change it
- A) increases output and thus demand for all inputs increases.
  - B) decreases output and thus demand for all inputs decreases.
  - C) decreases demand for labor alone and there is no change in its output level.
  - D) decreases output and decreases demand for labor.

Answer: B

Diff: 1

Topic: Labor Markets

Skill: Definition

- 15) Related to the *Economics in Practice* on page 211: Which of the following best explains why the top salaries paid for acting in a film are much higher than the top salaries paid for acting on Broadway?
- A) The average cost of a ticket to a live performance is much higher than the average cost of a ticket to see a film.
  - B) The potential audience of a film is much larger than the potential audience for a Broadway show.
  - C) The production and marketing costs for a film are much higher than they are for a Broadway show.
  - D) Companies often pay millions of dollars to have their products placed prominently in films, but there is no significant market for product placement in Broadway shows.

Answer: B

Diff: 3

Topic: Labor Markets: Economics in Practice

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

- 1) Complements and substitutes exist for outputs, but not for inputs.

Answer: FALSE

Diff: 1

Topic: Labor Markets

Skill: Fact

- 2) If capital and labor are substitute inputs, the productivity of labor falls as the use of capital increases.

Answer: FALSE

Diff: 1

Topic: Labor Markets

Skill: Fact

- 3) The infusion of capital into an industry raises the productivity of the other inputs in that industry.

Answer: TRUE

Diff: 1

Topic: Labor Markets

Skill: Fact

- 4) Labor is a firm's only variable input. The firm should hire additional units of labor as long as the wage is less than or equal to the marginal revenue product of that additional unit of labor.

Answer: TRUE

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 5) As firms hire additional units of labor, eventually the marginal revenue product will always increase.

Answer: FALSE

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 6) According to the output effect of a labor price decrease, when supply of labor increases, firms eventually increase output and demand for all inputs.

Answer: TRUE

Diff: 1

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 7) When wages increase, the net effect on the level of capital used depends on the relative magnitudes of the factor substitution and output effects.

Answer: TRUE

Diff: 2

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

8) When wages fall, the employment of capital always decreases.

Answer: FALSE

Diff: 2

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

9) Related to the Economics in Practice on page 211. Demand for Julia Roberts' acting services is \$1 million per week regardless of whether she works in a film, TV, or theater.

Answer: FALSE

Diff: 1

Topic: Labor Markets: Economics in Practice

Skill: Fact

## 10.3 Land Markets

### 1 Multiple Choice

1) Because a famous painting is fixed in supply, its price is

A) demand determined.

B) supply determined.

C) inelastic.

D) independently determined.

Answer: A

Diff: 3

Topic: Land Markets

Skill: Conceptual

AACSB: Reflective Thinking

2) The number of seats available in a stadium is fixed at 80,000. The equilibrium price for a ticket to a football game at the stadium is \$30. The equilibrium price for a ticket to a baseball game at the stadium is \$20. Which of the following is TRUE?

A) Football games must be more expensive to produce than baseball games.

B) The demand for baseball games must be more elastic than the demand for football games.

C) The supply of baseball games must be less elastic than the supply of football games.

D) The demand for each baseball game must be lower than the demand for each football game.

Answer: D

Diff: 3

Topic: Land Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 3) The number of seats available in a stadium is fixed at 80,000. The equilibrium price for a ticket to a football game at the stadium is \$30. The equilibrium price for a ticket to a soccer match at the stadium is \$10. Which of the following is TRUE?
- A) Football games must be more expensive to produce than a soccer match.
  - B) The demand for each football game must be more than the demand for each soccer match.
  - C) The supply of soccer matches must be less elastic than the supply of football games.
  - D) The demand for each soccer game must be greater than the demand for each football game.

Answer: B

Diff: 3

Topic: Land Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 4) If the marginal revenue product of land is greater than its price, a firm should
- A) use more land.
  - B) use less land.
  - C) try to decrease the productivity of land.
  - D) decrease the price it is willing to pay for land.

Answer: A

Diff: 3

Topic: Land Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 5) A profit-maximizing firm will continue to employ land until
- A)  $MP_{LAND} = P_{LAND}$ .
  - B)  $MRP_{LAND} = 0$ .
  - C)  $MRP_{LAND} = MP_{LAND}$ .
  - D)  $MRP_{LAND} = P_{LAND}$ .

Answer: D

Diff: 1

Topic: Land Markets

Skill: Fact

- 6) If the MRP of land is less than its price, a firm should
- A) use more land.
  - B) use less land.
  - C) try to decrease the productivity of land.
  - D) increase the price it is willing to pay for land.

Answer: B

Diff: 1

Topic: Land Markets

Skill: Fact

- 7) If land becomes more valuable in residential use than in commercial use,
- A) the supply of land available for commercial use should decrease and the supply of land for residential use should increase.
  - B) there can be no change in the allocation of land because land is fixed in supply.
  - C) there will be no change in the allocation of land, as there is no responsiveness to price changes by suppliers of land.
  - D) the supply of land for commercial use will become perfectly elastic and the supply of land for residential use will become perfectly inelastic.

Answer: A

Diff: 1

Topic: *The Firm's Profit Maximization Condition in Input Markets*

Skill: *Fact*

- 8) Related to the *Economics in Practice* on page 214: The network of high-speed rail has expanded considerably in Europe. As a result,
- A) the opportunity cost of living farther from one's work has fallen.
  - B) land values in communities served by the network is falling.
  - C) demand for air travel in Europe is likely becoming less elastic.
  - D) All of the above are correct.

Answer: A

Diff: 2

Topic: *Land Markets: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 9) Related to the *Economics in Practice* on page 214: Which of the following would be the most likely result if high-speed rail service were introduced to an area and made commuting from that area easier?
- A) The cost of living far from one's workplace would rise, and the value of land would increase.
  - B) The cost of living far from one's workplace would rise, and the value of land would decrease.
  - C) The cost of living far from one's workplace would drop, and the value of land would increase.
  - D) The cost of living far from one's workplace would drop, and the value of land would decrease.

Answer: C

Diff: 2

Topic: *Land Markets: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 2 True/False

- 1) "Demand determined" means that price is set by buyers' demand and a fixed supply.

Answer: TRUE

Diff: 2

Topic: *Land Markets*

Skill: *Definition*

2) Pure rent is the return to any factor of production that is in fixed supply.

Answer: TRUE

Diff: 2

Topic: Land Markets

Skill: Definition

3) A firm will use land up to the point at which the MRP of land is equal to the price of land.

Answer: TRUE

Diff: 1

Topic: Land Markets

Skill: Fact

4) The return to a factor that is in fixed supply is a pure rent.

Answer: TRUE

Diff: 1

Topic: Land Markets

Skill: Definition

5) The value of land is determined in part by what firms and households are willing to pay for it.

Answer: FALSE

Diff: 2

Topic: Land Markets

Skill: Definition

## 10.4 The Firm's Profit-Maximizing Condition in Input Markets

### 1 Multiple Choice

1) Assume the Backwoods Shoe Company hires three inputs: labor ( $L$ ), capital ( $K$ ), and land ( $A$ ) to produce shoes ( $X$ ). Which of the following conditions must be met so that the firm is using the optimal, or least costly, combination of inputs?

A)  $MPL = MPK = MPA$

B)  $PL = PK = PA$

C)  $MPL/PL = MPK/PK = MPA/PA$

D)  $MPL = MPK = MPA = 1/PX$

Answer: C

Diff: 1

Topic: The Firm's Profit Maximization Condition in Input Markets

Skill: Fact

2) A firm hires labor, capital, and land to produce tomatoes. Currently the marginal product of the last unit of labor input is 20, the marginal product of the last unit of capital input is 30, and the marginal product of the last unit of land input is 100. The market wage is \$10 and the market price for capital is \$15. If the firm is using the optimal combination of inputs, then the price of land is

A) \$2.

B) \$20.

C) \$50.

D) indeterminate from the given information.

Answer: C

Diff: 2

Topic: The Firm's Profit Maximization Condition in Input Markets

Skill: Analytic

AACSB: Analytic Skills

- 3) A firm is currently hiring capital and labor so that  $MPL/PL < MPK/PK$ , if the firm wishes to maximize profits it should hire
- A) less labor and less capital.
  - B) more capital and more labor.
  - C) more labor and less capital.
  - D) less labor and more capital.

Answer: D

Diff: 3

Topic: *The Firm's Profit Maximization Condition in Input Markets*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 10.5 Input Demand: The Labor and Land Markets

### 1 Multiple Choice

- 1) Shifts in factor demand result from changes in
- A) demand for outputs.
  - B) the quantity of other factors with which it works.
  - C) the price of other inputs.
  - D) All of the above are correct.

Answer: A

Diff: 1

Topic: *Input Demand Curves*

Skill: *Definition*

### 2 True/False

- 1) A technological change would cause movement along the demand curve for inputs.

Answer: FALSE

Diff: 2

Topic: *Input Demand Curves*

Skill: *Definition*

## 10.6 Resource Allocation and the Mix of Output in Competitive Markets

### 1 Multiple Choice

- 1) Custom Made Clothing, a small clothing manufacturer, can use either a capital-intensive or labor-intensive technology to produce a product. If the price of capital increases and the price of labor remains constant, this firm most likely would
- A) switch to the labor-intensive technology.
  - B) continue to use the capital-intensive technology and reduce the amount of output produced.
  - C) leave the industry.
  - D) try to increase the productivity of capital.

Answer: A

Diff: 3

Topic: *Resource Allocation and the Mix of Output in Competitive Markets*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

2) Joe and Carl are both reporters and they both have the same productivity –they each can write five articles a week. Joe writes articles about celebrities. Carl writes articles about economics. Joe earns twice as much as Carl. Which of the following could explain this?

- A) There are more reporters writing about celebrities than there are reporters writing about economics.
- B) The output effect is greater for celebrity writers than economics writers.
- C) There must be more substitutes available for celebrity writers than there are for economics writers.
- D) People are willing to pay more for stories about celebrities than for stories about economics.

Answer: D

Diff: 3

Topic: Resource Allocation and the Mix of Output in Competitive Markets

Skill: Conceptual

AACSB: Reflective Thinking

3) At equilibrium, each factor ends up receiving rewards determined by its productivity. This is known as

- A) marginal productivity theory of income distribution.
- B) law of income distribution.
- C) law of diminishing marginal returns.
- D) derived demand.

Answer: A

Diff: 1

Topic: Resource Allocation and the Mix of Output in Competitive Markets

Skill: Definition

## 2 True/False

1) All else equal, more productive workers earn higher incomes.

Answer: TRUE

Diff: 2

Topic: Resource Allocation and the Mix of Output in Competitive Markets

Skill: Conceptual

AACSB: Reflective Thinking

2) The marginal productivity theory of income distribution states that income will be distributed equally across all factors of production.

Answer: FALSE

Diff: 2

Topic: Resource Allocation and the Mix of Output in Competitive Markets

Skill: Definition



# Chapter 11 Input Demand: The Capital Markets and Investment Decision

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## 11.1 Capital, Investment, and Depreciation

### 1 Multiple Choice

- 1) Goods produced by the economic system that are used as inputs in the production of future goods and services are
- A) consumable goods.
  - B) capital goods.
  - C) tangible goods.
  - D) depreciation goods.

Answer: B

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 2) In the capital market, households \_\_\_\_\_ supply the financial resources to firms that allow them to purchase \_\_\_\_\_.
- A) indirectly; capital
  - B) directly; capital
  - C) indirectly; land
  - D) indirectly; labor

Answer: A

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 3) The large earthquake in China in 2008 destroyed large amounts of all of the following EXCEPT:
- A) tangible capital
  - B) social capital
  - C) human capital
  - D) financial capital

Answer: D

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Conceptual

AACSB: Reflective Thinking

- 4) As the inventory of a firm falls,
- A) there is no change in its capital.
  - B) its intangible capital decreases.
  - C) its tangible capital decreases.
  - D) its social capital increases.

Answer: C

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 5) Firms that offer to pay for college tuition for their employees are investing in \_\_\_\_\_ capital.
- A) tangible
  - B) productive
  - C) social
  - D) human

Answer: D

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 6) A clothing manufacturer produced 5,000 sweaters, but sold only 4,000 of them. The remaining 1,000 sweaters would be classified as
- A) a loss to the firm.
  - B) part of the firm's tangible capital.
  - C) part of the firm's intangible capital.
  - D) a factor of production.

Answer: B

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 7) An example of tangible capital is
- A) a restaurant's unsold, unopened cans of soda.
  - B) an idea for a new business.
  - C) the goodwill a firm has established through advertising.
  - D) knowledge of how to program a computer.

Answer: A

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 8) The measure of a firm's \_\_\_\_\_ is the current market value of its plant, equipment, inventories, and intangible assets.
- A) investment
  - B) depreciation
  - C) capital stock
  - D) capital flow

Answer: C

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 9) A firm's capital is measured as a(n) \_\_\_\_\_ while investment in new capital is measured as a(n) \_\_\_\_\_.
- A) flow; stock
  - B) stock; flow
  - C) stock; change
  - D) physical amount; dollar value

Answer: B

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 10) A university requires that all entering first-year students learn how to use word processing and spreadsheet software. This is an investment in what type of capital?
- A) Tangible
  - B) Financial
  - C) Human
  - D) Productive

Answer: C

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 11) "Goodwill" is an example of
- A) physical capital.
  - B) intangible capital.
  - C) financial capital.
  - D) a public service industry.

Answer: B

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 12) An example of intangible capital is
- A) a vacation house.
  - B) a flower garden.
  - C) a book.
  - D) a trained apprenticeship program.

Answer: D

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 13) You take a class that improves your critical thinking skills. This represents an investment in your
- A) human capital.
  - B) social capital.
  - C) tangible capital.
  - D) financial capital.

Answer: A

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 14) Capital goods yield benefits
- A) as soon as the investment decision is made.
  - B) before they are put to use.
  - C) over their life span.
  - D) in the present only.

Answer: C

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Fact

- 15) The term *investment* as it is used by an economist refers to
- A) the creation of new capital.
  - B) the act of buying a share of stock or a bond.
  - C) a household's savings.
  - D) the net worth of a company's financial assets.

Answer: A

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 16) Which of the following would constitute an act of investment by a household, as economists use the term?
- A) Building a new construction vacation home
  - B) Purchasing 100 shares of Microsoft stock
  - C) Buying a corporate bond
  - D) Borrowing money from the bank to pay for a vacation cruise

Answer: A

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

17) Which of the following would NOT be considered an act of investing in capital?

- A) A father paying for his daughter's college education
- B) A firm buying a new energy-saving machine
- C) The state government building a new road
- D) The Postal Service delivering the mail

Answer: D

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

18) Depreciation is

- A) the sum of gross and net investment.
- B) new additions to a firm's stock of intangible capital.
- C) the decline in the economic value of an asset over time.
- D) the decrease in the general price level.

Answer: C

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

19) Which of the following would constitute depreciation, as economists use the term?

- A) Using some of your savings to buy a car
- B) A GM shareholder selling some of her stock
- C) Inventories of firms decreasing due to an increase in sales
- D) All new software requires Windows Vista not Windows XP as an operating system

Answer: D

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

20) A capital asset will depreciate because

- A) it wears out physically.
- B) a similar product becomes available.
- C) of an increase in the tax on profits.
- D) All of the above are correct.

Answer: A

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Fact

## 2 True/False

1) Capital is defined as the current market value of a firm's productive assets.

Answer: TRUE

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

2) Those goods produced by the economic system that are used as inputs in the production of future goods and services are known as capital.

Answer: TRUE

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

3) Capital stock is the current market value of all of the shares of stock a company has.

Answer: FALSE

Diff: 2

Topic: *Capital, Investment, and Depreciation*

Skill: *Definition*

4) The funds that firms use to buy capital come directly or indirectly from households.

Answer: TRUE

Diff: 1

Topic: *Capital, Investment, and Depreciation*

Skill: *Fact*

5) Human capital is a type of social capital.

Answer: FALSE

Diff: 1

Topic: *Capital, Investment, and Depreciation*

Skill: *Definition*

6) Residential structures and inventories are examples of tangible capital.

Answer: TRUE

Diff: 1

Topic: *Capital, Investment, and Depreciation*

Skill: *Definition*

7) The value of capital is as great as the services it produces over time.

Answer: TRUE

Diff: 1

Topic: *Capital, Investment, and Depreciation*

Skill: *Definition*

8) Capital stock increases with investment and decreases with depreciation.

Answer: TRUE

Diff: 2

Topic: *Capital, Investment, and Depreciation*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 11.2 The Capital Market

### 1 Multiple Choice

1) The market in which households supply their savings to firms that demand funds in order to buy capital goods is the \_\_\_\_\_ market.

A) money

B) savings

C) investment

D) capital

Answer: D

Diff: 2

Topic: *The Capital Market*

Skill: *Definition*

- 2) When a household lends money directly to a firm, the firm gives the household a
- A) share of stock.
  - B) certificate of investment.
  - C) bond.
  - D) dividend.

Answer: C

Diff: 1

Topic: The Capital Market

Skill: Fact

- 3) The stock market, banks, and savings and loans are three examples of institutions that economists would classify as belonging to the financial
- A) savings markets.
  - B) investment market.
  - C) capital market.
  - D) labor market.

Answer: C

Diff: 2

Topic: The Capital Market

Skill: Definition

- 4) The two most important forms of capital income are
- A) rents and profits.
  - B) investments and rents.
  - C) dividends and depreciation.
  - D) interest and profits.

Answer: D

Diff: 1

Topic: The Capital Market

Skill: Fact

- 5) Capital income includes all of the following EXCEPT:
- A) rents.
  - B) interest.
  - C) profit.
  - D) salary

Answer: D

Diff: 1

Topic: The Capital Market

Skill: Fact

- 6) You are asked to lend a friend \$10,000 for a year. At the end of the year your friend agrees to pay you \$10,500. The interest rate on this loan is
- A) 0.05%.
  - B) 5.0%
  - C) 105%.
  - D) indeterminate from this information.

Answer: B

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 7) You are asked to lend a friend \$20,000 for a year. At the end of the year your friend agrees to pay you \$21,000. The interest rate on this loan is
- A) 4.50%
  - B) 5.00%.
  - C) 5.50%.
  - D) indeterminate from this information.

Answer: B

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 8) You will agree to lend your sister's grandma's daughter \$2,000 for a year, if at the end of the year she pays you \$2,200. The interest rate you are charging her is
- A) 1.1%.                      B) 9.09%.                      C) 10%.                      D) 20%.

Answer: C

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 9) You agree to lend a friend \$15,000 for a year at an annual interest rate of 20%. At the end of the year your friend must pay you \_\_\_\_\_ in interest.

A) \$133                      B) \$750                      C) \$1,500                      D) \$3,000

Answer: D

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 10) You agree to lend a friend \$20,000 for a year at an annual interest rate of 45%. At the end of the year your friend must pay you \_\_\_\_\_ in interest.

A) \$133                      B) \$750                      C) \$1,900                      D) \$9,000

Answer: D

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 11) You agree to lend \_\_\_\_\_ to a friend for a year at an annual interest rate of 10%. At the end of the year your friend pays you \$500 in interest.

A) \$50                      B) \$550                      C) \$5,000                      D) \$5,500

Answer: C

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 12) You use \$50,000 of your own money to start a catering business. During the first year you earn a 5% return on that investment. If the current interest rate is 8%, you earn an economic profit of

A) -\$4,000.                      B) -\$2,500.                      C) -\$1,500.                      D) \$4,000.

Answer: C

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 13) You use \$45,000 of your own money to start an espresso stand. During the first year you earn a 10% return on that investment. If the current interest rate is 8%, you earn an economic profit of
- A) -\$900.                      B) \$100.                      C) \$500.                      D) \$900.

Answer: D

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 14) You use \$2,000 of your own money to start a dog-sitting service. During the first year you earn a 10% return on your investment. If the current interest rate is 7%, you earn an economic profit of
- A) \$60.                      B) \$140.                      C) \$200.                      D) \$340.

Answer: A

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 15) You use \$5,000 of your own money to start a dog-walking business. During the first year you earn a 6% return on your investment. If the current interest rate is 8%, you earn an economic profit of
- A) -\$60.                      B) -\$100.                      C) \$200.                      D) \$300.

Answer: B

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 16) Households' \_\_\_\_\_ limits firms' ability to invest in capital.
- A) investment in stock                      B) savings decisions  
C) supply of land                      D) tax liability

Answer: B

Diff: 2

Topic: The Capital Market

Skill: Definition

- 17) As a holder of a share of common stock, you are
- A) entitled to a portion of the firm's revenues.  
B) entitled to a portion of the firm's profits.  
C) entitled to a standard percentage return on your investment.  
D) responsible for the liabilities of the corporation.

Answer: B

Diff: 2

Topic: The Capital Market

Skill: Definition



- 18) When you use your own savings to start a business, you make a profit
- A) after the first dollar you earn, because you borrowed no funds to start the business.
  - B) after you earn an amount equal to the savings you used to start the business.
  - C) only after you cover the opportunity cost of using your savings to start your business.
  - D) only after you earn double the amount of money you invested.

Answer: C

Diff: 2

Topic: The Capital Market

Skill: Definition

- 19) Assume that the current interest rate is 6%. You invest \$10,000 of your own money in a restaurant that you own and operate. The normal return on this investment is
- A) \$0, as you used your own money.
  - B) \$600, as that is the interest forgone by not lending the money to someone else at a 6% interest rate.
  - C) \$10,000, as that is the amount invested in the restaurant.
  - D) \$10,600, the amount invested plus the interest charge on the investment.

Answer: B

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 20) You borrow \$10,000 at an interest rate of 5% to open Movies Galore, a DVD rental store. You will earn an economic profit if
- A) the return on your investment is between 0 and 5%.
  - B) the return on your investment is 5%.
  - C) the return on your investment is greater than 5%.
  - D) the return on your investment is 10% or greater.

Answer: C

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 21) You borrow \$10,000 at an interest rate of 5% to open Movies Galore, a DVD rental store. You will earn an economic loss if
- A) the return on your investment is less than 5%.
  - B) the return on your investment is exactly 5%.
  - C) the return on your investment is greater than 5%.
  - D) indeterminate from given information.

Answer: A

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 22) A software company writes a better operating system for personal computers and earns very large profits on this operating system. Which of the following is TRUE?
- A) The profits this firm earns are a return for an innovation.
  - B) The profits this firm earns aren't deserved, as the firm did not take any risks.
  - C) This firm must not be in a competitive market if it was able to earn a profit.
  - D) The firm must be a monopoly.

Answer: A

Diff: 3

Topic: *The Capital Market*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 23) A fund that takes household savings and puts them into high-risk ventures in exchange for a share of the profits if the new business succeeds is a
- A) business capital fund.
  - B) innovation capital fund.
  - C) risk capital fund.
  - D) venture capital fund.

Answer: D

Diff: 2

Topic: *The Capital Market*

Skill: *Definition*

- 24) A firm's retaining of earnings is really equivalent to the firm
- A) lending money to households.
  - B) borrowing money from households.
  - C) decreasing the net worth of households.
  - D) decreasing its own net worth.

Answer: B

Diff: 3

Topic: *The Capital Market*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 25) GM decides to build a new plant using retained earnings, then all of the following are true EXCEPT:
- A) GM's tangible capital will increase as a result.
  - B) GM is engaging in saving on behalf of its shareholders.
  - C) GM stock appreciates in value.
  - D) GM is avoiding experiencing opportunity costs.

Answer: D

Diff: 2

Topic: *The Capital Market*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 26) You paid \$90 for a psychology textbook at the beginning of the semester. At the end of the semester you sell the textbook for \$75. The textbook has depreciated
- A) \$1.00.
  - B) \$15.00.
  - C) \$20.00.
  - D) an indeterminate amount based on this information.

Answer: B

Diff: 2

Topic: *The Capital Market*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 27) Most mortgage loans in the United States are written by
- A) Fannie Mae.
  - B) banks.
  - C) savings and loans.
  - D) mortgage brokers.

Answer: D

Diff: 1

Topic: *The Capital Market*

Skill: *Fact*

## 2 True/False

- 1) When we speak of capital, we refer primarily to money and financial assets such as bonds and stock.

Answer: FALSE

Diff: 2

Topic: *The Capital Market*

Skill: *Definition*

- 2) In economics, "investment" refers only to the creation of new capital.

Answer: TRUE

Diff: 2

Topic: *The Capital Market*

Skill: *Definition*

- 3) Payments for capital include interest and rent.

Answer: FALSE

Diff: 1

Topic: *The Capital Market*

Skill: *Definition*

- 4) Savers and investors interact through intermediaries in financial capital markets.

Answer: TRUE

Diff: 1

Topic: *The Capital Market*

Skill: *Fact*

- 5) The level of household savings constrains firm investment.

Answer: TRUE

Diff: 2

Topic: *The Capital Market*

Skill: *Fact*

6) Owning a share of stock entitles the shareholder to a portion of the firm's profits.

Answer: TRUE

Diff: 1

Topic: *The Capital Market*

Skill: *Fact*

7) Venture capital funds involve very low risk.

Answer: FALSE

Diff: 1

Topic: *The Capital Market*

Skill: *Fact*

### 11.3 The Demand for New Capital and the Investment Decision

#### 1 Multiple Choice

1) You borrow \$40,000 at an interest rate of 5% to open Organic Foods, an all-natural food store. You will earn an economic profit if the return on your investment is

A) greater than 5%.

B) 5%.

C) between 0 and 5%.

D) 10% or greater.

Answer: A

Diff: 2

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

2) When making the decision to invest, the evaluation of the expected flow of future productive services that the investment project being considered will yield is an important consideration. This statement is accurate for

A) firms, but not for governments and households considering an investment project.

B) firms and governments, but not for households considering an investment project.

C) firms and households, but not for governments considering an investment project.

D) firms, households, and governments.

Answer: D

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

3) Which of the following statements of the expected flow of future benefits is FALSE?

A) Firms must rely on forecasts of expected future benefits to make sensible investment decisions.

B) Households, business firms, and governments all evaluate the expected flow of benefits when making investment decisions.

C) If future benefits are overestimated by the firm, the firm will under invest in capital.

D) If future benefits are underestimated by the firm, the firm will under invest in capital.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) When a Democrat is elected as president, business leaders expect that the corporate profits tax will be increased. Most likely, this will cause business firms, *ceteris paribus*, to
- A) plan to increase investment in the future to compensate for the higher tax rate.
  - B) decrease investment because they would expect lower benefits from investment.
  - C) not change their investment plans because higher corporate profit taxes will not change the demand for their product.
  - D) increase investment because the higher corporate profits tax will increase the return on any investment.

Answer: B

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 5) The expected cost of an investment
- A) is zero if a firm uses its own funds.
  - B) equals the market rate of interest plus the normal rate of return on an investment.
  - C) depends on the market interest rate.
  - D) equals the market rate of interest plus the inflation rate.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 6) You work as a forecaster for the major producer of digital cameras. You know that there is a strong positive relationship between the demand for digital cameras and the birth of a first child. A report has just been issued predicting that the birthrate is expected to increase steadily over the next 10 years. You should recommend which of the following courses of action to the firm?
- A) Don't change the amount of investment made, but raise the price of digital cameras in response to the expected increase in the demand.
  - B) Suggest that the investment in new capital to produce digital cameras be made only after it can be verified that the birthrate has increased.
  - C) Start to increase investment now so that when the birthrate increases and the demand for digital cameras increases, the firm will be able to meet that new demand.
  - D) Suggest that the firm curtail its advertising to avert a substantial increase in demand for digital cameras.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 7) A firm can invest in one of two projects—the purchase of new delivery vans or the training of its sales staff in the use of new sales techniques. Both projects cost the same amount of money. The purchase of new delivery vans is expected to reduce costs by \$5,000 each year for 10 years. The training of the sales staff in the use of a new sales technique is expected to increase revenues by \$5,000 each year for 5 years. Which of the following is TRUE?
- A) Each of these projects would have the same expected rate of return, as they both cost the same.
  - B) The training of the sales staff would have the higher expected rate of return, as it increases revenues whereas the purchase of delivery vans only reduces costs.
  - C) The purchase of delivery vans would have the higher expected rate of return, as it will reduce costs for a longer time period than the sales staff training will increase revenues.
  - D) The expected rates of return for these two projects cannot be compared, as one project reduces costs and the other increases revenues.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 8) Polar Water, a company that delivers bottled water, is considering three investment opportunities. The expected returns for each of the projects are as follows: buying a new delivery van, 20%; computer training for its office staff, 15%; and defensive driving training for its drivers, 8%. If the current interest rate is 10%, the firm should invest in
- A) only the purchase of a new delivery van.
  - B) the purchase of a new delivery van and computer training for its office staff.
  - C) all of the projects because the average of the returns is greater than 10%.
  - D) only the office staff training project.

Answer: B

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

Refer to the data provided in Table 11.1 below to answer the following questions.

**Table 11.1**

Project	Total Investment (dollars)	Expected Rate of Return (percentage)
New notebook for sales staff	\$500,000	22
Remodel for distribution center	\$400,000	18
On-site day care center	\$200,000	10
Employee fitness center	\$100,000	8

- 9) Refer to Table 11.1. If the interest rate is 28%, Nashbar Bicycle should
- A) fund all of the projects.
  - B) fund the remodeling of the distribution center and the on-site day care center.
  - C) fund only the purchase of new notebook computers for its sales staff.
  - D) not fund any of the projects.

Answer: D

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 10) Refer to Table 11.1. If the interest rate is 20%, Nashbar Bicycle should
- A) fund only the purchase of new notebook computers for its sales staff.
  - B) fund all of the projects except for the purchase of new notebook computers for its sales staff.
  - C) fund all of the projects.
  - D) not fund any of the projects.

Answer: A

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 11) Refer to Table 11.1. If the interest rate is 5%, Nashbar Bicycle should
- A) fund all of the projects.
  - B) not fund any of the projects.
  - C) fund only the employee fitness center.
  - D) fund all of the projects except for the employee fitness center.

Answer: A

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 12) Refer to Table 11.1. If the interest rate is 20%, Nashbar Bicycle's total investment would be  
 A) \$0.                                      B) \$100,000.                                      C) \$500,000.                                      D) \$700,000.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 13) Refer to Table 11.1. If the interest rate is 9%, Nashbar Bicycle's total investment would be  
 A) \$200,000.                                      B) \$300,000.                                      C) \$900,000.                                      D) \$1,100,000.

Answer: D

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 14) Refer to Table 11.1. If the interest rate is 25%, Nashbar Bicycle's total investment would be  
 A) \$0.                                      B) \$100,000.                                      C) \$500,000.                                      D) \$1,100,000.

Answer: A

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

*Refer to the data provided in Table 11.2 below to answer the following questions.*

**Table 11.2**

Project	Total Investment (dollars)	Expected Rate of Return (percentage)
New bookkeeping software	\$150,000	5
New tractor	\$200,000	12
New grain storage tanks	\$250,000	10
Irrigation system	\$500,000	15

- 15) Refer to Table 11.2. If the interest rate is 11%, then the farmer will only  
 A) buy the bookkeeping software.  
 B) buy the bookkeeping software and the grain storage tanks.  
 C) buy the tractor and the irrigation system.  
 D) buy the tractor.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 16) Refer to Table 11.2. If the interest rate is 13%, then the farmer will engage in investment of  
 A) \$500,000.                                      B) \$600,000.                                      C) \$700,000.                                      D) \$1,100,000.

Answer: A

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*



- 17) Refer to Table 11.2. When the interest rate \_\_\_\_\_, the farmer will engage in no investment.
- A) is greater than 15%
  - B) is less than 5%.
  - C) is less than 15%.
  - D) is greater than 5%.

Answer: A

Diff: 3

Topic: The Demand for New Capital and the Investment Decision

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Table 11.2. When the interest rate \_\_\_\_\_, the farmer will investment in all four projects.

- A) is greater than 15%
- B) is less than 5%.
- C) is less than 15%.
- D) is greater than 5%.

Answer: B

Diff: 3

Topic: The Demand for New Capital and the Investment Decision

Skill: Analytic

AACSB: Analytic Skills

- 19) When market interest rates \_\_\_\_\_, \_\_\_\_\_ investment projects are undertaken.

- A) decrease; more
- B) increase; more
- C) decrease; less
- D) increase; no

Answer: A

Diff: 3

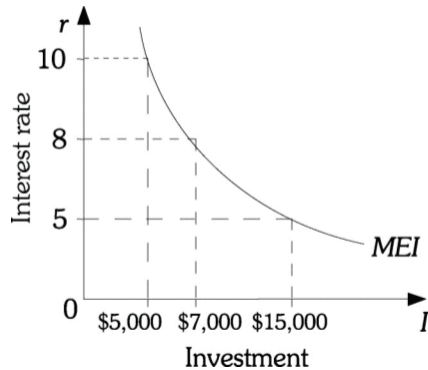
Topic: The Demand for New Capital and the Investment Decision

Skill: Conceptual

AACSB: Reflective Thinking

**Refer to the information provided in Figure 11.1 below to answer the questions that follow.**

NOTE: The MEI (marginal efficiency of investment) curve represents the demand for investment.



**Figure 11.1**

- 20) Refer to Figure 11.1. If the market rate of interest is 5%, this firm's investment will total
- A) \$5,000.
  - B) \$8,000.
  - C) \$15,000.
  - D) \$27,000.

Answer: C

Diff: 2

Topic: The Demand for New Capital and the Investment Decision

Skill: Analytic

AACSB: Analytic Skills

- 21) Refer to Figure 11.1. If the market rate of interest is 10%, this firm's investment will total
- A) \$0.    B) \$5,000.    C) \$7,000.    D) \$15,000.

Answer: B

Diff: 2

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 22) An investment should be undertaken
- A) if the present value of the expected income stream associated with the investment is greater than the full cost of the investment project.
- B) if the present value of the expected income stream associated with the investment is less than the full cost of the investment project.
- C) any time the present value of the expected income stream associated with the investment is positive.
- D) if the present value of the costs of the investment project exceed the present value of the expected returns from the investment project.

Answer: A

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 23) In general, a firm will be likely to invest as long as the
- A) interest rate is less than the inflation rate.
- B) firm doesn't have to borrow any money to make the investment.
- C) profits realized from the investment are sufficient to cover the interest payments.
- D) firm can sell bonds directly to the public instead of borrowing from a bank.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 24) All else equal, more investment takes place at
- A) higher market interest rates.    B) lower market interest rates.
- C) higher nominal interest.    D) higher real interest rates.

Answer: B

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 25) Suppose that an international incident occurs that creates uncertainty in the market. It is likely that this incident will \_\_\_\_\_ the level of private investment spending.
- A) decrease    B) increase    C) neutralize    D) not affect

Answer: A

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 26) Suppose that the normal rate of return in the dot matrix printer industry is 10% and the return being earned by firms in this industry equals exactly 5%. Which of the following is likely to follow from this scenario?
- A) Firms will collude to keep competition out.
  - B) New firms will want to enter the industry.
  - C) Firms will want to leave the industry.
  - D) The normal rate of return will fall to 5% in the long run.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 27) Suppose that a normal rate of return in the economy is 10% and the rate of return being earned by firms in a competitive industry equals exactly 10%. Which of the following is a CORRECT prediction based on this information?
- A) New firms will want to enter this industry, as the existing firms are earning an economic profit.
  - B) Firms already in the industry will want to expand to try to increase their rate of return.
  - C) Firms in the industry will not undertake any investment projects other than to replace depreciating capital stock.
  - D) The industry size will contract.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 28) Saying a firm will continue investing up to the point at which the marginal revenue product of capital is equal to the price of capital is equivalent to saying that a firm will keep investing in new capital up to the point where
- A) the expected rate of return is zero.
  - B) economic profit is zero.
  - C) the expected rate of return is equal to the interest rate.
  - D) the price of capital equals the interest rate.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 29) The firm should continue investing
- A) even if the  $MRP_K$  is equal to the price of capital.
  - B) only as long as the  $MRP_K$  is less than the price of capital.
  - C) up to the point where the  $MRP_K$  equals the price of capital.
  - D) only as long as the price of capital is greater than the interest rate.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 30) As interest rates fall, a firm would
- A) have higher expected costs of investment.
  - B) have decreasing present value of expected earning.
  - C) be willing to pay less now to purchase the same number of future dollars.
  - D) be willing to pay more now to purchase the same number of future dollars.

Answer: D

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 31) As interest rates rise, a firm would
- A) have lower expected costs of investment.
  - B) have increasing present value of expected earning.
  - C) be willing to pay less now to purchase the same number of future dollars.
  - D) be willing to pay more now to purchase the same number of future dollars.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 32) The quantity of investment demanded by firms
- A) is inversely related to the interest rate.
  - B) is directly related to the interest rate.
  - C) is unrelated to the interest rate.
  - D) is positively related to the level of uncertainty.

Answer: A

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 33) Related to the *Economics in Practice* on page 231: All of the following, if true, would support the case for investing in “green” companies EXCEPT:
- A) increases in government subsidies to environmentally-friendly firms
  - B) increases in prices for oil and natural gas
  - C) societal pressure to reduce pollution and global warming
  - D) improvements in oil extraction technology

Answer: D

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 2 True/False

- 1) A firm will continue investing up to the point at which the marginal revenue product of capital is equal to the interest rate.

Answer: TRUE

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Fact*

- 2) A firm should invest as long as funds are available and the expected rate of return is greater than the interest rate.

Answer: TRUE

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Fact*

- 3) When a firm retains earnings for investment purposes, it is effectively saving on behalf of its shareholders.

Answer: TRUE

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Fact*

- 4) A considerable amount of uncertainty is involved in making investment decisions.

Answer: TRUE

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Fact*

- 5) Benefits of investments are generally certain, but costs are harder to quantify and involve greater uncertainty.

Answer: FALSE

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Fact*

- 6) If the expected rate of return on an investment is 10% and the market interest rate is 12%, then the investment will be undertaken.

Answer: FALSE

Diff: 2

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 7) Related to the *Economics in Practice* on page 231: All green companies are sure to be highly profitable.

Answer: FALSE

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision: Economics in Practice*

Skill: *Fact*

## 11.4 Appendix: Calculating Present Value

### 1 Multiple Choice

- 1) If the interest rate is 10%, the current market value of \$1 to be delivered in one year is  
A) \$.99.                      B) \$.91.                      C) \$1.                      D) \$1.10.

Answer: B

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 2) If the interest rate is 15%, the current market value of \$1 to be delivered in one year is  
A) \$.87.                      B) \$.91.                      C) \$1.                      D) \$1.15.

Answer: A

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 3) The present discounted value of  $R$  dollars to be paid in  $t$  years is  
A) the future market value of receiving  $R$  dollars in  $t$  years.  
B) equal to  $R \times t$  years.  
C) the amount you have to put aside now if you want to ensure that you end up with  $R$  dollars  $t$  years from now.  
D) the amount you will have to save in the future to allow you to consume  $R$  dollars today.

Answer: C

Diff: 3

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 4) The formula for present discounted value is \_\_\_\_\_, where  $R$  dollars is to be paid  $t$  years in the future and the agreed upon interest rate is  $r$ .  
A)  $R(1+r)^t$ .                      B)  $(1+r)^t/R$ .                      C)  $R/(1+r)^t$ .                      D)  $(1+r)/R^t$ .

Answer: C

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 5) Assume the current interest rate is 20%. The present value of \$900 in one year would be  
A) \$180.                      B) \$450.                      C) \$750.                      D) \$1,080.

Answer: C

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 6) You win a lottery that pays \$10,000 each year for the next 5 years beginning next year. How much are your winnings worth today?
- A) \$50,000
  - B) \$45,455
  - C) \$10,000
  - D) indeterminate with the given information.

Answer: D

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 7) Assume the current interest rate is 25%. The present value of \$1,000 in one year would be
- A) \$180.
  - B) \$450.
  - C) \$750.
  - D) \$800.

Answer: D

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 8) Tom's Donuts can invest in a new espresso machine that costs \$300 and will yield expected profits of \$200 each year for two years. What is the present discounted value of the expected profits from this investment if the interest rate is 5%?
- A) \$185.93
  - B) \$276.64
  - C) \$371.89
  - D) \$380.96

Answer: C

Diff: 3

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 9) Tom's Donuts can invest in a new espresso machine that costs \$300 and will yield expected profits of \$200 each year for two years. At lower interest rates, the present discounted value of profits from the investment
- A) increases.
  - B) decreases.
  - C) is unchanged.
  - D) indeterminate from the given information.

Answer: A

Diff: 3

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 10) ABC Corp. is considering an investment project that costs \$500 today. It expects the project will yield income of \$200 at the end of years 1, 2, and 3. If the interest rate is 10%, the firm
- A) should undertake the investment.
  - B) should forgo the investment.
  - C) is just indifferent between undertaking the investment and not.
  - D) indeterminate from the given information.

Answer: B

Diff: 3

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 11) ABC Corp. is considering an investment project that costs \$500 today. It expects the project will yield income of \$200 at the end of years 1, 2, and 3. The interest rate must be \_\_\_\_\_ for the firm to undertake the project.

- A) at least 11%
- B) no more than 9%
- C) exactly equal to 10%
- D) indeterminate from the given information.

Answer: B

Diff: 3

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

- 1) The present discounted value of a stream of future income increases as the interest rate decreases.

Answer: TRUE

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Conceptual

AACSB: Reflective Thinking

- 2) The present value of \$100 in one year is \$86.96 when the interest rate is 15%.

Answer: TRUE

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills



# Chapter 12 General Equilibrium and the Efficiency of Perfect Competition

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## 12.1 General Equilibrium Analysis

### 1 Multiple Choice

- 1) Examining the equilibrium conditions of individual markets and for households and firms separately is referred to as
- A) partial equilibrium analysis.
  - B) general equilibrium analysis.
  - C) comparative statics.
  - D) efficiency analysis.

Answer: A

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

- 2) Analyzing the impact of falling interest rates on the residential housing market is an example of a(n) \_\_\_\_\_ equilibrium analysis.
- A) specific
  - B) isolated
  - C) general
  - D) partial

Answer: D

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

- 3) The government has recently imposed a quota on the amount of pineapples that can be imported into the United States. You are asked to analyze how this will affect the price of pineapples and the price of cottage cheese, a complement to pineapples. This is an example of \_\_\_\_\_ equilibrium analysis.
- A) partial
  - B) general
  - C) interrelated
  - D) substitute goods

Answer: A

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

- 4) The government has recently imposed a quota on the amount of pineapples that can be imported into the United States. The quota will \_\_\_\_\_ the price of pineapples and \_\_\_\_\_ the price of cottage cheese (a complement to pineapples).
- A) increase; will not change
  - B) increase; decrease
  - C) increase; increase
  - D) decrease; decrease

Answer: B

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

5) Technological breakthroughs revolutionized the calculator industry during the 1970s. Studying the impact on these technological changes in the calculator industry alone would be an example of

- A) partial equilibrium analysis.
- B) general equilibrium analysis.
- C) market equilibrium analysis.
- D) efficiency analysis.

Answer: A

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

6) Which of the following questions is NOT answered by general equilibrium analysis?

- A) Are equilibria in different markets compatible with one another?
- B) Can all markets simultaneously be in equilibrium?
- C) How will a change in one market affect another market?
- D) What outcome is most desirable for the whole society?

Answer: D

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

7) It is essential to establish specific criteria to judge the performance of any economic system.

Two such criteria are

- A) efficiency and equity.
- B) profit opportunities and technological progress.
- C) efficiency and profit opportunities.
- D) technological progress and achieving general equilibrium.

Answer: A

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

8) An economist investigates the impact that implementing an energy tax has on all industries and input markets. She does a(n) \_\_\_\_\_ equilibrium analysis.

- A) interrelated
- B) general
- C) interconnected
- D) business

Answer: B

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

9) Efficiency occurs when

- A) the economy is producing what people want at least possible cost.
- B) the economy has a fair and just distribution of income.
- C) all markets are in equilibrium.
- D) unemployment is low and prices are stable.

Answer: A

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

- 10) Resources are allocated efficiently when
- A) the market produces what people want.
  - B) economic profits are zero.
  - C) output is distributed in an equitable fashion.
  - D) output is produced in a sustainable fashion.

Answer: A

Diff: 1

Topic: General Equilibrium Analysis

Skill: Conceptual

- 11) Firms stop producing tapes and start producing compact discs because people prefer compact discs to tapes. This will
- A) make the distribution of outcome more equitable.
  - B) make the economy more stable.
  - C) improve efficiency.
  - D) make the economy less stable.

Answer: C

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 12) A new technology is developed for producing microwave ovens that reduces production costs by 10%. Which of the following is the most likely consequence of this technological change?
- A) Firms will continue to operate efficiently as long as no firm adopts this new technology.
  - B) Firms must adopt this new technology to remain efficient.
  - C) This new technology will not affect efficiency, but it will change the equilibrium price and quantity for this industry.
  - D) If firms do not adopt this new technology, then the economy will remain in general equilibrium, because firms will not change their price and output decisions.

Answer: B

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 12.1 below to answer the questions that follow.

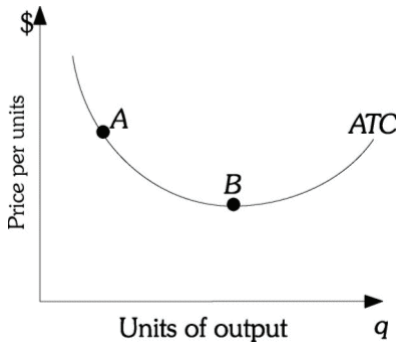


Figure 12.1

- 13) Refer to Figure 12.1. This firm is currently at Point A on the ATC curve. If this firm moves toward Point B, this will make the
- A) distribution of outcome more equitable.
  - B) economy more stable.
  - C) economy more efficient.
  - D) economy less stable.

Answer: C

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

- 14) Refer to Figure 12.1. The firm is
- A) equally efficient when it produces at points A and B.
  - B) more efficient when it produces at point A than at point B.
  - C) more efficient when it produces at point B than at point A.
  - D) producing at least possible cost anywhere along the given ATC curve.

Answer: C

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

Refer to the information provided in the Figure 12.2 below to answer the questions that follow.

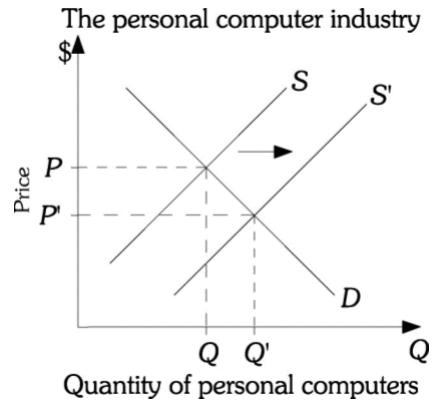


Figure 12.2

- 15) Refer to Figure 12.2. A technological advance causes the supply of personal computers to increase. The graph of this situation represents a
- A) general equilibrium analysis because it identifies what happens to both equilibrium price and quantity of personal computers.
  - B) partial equilibrium analysis because it considers only this one industry.
  - C) firm-specific analysis because only one firm would be affected by the technological advance.
  - D) technological analysis because the change resulted from a technological advance.

Answer: B

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 16) To conduct a general equilibrium analysis of a change in consumer preferences away from beef and toward chicken, you must consider
- A) changes in the equilibrium prices and quantities of beef and chicken.
  - B) changes in the amount of resources allocated to the production of beef and chicken.
  - C) changes in the price of resources allocated to the production of beef and chicken.
  - D) All of the above

Answer: D

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 17) A technological change in the production of cars will
- A) affect only the markets for inputs used to produce cars.
  - B) affect only the way cars are produced.
  - C) have no effect on consumers.
  - D) affect input and output markets in the automobile industry and other related industries.

Answer: D

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 18) A gas tax holiday would
- A) affect the market for gasoline.
  - B) affect the market for air travel.
  - C) affect the level of congestion on roads.
  - D) All of the above are correct.

Answer: D

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 19) Assume that an economy producing two products, skateboards and in-line skates, is initially in equilibrium, and that skateboards and in-line skates are substitutes. If consumer preferences shift away from skateboards and toward in-line skates, which of the following will NOT occur?
- A) In the short run, firms producing skateboards will incur losses.
  - B) In the short run, firms producing in-line skates will earn a profit.
  - C) Additional capital will begin to flow into in-line skates production in the long run.
  - D) Additional capital will begin to flow into skateboard production in the long run.

Answer: D

Diff: 1

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 20) Preferences have just shifted away from beef and into mutton. If you are a sheep rancher, the best profit-maximizing strategy is to
- A) shut down.
  - B) produce as much as possible to earn profits in the short run.
  - C) shift some of your ranching capacity into cattle raising.
  - D) cut prices to increase market share.

Answer: B

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 21) Initially the beef and mutton markets are in equilibrium, then preferences shift away from beef and into mutton. If you are a cattle rancher, the best profit-maximizing strategy is to
- A) shut down.
  - B) increase output so as to increase your market share.
  - C) shift some of your ranching capacity into cattle raising.
  - D) decrease output so as to minimize short run losses..

Answer: D

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 22) Suppose there is a permanent shift of consumer preferences away from pretzels and toward potato chips. The most likely result would be
- A) in the short run economic losses in the potato chip market.
  - B) in the long run a fall in the supply of potato chips.
  - C) in the short run a rise in the price of pretzels.
  - D) short-run profits in the potato chip market.

Answer: D

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 23) Scientists find that eating corn three times a day will prolong life. This leads to a shift in preferences away from wheat and toward corn. As we move from one equilibrium to another, we can predict that
- A) all input markets are affected.
  - B) all input markets except land are affected because both products use land as an input.
  - C) labor markets are not affected because the wheat industry and the corn industry use laborers to drive tractors.
  - D) even if they use different technologies, no input markets are affected because they use the same inputs.

Answer: A

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in the Figure 12.3 below to answer the questions that follow.

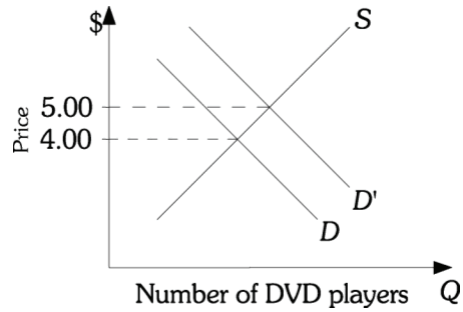


Figure 12.3

- 24) Refer to Figure 12.3. The DVD industry is a constant-cost industry. As the demand for DVD players shifts from  $D$  to  $D'$ , which of the following is LEAST likely to result?
- More resources will be allocated to produce DVD players.
  - The demand for DVDs will increase.
  - If the market for DVD players is competitive the price will increase to \$5.00 in the short and long run.
  - If the market for DVD players is perfectly competitive, economic profits in this industry will increase in the short run, but will fall back to zero in the long run.

Answer: C

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 25) Suppose that a town has two major hospitals. One of these hospitals is unionized and the union has just negotiated a 10% wage increase each year for the next three years. Which of the following is most likely to occur?
- The price of labor in the unionized hospital will increase, but there will be no changes in the price of labor in the nonunionized hospital.
  - The price of labor will change in both the union and nonunion hospitals, but no other input markets will be affected.
  - The price of labor will change in both the unionized and nonunionized hospitals. Employment of labor and other inputs is also likely to change in both hospitals.
  - The only effect will be that the price charged by the unionized hospital will increase to cover the additional costs of labor.

Answer: C

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking



## 2 True/False

- 1) Efficiency is the condition in which the economy is producing what people want at the least possible cost.  
Answer: TRUE  
Diff: 2  
Topic: *General Equilibrium Analysis*  
Skill: *Definition*
- 2) When one market reaches a new equilibrium, the general equilibrium condition has been satisfied.  
Answer: FALSE  
Diff: 1  
Topic: *The Source of Market Failure*  
Skill: *Fact*
- 3) Partial equilibrium analysis is the process of examining the equilibrium conditions for households and firms combined for more than one but not all individual markets.  
Answer: FALSE  
Diff: 2  
Topic: *General Equilibrium Analysis*  
Skill: *Definition*
- 4) Both economists and mathematicians have shown there exists at least one set of prices that will clear all markets in a system simultaneously, known as equilibrium price.  
Answer: TRUE  
Diff: 1  
Topic: *General Equilibrium Analysis*  
Skill: *Fact*
- 5) Input and output markets operate independently and thus should be analyzed as separate entities.  
Answer: FALSE  
Diff: 2  
Topic: *General Equilibrium Analysis*  
Skill: *Conceptual*
- 6) General equilibrium exists when all markets in an economy are simultaneously in equilibrium.  
Answer: TRUE  
Diff: 1  
Topic: *General Equilibrium Analysis*  
Skill: *Definition*
- 7) The large demand in the iPod market has had very little effect in the market for music downloads.  
Answer: FALSE  
Diff: 2  
Topic: *General Equilibrium Analysis*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*

- 8) The sharp decline in the housing market in 2006 resulted in an increase in wages for construction workers.

Answer: FALSE

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 9) Free markets may not be efficient.

Answer: TRUE

Diff: 1

Topic: General Equilibrium Analysis

Skill: Conceptual

## 12.2 Allocative Efficiency and Competitive Equilibrium

### 1 Multiple Choice

- 1) A condition in which no change is possible that will make some members of society better off without making some other members of society worse off is called

- A) Pareto optimality.  
B) partial equilibrium.  
C) general equilibrium.  
D) market failure.

Answer: A

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 2) Pareto optimality is the condition in which

- A) the distribution of income is equal.  
B) no change is possible that will make some members of society better off without making at least one other member of society worse off.  
C) firms are forced to internalize the effects of all externalities.  
D) it is possible to make one person better off without making someone else worse off.

Answer: B

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 3) An economist has estimated that the maintenance of a public park costs \$25,000 a year and that the public park generates \$30,000 a year in revenue for merchants near the park. From society's point of view, the maintenance of this park is

- A) inefficient, because everyone in the community pays taxes to support the park, but only the merchants near the park benefit.  
B) inefficient because the additional revenues generated by the park are so low.  
C) potentially efficient because the value of the gains exceed the value of the costs.  
D) potentially efficient because no one would be made worse off as a result of maintaining the park.

Answer: C

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 4) Suppose a new government policy will generate \$5,000 of benefits for local businesses and \$3,000 of costs. This policy can best be described as
- A) Pareto efficient.
  - B) inefficient.
  - C) potentially efficient.
  - D) equitable.

Answer: C

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Analytic Skills

- 5) Suppose a policy change will generate \$100,000 of benefits for low-income families and \$120,000 of costs for high-income families. This change can best be described as
- A) Pareto efficient.
  - B) inefficient.
  - C) potentially efficient.
  - D) equitable.

Answer: B

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

AACSB: Analytic Skills

- 6) Suppose a policy change will generate \$180,000 of benefits for low-income families and \$150,000 of costs for high-income and middle-class families. This change can best be described as
- A) inefficient.
  - B) Pareto efficient.
  - C) potentially efficient.
  - D) equitable.

Answer: C

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

AACSB: Analytic Skills

- 7) An activity that makes some people better off and nobody worse off is a
- A) government transfer program such as Social Security.
  - B) reduction in interest rates.
  - C) price floor that increases income to suppliers.
  - D) voluntary exchange.

Answer: D

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 8) If some gain and some lose as the result of a change, and it can be demonstrated that the value of the gains exceeds the value of the losses, then the change is said to be
- A) potentially efficient.
  - B) inefficient.
  - C) unequivocally Pareto optimal.
  - D) technically efficient.

Answer: A

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 9) A voluntary exchange between Mike (the purchaser) and Wayne (the seller) occurs because
- A) Mike stands to gain and Wayne to lose.
  - B) Mike stands to lose and Wayne to gain.
  - C) they both gain from the transaction.
  - D) they had no choice.

Answer: C

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 10) A household will buy a good as long as the
- A) good's price is greater than the maximum a consumer would be willing to pay for it.
  - B) marginal utility from its consumption is greater than or equal to its market price.
  - C) good still provides the consumer with average utility.
  - D) good's use value is less than the price being charged for the good.

Answer: B

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 11) If a restaurant runs a special and sells a lobster dinner for \$4.50, Amy buys one lobster dinner a week. If lobster dinners are not on special and the price is \$16.00, Amy buys zero lobster dinners per week. Which of the following is TRUE?
- A) Amy's demand for lobster is inelastic.
  - B) Amy's marginal utility from a lobster dinner is less than \$4.50.
  - C) The value of Amy's marginal utility from a lobster dinner is at least \$4.50 and less than \$16.00.
  - D) Amy's marginal utility from a lobster dinner is greater than \$16.00.

Answer: C

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in the Figure 12.4 below to answer the questions that follow.

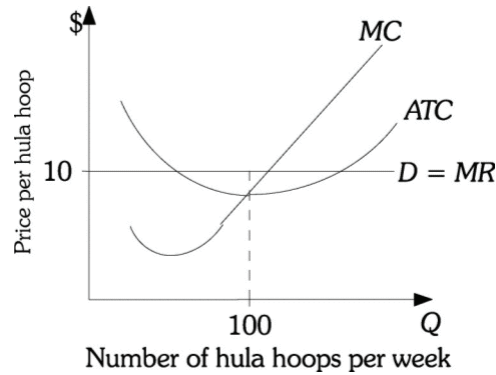


Figure 12.4

- 12) Refer to Figure 12.4. Hula hoops are produced in a perfectly competitive market. This hula hoop firm is currently producing and selling 100 hula hoops per week. Which of the following is TRUE?
- A) Society would be better off if more hula hoops were produced because at the current level of production price is greater than marginal cost.
  - B) Society would be better off if fewer hula hoops were produced because if this firm reduced its production, its profits would increase.
  - C) Hula hoop production is at the efficient level because  $ATC$  is minimized.
  - D) Fewer resources should be devoted to hula hoop production because  $ATC$  is less than price.

Answer: A

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 13) The opportunity cost of using resources to produce more of one good instead of more of another good is its
- A) marginal revenue.
  - B) marginal cost.
  - C) price.
  - D) total cost.

Answer: B

Diff: 1

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Fact

- 14) A person who chooses not to be in the labor force reveals that
- A) his potential product in the market is zero.
  - B) either leisure or the value of nonpaid labor is worth more to him than the value that society places on his potential product in the market.
  - C) either leisure or the value of nonpaid labor is worth less to him than the value that society places on his potential product in the market.
  - D) either leisure or the value of nonpaid labor is worth zero to him.

Answer: B

Diff: 1

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Fact

- 15) In making labor supply decisions households weigh
- A) the market wage against the value of market produced goods.
  - B) the market wage against the value of their marginal product of labor.
  - C) the market wage against the value of leisure and time spent in unpaid household production.
  - D) child care costs.

Answer: C

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 16) Marginal cost is a good measure of
- A) the social value of a marginal unit of a good.
  - B) the least costly way to produce all units of a good.
  - C) what society gives up by using resources to produce more of a good or service.
  - D) what society gains by using resources to produce more of a good or service.

Answer: C

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

- 17) In perfect competition, when firms are maximizing profits and households are maximizing utility,
- A) Pareto optimality has been obtained.
  - B) voluntary exchange can be used to make both firms and households better off.
  - C) the outcome is inefficient.
  - D) individual welfare is maximized, but social welfare is not.

Answer: A

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 18) A \_\_\_\_\_ system is one in which all possible trades that make some societal members better off without making others worse off have been exhausted.
- A) Pareto maximized
  - B) Pareto optimal
  - C) market
  - D) general equilibrium

Answer: B

Diff: 1

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 19) You value your economics textbook at \$10. Someone else values it at \$25, and that person is willing to pay you \$20 for your textbook. Would selling your textbook to this person for \$20 be Pareto efficient?
- A) No, because you did not receive the maximum amount the other person would have been willing to pay for the textbook.
  - B) No, the person paid you \$20 for the book so his net benefit was only \$5, whereas your net benefit was \$10. For this change to be Pareto efficient, each of you should have the same net benefit.
  - C) Yes, because both of you are better off as a result of the trade.
  - D) Yes, because even though you gain from the trade and he loses, there is the potential for you to compensate him for his loss.

Answer: C

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 20) You value your favorite shirt at \$110. Someone else values it at \$150, and that person is willing to pay you \$120 for your shirt. Would selling your shirt to this person for \$120 be Pareto efficient?
- A) No, because you did not receive the maximum amount the other person would have been willing to pay for the shirt.
  - B) No, the person paid you \$120 for the shirt so his net benefit was \$30, while your net benefit was \$10. For this change to be Pareto efficient, each of you should have the same net benefit.
  - C) Yes, because even though you gain from the trade and he loses, there is the potential for you to compensate him for his loss.
  - D) Yes, because both of you are better off as a result of the trade.

Answer: D

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 21) When all the conditions for perfect competition are met,
- A) resources are allocated among firms efficiently.
  - B) final products are distributed among households efficiently.
  - C) the system produces the goods and services consumers want.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

22) Which assumption(s) are necessary for an efficient allocation of resources among firms?

- A) Factor markets are open and competitive.
- B) All firms pay the same prices for inputs.
- C) Firms behave so as to maximize their profits.
- D) All of the above are correct.

Answer: D

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

23) In order to have an efficient distribution of final products to households,

- A) free and open markets are essential.
- B) households must maximize their income.
- C) the equity criterion must be satisfied.
- D) there can be no unemployment.

Answer: A

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

24) The condition  $P = MC$  implies that

- A) there is no consumer surplus for any consumer.
- B) an individual who values the product at more than  $P$  will receive consumer surplus.
- C) an individual who values the product at less than  $P$  will receive consumer surplus.
- D) the amount of consumer surplus is infinite.

Answer: B

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

25) Under perfect competition, the efficient level of output is produced because

- A) government regulates the output level that must be produced.
- B) firms earn only a normal profit in the long run.
- C) firms can earn an economic profit in the long run.
- D) price equals marginal cost.

Answer: D

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

26) In perfect competition, the condition that ensures that the right things are produced is

- A)  $MU_X = P_X$ .
- B)  $P = MC$ .
- C)  $P = ATC$ .
- D)  $MRP_L = ATC$ .

Answer: B

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition



27) Under perfect competition the person that ends up with the marginal unit is the person that values it

- A) at an amount above its price.
- B) at an amount lower than its price.
- C) exactly at its price.
- D) above its marginal cost.

Answer: C

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

28) If at the current output of X the  $P_X > MC_X$ , then society gains by

- A) producing more X.
- B) producing less X.
- C) raising the price of X.
- D) increasing the cost of producing X.

Answer: A

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Analytic Skills

29) If at the current output of X the  $P_X < MC_X$ , then society gains by

- A) producing more X.
- B) producing less X.
- C) lowering the price of X.
- D) increasing the cost of producing X.

Answer: B

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Analytic Skills

30) If society will gain by producing more X, then it must be the case that currently

- A)  $P_X = MC_X$ .
- B)  $P_X > MC_X$ .
- C)  $P_X < MC_X$ .
- D) either  $P_X > MC_X$  or  $P_X < MC_X$ .

Answer: B

Diff: 1

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Analytic Skills

31) \_\_\_\_\_ reflects household willingness to pay and \_\_\_\_\_ reflects the opportunity cost of the resources needed to produce a good.

- A) Marginal utility; price
- B) Price; marginal cost
- C) Price; average total cost
- D) Demand; price

Answer: B

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

- 32) Society will produce the efficient mix of output if all firms equate
- A) price and marginal cost.
  - B) price and average total cost.
  - C) marginal cost and average total cost.
  - D) price and marginal revenue.

Answer: A

Diff: 1

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Fact

- 33) Relating to the *Economics in Practice* on page 247: Which of the following would be an expected result of increased government subsidies for ethanol, a fuel produced from corn?
- A) an increase in the price of gasoline made in part from ethanol
  - B) an increase in the price of land used to farm corn
  - C) decreases in the price of land used to farm grains other than corn
  - D) a decrease in the production of corn relative to other grains

Answer: D

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

- 34) Relating to the *Economics in Practice* on page 247: Ethanol, a fuel produced from corn, subsidies have increased the supply of corn. As a result, demand for farm land has \_\_\_\_\_. Further, the supply of other grains has \_\_\_\_\_.
- A) increased; increased
  - B) decreased; decreased
  - C) increased; decreased
  - D) decreased; increased

Answer: C

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium: Economics in Practice

Skill: Analytic

AACSB: Analytic Skills

- 35) Relating to the *Economics in Practice* on page 252: All of the following are true statements about ticket scalping EXCEPT:
- A) When a ticket is resold both the ticket seller and the ticket buyer are better off than they would have been without the exchange.
  - B) The best indicator of ticket's actual market value is the face value of the ticket.
  - C) New technology allows ticket scalpers to acquire and resell tickets more efficiently.
  - D) Attempting to prevent trade based on consumers' ability and willingness to pay has often been problematic.

Answer: B

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium: Economics in Practice

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

- 1) If after a change in an allocation it can be demonstrated that the value of the gains exceeds the value of the losses, then the change is said to be potentially efficient.

Answer: TRUE

Diff: 1

Topic: *Allocative Efficiency and Competitive Equilibrium*

Skill: *Fact*

- 2) A government policy generates \$10,000 of benefits to underprivileged youth at a cost of \$5,000 to taxpayers. The policy is Pareto efficient.

Answer: FALSE

Diff: 1

Topic: *Allocative Efficiency and Competitive Equilibrium*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 3) For a policy to be Pareto efficient it must make everyone at least a little better off.

Answer: FALSE

Diff: 1

Topic: *Allocative Efficiency and Competitive Equilibrium*

Skill: *Conceptual*

- 4) A perfectly competitive system is efficient.

Answer: TRUE

Diff: 1

Topic: *Allocative Efficiency and Competitive Equilibrium*

Skill: *Conceptual*

- 5) A perfectly competitive system results in an efficient allocation of resources among firms and an equal distribution of final products among households.

Answer: FALSE

Diff: 1

Topic: *Allocative Efficiency and Competitive Equilibrium*

Skill: *Conceptual*

- 6) Efficiency and equity are synonymous.

Answer: FALSE

Diff: 1

Topic: *Allocative Efficiency and Competitive Equilibrium*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 7) Relating to the Economics in Practice on page 252. Ticket scalping is welfare improving.

Answer: TRUE

Diff: 2

Topic: *Allocative Efficiency and Competitive Equilibrium: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

8) Relating to the Economics in Practice on page 252. Ticket scalping would be very simple to stop in the electronic age in which we live.

Answer: FALSE

Diff: 1

Topic: Allocative Efficiency and Competitive Equilibrium: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

## 12.3 The Sources of Market Failure

### 1 Multiple Choice

1) Assume that the marginal cost of producing steel does not include the cost of the damage to the environment as a result of pollution. By producing where  $P = MC$ , the firm will be producing

- A) the efficient amount of steel.
- B) more than the efficient amount of steel.
- C) less than the efficient amount of steel.
- D) a zero quantity of steel.

Answer: B

Diff: 3

Topic: The Source of Market Failure

Skill: Conceptual

AACSB: Analytic Skills

2) Sources of market failure include

- A) private goods.
- B) competitive behavior.
- C) externalities.
- D) unequal income distribution.

Answer: C

Diff: 1

Topic: The Source of Market Failure

Skill: Definition

3) Which one of the following is NOT a source of market failure?

- A) externalities.
- B) public goods.
- C) imperfect information.
- D) price ceilings.

Answer: D

Diff: 1

Topic: The Source of Market Failure

Skill: Definition

4) Taxes and subsidies can be used by the government to \_\_\_\_\_ externalities.

- A) create
- B) internalize
- C) measure
- D) analyze

Answer: B

Diff: 2

Topic: The Source of Market Failure

Skill: Conceptual

- 5) Assume that price underestimates the value that society places on the flu vaccine. If firms produce where  $P = MC$ , firms will be producing
- A) the socially efficient amount of flu vaccine.
  - B) more than the socially efficient amount of flu vaccine
  - C) less than the socially efficient amount of flu vaccine.
  - D) so that consumer surplus is zero.

Answer: C

Diff: 3

Topic: *The Source of Market Failure*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 6) When resources are misallocated, or allocated inefficiently,
- A) market failure occurs.
  - B) then there must be external costs or benefits in production.
  - C) then it must be the case that there is imperfect information in the market.
  - D) then it must be the case that the good is a public good.

Answer: A

Diff: 2

Topic: *The Source of Market Failure*

Skill: *Definition*

- 7) Market failure occurs when
- A) firms that are incurring losses leave a market.
  - B) perfectly competitive firms produce where  $MR = MC$ .
  - C) resources are misallocated, or allocated inefficiently.
  - D) firms are only able to earn a normal profit.

Answer: C

Diff: 2

Topic: *The Source of Market Failure*

Skill: *Definition*

- 8) Imperfect competition occurs
- A) when firms are not profit maximizers.
  - B) whenever firms are losing money.
  - C) when firms have some control over price and competition.
  - D) when the consumption of the good involves an external benefit.

Answer: C

Diff: 2

Topic: *The Source of Market Failure*

Skill: *Definition*

- 9) \_\_\_\_\_ is an example of an imperfectly competitive market structure.
- A) Monopoly
  - B) Oligopoly
  - C) Monopolistic competition
  - D) All of the above are correct.

Answer: D

Diff: 1

Topic: *The Source of Market Failure*

Skill: *Conceptual*

- 10) In imperfectly competitive markets,
- A) the output is overproduced
  - B) price is equal to marginal cost so as to maximize profits
  - C) the price is higher than it would be in perfect competition
  - D) profits are excessive.

Answer: C

Diff: 2

Topic: The Source of Market Failure

Skill: Conceptual

- 11) Monopolies
- A) are price takers.
  - B) are constrained by the market demand for their product.
  - C) set price so as to maximize their total revenue.
  - D) overproduce their product to maximize their profits.

Answer: B

Diff: 2

Topic: The Source of Market Failure

Skill: Conceptual

- 12) There is only one firm producing chocolate-covered ants. This is an example of a(n)
- A) imperfect market.
  - B) external benefit in production.
  - C) external cost in consumption.
  - D) social good.

Answer: A

Diff: 2

Topic: The Source of Market Failure

Skill: Definition

- 13) If a perfectly competitive industry were to become monopolized, which of the following would occur?
- A) Both price and output would remain unchanged.
  - B) Price would increase and output would decrease.
  - C) Both price and output would decrease.
  - D) Price would decrease and output would increase.

Answer: B

Diff: 3

Topic: The Source of Market Failure

Skill: Conceptual

AACSB: Reflective Thinking

- 14) Assume that an industry is currently a monopoly. If the government breaks this monopoly up into a large number of small perfectly competitive firms, we would expect which one of the following to occur?
- A) Price will fall and industry output will increase.
  - B) Price will increase and industry output will decrease.
  - C) Both price and industry output will increase.
  - D) Both price and industry output will decrease.

Answer: A

Diff: 3

Topic: The Source of Market Failure

Skill: Conceptual

AACSB: Reflective Thinking

- 15) Suppose Microsoft is large enough to raise the market wage rate of computer programmers in the software industry by increasing its demand for these people. Which of the following is the best description of this? This is a good example of
- A) an external cost.
  - B) a factor of production being a "public input."
  - C) the workers receiving external benefits.
  - D) an imperfect market.

Answer: D

Diff: 3

Topic: *The Source of Market Failure*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 16) Suppose you know that the breakfast cereal industry is characterized by significant "barriers to entry." Which of the following is a correct inference?
- A) Economic profits in the breakfast cereal industry are likely to persist, ceteris paribus.
  - B) The breakfast cereal industry could be an unregulated, perfectly competitive industry.
  - C) The government must be artificially restricting entry into the breakfast cereal industry.
  - D) The breakfast cereal industry is producing a type of public good.

Answer: A

Diff: 3

Topic: *The Source of Market Failure*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 17) The equilibrium condition  $P = MC$  holds
- A) only if all markets are imperfectly competitive.
  - B) as long as all firms maximize profits.
  - C) only if all markets are perfectly competitive.
  - D) only for goods produced by the public sector.

Answer: C

Diff: 2

Topic: *The Source of Market Failure*

Skill: *Definition*

- 18) In general, we expect \_\_\_\_\_ in imperfectly competitive industries.
- A) a Pareto optimal allocation of resources
  - B) an inefficient allocation of resources
  - C) an efficient allocation of resources, but an inequitable income distribution
  - D) the free-rider problem

Answer: B

Diff: 3

Topic: *The Source of Market Failure*

Skill: *Conceptual*

19) The whole class of goods that will be underproduced or not produced at all in a completely unregulated market economy are referred to as

- A) free goods.
- B) Pareto goods.
- C) private goods.
- D) public goods.

Answer: D

Diff: 2

Topic: The Source of Market Failure

Skill: Definition

20) \_\_\_\_\_ is an example of a public good.

- A) An automobile
- B) National defense
- C) A restaurant meal
- D) A medical service

Answer: B

Diff: 1

Topic: The Source of Market Failure

Skill: Fact

21) All of the following are true about public goods EXCEPT:

- A) bestow collective benefits on members of society.
- B) are non-excludable since those who do not pay for them cannot be excluded from enjoying them.
- C) will be under supplied by the private sector.
- D) are only produced by government agencies.

Answer: D

Diff: 1

Topic: The Source of Market Failure

Skill: Definition

22) Public goods are generally produced by

- A) the government.
- B) monopolies.
- C) perfectly competitive industries.
- D) freely functioning markets.

Answer: A

Diff: 1

Topic: The Source of Market Failure

Skill: Definition

23) Because public goods are characterized by being collectively consumed,

- A) the government cannot produce them.
- B) they are illegal.
- C) they are very expensive, thus the private sector cannot provide them.
- D) the private sector may not provide them because they cannot exclude those who do not pay.

Answer: D

Diff: 3

Topic: The Source of Market Failure

Skill: Conceptual



24) If no one can be excluded from consuming its benefits and there is no rivalry in consumption, then the good is a \_\_\_\_\_ good.

- A) private                      B) Pareto                      C) public                      D) free

Answer: C

Diff: 2

Topic: *The Source of Market Failure*

Skill: *Definition*

25) An example of a public good is

- A) an apple.                      B) a public utility.  
C) a joke.                      D) a book.

Answer: C

Diff: 1

Topic: *The Source of Market Failure*

Skill: *Fact*

26) Which of the following would be classified as an external cost?

- A) As more firms began hiring computer programmers, the salaries of computer programmers increased and therefore the firm's cost of production increased.  
B) A private firm will not provide national defense, as it is impossible to confine the benefits to only those individuals who have paid for it.  
C) You are not able to study at night because there is so much noise coming from the dorm room next to yours.  
D) When you purchase a prescription drug you are not made fully aware of all the possible side effects that may result from taking the drug.

Answer: C

Diff: 1

Topic: *The Source of Market Failure*

Skill: *Fact*

27) Your next-door neighbor has a beautiful rose garden. But you are allergic to roses and cannot use your yard because of the rose pollen that drifts into your yard. In this case, the rose garden is an example of a

- A) public good.                      B) good that imposes an external cost.  
C) good that provides an external benefit.                      D) Pareto good.

Answer: B

Diff: 2

Topic: *The Source of Market Failure*

Skill: *Definition*

28) Which of the following is an example of an external benefit?

- A) More people start to ride the bus because they become more public-spirited and, as a result, air pollution is reduced.  
B) Firms are able to reduce their costs of production by using a more efficient technology.  
C) The federal government spends a million dollars on improving national parks.  
D) A firm has just gotten permission to open a landfill on property that is adjacent to your home.

Answer: A

Diff: 1

Topic: *The Source of Market Failure*

Skill: *Fact*

29) One reason to require medical practitioners to be licensed is that

- A) medical care involves substantial externalities.
- B) medical care is so expensive.
- C) medical care is a public good.
- D) medical care consumers lack perfect information.

Answer: D

Diff: 2

Topic: *The Source of Market Failure*

Skill: *Conceptual*

30) Which of the following help to correct for the market failure of imperfect information?

- A) Truth-in-advertising regulations
- B) Used car warranties
- C) Medical licensing
- D) All of the above are correct.

Answer: D

Diff: 2

Topic: *The Sources of Market Failure*

Skill: *Conceptual*

31) Imperfect information on the part of buyers and sellers

- A) will not stop the economy from achieving market efficiency, assuming the other conditions for market efficiency hold.
- B) is no longer a problem because the "truth-in-advertising" regulations have been instituted.
- C) remains a barrier to achieving market efficiency, at least in some industries.
- D) cannot persist in a market economy.

Answer: C

Diff: 1

Topic: *The Source of Market Failure*

Skill: *Fact*

32) Bill sells Mary a worthless coin that Bill deviously told Mary "belonged to an ancient Persian king and is of enormous value to coin collectors." Economists would call this an

- A) efficient exchange, as any type of voluntary exchange promotes efficiency.
- B) inefficient exchange, as at least one party used false market information.
- C) efficient exchange, assuming Bill was not intentionally trying to trick Mary.
- D) inefficient exchange because there were externalities involved.

Answer: B

Diff: 3

Topic: *The Source of Market Failure*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 2 True/False

1) Public goods are goods that we all agree are useful and therefore are all willing to pay for. This implies that there is no efficiency problem in the production of public goods.

Answer: FALSE

Diff: 2

Topic: *The Source of Market Failure*

Skill: *Definition*

2) It is because firms consciously try to balance social costs and benefits that efficiency conditions of perfect competition come about.

Answer: FALSE

Diff: 1

Topic: *The Source of Market Failure*

Skill: *Fact*

3) The existence of public goods can be a source of market failure.

Answer: TRUE

Diff: 1

Topic: *The Source of Market Failure*

Skill: *Fact*

4)  $P$  equals  $TR$  for a profit-maximizing monopoly.

Answer: FALSE

Diff: 1

Topic: *The Source of Market Failure*

Skill: *Fact*

5) An externality exists when the cost or benefit resulting from some activity or transaction is experienced by parties external to the activity or transaction.

Answer: TRUE

Diff: 1

Topic: *The Source of Market Failure*

Skill: *Fact*

6) Imperfect markets include monopolies, oligopolies, and monopolistically competitive industries.

Answer: TRUE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Definition*

7) Market failure results in an inefficient allocation of resources.

Answer: TRUE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Definition*

8) Mitsubishi is an example of a perfectly competitive firm.

Answer: FALSE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Conceptual*

9) Monopolies can sell all of their output at any price desire.

Answer: FALSE

Diff: 2

Topic: *The Sources of Market Failure*

Skill: *Conceptual*

10) Clean air is an example of a public good.

Answer: FALSE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Definition*

11) National defense is an example of an externality.

Answer: FALSE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Definition*

12) The life insurance industry is an example of an industry with imperfect information.

Answer: TRUE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Definition*

## 12.4 Evaluating the Market Mechanism

### 1 Multiple Choice

1) Some contend that the outcome of any free market is ultimately inequitable, because

- A) public goods will be underprovided by the government.
- B) some people become rich while others remain very poor.
- C) firms are not forced to take external costs into account.
- D) periods of unemployment and inflation still occur.

Answer: B

Diff: 3

Topic: *Evaluating the Market Mechanism*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

2) A freely functioning market

- A) will always be efficient.
- B) will fairly reward talent and punish the lazy.
- C) can not be made more efficient with government intervention.
- D) maximizes freedom of choice.

Answer: D

Diff: 2

Topic: *Evaluating the Market Mechanism*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

### 2 True/False

1) Market failures may be corrected through government intervention.

Answer: TRUE

Diff: 2

Topic: *Evaluating the Market Mechanism*

Skill: *Conceptual*

2) Freely functioning markets in the real world always result in efficient allocations of resources.

Answer: FALSE

Diff: 2

Topic: *Evaluating the Market Mechanism*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

3) Even if a market outcome is efficient it may not be equitable.

Answer: TRUE

Diff: 2

Topic: *Evaluating the Market Mechanism*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

# Chapter 13 Monopoly and Antitrust

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## 13.1 Imperfect Competition and Market Power

### 1 Multiple Choice

- 1) In imperfectly competitive markets,
- A) there is no competition in the markets.
  - B) some competition may exist in the markets.
  - C) some competition may exist but only on price and not in other ways.
  - D) some competition may exist but only in other ways and not on price.

Answer: B

Diff: 1

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

- 2) A firm must be able to \_\_\_\_\_ competition if it is to exercise control over the price of its product.
- A) maximize                      B) increase                      C) not change                      D) limit

Answer: D

Diff: 1

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

- 3) In an imperfectly competitive industry
- A) a single firm has no control over the price of its output.
  - B) a single firm has some control over the price of its output.
  - C) a single firm will be able to sell all of its output at whatever price it wants to charge.
  - D) the government will always regulate the output price.

Answer: B

Diff: 1

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

- 4) Imperfect competition
- A) means there is no competition in the market.
  - B) results in less efficient market outcomes.
  - C) should always be regulated by the government
  - D) is a major cause of externalities in the market.

Answer: B

Diff: 1

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Conceptual

- 5) Monopolies, oligopolies, and monopolistic competitive industries all
- A) earn positive profits in the long run.
  - B) have market power.
  - C) are completely unconstrained in their pricing.
  - D) raise price and quantity over what would occur in perfect competition in order to maximize their profits.

Answer: B

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Definition*

- 6) Imperfect competition and market power
- A) are major sources of inefficiency.
  - B) result in higher output than in perfect competition.
  - C) are always the result of product differentiation.
  - D) result from diseconomies of scale.

Answer: A

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Conceptual*

- 7) A monopoly is an industry with
- A) a single firm in which the entry of new firms is blocked.
  - B) a small number of firms each large enough to impact the market price of its output..
  - C) many firms each able to differentiate their product.
  - D) many firms each too small to impact the market price of its output.

Answer: A

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

- 8) An oligopoly is an industry market structure with
- A) a single firm in which the entry of new firms is blocked.
  - B) a small number of firms each large enough to impact the market price of its output.
  - C) many firms each able to differentiate their product.
  - D) many firms each too small to impact the market price.

Answer: B

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

- 9) Monopolistic competition is an industry market structure with
- A) a single firm in which the entry of new firms is blocked.
  - B) a small number of firms each large enough to impact the market price of its output.
  - C) many firms each able to differentiate their product.
  - D) many firms each too small to impact the market price of its output.

Answer: C

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

- 10) Market power refers to a firm's ability to
- A) raise price without losing all sales of its product.
  - B) charge any price it likes.
  - C) sell any amount of output it desires at the market-determined price.
  - D) monopolize a market completely.

Answer: A

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Definition*

- 11) A coffee manufacturer raises the price of its coffee by 10%, and the quantity demanded of its coffee falls by only 12%. This firm has
- A) no monopoly power in the output market.
  - B) some market power.
  - C) some output power.
  - D) not been able to prevent its competitors from competing with it on price.

Answer: B

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

- 12) Which of the following is LEAST likely to be considered a firm in an imperfectly competitive industry?
- A) A Burger King in Pittsburgh, Pa.
  - B) Ohio Bell Telephone Company
  - C) A wheat farmer in Kansas
  - D) The only locally owned and operated bank in Severn, Md.

Answer: C

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Definition*

- 13) When \_\_\_\_\_ substitutes exist, a firm in an imperfectly competitive industry has \_\_\_\_\_ power to raise price.
- A) more; more                      B) more; less                      C) fewer; less                      D) no; infinite

Answer: B

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

- 14) The \_\_\_\_\_ broadly a market is defined; the more difficult it becomes to find \_\_\_\_\_.
- A) more; substitutes                      B) more; complements  
C) less; substitutes                      D) less; goods independent of each other

Answer: A

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*



- 15) The demand for food will likely be price \_\_\_\_\_ while the demand for Brand X Burger will likely be price \_\_\_\_\_.
- A) elastic; elastic
  - B) elastic; inelastic
  - C) inelastic; elastic
  - D) inelastic; inelastic

Answer: C

Diff: 2

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

- 16) The demand for Ben & Jerry's ice cream will likely be \_\_\_\_\_ the demand for dessert.
- A) more price elastic than
  - B) less price elastic than
  - C) equally price elastic as
  - D) indeterminate from the given information.

Answer: A

Diff: 2

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

- 17) In a monopolistic industry there is(are) \_\_\_\_\_ firm(s) and \_\_\_\_\_.
- A) many; free entry of new firms
  - B) many; entry of new firms is blocked
  - C) a single; free entry of new firms
  - D) a single; entry of new firms is blocked

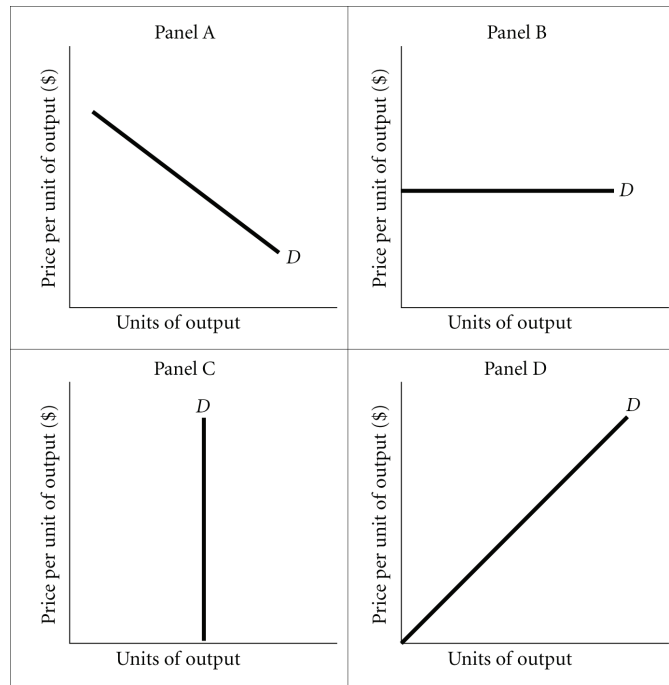
Answer: D

Diff: 1

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

Refer to the information provided in Figure 13.1 below to answer the question that follows.



**Figure 13.1**

- 18) Refer to Figure 13.1. The demand curve facing an individual producer of wheat is most likely represented by  
 A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: B

Diff: 2

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Figure 13.1. The demand curve facing an electric company is most likely represented by  
 A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: A

Diff: 2

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Analytic

AACSB: Analytic Skills

- 20) Refer to Figure 13.1. The demand curve facing Microsoft is most likely represented by  
 A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: A

Diff: 2

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Analytic

AACSB: Analytic Skills

- 21) Refer to Figure 13.1. The demand curve for insulin is most likely represented by  
A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: C

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 22) Firms with market power must decide all of the following EXCEPT  
A) how much to supply in each input market.  
B) how much to produce.  
C) how to produce it.  
D) what price to charge for their output.

Answer: A

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

## 2 True/False

- 1) A market where there is only one buyer for a good or service is called a monopoly.

Answer: FALSE

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Definition*

- 2) In imperfect competition, competition may take place in more levels than in perfect competition.

Answer: TRUE

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Conceptual*

- 3) There are a few firms selling differentiated products in a monopolistically competitive industry.

Answer: FALSE

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Definition*

- 4) The demand for Tyson chicken is more elastic than the demand for meat.

Answer: TRUE

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Conceptual*

- 5) Imperfect competition results in inefficiency but greater equity.

Answer: FALSE

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

- 6) A firm with market power will be able to sell all of their output at any price they desire.

Answer: FALSE

Diff: 1

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

## 13.2 Price and Output Decisions in Pure Monopoly Markets

### 1 Multiple Choice

- 1) Monopolists differ from perfectly competitive firms
- A) on the cost and demand sides of the profit equation.
  - B) on the cost side of the profit equation alone.
  - C) on the demand side of the profit equation alone.
  - D) on neither the cost nor demand sides of the profit equation.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 2) XYZ Computer Company has a monopoly on the sale of a specialized color printer. If it sells two of these printers its total revenue is \$1,000, and if it sells three color printers its total revenue is \$1,600. The marginal revenue of the third color printer sold is
- A) \$200.
  - B) \$300.
  - C) \$600.
  - D) \$1,300.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 3) For a monopolist to sell more units of output,
- A) the price must be increased.
  - B) the price must be reduced.
  - C) demand must become more elastic.
  - D) the other competing firms must sell fewer units.

Answer: B

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 4) An important distinction between perfect competition and monopoly is that in
- A) perfect competition there is no distinction between the firm and the industry.
  - B) perfect competition the firm is the industry.
  - C) monopoly the firm faces the market demand curve.
  - D) monopoly the firm produces less than the total quantity supplied.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 5) In a monopoly, the market demand curve is
- A) the same as the demand curve facing the firm.
  - B) the summation of all the individual firm's cost curves.
  - C) nonexistent.
  - D) the marginal cost curve above minimum average variable cost.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 6) For a monopoly, the marginal revenue curve has \_\_\_\_\_ point(s) in common with the firm's linear demand curve.
- A) one
  - B) no
  - C) all
  - D) Indeterminate from the given information.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 7) For a perfectly competitive firm, the marginal revenue curve has \_\_\_\_\_ point(s) in common with the firm's demand curve.
- A) one
  - B) no
  - C) all
  - D) Indeterminate from the given information.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 8) Voss Calculator Company has a monopoly on the sale of graphing calculators. If it sells two of these calculators its total revenue is \$600, and if it sells three calculators its total revenue is \$750. The marginal revenue of the third calculator sold is
- A) \$50.
  - B) \$75.
  - C) \$150.
  - D) \$250.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 9) When a monopolist sells two units of output its total revenue is \$150. When a monopolist sells three units of output its total revenue, is \$210. When the monopolist sells three units of output, the price per unit is
- A) \$50.
  - B) \$60.
  - C) \$70.
  - D) \$75.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

10) When a monopolist sells two units of output its total revenue is \$600. When a monopolist sells three units of output its total revenue is \$630. When the monopolist sells three units of output, the price per unit is

- A) \$210.                      B) \$230.                      C) \$300.                      D) \$630.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

11) When a monopolist sells two units of output its total revenue is \$600. When a monopolist sells three units of output its total revenue is \$630. In order to sell three units of output instead of only two, the monopolist must

- A) increase its price by \$30 per unit.  
B) decrease its price by \$90 per unit.  
C) make no change in price and increase output by one unit.  
D) decrease its price by \$30 per unit.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

12) Stereo Sound Unlimited has a monopoly over the installation of quadraphonic sound systems. If Stereo Sound Unlimited's total revenue from installing 10 sound systems is \$20,000 and its total revenue from installing 11 sound systems is \$18,000, what is the marginal revenue of the eleventh sound system?

- A) -\$2,000                      B) -\$1,000                      C) \$2,000                      D) \$3,800

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

13) Hi Phi Sound Unlimited has a monopoly over the installation of quadraphonic sound systems. Hi Phi Unlimited's total revenue from installing 15 sound systems is \$30,000 and its total revenue from installing 16 sound systems is \$33,000. The marginal revenue received from selling the 16th sound system is

- A) equal to the price of the 16th sound system.  
B) greater than the price of the 16th sound system.  
C) less than the price of the 16th sound system.  
D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 14) Hi Phi Sound Unlimited has a monopoly over the installation of quadraphonic sound systems. If Hi Phi Unlimited's total revenue from installing 15 sound systems is \$30,000 and its total revenue from installing 16 sound systems is \$33,000, what is the marginal revenue of the sixteenth sound system?

A) -\$3,000                      B) \$2,000                      C) \$2,062.50                      D) \$3,000

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 13.3 below to answer the questions that follow.

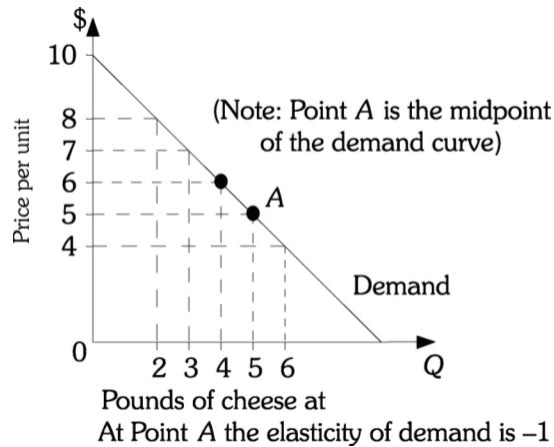


Figure 13.3

- 15) Refer to Figure 13.3. The marginal revenue of the fourth pound of cheese is

A) \$1.                      B) \$3.                      C) \$6.                      D) \$24.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 16) Refer to Figure 13.3. The marginal revenue of the sixth pound of cheese is

A) -\$4.                      B) -\$1.                      C) \$1.                      D) \$4.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 17) Refer to Figure 13.3. This firm's total revenue will be maximized at a price of  
 A) \$8.                                      B) \$6.                                      C) \$5.                                      D) \$4.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Figure 13.3. This firm's marginal revenue will be positive at  
 A) prices above \$5.                                      B) prices below \$5.  
 C) all prices.                                      D) prices between \$4 and \$8.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Figure 13.3. This firm's marginal revenue will be negative at  
 A) prices above \$5.                                      B) prices below \$5.  
 C) all prices.                                      D) prices between \$4 and \$8.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 13.4 below to answer the questions that follow.

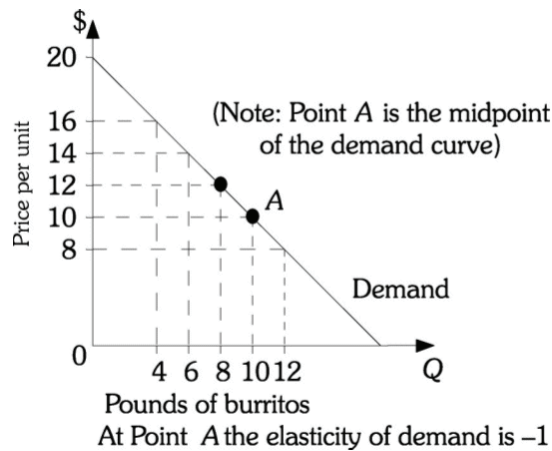


Figure 13.4

- 20) Refer to Figure 13.4. The marginal revenue of the eighth pound of burritos is  
 A) \$3.                                      B) \$6.                                      C) \$12.                                      D) \$96.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills



- 21) Refer to Figure 13.4. The marginal revenue of the 12th pound of burritos is  
A) -\$4.                                      B) -\$2.                                      C) \$2.                                      D) \$8.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 22) Refer to Figure 13.4. This firm's total revenue will be maximized at a price of  
A) \$12.                                      B) \$10.                                      C) \$8.                                      D) \$6.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 23) Refer to Figure 13.4. This firm's marginal revenue will be positive at  
A) prices above \$20.                                      B) prices above \$10.  
C) all prices.                                      D) prices between \$4 and \$8.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 24) Refer to Figure 13.4. This firm's marginal revenue will be negative at  
A) prices below \$10.                                      B) prices above \$12.  
C) all prices.                                      D) prices between \$4 and \$18.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 25) The demand curve facing a monopolistic firm is \_\_\_\_\_.  
A) upward-sloping                                      B) downward-sloping  
C) horizontal                                      D) vertical

Answer: B

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 26) For a non-discriminating monopolist to sell one more unit, it must \_\_\_\_\_.  
A) raise the price of only the last unit produced  
B) lower the price of only the last unit produced  
C) raise the price of the last as well as all previous units produced  
D) lower the price of the last as well as all previous units produced

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 27) A non-discriminating monopolist maximizes total revenue when its marginal revenue is \_\_\_\_\_.
- A) positive                      B) zero                      C) negative                      D) equal to price

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 28) A non-discriminating monopolist's price equals its marginal revenue only when
- A) output is zero.  
B) total revenue is a maximum.  
C) marginal revenue is zero.  
D) the monopolist's demand schedule intersects the horizontal (quantity) axis..

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 29) Assuming demand is linear, the shape of a monopolist's total revenue schedule is a
- A) straight line passing through the origin.  
B) straight line with negative slope.  
C) curve from the origin with increasing slope.  
D) curve from the origin with decreasing slope.

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 30) For a monopolist, price
- A) equals marginal revenue at all output levels.  
B) is less than marginal revenue.  
C) is greater than marginal revenue.  
D) can be greater than or less than marginal revenue.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 31) When the demand curve is a downward sloping straight line, the slope of the marginal revenue curve is
- A) always equal to one.  
B) the same as the slope of the demand curve.  
C) half as steep as the demand curve.  
D) twice as steep as the demand curve.

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

32) When the demand curve is a downward sloping straight line, the quantity at which the demand curve intersects the horizontal (quantity) axis is \_\_\_\_\_ the quantity at which the marginal revenue curve intersects the horizontal (quantity) axis.

- A) equal to                      B) less than                      C) twice                      D) four times

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

33) The Rare Bird Company has a monopoly in the sale of macaws in Iowa. When the Rare Bird Company sells three macaws its marginal revenue is \$30. When the Rare Bird Company sells four macaws its marginal revenue will be

- A) less than \$30.  
B) greater than \$30.  
C) equal to \$30.  
D) greater than \$30 if demand is elastic and less than \$30 if demand is inelastic.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

34) For a monopolist, if total revenue increases as output decreases, then marginal revenue is

- A) equal to price.                      B) zero.  
C) positive.                      D) negative.

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

35) A monopolist will not produce

- A) a positive level of output when its marginal revenue is declining.  
B) a positive level of output when its price is less than average total cost but greater than average variable cost.  
C) in the inelastic portion of its demand curve, where marginal revenue is negative.  
D) in the perfectly competitive level of output when it engages in perfect price discrimination.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 36) Suppose we know that a monopolist is maximizing its profits. Which of the following is a correct inference? The monopolist has
- A) maximized its total revenue.
  - B) set price equal to its average cost.
  - C) maximized the difference between marginal revenue and marginal cost.
  - D) equated marginal revenue and marginal cost.

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

Refer to the information provided in Figure 13.5 below to answer the questions that follow.

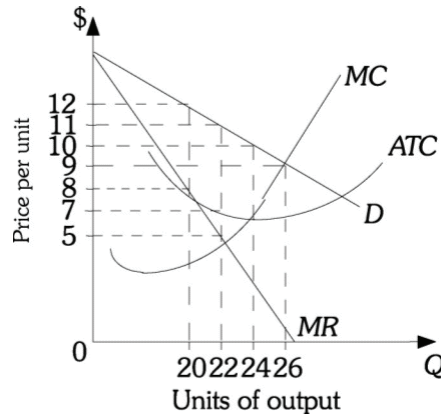


Figure 13.5

- 37) Refer to Figure 13.5. The profit-maximizing level of output for this monopolist is \_\_\_\_\_ units of output.

A) 20                                      B) 22                                      C) 24                                      D) 26

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 38) Refer to Figure 13.5. The profit-maximizing price for this firm is

A) \$5.                                      B) \$7.                                      C) \$9.                                      D) \$11.

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 39) Refer to Figure 13.5. If this firm is producing the profit-maximizing quantity and selling it at the profit-maximizing price, the firm's profit will be
- A) \$0.                      B) \$88.                      C) \$154.                      D) \$242.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 40) The XYZ Computer Company has a monopoly over the production of a specialized color printer. The XYZ Computer Company will find it profitable to increase the production of specialized color printers as long as marginal cost
- A) is less than marginal revenue.                      B) equals marginal revenue.  
C) is greater than marginal revenue.                      D) is positive.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 41) The XYZ Computer Company has a monopoly over the production of a specialized color printer. The XYZ Computer Company will find it profitable to reduce output as long as marginal revenue
- A) is greater than marginal cost.                      B) equals marginal cost.  
C) is less than marginal cost.                      D) is positive.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 42) A profit-maximizing monopolist will produce the level of output where
- A) marginal revenue is zero.  
B) marginal cost is minimized.  
C) price equals marginal cost.  
D) marginal revenue equals marginal cost.

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 43) Ameritech® has a monopoly over local telephone service. If Ameritech® is producing where marginal revenue is less than marginal cost, the firm
- A) could increase profits by reducing output.  
B) could increase profits by increasing output.  
C) is maximizing profits.  
D) must be earning a zero profit.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 44) A monopolist sets both price and quantity simultaneously, and the amount of output that it supplies depends
- A) only on the marginal cost curve.
  - B) only on the demand curve.
  - C) on both its marginal cost curve and the demand curve that it faces.
  - D) on both its average cost curve and the demand curve that it faces.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 45) A monopolist is currently maximizing profits. In addition, if  $P > ATC > MC$ , then the monopolist
- A) just breaks even.
  - B) earns positive economic profits.
  - C) is covering total variable costs but not total fixed costs.
  - D) is covering total fixed costs but not total variable costs.

Answer: B

Diff: 3

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 46) When the addition to a monopolist's total profit is negative from selling another unit, then it follows that
- A)  $MR > ATC$ .
  - B)  $MR = MC$ .
  - C)  $MR > MC$ .
  - D)  $MR < MC$ .

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 47) A monopolist's supply of a good is
- A) dependent on the monopolist's demand curve and its marginal cost curve.
  - B) given by the portion of the monopolist's marginal cost curve that lies above the average variable cost curve.
  - C) independent of the monopolist's demand curve.
  - D) given by the portion of the monopolist's average variable cost curve that lies above the marginal cost curve.

Answer: A

Diff: 3

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 48) Because of a patent, Alcoa is the only manufacturer of soda cans with a stay-put tab. Alcoa can earn a profit on the sale of soda cans with stay-put tabs
- A) in the short run but not in the long run because new firms will enter the industry in the long run.
  - B) only in the long run because government regulations prevent monopolists from earning profits in the short run.
  - C) in the long run but not the short run because the monopolist will face competition in the short run.
  - D) in the long run because entry into the industry by new firms is blocked until the patent expires.

Answer: D

Diff: 3

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 49) In the short run, when a monopolist incurs a loss it will
- A) always shut down.
  - B) always produce where marginal cost equals marginal revenue.
  - C) produce as long as total revenue is sufficient to cover variable costs.
  - D) produce as long as total revenue is sufficient to cover fixed costs.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 50) In the long run, a monopoly
- A) will always earn zero economic profits.
  - B) may earn positive economic profits due to entry barriers.
  - C) will never exit the industry.
  - D) will yield an efficient outcome.

Answer: B

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 51) If a monopolist earns positive economic profits in the long run,
- A) new firms will enter the market.
  - B) the monopolist expands production.
  - C) the industry supply curve shifts to the right.
  - D) the monopolist will not change its behavior.

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 52) A monopolist suffers a loss if its \_\_\_\_\_ schedule is everywhere above its \_\_\_\_\_ schedule.
- A) ATC; MC
  - B) MC; AVC
  - C) ATC; Demand
  - D) Demand; ATC

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 53) A monopolist is NOT guaranteed positive economic profits solely because it is a monopoly since there may be no output for which
- A)  $TR = TVC$ .                      B)  $TR > TC$ .                      C)  $MC = MR$ .                      D)  $ATR < MR$ .

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 54) The Exclusive Gift Company has a monopoly over the sale of gold hula hoops. This company is currently pricing and producing where marginal revenue is equal to marginal cost. It is selling 50 gold hula hoops at a price of \$5,000 each. Total costs for the company are \$300,000 of which fixed costs are \$100,000. You are hired as an economic consultant to this company. You should advise this monopolist to
- A) shut down in the short run and exit the industry in the long run.  
B) produce in the short run and expand capacity in the long run.  
C) produce in the short run but exit the industry in the long run if conditions do not change.  
D) shut down in the short run but expand capacity in the long run if conditions do not change.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills



Refer to the information provided in Figure 13.6 below to answer the question that follows.

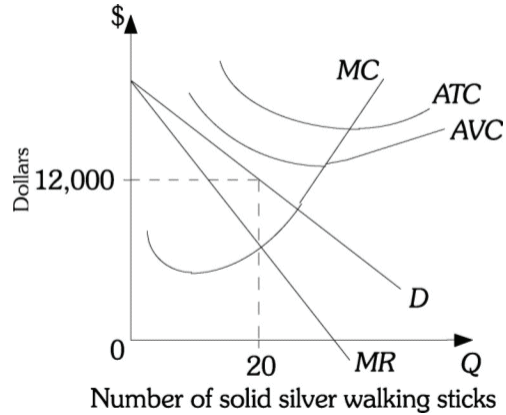


Figure 13.6

- 55) Refer to Figure 13.6. The Silver Exchange has a monopoly over the sale of solid silver walking sticks. The Silver Exchange has hired you as an economic consultant. You should advise this monopolist to
- A) shut down in the short run and exit the industry in the long run.
  - B) produce in the short run and expand capacity in the long run.
  - C) produce in the short run but exit the industry in the long run.
  - D) shut down in the short run but expand capacity in the long run.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 13.7 below to answer the question that follows.

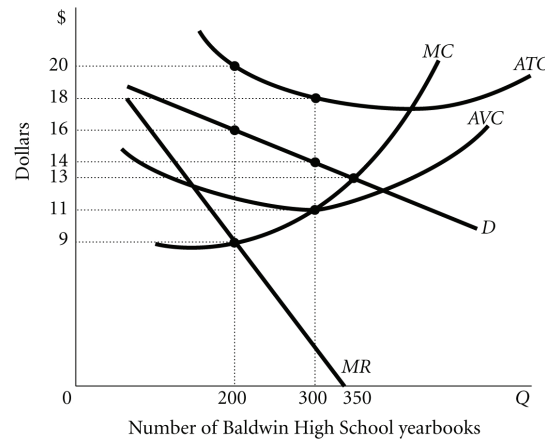


Figure 13.7

- 56) Refer to Figure 13.7. The profit-maximizing level of output for the Memory Company is \_\_\_\_\_ high school yearbooks.  
A) 0                                      B) 200                                      C) 300                                      D) 350

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 57) Refer to Figure 13.7. The profit-maximizing price for the Memory Company's high school yearbook is  
A) \$0.                                      B) \$9.                                      C) \$16.                                      D) \$20.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 58) Refer to Figure 13.7. The maximum profit level for the Memory Company is  
A) -\$1,800.                                      B) -\$1,200.                                      C) -\$800.                                      D) \$0.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 59) Refer to Figure 13.7. The Memory Company's operating profit is  
A) -\$800.                                      B) -\$1,000.                                      C) \$800.                                      D) \$1,000.

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 60) Relative to a competitively organized industry, a monopoly is more likely to produce
- A) more output, charges higher prices, and earns economic profits.
  - B) less output, charges lower prices, and earns economic profits.
  - C) less output, charges lower prices, and earns only a normal profit.
  - D) less output, charges higher price, and earns economic profits.

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 61) Relative to a monopolized industry, a competitively organized industry is more likely to produce
- A) more output, charges higher prices, and earns economic profits.
  - B) more output, charges lower prices, and earns economic profits.
  - C) more output, charges lower prices, and earns only a normal profit.
  - D) less output, charges higher prices, and earns economic profits.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 62) Relative to a competitively organized industry, firms acting collusively are more likely to produce
- A) more output; charge higher prices, and earn economic profits.
  - B) less output, charge lower prices, and earn economic profits.
  - C) less output, charge lower prices, and earn only a normal profit.
  - D) less output, charge higher prices, and earn economic profit.

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 13.8 below to answer the questions that follow.

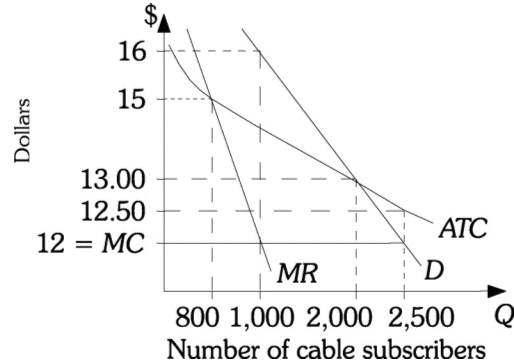


Figure 13.8

- 63) Refer to Figure 13.8. If the government regulates Armstrong Cable so they can earn only a normal return, the price would be set at
- A) \$12.00.                      B) \$12.50.                      C) \$13.00.                      D) \$16.00.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 64) A \_\_\_\_\_ prevents new firms from entering and competing in a monopolistic industry.
- A) barrier to entry                      B) collusive agreement  
C) market power sharing agreement                      D) cartel agreement

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 65) \_\_\_\_\_ is(are) protected by barriers to entry, specifically \_\_\_\_\_.
- A) State lotteries; government rules                      B) DeBeers Company; economies of scale  
C) Cable companies; patents                      D) All of the above are correct.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 66) DeBeers' diamond monopoly results from
- A) economies of scale.  
B) a patent.  
C) a government franchise.  
D) ownership of a scarce factor of production.

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 67) Which type of barrier to entry allowed the electric company to maintain a monopoly over the production of electricity?
- A) a patent
  - B) economies of scale
  - C) diseconomies of scale
  - D) ownership of a scarce factor of production

Answer: B

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

Refer to the information provided in the Figure 13.2 below to answer the question that follows.

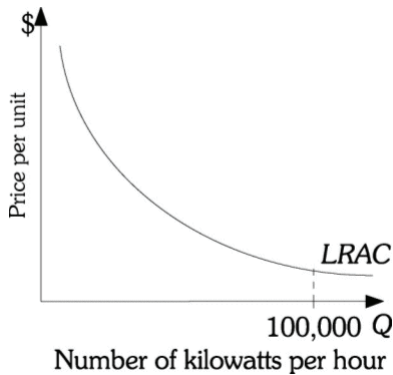


Figure 13.2

- 68) Refer to Figure 13.2. The only firm producing electricity has the long-run average total cost curve shown. The total amount of demand for kilowatts is 100,000 per hour. It makes economic sense for this firm to be the only producer of electricity because this firm
- A) must be realizing economies of scale in producing electricity.
  - B) must have a patent on the production process necessary to produce electricity.
  - C) must have control over a scarce factor of production.
  - D) must have a government franchise to produce electricity.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

AACSB: Analytic Skills

- 69) Refer to Figure 13.2. Each electricity producer has the given LRAC curve. The total cost of producing 100,000 kilowatts per hour is minimized with \_\_\_\_\_ firm(s) in the industry.
- A) one
  - B) ten
  - C) one hundred
  - D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

AACSB: Analytic Skills

- 70) \_\_\_\_\_ present(s) a barrier to entry in the DVD player market.
- A) Economies of scale
  - B) Ownership of a scarce resource
  - C) Network externalities
  - D) A government franchise

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 71) Due to the network externalities in the game console market, we would expect this market to
- A) overproduce game consoles.
  - B) be highly concentrated.
  - C) be efficient.
  - D) be serviced by a natural monopoly.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 72) Patents
- A) slow the flow of benefits from research and development to consumers.
  - B) are granted for a period of 10 years in the United States.
  - C) create monopolies and are thus efficient.
  - D) All of the above are correct.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 73) \_\_\_\_\_ are NOT a barrier to entry.
- A) Government franchises
  - B) Patents
  - C) Consent decrees
  - D) Economies of scale

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 74) A barrier to entry that grants exclusive use of an invented product or process to the inventor is called \_\_\_\_\_.
- A) a government franchise
  - B) a patent
  - C) economies of scale
  - D) the ownership of a scarce resource

Answer: B

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 75) Although patents are a \_\_\_\_\_, they also provide \_\_\_\_\_.
- A) collusive agreement; for free entry of new firms
  - B) collusive agreement; an incentive for invention and innovation
  - C) barrier to entry; for free entry of new firms
  - D) barrier to entry; an incentive for invention and innovation

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

76) When a firm's LRAC curve is still declining when it intersects the market demand curve, we call the firm a(n) \_\_\_\_\_.

- A) perfect competitor
- B) monopolistic competitor
- C) oligopolist
- D) natural monopolist

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

77) An industry that realizes such large economies of scale in producing its product that single-firm production of that good or service is most efficient is called a(n) \_\_\_\_\_ monopoly.

- A) fixed cost
- B) economies of scale
- C) patent
- D) natural

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

78) It would be inefficient to break up a \_\_\_\_\_ monopoly.

- A) government created
- B) price-fixing
- C) cartelized
- D) natural

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

79) For a monopoly to be a natural monopoly,

- A) economies of scale must be realized at a scale that is close to total demand in the market.
- B) economies of scale must be realized at a scale that is small relative to the market.
- C) there must be constant returns to scale.
- D) the long-run average cost curve must continue to increase until it hits the market demand curve.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

80) The classic examples of natural monopolies over the years have been

- A) agriculture.
- B) auto manufacturers.
- C) public utilities.
- D) retail trade.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

Refer to the information provided in Table 13.1 below to answer the questions that follow.

Table 13.1

Price (\$)	Quantity
4.00	2000
3.50	2400
3.00	2800
2.50	3200
2.00	3600
1.50	4000
1.00	4400

81) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table, what is its marginal revenue from the 2400th unit it sells?

- A) \$1                      B) \$3.50                      C) \$3.75                      D) \$400

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

82) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table, what is its marginal revenue from the 4000th unit it sells?

- A) -\$3                      B) \$1.50                      C) \$3                      D) \$1200

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

83) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table, at what level of output is its marginal revenue maximized?

- A) 2400                      B) 2800                      C) 3200                      D) 3600

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

84) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table, its marginal revenue is positive

- A) at all prices above \$3.00.                      B) at all prices.  
C) at all prices below \$3.00.                      D) at all price but \$3.00.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills



85) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$1 per unit of providing the product, what is the level of output that would maximize its profits?

- A) 2000                      B) 2400                      C) 2800                      D) 3200

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

86) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$1 per unit of providing the product, what price should it charge per unit of output so as to maximize its profits?

- A) \$4.00                      B) \$3.50                      C) \$3.00                      D) \$2.50

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

87) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$1 per unit of providing the product, what is the maximum profit the monopoly can earn?

- A) \$4,800                      B) \$5,600                      C) \$6,000                      D) \$8,400

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

88) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$1 per unit of providing the product, what is the most the monopoly would expend in rent-seeking activity?

- A) \$4,800                      B) \$5,600                      C) \$6,000                      D) \$8,400

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

89) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$1 per unit of providing the product, what is the societal loss associated with the monopoly?

- A) \$2,500  
B) \$5,000  
C) \$15,400  
D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Table 13.2 below to answer the questions that follow.

Table 13.2

Price (\$)	Quantity
10.00	1
9.00	2
8.00	3
7.00	4
6.00	5
5.00	6
4.00	7

- 90) Refer to Table 13.2. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$2 per unit of providing the product, then the monopoly maximizes its profits by charging \_\_\_\_\_ per unit and selling \_\_\_\_\_ units of output.

A) \$6; 5                      B) \$7; 4                      C) \$5; 6                      D) \$8; 3

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 91) Refer to Table 13.2. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$4 per unit of providing the product, then the monopoly maximizes its profits by charging \_\_\_\_\_ per unit and selling \_\_\_\_\_ units of output.

A) \$6; 5                      B) \$7; 4                      C) \$5; 6                      D) \$8; 3

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 92) Refer to Table 13.2. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$6 per unit of providing the product, then the monopoly maximizes its profits by charging \_\_\_\_\_ per unit and selling \_\_\_\_\_ units of output.

A) \$6; 5                      B) \$7; 4                      C) \$5; 6                      D) \$8; 3

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to Scenario 13.1 below to answer the questions that follow.

SCENARIO 13.1: The government of Catalina Island is currently inviting investors to bid for the exclusive right to provide cable television service to its residents. The market demand for this service is  $P = 55 - 0.01Q$ , where  $Q$  is the number of households that would subscribe to the cable service and  $P$  is the monthly fee charged to the subscribers. The associated marginal revenue curve is  $MR = 55 - 0.02Q$ . Universal Entertainment is interested in bidding for the right to provide cable service on Catalina Island. It has a constant average and marginal cost of \$15 for providing cable service to each household.

93) Refer to Scenario 13.1. If Universal Entertainment were to be awarded the exclusive right to provide cable service on Catalina Island, how many households would it service?

- A) 2000                      B) 2750                      C) 4000                      D) 5500

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

94) Refer to Scenario 13.1. If Universal Entertainment were to be awarded the exclusive right to provide cable service on Catalina Island, what price would it charge per household per month?

- A) \$15.00                      B) \$27.50                      C) \$35.00                      D) \$55.00

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

95) Refer to Scenario 13.1. If Universal Entertainment were to be awarded the exclusive right to provide cable service on Catalina Island, how much profit would it earn?

- A) \$0                              B) \$40,000                      C) \$70,000                      D) \$80,000

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

96) Refer to Scenario 13.1. What is the most Universal Entertainment would bid for the franchise?

- A) \$0                              B) \$40,000                      C) \$70,000                      D) \$80,000

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 97) Refer to Scenario 13.1. At what level of output (number of households) is Universal Entertainment's total revenue maximized?
- A) 2500
  - B) 2750
  - C) 5000
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 98) Related to the *Economics in Practice* on page 272: Which of the following best explains why cable television consists of local monopolies?
- A) A firm that is awarded a local cable monopoly must follow a set of rules governing price and availability.
  - B) Profit margins in the cable television industry are consistently higher than those of other industries.
  - C) Fixed costs are high, but the marginal cost of serving additional customers is low.
  - D) As the cable television industry has matured, access to cable television is increasingly perceived as a household necessity.

Answer: C

Diff: 3

Topic: Price and Output Decisions in Pure Monopoly Markets: Economics in Practice

Skill: Analytic

AACSB: Analytic Skills

- 99) Related to the *Economics in Practice* on page 272: The cable industry is best characterized as \_\_\_\_\_.
- A) perfectly competitive
  - B) a natural monopoly
  - C) monopolistically competitive
  - D) having diseconomies of scale

Answer: B

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets: Economics in Practice

Skill: Fact

## 2 True/False

- 1) Monopolists do not have supply curves that are independent of market demand.

Answer: TRUE

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 2) The condition for profit-maximization for competitive firms and monopolies is the same: marginal revenue equals marginal cost. Hence, monopolies are efficient.

Answer: FALSE

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 3) The profit-maximizing level of output for a monopolist is the one at which marginal revenue equals marginal cost.

Answer: TRUE

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 4) Because the marginal revenue curve for a monopolist lies below its demand curve, the profit-maximizing price of the monopolist will be above marginal cost.

Answer: TRUE

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 5) A monopoly's supply curve is the portion of the firm's marginal cost curve that lies above the average variable cost curve.

Answer: FALSE

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 6) Because the monopolist is the sole producer of a good, it can never incur a loss.

Answer: FALSE

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 7) No supply curve exists for a monopoly in the sense that a supply curve exists for a perfectly competitive firm.

Answer: TRUE

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 8) If an industry realizes significant economies of scale relative to the size of the market, it is most efficient for there to be a single firm in the industry.

Answer: TRUE

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 9) In perfect competition, price is equal to marginal revenue while in monopoly price is greater than marginal revenue.

Answer: TRUE

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 10) If a monopoly earns a loss in the short run and market conditions do not change, then it should exit the industry in the long run.  
Answer: TRUE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Conceptual*
- 11) The monopolist's total revenue curve is represented graphically by a positively sloped line.  
Answer: FALSE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Conceptual*
- 12) A monopoly earns total revenue of \$5000 when it sells 500 units of output and total revenue of \$5400 when it sells 600 units of output. Thus, the marginal revenue of the 600th unit is \$9.  
Answer: FALSE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Analytic*  
AACSB: *Analytic Skills*
- 13) The demand curve facing the monopoly is horizontal.  
Answer: FALSE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Definition*
- 14) Barriers to entry include network externalities and patents.  
Answer: TRUE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Definition*
- 15) For a firm to be a natural monopoly, economies of scale must be realized at a scale that is close to total demand in the market.  
Answer: TRUE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Fact*

### 13.3 The Social Costs of Monopoly

#### 1 Multiple Choice

Refer to the information provided in Figure 13.9 below to answer the questions that follow.

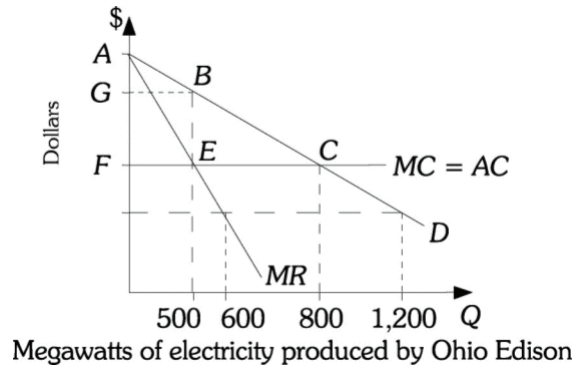


Figure 13.9

- 1) Refer to Figure 13.9. The amount of consumer surplus under monopoly is equal to area  
 A)  $AFE$ .                      B)  $GAB$ .                      C)  $BEC$ .                      D)  $AFC$ .

Answer: B

Diff: 2

Topic: The Social Costs of Monopoly

Skill: Analytic

AACSB: Analytic Skills

- 2) Refer to Figure 13.9. From society's point of view the efficient level of electricity production is \_\_\_\_\_ megawatts.  
 A) 500                      B) 600                      C) 800                      D) 1200

Answer: C

Diff: 2

Topic: The Social Costs of Monopoly

Skill: Analytic

AACSB: Analytic Skills

- 3) Refer to Figure 13.9. If Ohio Edison is forced to produce the efficient level of electricity (instead of the monopoly level),  
 A) the net social gain equals area  $BEC$ .  
 B) the monopolist loses profits equal to  $FABE$ .  
 C) consumers gain consumer surplus of  $AFC$ .  
 D) the monopolist earns a profit of  $FGBC$ .

Answer: A

Diff: 2

Topic: The Social Costs of Monopoly

Skill: Analytic

AACSB: Analytic Skills

- 4) Refer to Figure 13.9. If competition is introduced into the market the net social gain may be greater than the area BEC to the extent that
- A) the firm may have engaged in rent-seeking behavior, the cost of which would also be avoided.
  - B) society may value the increase in consumer welfare on equity as well as efficiency grounds.
  - C) firms facing competition may have a greater incentive to cut costs and innovate which result in gains to society.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: *The Social Costs of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 5) Refer to Figure 13.9. If Ohio Edison is regulated to act as a perfectly competitive firm (instead of the monopoly level)
- A) output would increase from 500 to 600 units.
  - B) consumer surplus would increase by the area FGBC.
  - C) the firm will earn profits of BEC.
  - D) the net social gain to society equals ACF.

Answer: B

Diff: 2

Topic: *The Social Costs of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 6) Refer to Figure 13.9. If Ohio Edison is forced to act as a perfect competitor (instead of the monopoly level), the net social gain is
- A) ACF.
  - B) FGBC.
  - C) BEC.
  - D) FABE.

Answer: C

Diff: 2

Topic: *The Social Costs of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 7) Refer to Figure 13.9. If this industry was originally perfectly competitive and becomes monopolized, the amount of consumer surplus transferred to Ohio Edison in the form of profits is
- A) FGBE.
  - B) BEC.
  - C) FGBC.
  - D) FABE.

Answer: A

Diff: 2

Topic: *The Social Costs of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*



- 8) Refer to Figure 13.9. If Ohio Edison engages in rent-seeking behavior to maintain their monopoly, the true net social cost of monopoly is
- A) *FGBC*.
  - B) *BEC* and the portion of area *FGBE* that pays for the rent-seeking behavior.
  - C) *AGB* and the portion of area *FGBE* that pays for the rent-seeking behavior.
  - D) *FAC*.

Answer: B

Diff: 2

Topic: *The Social Costs of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 9) Refer to Figure 13.9. Ohio Edison would be willing to pay up to area \_\_\_\_\_ for rent-seeking activities to protect its monopoly power.
- A) *FAE*.
  - B) *FGBE*.
  - C) *FGBC*.
  - D) *BEC*.

Answer: B

Diff: 2

Topic: *The Social Costs of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 10) A monopolist
- A) faces the same pressures to cut costs as a competitive firm does.
  - B) must use the most efficient technology or it will be driven out of business by firms that do.
  - C) is protected from competition by barriers to entry.
  - D) faces the same pressures to innovate as a competitive firm does.

Answer: C

Diff: 1

Topic: *The Social Costs of Monopoly*

Skill: *Fact*

- 11) From society's point of view, a monopolist produces too little because price
- A) is less than marginal cost.
  - B) is less than average cost.
  - C) exceeds average cost.
  - D) exceeds marginal cost.

Answer: D

Diff: 1

Topic: *The Social Costs of Monopoly*

Skill: *Fact*

- 12) There is a bill pending before the Kansas State Legislature that would prohibit private companies from selling health insurance and would make the state the single payer of health care bills. Private health insurance companies that have made above normal profits have spent large sums of money trying to prevent this bill from being passed into law. This is an example of
- A) government failure.
  - B) collusion.
  - C) an externality.
  - D) rent-seeking behavior.

Answer: D

Diff: 2

Topic: *The Social Costs of Monopoly*

Skill: *Definition*

13) AARP lobbies aggressively for the interests of retired persons. For example, AARP has been instrumental in obtaining medical benefits for senior citizens. Such behavior on the part of AARP is called \_\_\_\_\_.

- A) government failure.
- B) discrimination.
- C) consumer loss.
- D) rent-seeking behavior.

Answer: D

Diff: 2

Topic: *The Social Costs of Monopoly*

Skill: *Definition*

14) Government failure

- A) leads to a more efficient allocation of resources.
- B) leads to a less efficient allocation of resources.
- C) occurs because households or firms do not act in their own self-interest.
- D) occurs because government officials do not act in their own self-interest.

Answer: B

Diff: 2

Topic: *The Social Costs of Monopoly*

Skill: *Fact*

15) The notion that the government becomes the tool of the rent seeker and makes the allocation of resources even less efficient than before is known as \_\_\_\_\_ and is described in \_\_\_\_\_ .

- A) rent-seeking; public choice theory
- B) government failure; public choice theory
- C) collusion; conspiracy theory
- D) discrimination; conspiracy theory

Answer: B

Diff: 2

Topic: *The Social Costs of Monopoly*

Skill: *Definition*

Refer to the information provided in Figure 13.10 below to answer the questions that follow.

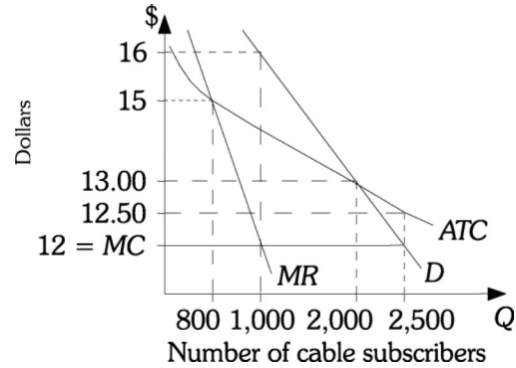


Figure 13.10

- 16) Refer to Figure 13.10. If Armstrong Cable were free to sell to any number of subscribers it desires and set any price, it would sell to \_\_\_\_\_ subscribers at a price of \_\_\_\_\_.

A) 800; \$15                      B) 1,000; \$16                      C) 2,200; \$13                      D) 2,500; \$12

Answer: B

Diff: 2

Topic: The Social Costs of Monopoly

Skill: Analytic

AACSB: Analytic Skills

- 17) Refer to Figure 13.10. For Armstrong Cable the profit-maximizing number of subscribers is

A) 800.                                      B) 1,000.                                      C) 2,200.                                      D) 2,500.

Answer: B

Diff: 2

Topic: The Social Costs of Monopoly

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Figure 13.10. If Armstrong Cable is forced to sell the efficient level output it will

A) incur a loss of \$7,250.                      B) incur a loss of \$1,250.  
C) earn a zero profit.                                      D) earn a profit of \$4,000.

Answer: B

Diff: 2

Topic: The Social Costs of Monopoly

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Figure 13.10. If the government imposed a price ceiling of \$12 on this firm, the firm would sell to
- A) 1,000 subscribers and earn a profit of \$4,000.
  - B) more than 2,500 subscribers so that price would equal average total cost.
  - C) 2,500 subscribers but would require a subsidy of \$1,250 to stay in business.
  - D) 2,200 subscribers and would require a subsidy of \$2,200 to stay in business.

Answer: C

Diff: 2

Topic: *The Social Costs of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

- 1) Government failure occurs when the government runs a budget deficit.

Answer: FALSE

Diff: 1

Topic: *The Social Costs of Monopoly*

Skill: *Definition*

- 2) Public choice theory states that government officials act in the public interest rather than their own self-interest when setting policies and regulations.

Answer: FALSE

Diff: 1

Topic: *The Social Costs of Monopoly*

Skill: *Definition*

- 3) Farmers lobbying the government for agricultural price supports are engaging in rent-seeking behavior.

Answer: TRUE

Diff: 1

Topic: *The Social Costs of Monopoly*

Skill: *Definition*

- 4) One source of inefficiency associated with monopolies stems from their insulation from competition and thus reduced incentive to cut costs and innovate.

Answer: TRUE

Diff: 1

Topic: *The Social Costs of Monopoly*

Skill: *Conceptual*

- 5) When an industry is monopolized, the move from a competitive environment to a monopoly leads to a decrease in consumer surplus and an increase in industry profits in a one-to-one ratio.

Answer: FALSE

Diff: 1

Topic: *The Social Costs of Monopoly*

Skill: *Conceptual*

## 13.4 Price Discrimination

### 1 Multiple Choice

- 1) Which of the following statements regarding perfect price discrimination is FALSE?
- A) Perfect price discrimination is charging different prices to different buyers.
  - B) Perfect price discrimination is an attempt by monopolists to capture consumer surplus as profit.
  - C) Perfect price discrimination can eliminate the deadweight loss to society of a monopoly.
  - D) Perfect price discrimination yields the same market price and output result as perfect competition.

Answer: D

Diff: 2

Topic: Price Discrimination

Skill: Fact

- 2) A monopolist who has a horizontal ATC schedule and perfectly price discriminates
- A) leaves buyers a decreased but still positive amount of consumer surplus.
  - B) increases the amount of consumer surplus that is lost to the buyers and not gained by the monopolist.
  - C) appropriates all consumer surplus as profit.
  - D) does not change the amount of consumer surplus that buyers had before the monopolist perfectly price discriminated.

Answer: C

Diff: 2

Topic: Price Discrimination

Skill: Conceptual

- 3) Why do price discriminating firms often offer lower prices to children and elderly?
- A) They have a lower willingness to pay than other consumers.
  - B) Their demand for goods and services tends to be less elastic than other consumers.
  - C) Such a strategy lowers the costs of the firm.
  - D) These firms are more interested in equity than profit maximizing.

Answer: A

Diff: 2

Topic: Price Discrimination

Skill: Conceptual

AACSB: Reflective Thinking

- 4) A monopolist who has a horizontal ATC schedule and charges the same monopoly price to all buyers
- A) appropriates more consumer surplus as profit than a perfect price discriminator does.
  - B) appropriates less consumer surplus as profit than a perfect price discriminator does.
  - C) appropriates less consumer surplus as profit than a perfectly competitive firm does.
  - D) does not lower the amount of consumer surplus that buyers have compared with what they would have if instead they faced a perfectly competitive firm.

Answer: B

Diff: 3

Topic: Price Discrimination

Skill: Analytic

AACSB: Analytic Skills

- 5) Which of the following is NOT an example of price discrimination?
- A) Airlines charging lower prices to travelers who stay over a Saturday night
  - B) Student discounts at movie theaters
  - C) Back-to-school sales
  - D) Discounted coffee for senior citizens at restaurants

Answer: C

Diff: 2

Topic: Price Discrimination

Skill: Conceptual

Refer to the information provided in Figure 13.12 below to answer the questions that follow.

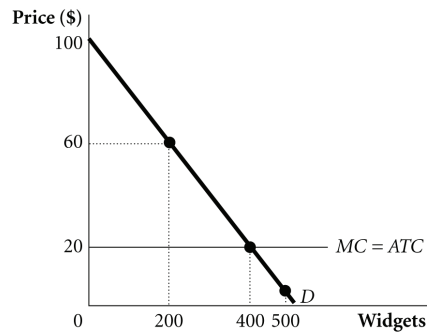


Figure 13.12

- 6) Refer to Figure 13.12. Suppose a monopolist faces the demand and costs in the figure and is able to perfectly price discriminate. How many widgets does the monopoly supply when they act so as to maximize their profits?
- A) 200
  - B) 400
  - C) 500
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Price Discrimination

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Figure 13.12. Suppose a monopolist faces the demand and costs in the figure and is able to perfectly price discriminate. How much surplus is realized by consumers?
- A) \$0
  - B) \$16,000
  - C) \$32,000
  - D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Price Discrimination

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Figure 13.12. Suppose a monopolist faces the demand and costs in the figure and is able to perfectly price discriminate. How much profit does the monopolist earn?
- A) \$0
  - B) \$16,000
  - C) \$32,000
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Price Discrimination

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 13.12. Suppose a monopolist faces the demand and costs in the figure and is able to perfectly price discriminate. What is the economic welfare loss from having a monopoly instead of a perfectly competitive industry supplying widgets?
- A) \$0
  - B) \$4,000
  - C) \$16,000
  - D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Price Discrimination

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

- 1) Monopolists attempt to capture producer surplus in the form of profits by using price discrimination.

Answer: FALSE

Diff: 2

Topic: Price Discrimination

Skill: Definition

- 2) Monopolists who perfectly price discriminate produce the socially efficient level of output.

Answer: TRUE

Diff: 2

Topic: Price Discrimination

Skill: Fact

- 3) In order to effectively price discriminate, a monopolist must only be able to prevent resale between groups.

Answer: FALSE

Diff: 2

Topic: Price Discrimination

Skill: Conceptual

## 13.5 Remedies for Monopoly: Antitrust Policy

### 1 Multiple Choice

- 1) In 1890 the United States Congress
- A) created the Interstate Commerce Commission.
  - B) passed the Sherman Antitrust Act.
  - C) passed the Rule of Reason Act.
  - D) created the Federal Trade Commission.

Answer: B

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 2) In 1914, the United States Congress
- A) passed the Sherman Antitrust Act.
  - B) passed the Rule of Reason Act.
  - C) created the Federal Trade Commission.
  - D) created the Per Se Rule.

Answer: C

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 3) Which of the following declared monopoly and trade restraints illegal?
- A) the Clayton Act
  - B) the Federal Trade Commission Act
  - C) the Sherman Act
  - D) the Cellar-Kefauver Act

Answer: C

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 4) Which of the following made tying contracts illegal and banned price discrimination with the intent to monopolize?
- A) the Clayton Act
  - B) the Federal Trade Commission Act
  - C) the Sherman Act
  - D) the Cellar-Kefauver Act

Answer: A

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 5) The Sherman Antitrust Act of 1890
- A) made illegal every conspiracy in restraint of trade or commerce among the several states.
  - B) made tying contracts illegal.
  - C) limited mergers that would substantially lessen competition or tend to create a monopoly.
  - D) banned price discrimination.

Answer: A

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact



- 6) The biggest problem with the Sherman Antitrust Act of 1890 was that it was unclear what
- A) "tying contracts" were.
  - B) "price discrimination" was.
  - C) specific acts were to be considered "restraints of trade."
  - D) "substantially lessen competition" meant.

Answer: C

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 7) The criterion introduced by the Supreme Court in 1911 to determine whether a particular action was illegal or legal within the terms of the Sherman Act is called the
- A) Interstate Commerce Rule.
  - B) Clayton Act Rule.
  - C) Federal Trade Commission Rule.
  - D) Rule of Reason.

Answer: D

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 8) Congress established the \_\_\_\_\_ to investigate "...the organization, business conduct, practices, and management" of companies that engage in interstate commerce.
- A) Federal Trade Commission
  - B) Antitrust Division of the Justice Department
  - C) Interstate Commerce Commission
  - D) National Transportation Board

Answer: A

Diff: 2

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 9) A rule enunciated by the courts declaring a particular action or outcome to be an intrinsic violation of antitrust law is called the
- A) rule of reason.
  - B) per se rule.
  - C) Wheeler-Lea Act.
  - D) consent decree rule.

Answer: B

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 10) The two different administrative bodies responsible for initiating actions on behalf of the U.S. government against individuals or companies violating antitrust laws are called the
- A) Antitrust Division of the Justice Department and the Federal Trade Commission.
  - B) Interstate Commerce Commission and the Federal Trade Commission.
  - C) Antitrust Division of the Justice Department and the Federal Utility Commission.
  - D) Interstate Commerce Commission and the Federal Utility Commission.

Answer: A

Diff: 2

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 11) The Antitrust Division of the Justice Department
- A) is composed of five members appointed by the president and confirmed by the Senate for terms of 7 years.
  - B) can issue cease-and-desist orders to offenders.
  - C) has established a set of trade regulations that make clear what practices it deems unfair and subject to action.
  - D) initiates action against those who violate antitrust laws and decides which cases to prosecute.

Answer: D

Diff: 3

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 12) The \_\_\_\_\_ is(are) empowered to impose a number of \_\_\_\_\_ if it(they) find(s) that antitrust law has been violated.
- A) Antitrust Division of the Justice Department; fines
  - B) Interstate Commerce Commission; fines
  - C) courts; remedies
  - D) Federal Trade Commission; remedies

Answer: C

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 13) Courts must approve \_\_\_\_\_, that is, formal agreements on remedies between all parties to an antitrust case.
- A) consent decrees
  - B) criminal actions
  - C) treble damages
  - D) private actions

Answer: A

Diff: 2

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 14) In 2000 Microsoft was
- A) punished for violating the U.S. Antitrust laws by a fine exceeding one million dollars.
  - B) ordered to dispose of all of its subsidiary companies.
  - C) required to make its patents, trademarks, and trade secrets available to competitors.
  - D) found guilty of violating U.S. Antitrust laws.

Answer: D

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 15) In 1911 two major antitrust cases were brought before the Supreme Court involving
- A) Eastman Kodak and Standard Oil.
  - B) American Tobacco and United States Steel.
  - C) Standard Oil and American Tobacco.
  - D) United Shoe Machinery and United States Steel.

Answer: C

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 16) Antitrust cases against Eastman Kodak, International Harvester, United Shoe Machinery, and United States Steel resulted in the firms
- A) being found not guilty of unreasonable conduct under the Sherman Act.
  - B) being fined and then dissolved.
  - C) settling their cases with consent decrees.
  - D) being found guilty of tying under the Clayton Act.

Answer: A

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 17) Related to the Economics in Practice on page 279. The U.S. Federal Trade Commission attempted to block the acquisition of Wild Oats by Whole Foods. Why?
- A) The government believed that the acquisition would lead to higher prices for consumers and better quality products.
  - B) The government believed that the acquisition would lead to lower profits for the two companies.
  - C) The government believed that the acquisition would lead to monopoly power for the company and reduced welfare for consumers.
  - D) All of the above are correct.

Answer: C

Diff: 2

Topic: Remedies for Monopoly: Antitrust Policy: Economics in Practice

Skill: Fact

- 18) Related to the Economics in Practice on page 279. The key issue surrounding the U.S. Federal Trade Commission's attempt to block the acquisition of Wild Oats by Whole Foods was
- A) whether the acquisition would lead to lower prices for consumers.
  - B) the definition of the market and thus whether or not there existed close substitutes for Whole Foods' products.
  - C) whether preventing the acquisition was fair to Whole Foods and Wild Oats.
  - D) None of the above are correct.

Answer: B

Diff: 2

Topic: Remedies for Monopoly: Antitrust Policy: Economics in Practice

Skill: Fact

## 2 True/False

- 1) The U.S. law that declared monopolies illegal is the Sherman Act of 1890.

Answer: TRUE

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 2) A *per se rule* is a rule enunciated by the courts declaring a particular action or outcome an intrinsic violation of antitrust law.

Answer: TRUE

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 3) The rule of reason is the criterion introduced by the courts for determining whether a firm's action was illegal under the Clayton Act.  
Answer: FALSE  
Diff: 1  
Topic: Remedies for Monopoly: Antitrust Policy  
Skill: Definition
- 4) The Clayton Act was passed, in part, to strengthen the Sherman Act.  
Answer: TRUE  
Diff: 1  
Topic: Remedies for Monopoly: Antitrust Policy  
Skill: Fact
- 5) The Clayton Act outlawed tying contracts, price discrimination, and all mergers.  
Answer: FALSE  
Diff: 1  
Topic: Remedies for Monopoly: Antitrust Policy  
Skill: Fact
- 6) Both American Tobacco and United States Steel were found guilty of antitrust violations under the Sherman Act.  
Answer: FALSE  
Diff: 1  
Topic: Remedies for Monopoly: Antitrust Policy  
Skill: Fact
- 7) Government led antitrust actions are far more common than private antitrust cases.  
Answer: FALSE  
Diff: 1  
Topic: Remedies for Monopoly: Antitrust Policy  
Skill: Fact
- 8) Related to the Economics in Practice on page 279. Whole Foods was allowed to acquire Wild Oats because the judge felt that the merger would not harm consumers.  
Answer: TRUE  
Diff: 1  
Topic: Remedies for Monopoly: Antitrust Policy: Economics in Practice  
Skill: Fact

# Chapter 14 Oligopoly

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## 14.1 Market Structure in an Oligopoly

### 1 Multiple Choice

- 1) The airline industry is an example of a(n) \_\_\_\_\_ industry.
- |                                 |                  |
|---------------------------------|------------------|
| A) perfectly competitive        | B) monopolistic  |
| C) monopolistically competitive | D) oligopolistic |

Answer: D

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Fact

- 2) In which of the four oligopolistic markets below is there considerable price competition?
- |                              |                                 |
|------------------------------|---------------------------------|
| A) music production industry | B) stent industry               |
| C) airline industry          | D) high-definition DVD industry |

Answer: C

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Fact

- 3) In general, oligopolists compete
- A) on price alone.
  - B) on many dimensions except for price.
  - C) on price, R&D, and marketing and advertising.
  - D) None of the above. There is no competition in oligopolistic industries.

Answer: C

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

- 4) Oligopolists must \_\_\_\_\_ to their strategy in order to determine their optimal strategy.
- A) anticipate the reaction of their customers
  - B) anticipate the reaction of their rivals
  - C) both (A) and (B) are correct.
  - D) None of the above.

Answer: C

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

- 5) A(n) \_\_\_\_\_ industry is characterized by strategic behavior.
- |                                 |                  |
|---------------------------------|------------------|
| A) perfectly competitive        | B) monopolistic  |
| C) monopolistically competitive | D) oligopolistic |

Answer: D

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Fact

- 6) A(n) \_\_\_\_\_ industry has a single, unique product and blocked entry.
- A) perfectly competitive
  - B) monopolistically competitive
  - C) monopolistic
  - D) oligopolistic

Answer: C

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Fact

- 7) A form of industry structure characterized by a few firms each large enough to influence market price is
- A) perfect competition
  - B) monopolistic competition
  - C) oligopoly
  - D) monopoly

Answer: C

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 8) Of the following, \_\_\_\_\_ is the best example of an oligopolistic industry.
- A) grocery stores
  - B) automobiles production
  - C) electric power
  - D) soybean farming

Answer: B

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 9) Products may be homogeneous or differentiated in the \_\_\_\_\_ market structure.
- A) perfectly competitive
  - B) monopolistic
  - C) monopolistically competitive
  - D) oligopolistic

Answer: D

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

- 10) A \_\_\_\_\_ industry has a relatively small number of firms that dominate a market.
- A) Cournot
  - B) contestable
  - C) concentrated
  - D) monopolistically competitive

Answer: C

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

- 11) Oligopoly is difficult to analyze because
- A) there is no price competition among oligopolistic firms.
  - B) of the complex interdependence that usually exists among oligopolistic firms.
  - C) price is NOT a decision variable for oligopolistic firms.
  - D) there is price competition among oligopolistic firms but no competition on product quality.

Answer: B

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Fact

- 12) The four largest firms account for approximately 90% of U.S. beer sales. The U.S. beer industry would be best classified as a(n)
- A) perfectly competitive industry.
  - B) monopolistically competitive industry.
  - C) oligopoly.
  - D) monopoly.

Answer: C

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 13) The market structure in which the behavior of any given firm depends on the behavior of the other firms in the industry is
- A) perfect competition
  - B) monopoly
  - C) monopolistic competition
  - D) oligopoly

Answer: D

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 14) In oligopoly, firms
- A) are able to influence price only if the oligopolist's products are standardized.
  - B) are able to influence price only if the oligopolist's products are differentiated.
  - C) by virtue of their size, are able to influence price regardless of whether or not the product is differentiated or standardized.
  - D) have no influence over price regardless of whether or not the product is differentiated or standardized.

Answer: C

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 15) The major distinguishing characteristic of oligopoly is that
- A) firms produce differentiated products.
  - B) firms can influence the price of their product.
  - C) entry into the industry easy.
  - D) firms are interdependent.

Answer: D

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 16) According to the Five Forces Model, \_\_\_\_\_ are the five competitive forces that determine the level of competition and profitability in an industry.
- A) rivals, buyers, suppliers, substitutes, and potential entrants.
  - B) rivals, consumers, labor, weather, and government.
  - C) buyers, suppliers, government, foreign competition, and weather.
  - D) None of the above are correct.

Answer: A

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

17) The Five Forces Model helps illustrate the five competitive forces that determine the \_\_\_\_\_ in an industry.

- A) price and quality of output
- B) level of R&D and price of output
- C) level of competition and profitability
- D) profitability and degree of product differentiation

Answer: C

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

18) The \_\_\_\_\_ is the share of industry output in sales or employment accounted for by the largest four firms in an industry.

- A) concentration ratio
- B) contestability ratio
- C) competitive index
- D) collusive level

Answer: A

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

19) The concentration ratio is generally calculated for the largest \_\_\_\_\_ firms.

- A) two
- B) four
- C) ten
- D) all the firms in the industry

Answer: B

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

20) A market is defined as perfectly contestable if entry to it

- A) is costless, but exit from it is costly.
- B) is costly, but exit from it is costless.
- C) and exit from it are both costly.
- D) and exit from it are both costless.

Answer: D

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

21) Entry to and exit from a \_\_\_\_\_ market are \_\_\_\_\_.

- A) oligopolistic; costless
- B) perfectly competitive; costly
- C) perfectly contestable; costly
- D) perfectly contestable; costless

Answer: D

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Fact

22) In contestable markets, large oligopolistic firms end up behaving like

- A) monopolistically competitive firms.
- B) a monopoly.
- C) perfectly competitive firms.
- D) a cartel.

Answer: C

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition



- 23) The conclusion that firms in oligopoly produce where price exceeds marginal cost is true for all models of oligopoly except the
- A) collusive oligopoly model.
  - B) price-leadership model.
  - C) Cournot model.
  - D) perfectly contestable market model.

Answer: D

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 24) Related to the Economics in Practice on page 286: Which of the forces from the Five Forces Model help explain why record labels are losing profits?
- A) substitutes
  - B) Suppliers and substitutes
  - C) Suppliers, substitutes, and buyers
  - D) Suppliers, substitutes, buyers, and potential entrants

Answer: C

Diff: 1

Topic: Market Structure in an Oligopoly: Economics in Practice

Skill: Fact

- 25) Which of the following best describes the effect of the Internet on the recording industry?
- A) It has caused the supply of branded stars such as Madonna to become much more inelastic.
  - B) It has made live concerts less profitable by making recorded music available to more people.
  - C) It has shifted power away from record labels by making the distribution of recorded music much easier.
  - D) It has expanded the ability of stars to sign long-term, lucrative contracts.

Answer: C

Diff: 2

Topic: Market Structure in an Oligopoly: Economics in Practice

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

- 1) The size of the firm is what differentiates oligopoly markets from the other three market structure types (perfect competition, monopoly, and monopolistic competition).

Answer: FALSE

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 2) The fact that the behavior of one firm depends on the behavior of other firms is what differentiates oligopoly markets from the other three market structure types (perfect competition, monopoly, and monopolistic competition).

Answer: TRUE

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

3) Oligopolists compete on price but not quality.

Answer: FALSE

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

4) Oligopolists have market power.

Answer: TRUE

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

5) Traditionally, the music production industry has competed vigorously on price.

Answer: FALSE

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Fact

6) Traditionally, the stent industry has competed vigorously on R&D but not price.

Answer: TRUE

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Fact

7) Traditionally, the airline industry has competed vigorously on price.

Answer: TRUE

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Fact

8) The more homogeneous the products produced by oligopolists, the more their behavior will resemble that of the monopolist.

Answer: TRUE

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Conceptual

9) Markets in which entry and exit are costly are known as contestable markets.

Answer: FALSE

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

10) The Five Forces Model illustrates the forces that determine the level of product differentiation and price competition in an industry.

Answer: FALSE

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

11) The concentration ratio of an industry is an indicator of the size distribution of firms.

Answer: FALSE

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

## 14.2 Oligopoly Models

### 1 Multiple Choice

1) The oligopolistic model in which firms produce exactly the same results as would exist if a monopolist controlled the entire industry is called the \_\_\_\_\_ model.

A) Cournot

B) Price leadership

C) Maximin strategy

D) Collusive Cartel

Answer: D

Diff: 1

Topic: Oligopoly Models

Skill: Definition

Refer to the information provided in Figure 14.7 below to answer the questions that follow.

Demand and cost conditions for the Chewing Gum Industry

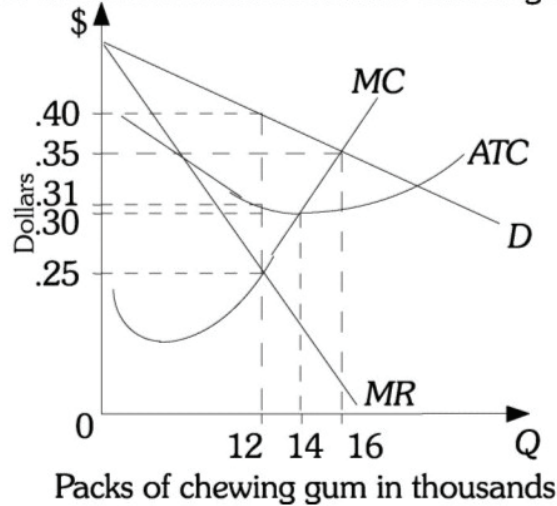


Figure 14.7

2) Refer to Figure 14.7. Six firms that produce chewing gum form a cartel. The cartel faces the market demand curve given by  $D$ . To maximize profits, the cartel should produce \_\_\_\_\_ packs of chewing gum and the price should be \_\_\_\_\_.

A) 12,000; \$.25

B) 12,000; \$.40

C) 14,000; \$.30

D) 16,000; \$.35

Answer: B

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

AACSB: Analytic Skills

- 3) Refer to Figure 14.7. Six chewing gum producing firms form a cartel. The firms have identical cost structures. If the cartel produces the profit maximizing output level, each firm should produce
- A) 2,000 packs of chewing gum.
  - B) 6,000 packs of chewing gum.
  - C) 12,000 packs of chewing gum.
  - D) indeterminate output levels from this information.

Answer: A

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

AACSB: Analytic Skills

- 4) Refer to Figure 14.7. Firms form a cartel that maximizes profits. The profits are
- A) \$0.
  - B) \$1,080.
  - C) \$1,800.
  - D) indeterminate from this information.

Answer: B

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

AACSB: Analytic Skills

- 5) The colluding oligopoly will face market demand and produce up until the point at which
- A) price and marginal cost are equal and price will be set equal to marginal cost.
  - B) marginal revenue and marginal cost are equal and price will be set above marginal cost.
  - C) price and marginal revenue are equal and price will be set below marginal cost.
  - D) marginal revenue and marginal cost are equal and price will be set below marginal cost.

Answer: B

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

- 6) Assume that firms in an oligopoly are currently colluding to set price and output to maximize total industry profit. If the government forces the oligopolists to stop colluding, the price charged by the oligopolies will \_\_\_\_\_ and the total output produced will \_\_\_\_\_.
- A) increase; increase
  - B) increase; decrease
  - C) decrease; increase
  - D) decrease; decrease

Answer: C

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

- 7) \_\_\_\_\_ is a group of firms colluding to make price and output decisions.
- A) A concentrated industry.
  - B) An oligopoly.
  - C) A cartel.
  - D) Price leadership.

Answer: C

Diff: 2

Topic: Oligopoly Models

Skill: Definition

- 8) In an oligopolistic industry, the price firms charge and the quantity they produce would be the same as if the industry was a monopoly if
- A) the market is contestable.
  - B) the oligopolists behave as Cournot assumed.
  - C) one of the oligopolists acts as a dominant firm price leader.
  - D) the oligopolists collude.

Answer: D

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 9) You read that 25 firms that grow and export peanuts to the United States decide to form a cartel. The cartel aims to raise the price of peanuts and reduce output to increase profits for the peanut growers. You predict that this cartel will probably
- A) not be successful because the number of firms is unmanageable and there are a number of good substitutes for peanuts.
  - B) not be successful because there are too few firms that are trying to organize the cartel.
  - C) be successful because the demand for peanuts is very elastic.
  - D) be successful because it will be very easy to enforce the rules among only 25 firms.

Answer: A

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 10) \_\_\_\_\_ occurs when price- and quantity-fixing agreements among producers are implicit.
- A) Tacit collusion
  - B) A Cournot model
  - C) A price-leadership model
  - D) A monopoly

Answer: A

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 11) Tacit collusion
- A) is legal under the U.S. antitrust laws.
  - B) occurs when firms engage in formal agreements to reduce output and increase prices in their industry.
  - C) is more likely to be successful in increasing industry profits when there are a few, similar firms in the industry.
  - D) is more likely to effectively raise prices in the industry when demand is elastic.

Answer: C

Diff: 2

Topic: Oligopoly Models

Skill: Definition

- 12) A weakness of the Cournot model is that
- A) it assumes that firms' actions are not interdependent.
  - B) it cannot explain how firms initially set price and quantity.
  - C) the pricing strategies that firms use are too complex.
  - D) it assumes that firms do not anticipate the moves of their rivals.

Answer: D

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 13) In the Cournot model, when a new firm begins production it assumes its demand curve is
- A) the market demand less the amount the other firm is selling.
  - B) the market demand plus the amount the other firm is selling.
  - C) the same as the competing firm's demand curve.
  - D) one-half of the competing firm's demand curve.

Answer: A

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 14) Which of the following is NOT an assumption of the Cournot model presented in the text?
- A) There are two firms in an industry.
  - B) Each firm takes the output of the other firm as given.
  - C) Both firms maximize profits.
  - D) If the first firm cuts price, the second firm will follow and if the first raises price, the second will not follow.

Answer: D

Diff: 2

Topic: Oligopoly Models

Skill: Fact

- 15) In the Cournot model the final level of output falls between the output that would prevail if the market were \_\_\_\_\_ and the output that would be set by a \_\_\_\_\_.
- A) competitive; monopoly
  - B) oligopolistic; monopoly
  - C) monopolistic; cartel
  - D) monopolistically competitive; cartel

Answer: A

Diff: 2

Topic: Oligopoly Models

Skill: Conceptual

- 16) A two firm oligopoly is known as a \_\_\_\_\_ .
- A) duopoly
  - B) cartel
  - C) monopoly
  - D) contestable market

Answer: A

Diff: 1

Topic: Oligopoly Models

Skill: Definition

17) In the Cournot model, each firm's \_\_\_\_\_ shows the firm's optimal, profit-maximizing output given its rival's output.

- A) price leadership decision
- B) reaction function
- C) collusive response
- D) dominant strategy

Answer: B

Diff: 1

Topic: Oligopoly Models

Skill: Definition

18) The demand curve facing a dominant firm in the price leadership model is derived by subtracting the

- A) amount supplied by the smaller firms from market demand.
- B) amount supplied by the smaller firms from market supply.
- C) amount demanded by customers from the smaller firms from market supply.
- D) dominant firm's marginal cost curve from the industry's supply curve.

Answer: A

Diff: 1

Topic: Oligopoly Models

Skill: Fact

19) An oligopoly with a dominant price leader will produce an output level that is \_\_\_\_\_ than the output level that would prevail if the industry were a monopoly and sells it at a price that is \_\_\_\_\_ than the price that would prevail if the industry were a monopoly.

- A) higher; higher
- B) higher; lower
- C) lower; lower
- D) lower; higher

Answer: B

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

20) An oligopoly with a dominant price leader will produce a level of output

- A) equal to what a monopolist would choose in the same industry.
- B) between that which would prevail under competition and that which a monopolist would choose in the same industry.
- C) between that which would prevail under competition and that which a monopolistic competitor would choose in the same industry.
- D) that would prevail under competition.

Answer: B

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

21) A form of oligopoly in which a dominant firm sets the price and all smaller firms in the industry follow the dominant firm's pricing policy is called

- A) the Cournot model.
- B) the contestable markets model.
- C) a cartel.
- D) the price-leadership model.

Answer: D

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 22) The price-leadership model does NOT assume the
- A) demand elasticity in response to an increase in price is different from the demand elasticity in response to a price cut.
  - B) industry is made up of one large firm and a number of smaller, competitive firms.
  - C) dominant firm maximizes profit.
  - D) dominant firm allows the smaller firms to sell all they want at the price the leader has set.

Answer: A

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 23) \_\_\_\_\_ occurs when a large, powerful firm drives smaller firms out of the market by temporarily selling at an artificially low price.
- A) A dominant strategy
  - B) A prisoner's dilemma
  - C) A maximin strategy
  - D) Predatory pricing

Answer: D

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 24) Predatory pricing is
- A) often effective and a relatively inexpensive means of eliminating competition.
  - B) legal under the U.S. antitrust laws.
  - C) the practice by which a large, powerful firm attempts to drive its competitors out of the market by temporarily setting an artificially low price.
  - D) generally more effective when barriers to entry exist.

Answer: C

Diff: 2

Topic: Oligopoly Models

Skill: Definition

## 2 True/False

- 1) An oligopoly with a dominant price leader will produce a level of output between that which would prevail under competition and that which a monopolist would choose in the same industry.

Answer: TRUE

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 2) Cartels, tacit collusion, and predatory pricing are all illegal under U.S. antitrust laws.

Answer: TRUE

Diff: 1

Topic: Oligopoly Models

Skill: Fact



3) Output in a Cournot duopoly is at a level between that in perfect competition and monopolistic competition.

Answer: FALSE

*Diff: 1*

*Topic: Oligopoly Models*

*Skill: Conceptual*

4) The Cournot model assumes that the firms take their competitors output as fixed.

Answer: TRUE

*Diff: 1*

*Topic: Oligopoly Models*

*Skill: Fact*

5) Cartels are more successful when members play by the rules and the industry faces an inelastic demand.

Answer: TRUE

*Diff: 1*

*Topic: Oligopoly Models*

*Skill: Conceptual*

6) Under the collusion model, the outcome in an oligopoly is the same as a monopoly.

Answer: TRUE

*Diff: 1*

*Topic: Oligopoly Models*

*Skill: Conceptual*

## 14.3 Game Theory

### 1 Multiple Choice

Refer to the information provided in Table 14.1 below to answer the question that follows.

**Table 14.1**  
**B's Strategy**

		Raise Price	Don't Raise Price
A's Strategy	Raise Price	A's profit \$3,000 B's profit \$3,000	A's profit \$10,000 B's profit \$15,000
	Don't Raise Price	A's profit \$15,000 B's profit \$10,000	A's profit \$5,000 B's profit \$5,000

- 1) Refer to Table 14.1. Firm A's optimal strategy is
- A) to not raise the price of its product.
  - B) to raise the price of its product.
  - C) dependent on what Firm B does.
  - D) indeterminate from this information, as no information is provided on Firm A's risk preference.

Answer: C

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 2) Refer to Table 14.1. The Nash equilibrium in the game is \_\_\_\_\_.
- A) (Raise Price, Don't Raise Price)
  - B) (Don't Raise Price, Raise Price)
  - C) (Don't Raise Price, Don't Raise Price)
  - D) Both (A) and (B) are correct.

Answer: D

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 3) Refer to Table 14.1. If both firms follow a maximin strategy, the equilibrium in the game is \_\_\_\_\_.
- A) (Raise Price, Don't Raise Price)
  - B) (Raise Price, Raise Price)
  - C) (Don't Raise Price, Raise Price)
  - D) (Don't Raise Price, Don't Raise Price)

Answer: D

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Table 14.2 below to answer the question that follows.

		<b>Advertise</b>	<b>Don't Advertise</b>
<b>A's Strategy</b>	Advertise	A's profit \$100 million B's profit \$100 million	A's profit \$200 million B's profit \$50 million
	Don't	A's profit \$50 million	A's profit \$75 million
	Advertise	B's profit \$200 million	B's profit \$75 million
	Don't	A's profit \$50 million	A's profit \$75 million

- 4) Refer to Table 14.2. Firm A's dominant strategy is
- A) to advertise.
  - B) to not advertise.
  - C) dependent on what Firm B does.
  - D) indeterminate from this information, as no information is provided on Firm A's risk preference.

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 5) Refer to Table 14.2. What is the Nash equilibrium in the game?
- A) (Advertise, Advertise)
  - B) (Don't Advertise, Don't Advertise)
  - C) (Don't Advertise, Advertise)
  - D) (Advertise, don't advertise)

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 6) Refer to Table 14.2. If both firms follow a maximin strategy, the equilibrium in the game is \_\_\_\_\_.
- A) (Advertise, Advertise)
  - B) (Don't Advertise, Don't Advertise)
  - C) (Don't Advertise, Advertise)
  - D) (Advertise, don't advertise)

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Table 14.3 below to answer the question that follows.

**Table 14.3**  
**B's Strategy**

		Advertise	Don't Advertise
A's Strategy	Advertise	A's profit \$75 million B's profit \$75 million	A's profit \$200 million B's profit \$50 million
	Don't	A's profit \$50 million	A's profit \$100 million
	Advertise	B's profit \$200 million	B's profit \$100 million
	Don't		

- 7) Refer to Table 14.3. Firm A's dominant strategy is
- A) to advertise.
  - B) to not advertise.
  - C) dependent on what Firm B does.
  - D) indeterminate from this information, as no information is provided on Firm A's risk preference.

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 8) Refer to Table 14.3. What is the Nash equilibrium in the game?
- A) (Advertise, Advertise)
  - B) (Don't Advertise, Don't Advertise)
  - C) (Don't Advertise, Advertise)
  - D) (Advertise, don't advertise)

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 9) Refer to Table 14.3. If both firms follow a maximin strategy, the equilibrium in the game is \_\_\_\_\_.
- A) (Advertise, Advertise)
  - B) (Don't Advertise, Don't Advertise)
  - C) (Don't Advertise, Advertise)
  - D) (Advertise, don't advertise)

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 10) Refer to Table 14.3. The result of this game is known as a \_\_\_\_\_.
- A) prisoner's dilemma
  - B) collusive outcome
  - C) repeated strategy
  - D) tit-for-tat outcome

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

- 11) Refer to Table 14.3. The result of this game is a prisoner's dilemma. In which of the following cases is it most likely that the firms will be able to overcome the prisoner's dilemma?
- A) repeated play
  - B) a single interaction
  - C) when both firms follow a maximin strategy
  - D) government intervention

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

- 12) The prisoner's dilemma game presented in the text involves \_\_\_\_\_ players each with \_\_\_\_\_ strategies.
- A) two; two
  - B) two; three
  - C) three; two
  - D) three; three

Answer: A

Diff: 1

Topic: Game Theory

Skill: Fact

- 13) A(n) \_\_\_\_\_ occurs if all players in a game play their best strategies given what their competitors do.
- A) dominant strategy
  - B) Nash equilibrium
  - C) prisoner's dilemma
  - D) tit-for-tat strategy

Answer: B

Diff: 3

Topic: Game Theory

Skill: Conceptual

- 14) A player chooses a maximin strategy to \_\_\_\_\_ gain the player can earn.
- A) minimize the minimum
  - B) maximize the maximum
  - C) maximize the minimum
  - D) minimize the maximum

Answer: C

Diff: 1

Topic: Game Theory

Skill: Fact

- 15) \_\_\_\_\_ is a repeated game strategy in which a player responds in kind to an opponent's play.
- A) Maximin
  - B) Tit-for-tat
  - C) Prisoner's dilemma
  - D) Price leadership

Answer: A

Diff: 1

Topic: Game Theory

Skill: Definition

- 16) Related to the *Economics in Practice* on page 296: What would be the most likely result if a change in advertising law allowed rental car companies to remove taxes and fees from their advertised price?
- A) Rental car prices would drop, as rental car companies would be able to pass on their savings to consumers.
  - B) Rental cars companies would be more likely to expand their advertising efforts.
  - C) Consumers would be less aware of rental car price changes.
  - D) Demand for substitutes for rental cars, such as taxis, would increase.

Answer: C

Diff: 3

Topic: *Game Theory; Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 2 True/False

- 1) Game theory enables economists to fully understand and predict the behavior of oligopolistic industries with more than two firms.

Answer: FALSE

Diff: 2

Topic: *Game Theory*

Skill: *Definition*

- 2) Firms are more likely to avoid a prisoner's dilemma when they interact repeatedly than when they rarely interact.

Answer: TRUE

Diff: 1

Topic: *Game Theory*

Skill: *Conceptual*

- 3) A maximin strategy will maximize the maximum payoff that can be earned.

Answer: FALSE

Diff: 1

Topic: *Game Theory*

Skill: *Definition*

- 4) When all players play their best strategy given what their competitors are doing, they are following their dominant strategy.

Answer: FALSE

Diff: 1

Topic: *Game Theory*

Skill: *Definition*

- 5) In the Cournot model, firms take their rivals' reactions as given.

Answer: TRUE

Diff: 1

Topic: *Game Theory*

Skill: *Definition*

6) Game theory was first developed by John Nash.

Answer: FALSE

Diff: 1

Topic: Game Theory

Skill: Fact

Refer to the information provided in Table 14.1 below to answer the question that follows.

**Table 14.1**  
**B's Strategy**

		<b>B's Strategy</b>	
		<b>Raise Price</b>	<b>Don't Raise Price</b>
<b>A's Strategy</b>	Raise	A's profit \$3,000	A's profit \$10,000
	Price	B's profit \$3,000	B's profit \$15,000
	Don't	A's profit \$15,000	A's profit \$5,000
	Raise	B's profit \$10,000	B's profit \$5,000

7) Refer to Table 14.1. Firm A does not have a dominant strategy.

Answer: TRUE

Diff: 1

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Table 14.2 below to answer the question that follows.

**Table 14.2**  
**B's Strategy**

		<b>B's Strategy</b>	
		<b>Advertise</b>	<b>Don't Advertise</b>
<b>A's Strategy</b>	Advertise	A's profit \$100 million B's profit \$100 million	A's profit \$200 million B's profit \$50 million
	Don't	A's profit \$50 million	A's profit \$75 million
	Advertise	B's profit \$200 million	B's profit \$75 million

8) Refer to Table 14.2. Firm A's dominant strategy is to not advertise.

Answer: FALSE

Diff: 2

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

## 14.4 Oligopoly and Economic Performance

### 1 Multiple Choice

- 1) To the extent that oligopolies differentiate their products
- A) there is overproduction from society's point of view.
  - B) they force themselves into deadlocks that waste resources.
  - C) there is the promise of new and exciting products.
  - D) they are also likely to price at marginal cost.

Answer: C

Diff: 13

Topic: Oligopoly and Economic Performance

Skill: Fact

- 2) The economist Joseph Schumpeter argued that industrial concentration, in which a relatively small number of firms control the market place, actually \_\_\_\_\_ the rate of \_\_\_\_\_.
- A) increased; market competitiveness
  - B) increased; technological advance
  - C) decreased; market competitiveness
  - D) decreased; technological advance

Answer: B

Diff: 2

Topic: Oligopoly and Economic Performance

Skill: Fact

- 3) Which choice below is an argument that more technological change occurs in more competitive market structures?
- A) Most large, oligopolistic firms such as AT+T have done a great deal of research.
  - B) Oligopolistic firms earn the profits to pay for research; competitive firms do not.
  - C) Small firms are too "lean and mean" to support any research and development.
  - D) The "high-tech revolution" grew out of many tiny start-up operations.

Answer: D

Diff: 2

Topic: Oligopoly and Economic Performance

Skill: Conceptual

- 4) Which model of oligopoly results in the greatest efficiency?
- A) contestable markets model
  - B) Cournot model
  - C) price leadership model
  - D) collusion model

Answer: A

Diff: 2

Topic: Oligopoly and Economic Performance

Skill: Conceptual

- 5) Which of the following are benefits associated with the oligopoly model?
- A) allocative efficiency
  - B) pricing at marginal cost
  - C) product variety and innovation
  - D) None of the above are benefits associated with the oligopoly model.

Answer: C

Diff: 2

Topic: Oligopoly and Economic Performance

Skill: Conceptual



## 2 True/False

- 1) All models of oligopoly involve pricing above marginal cost and output levels below the competitive level.

Answer: FALSE

Diff: 1

Topic: *Oligopoly and Economic Performance*

Skill: *Conceptual*

- 2) Industries may be oligopolistic due to economies of scale.

Answer: TRUE

Diff: 1

Topic: *Oligopoly and Economic Performance*

Skill: *Conceptual*

- 3) Evidence generally suggests that oligopolies inhibit technological advances.

Answer: FALSE

Diff: 1

Topic: *Oligopoly and Economic Performance*

Skill: *Fact*

- 4) Evidence shows that firms in more highly concentrated industries spend more on R&D than firms in less concentrated industries.

Answer: TRUE

Diff: 1

Topic: *Oligopoly and Economic Performance*

Skill: *Fact*

- 5) Schumpeter and Galbraith believed that concentrated industries had lower rates of technological advances than less concentrated industries.

Answer: FALSE

Diff: 1

Topic: *Oligopoly and Economic Performance*

Skill: *Fact*

## 14.5 The Role of Government

### 1 Multiple Choice

- 1) The Celler-Kefauver Act of 1950
- A) declared every contract or conspiracy to restrain trade illegal.
  - B) outlawed specific monopolistic behaviors such as tying contracts, price discrimination, and unlimited mergers.
  - C) extended the language of the Federal Trade Commission Act to include "deceptive" as well as "unfair" competition methods.
  - D) extended the government's authority to ban vertical and conglomerate mergers.

Answer: D

Diff: 2

Topic: *The Role of Government*

Skill: *Fact*

2) The \_\_\_\_\_ Act extended the government's authority to ban vertical and conglomerate mergers.

- A) Sherman
- B) Clayton
- C) Celler-Kefauver
- D) Federal Trade Commission

Answer: C

Diff: 1

Topic: The Role of Government

Skill: Fact

3) The Herfindahl-Hirschman Index is

- A) calculated by summing the squared market share percentages for all firms in the industry.
- B) calculated as the sum of the market shares of the top four firms.
- C) calculated as the sum of the market shares for all firms in the industry.
- D) not used by the government in considering mergers.

Answer: A

Diff: 1

Topic: The Role of Government

Skill: Conceptual

4) The government uses \_\_\_\_\_ figures contained in the Herfindahl-Hirschman Index (HHI) to help determine whether or not it will challenge a proposed merger.

- A) market share
- B) firm size
- C) barriers to entry
- D) profit

Answer: A

Diff: 1

Topic: The Role of Government

Skill: Fact

5) If the Herfindahl-Hirschman Index of an industry is less than 1,000, then the Antitrust Division of the Justice Department

- A) will challenge any merger that would increase the index by over 100 points.
- B) considers the industry unconcentrated.
- C) considers the industry already concentrated.
- D) will challenge any merger that raises the index by more than 50 points.

Answer: B

Diff: 2

Topic: The Role of Government

Skill: Fact

6) If there are two firms in an industry and each has 50 percent market share, then the Herfindahl-Hirschman Index equals

- A) 2,500.
- B) 2,800.
- C) 5,000.
- D) 6,600.

Answer: C

Diff: 2

Topic: The Role of Government

Skill: Analytic

AACSB: Analytic Skills

- 7) Economists no longer attack industry concentration with the same fervor they once did because
- A) the theory of contestable markets shows that even firms in highly concentrated industries can be pushed to produce efficiently under certain market circumstances.
  - B) the benefits of product differentiation and product competition are illusory.
  - C) small firms do the most research in the United States.
  - D) substantial economies of scale result in completely competitive market structures.

Answer: A

Diff: 1

Topic: *The Role of Government*

Skill: *Fact*

- 8) What is the maximum value the HHI can take on?
- A) 1,000                      B) 5,000                      C) 10,000                      D) 100,000

Answer: C

Diff: 2

Topic: *The Role of Government*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 9) Industry A has two firms that each control 50 percent of the market. Industry B has three firms, where one firm controls 70 percent of the market and the other two firms control 15 percent of the market each. According to the HHI, which industry is more concentrated?
- A) Industry A
  - B) Industry B
  - C) Both industries are equally concentrated
  - D) indeterminate from the given information.

Answer: B

Diff: 2

Topic: *The Role of Government*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

- 1) The government uses the four firm concentration ratio as a guideline to determine which proposed mergers are acceptable.

Answer: FALSE

Diff: 1

Topic: *The Role of Government*

Skill: *Fact*

- 2) In order to calculate the HHI, the government must first define the relevant market.

Answer: TRUE

Diff: 1

Topic: *The Role of Government*

Skill: *Conceptual*

3) The Celler-Kefauver Act gave the Justice Department the authority to monitor and enforce the merger provisions from the Clayton Act.

Answer: TRUE

*Diff: 1*

*Topic: The Role of Government*

*Skill: Fact*

4) An industry in which there are five firms each accounting for 20 percent of the market has an HHI of 100.

Answer: FALSE

*Diff: 1*

*Topic: The Role of Government*

*Skill: Analytic*

*AACSB: Analytic Skills*

5) The U.S. beer industry has an HHI of 3525. If two beer producers propose a merger that would increase the industry HHI by 25 points, then the merger would be challenged based on the change in the HHI.

Answer: FALSE

*Diff: 1*

*Topic: The Role of Government*

*Skill: Fact*

# Chapter 15 Monopolistic Competition

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## 15.1 Industry Characteristics

### 1 Multiple Choice

- 1) The restaurant industry is an example of a(n) \_\_\_\_\_ industry.
- A) perfectly competitive
  - B) monopolistic
  - C) monopolistically competitive
  - D) oligopolistic

Answer: C

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 2) A monopolistically competitive industry has all of the following characteristics EXCEPT:
- A) There are no barriers to entry
  - B) Strategic behavior
  - C) Product differentiation
  - D) A large number of firms

Answer: B

Diff: 1

Topic: Industry Characteristics

Skill: Definition

- 3) A(n) \_\_\_\_\_ industry does NOT have price as a decision variable.
- A) perfectly competitively
  - B) monopolistic
  - C) monopolistically competitive
  - D) oligopolistic

Answer: A

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 4) There is easy entry into the \_\_\_\_\_ and \_\_\_\_\_ industries.
- A) perfectly competitive; monopolistically competitive
  - B) monopolistically competitive; oligopolistic
  - C) oligopolistic; monopolistic
  - D) monopolistic; perfectly competitive

Answer: A

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 5) Monopolistic competition differs from perfect competition primarily because in
- A) monopolistic competition, firms can differentiate their products.
  - B) perfect competition, firms can differentiate their products.
  - C) monopolistic competition, entry into the industry is blocked.
  - D) monopolistic competition, there are relatively few barriers to entry.

Answer: A

Diff: 3

Topic: Industry Characteristics

Skill: Conceptual

- 6) In San Francisco there are many retail clothing stores. Each store is slightly different from every other store. Retail clothing stores are an example of what market structure?
- A) perfect competition
  - B) monopolistic competition
  - C) oligopoly
  - D) monopoly

Answer: B

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 7) Which of the following features distinguishes monopolistically competitive firms from monopolies and oligopolies?
- A) monopolistically competitive firms cannot influence market price by virtue of their size alone while monopolies and oligopolies can.
  - B) monopolistically competitive firms are not constrained by market demand while monopolies and oligopolies are.
  - C) monopolistically competitive firms are price takers while monopolies and oligopolies are not.
  - D) monopolistically competitive firms sell a homogeneous product while monopolies and oligopolies sell a differentiated product.

Answer: A

Diff: 2

Topic: Industry Characteristics

Skill: Conceptual

- 8) In monopolistic competition, firms can have some market power
- A) by virtue of size alone.
  - B) by producing differentiated products.
  - C) because of barriers to entry into the industry.
  - D) because of barriers to exit from the industry.

Answer: B

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 9) Firms gain control over price in monopolistic competition by
- A) blocking entry of other firms into the industry.
  - B) producing a product for which there are no close substitutes.
  - C) differentiating their products.
  - D) colluding with other firms to set prices.

Answer: C

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 10) The feature that distinguishes monopolistic competition from perfect competition is that monopolistically competitive firms are
- A) large relative to the market.
  - B) price takers.
  - C) able to block the entry of other firms.
  - D) able to differentiate their products.

Answer: D

Diff: 3

Topic: Industry Characteristics

Skill: Conceptual

- 11) In a monopolistically competitive industry,
- A) firms are large relative to the total market.
  - B) firms are small relative to the total market.
  - C) firms can be either large or small relative to the total market.
  - D) there is only one firm.

Answer: B

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 12) Monopolistically competitive firms use a(n) \_\_\_\_\_ strategy to achieve market power.
- A) product differentiation
  - B) dominant
  - C) maximin
  - D) opportunistic behavior

Answer: A

Diff: 1

Topic: Industry Characteristics

Skill: Fact

## 2 True/False

- 1) A monopolistically competitive firm influences market price by virtue of its size.

Answer: FALSE

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 2) Firms in a monopolistically competitive industry are small relative to the total market.

Answer: TRUE

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 3) Monopolistically competitive firms, like perfectly competitive firms, sell a differentiated product.

Answer: FALSE

Diff: 1

Topic: Industry Characteristics

Skill: Definition

- 4) The automobile industry is a good example of a monopolistically competitive industry.

Answer: FALSE

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 5) Monopolistically competitive firms engage in both price and quality competition.

Answer: TRUE

Diff: 1

Topic: Industry Characteristics

Skill: Conceptual

6) Monopolistic competition is a common form of market structure in the United States.

Answer: TRUE

Diff: 1

Topic: Industry Characteristics

Skill: Fact

7) Monopolistically competitive firms are unable to affect the market price of their output, but are able to control the price of their own output.

Answer: TRUE

Diff: 1

Topic: Industry Characteristics

Skill: Conceptual

## 15.2 Product Differentiation and Advertising

### 1 Multiple Choice

1) The case for advertising includes the fact that

- A) it wastes society's scarce resources.
- B) firms spend large sums of money to create meaningless differences among products.
- C) it provides consumers with valuable information about product availability, quality, and price.
- D) it creates wants that otherwise would not have existed.

Answer: C

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

2) In order to achieve market power, monopolistically competitive firms use \_\_\_\_\_ .

- A) their size
- B) product differentiation
- C) strategic behavior
- D) predatory pricing

Answer: B

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Definition

3) In well functioning markets, all of the following reflect the degree of product variety EXCEPT:

- A) differences in consumers' tastes.
- B) cost economies from standardization.
- C) gains from network externalities.
- D) gains from coordination.

Answer: C

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Conceptual

4) Product differentiation that makes the product better for some consumers and worse for others is

- A) always welfare decreasing.
- B) vertical differentiation.
- C) horizontal differentiation.
- D) never undertaken by firms.

Answer: C

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Conceptual



- 5) Product differentiation that makes the product better than a rival's product from everyone's perspective
- A) always increases welfare.
  - B) is known as vertical differentiation.
  - C) is known as horizontal differentiation.
  - D) makes the rival's product obsolete.

Answer: B

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Conceptual

- 6) Product differentiation can be used by firms to do all of the following EXCEPT:
- A) gain market share.
  - B) erect barriers to entry for potential firms.
  - C) provide consumers with commitment devices.
  - D) gain complete control over the price of their product.

Answer: D

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Conceptual

- 7) Behavioral economics
- A) blends insights from sociology and economics.
  - B) suggests that too much variety may be welfare enhancing.
  - C) has contributed to microeconomics but not to macroeconomics.
  - D) suggests that consumers purchase health club memberships instead of paying per visit in an attempt to commit themselves to an exercise regime.

Answer: D

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Conceptual

- 8) The Internet has had a significant influence on advertising in all of the following ways EXCEPT:
- A) The Internet allows firms to actively interact with customers.
  - B) The Internet has improved firms' ability to target specific markets.
  - C) The Internet has reduced the level and transparency of informational advertising.
  - D) The Internet has reduced spending on advertising.

Answer: C

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Fact

- 9) The case for product differentiation does NOT include the fact that
- A) products that satisfy a real demand survive.
  - B) standards of living rise with product innovation.
  - C) new products satisfy people with different preferences.
  - D) it wastes society's scarce resources.

Answer: D

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Fact

- 10) The case AGAINST advertising includes the fact that
- A) firms spend large sums of money to create artificial differences among products.
  - B) it provides consumers with valuable information about product availability, quality, and price.
  - C) it increases competition by decreasing barriers to entry of new firms into an industry.
  - D) it ensures high quality and efficient production.

Answer: A

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Fact

- 11) Critics of advertising contend all of the following EXCEPT:
- A) The information content of advertising is minimal at best and deliberately deceptive at worst.
  - B) Advertising is intended to change peoples' preferences and to create wants that otherwise would not have existed.
  - C) Advertising may reduce competition by creating a barrier to entry of new firms into an industry.
  - D) Advertising can easily turn into productive competition that increases welfare.

Answer: D

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

- 12) The right answer to the debate regarding the welfare effects of advertising is that
- A) advertising always leads to concentration in an industry.
  - B) advertising always leads to positive economic profits in an industry.
  - C) advertising always improves the functioning of the market.
  - D) There is no right answer.

Answer: D

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

- 13) Related to the *Economics in Practice* on page 308: Producers of Honest Tea stop adding sugar to their tea when the marginal utility to consumers of doing so is
- A) positive.
  - B) negative.
  - C) zero.
  - D) Indeterminate from the given information.

Answer: A

Diff: 1

Topic: Product Differentiation and Advertising; Economics in Practice

Skill: Fact

- 14) Related to the *Economics in Practice* on page 308: A company selling iced tea discovers that as sugar is added to tea, customers' opinions of the taste of the tea rises for the first few grams of sugar and then drops. Even so, the company chooses not to add the amount sugar that would result in the best-tasting tea. Which of the following would explain why adding less sugar could be a wise decision?
- A) The price of sugar added to tea is much less significant than the price of other ingredients, such as tea leaves.
  - B) Manufacturers of tea are required to clearly indicate the amount of sugar in their products.
  - C) Teas with less sugar are more likely to appeal to health-conscious consumers.
  - D) Many products in the cold drink market are sold with substitutes for sugar, such as high fructose corn syrup.

Answer: C

Diff: 2

Topic: Product Differentiation and Advertising: Economics in Practice

Skill: Conceptual

AACSB: Analytic Skills

- 15) Referring to the *Economics in Practice* on page 312: Which of the following best supports the argument that calorie and fat labeling in restaurants will not reduce the percentage of people who are obese?
- A) Fat and calorie content are good indicators of the health value of a restaurant meal.
  - B) Most consumers are already aware of the kinds of foods that are likely to cause weight gain.
  - C) Obesity is only one of many health issues related to eating.
  - D) Definitions of obesity have varied over time, and so some people who are not considered obese today would have been considered obese a few decades ago.

Answer: B

Diff: 2

Topic: Product Differentiation and Advertising: Economics in Practice

Skill: Conceptual

AACSB: Analytic Skills

## 2 True/False

- 1) The basic function of advertising, according to its proponents, is to assist consumers in making informed, rational choices.

Answer: TRUE

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Definition

- 2) The more significant are economies of scale in an industry, the more product variety will be observed.

Answer: FALSE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

3) The more homogeneous are consumer's preferences, the less product variety will be observed.

Answer: TRUE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

4) Vertical differentiation makes products better for some consumers and worse for others.

Answer: FALSE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

5) One reason for selecting a section of microeconomics for which attendance is part of the grade (as opposed to one where it is not) is that it serves as a commitment device that will get you to attend class.

Answer: TRUE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Conceptual

6) Behavioral economics uses insights from both psychology and economics.

Answer: TRUE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

7) Advertising serves no productive purpose and is thus welfare decreasing.

Answer: FALSE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

8) Advertising provides consumers with product information and can promote competition. Thus, it is always welfare enhancing.

Answer: FALSE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

## 15.3 Price and Output Determination in Monopolistic Competition

### 1 Multiple Choice

1) Compared to a perfectly competitive firm, the demand schedule of a monopolistically competitive firm faces is

A) more price elastic.

B) less price elastic.

C) perfectly price elastic.

D) perfectly price inelastic.

Answer: B

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

2) The demand facing a monopolistically competitive firm is \_\_\_\_\_ a monopolistic firm and \_\_\_\_\_ a perfectly competitive firm.

- A) as elastic as; less elastic than  
B) less elastic than; more elastic than  
C) more elastic than; less elastic than  
D) more elastic than; as elastic as

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

3) Unlike a monopolistic firm's product, a monopolistically competitive firm's product

- A) is homogeneous.  
B) is a unique product.  
C) has many close substitutes.  
D) has no close substitutes.

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

4) A profit-maximizing firm in a monopolistically competitive market structure behaves much like a \_\_\_\_\_ in the short run.

- A) perfectly competitive firm  
B) monopolistic firm  
C) dominant firm  
D) Cournot duopolist

Answer: B

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

5) The pizza delivery industry is monopolistically competitive. Little Joe's Pizzeria raises its prices by 10%, but all the other pizzerias in town keep their prices the same. Which of the following is most likely to occur?

- A) Little Joe's Pizzeria will not be able to sell any pizzas, because it was the only firm to raise its price.  
B) Little Joe's Pizzeria will lose some of its customers.  
C) Little Joe's Pizzeria's profits will increase.  
D) The number of customers served by Little Joe's Pizzeria will increase.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

6) A monopolistically competitive firm produces where

- A) marginal revenue equals price.  
B) its marginal revenue curve lies above its demand curve.  
C) its marginal revenue curve intersects the quantity axis.  
D) marginal revenue equals marginal cost.

Answer: D

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 7) A monopolistically competitive firm maximizes profit where  
A)  $MR > MC$ .                  B)  $MC > MR$ .                  C)  $MR = MC$ .                  D)  $P = MC$ .

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 8) If  $P > ATC$ , then a profit maximizing, monopolistically competitive firm earns \_\_\_\_\_ economic profits.  
A) positive    B) negative  
C) zero    D) either positive or negative

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 9) If  $ATC > P$ , then a profit maximizing, monopolistically competitive firms earns \_\_\_\_\_ economic profits.  
A) positive    B) negative  
C) zero    D) either positive or negative

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 10) A monopolistically competitive firm that is incurring a loss will produce in the short run as long as the revenue the firm receives is sufficient to cover  
A) fixed costs.    B) marginal costs.  
C) advertising costs.    D) variable costs.

Answer: D

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 11) A monopolistically competitive firm can minimize its losses by producing where \_\_\_\_\_ as long as \_\_\_\_\_.  
A)  $MR = MC; P \geq AVC$     B)  $P = MC; P \geq ATC$   
C)  $P = ATC; P > MR$     D)  $P = MR; P \geq AFC$

Answer: A

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 12) A monopolistically competitive firm that is incurring a loss will shut down if  
A) marginal revenue is less than marginal cost.  
B) revenues are less than variable costs.  
C) price is less than average total cost.  
D) price is less than marginal cost.

Answer: B

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 13) The Specialty Cake Store, a monopolistically competitive firm, is producing 200 decorated cakes per day and selling each cake for \$12. At that production level  $ATC$  is \$20,  $AVC$  is \$15,  $AFC$  is \$5, and both  $MR$  and  $MC$  are \$8. This firm should
- A) continue to produce 200 cakes, as price is greater than  $AFC$ .
  - B) increase output to the point where price equals marginal cost.
  - C) decrease output to the point where marginal cost equals average cost.
  - D) produce zero cakes and just pay fixed costs.

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 14) The Specialty Cake Store, a monopolistically competitive firm, is producing 200 decorated cakes per day and selling each cake for \$17. At that production level  $ATC$  is \$20,  $AVC$  is \$15,  $AFC$  is \$5, and both  $MR$  and  $MC$  are \$8. This firm should
- A) continue to produce 200 cakes, as price is greater than  $AVC$ .
  - B) increase output to the point where price equals marginal cost.
  - C) decrease output to the point where price equals average total cost.
  - D) shutdown and produce zero cakes and just pay fixed costs.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 15) A monopolistically competitive firm
- A) can sell an infinite amount of output at the market-determined price.
  - B) must lower price to sell more output.
  - C) must raise price to sell more output.
  - D) sells a fixed amount of output regardless of price.

Answer: B

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 16) The Do It Yourself Hardware Store is a monopolistically competitive firm. Its marginal revenue curve
- A) is identical to its demand curve.
  - B) lies below its demand curve intersecting the quantity axis at the same point at which the demand curve intersects it.
  - C) lies below its demand curve intersecting the quantity axis midway between the origin and the point at which the demand curve intersects it.
  - D) is below its demand curve if demand is elastic and above the demand curve if demand is inelastic.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 17) To maximize profit, a monopolistically competitive firm will produce where
- A) marginal revenue equals price.
  - B) price equals marginal cost.
  - C) price equals average total cost.
  - D) marginal revenue equals marginal cost.

Answer: D

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

Refer to the information provided in Figure 15.1 below to answer the questions that follow. Below are cost curves for Dom's Barber Shop, a monopolistically competitive firm.

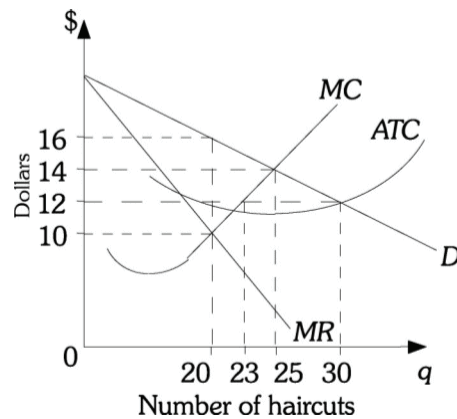


Figure 15.1

- 18) Refer to Figure 15.1. The profit-maximizing number of haircuts for Dom's Barber Shop is \_\_\_\_\_.

A) 20

B) 23

C) 25

D) 30

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 19) Refer to Figure 15.1. The profit-maximizing price for a haircut is

A) \$10.

B) \$12.

C) \$14.

D) \$16.

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills



- 20) Refer to Figure 15.1. If Dom's Barber Shop is maximizing profit, it is earning a profit of  
A) \$0.                      B) \$80.                      C) \$120.                      D) \$320.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 21) Refer to Figure 15.1. If Dom's Barber Shop is maximizing profit, its total revenue equals  
A) \$200.                      B) \$320.                      C) \$350.                      D) \$360.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 22) Refer to Figure 15.1. If Dom's Barber Shop is maximizing profit, its total costs are  
A) \$200.                      B) \$240.                      C) \$350.                      D) \$360.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 23) Refer to Figure 15.1. From society's point of view, the efficient level of output is  
A) 20 haircuts.                      B) 23 haircuts.                      C) 25 haircuts.                      D) 30 haircuts.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 24) Refer to Figure 15.1. In this industry in the long run  
A) firms will continue to earn economic profits.  
B) firms will enter until all firms earn a normal profit.  
C) demand for the product will decrease so that profits are decreased.  
D) the government will impose price controls to eliminate any economic profits.

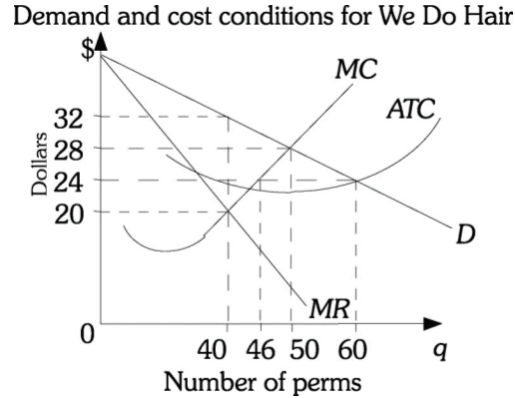
Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

Refer to the information provided in Figure 15.2 below to answer the questions that follow.



**Figure 15.2**

- 25) Refer to Figure 15.2. The profit-maximizing number of perms for We Do Hair, a monopolistically competitive firm, is \_\_\_\_\_.
- A) 60                      B) 50                      C) 46                      D) 40

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 26) Refer to Figure 15.2. At We Do Hair, a monopolistically competitive firm, the profit-maximizing price for a perm is
- A) \$32.                      B) \$28.                      C) \$24.                      D) \$20.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 27) Refer to Figure 15.2. If We Do Hair is maximizing profit as a monopolistically competitive firm, it is earning a profit of
- A) \$180.                      B) \$220.                      C) \$320.                      D) \$480.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 28) Refer to Figure 15.2. If We Do Hair is maximizing profit as a monopolistically competitive firm, its total revenue equals
- A) \$1,280.                      B) \$1,320.                      C) \$1,200.                      D) \$600.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 29) Refer to Figure 15.2. If We Do Hair is maximizing profit as a monopolistically competitive firm, its total costs are
- A) \$1,200.                      B) \$960.                      C) \$800.                      D) \$660.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 30) Refer to Figure 15.2. From society's point of view, the efficient level of output is
- A) 40 perms.                      B) 50 perms.                      C) 60 perms.                      D) 80 perms.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 31) Refer to Figure 15.2. In this monopolistically competitive industry in the long run
- A) firms will enter until all firms earn a normal profit.  
B) firms will continue to earn economic profits.  
C) demand for the product will decrease so that profits are decreased.  
D) the government will impose price controls to eliminate any economic profits.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 32) Mama Lena's, a frozen food producer, is a monopolistically competitive firm. Mama Lena's is currently selling frozen lasagna at a price of \$10. Mama Lena's marginal cost is \$5 and marginal revenue is \$5. This firm should \_\_\_\_\_ to maximize profits.
- A) increase output to where price just equals marginal cost  
B) decrease output to where price just equals marginal cost  
C) continue to produce the same output level  
D) Indeterminate from the given information.

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Figure 15.3 below to answer the questions that follow.

Demand and cost conditions facing Gwen's Country Curtains

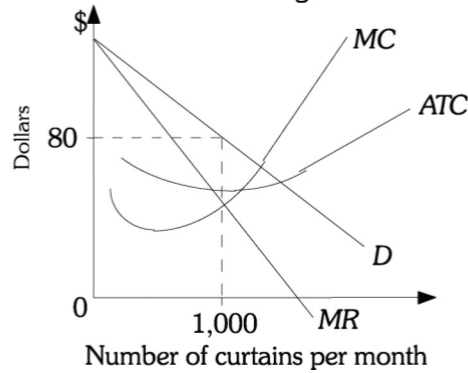


Figure 15.3

- 33) Refer to Figure 15.3. Gwen's Country Curtains is currently manufacturing 1,000 pairs of curtains per month. This firm
- should reduce the number of pairs of curtains it manufactures to maximize profit.
  - should increase the number of pairs of curtains it manufactures to maximize profit.
  - should continue to produce 1,000 pairs of curtains; it is already maximizing profits.
  - could increase profits by either increasing or decreasing the number of pairs of curtains it manufactures.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 34) Refer to Figure 15.3. In the long run, this monopolistic competitive firm should expect
- nothing to change; it will continue to make a profit.
  - firms to exit the industry and profits to increase.
  - firms to enter the industry until all economic profits are eliminated.
  - firms to enter the industry and profits to increase.

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Figure 15.4 below to answer the questions that follow.

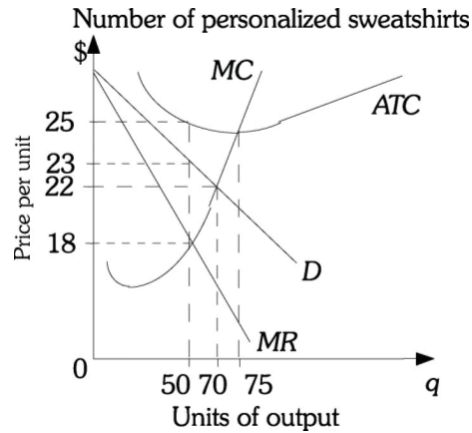


Figure 15.4

- 35) Refer to Figure 15.4. Assume The Hand Made Shirt Shop has fixed costs of \$150 and is a monopolistically competitive firm. To maximize profits in the short run, this firm should produce \_\_\_\_\_ personalized sweatshirts.

A) 0                                      B) 50                                      C) 70                                      D) 75

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 36) Refer to Figure 15.4. Assume The Hand Made Shirt Shop has fixed costs of \$150 and is a monopolistically competitive firm. To maximize profits in the short run, this firm should set a price of

A) \$18.                                      B) \$22.                                      C) \$23.                                      D) \$25.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 37) Refer to Figure 15.4. Assume The Hand Made Shirt Shop has fixed costs of \$150 and is a monopolistically competitive firm. If this firm is producing the profit-maximizing level of output and selling it at the profit-maximizing price, the firm's profit is

A) -\$250.                                      B) -\$150.                                      C) -\$100.                                      D) -\$50.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

38) Refer to Figure 15.4. Assume The Hand Made Shirt Shop has fixed costs of \$75 and is a monopolistically competitive firm. To maximize profits in the short run, this firm should produce \_\_\_\_\_ personalized sweatshirts.

- A) 0                                      B) 50                                      C) 70                                      D) 75

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

39) Refer to Figure 15.4. Assume The Hand Made Shirt Shop has fixed costs of \$75 and is a monopolistically competitive firm. If this firm is producing the profit-maximizing output level, the firm's profit is

- A) -\$175.                                      B) -\$100.                                      C) -\$75.                                      D) \$0.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

40) Refer to Figure 15.4. In the long run in this monopolistically competitive industry

- A) some firms will leave the industry until the remaining firms earn a normal profit.  
B) firms will leave the industry until each firm earns a positive economic profit.  
C) firms will enter the industry, which will increase the demand for the product.  
D) the government will subsidize the firms to eliminate any losses the firms incur.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

41) Refer to Figure 15.4. If the Hand Made Shirt Shop is monopolistically competitive, what is the profit-maximizing level of output for the firm?

- A) 0  
B) 50  
C) 70  
D) Indeterminate from the given information

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 42) Refer to Figure 15.4. If the Hand Made Shirt Shop is monopolistically competitive, what is the maximum level of fixed cost that would lead to the firm continuing to operate in the short run?
- A) \$100
  - B) \$1150
  - C) \$1250
  - D) The firm would continue to operate regardless of the level of fixed costs.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Figure 15.5 below to answer the questions that follow.

Demand and cost conditions facing the Custom Sweater Shop

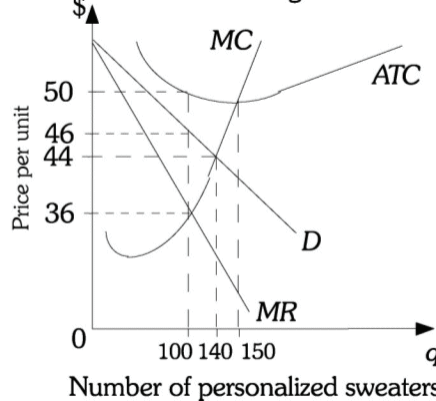


Figure 15.5

- 43) Refer to Figure 15.5. Assume the Custom Sweater Shop has fixed costs of \$500 and is a monopolistically competitive firm. To maximize profits in the short run, this firm should produce \_\_\_\_\_ personalized sweaters.
- A) 0
  - B) 100
  - C) 140
  - D) 150

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 44) Refer to Figure 15.5. Assume the Custom Sweater Shop has fixed costs of \$500 and is a monopolistically competitive firm. To maximize profits in the short run, this firm should set a price of
- A) \$36.
  - B) \$44.
  - C) \$46.
  - D) \$50.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 45) Refer to Figure 15.5. Assume the Custom Sweater Shop has fixed costs of \$500 and is a monopolistically competitive firm. If this firm is producing the profit-maximizing level of output and selling it at the profit-maximizing price, the firm's profit is
- A) -\$400.                      B) -\$350.                      C) -\$500.                      D) -\$50.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 46) Refer to Figure 15.5. Assume the Custom Sweater Shop has fixed costs of \$275 and is a monopolistically competitive firm. To maximize profits in the short run, this firm should produce \_\_\_\_\_ personalized sweaters.
- A) 0                                      B) 50                                      C) 75                                      D) 100

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 47) Refer to Figure 15.5. Assume the Custom Sweater Shop has fixed costs of \$275 and is a monopolistically competitive firm. If this firm is producing the profit-maximizing output level, the firm's profit is
- A) -\$275.                      B) -\$100.                      C) -\$75.                      D) \$0.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 48) Refer to Figure 15.5. In the long run in this monopolistically competitive industry
- A) firms will leave the industry until each firm earns an economic profit.  
B) some firms will leave the industry until the remaining firms earn a normal profit.  
C) firms will enter the industry, which will increase the demand for the product.  
D) the government will subsidize the firms to eliminate any losses the firms incur.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 49) Refer to Figure 15.5. If the Custom Sweater Shop is monopolistically competitive, what is the profit-maximizing level of output for the firm?
- A) 0  
B) 100  
C) 140  
D) Indeterminate from the given information

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills



- 50) Refer to Figure 15.5. If the Custom Sweater Shop is monopolistically competitive, what is the maximum level of fixed cost that would lead to the firm continuing to operate in the short run?
- A) \$400
  - B) \$4600
  - C) \$5000
  - D) The firm would continue to operate regardless of the level of fixed costs.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 51) If firms in a monopolistically competitive industry are incurring losses, in the long run
- A) investment in this industry will increase to reduce production costs.
  - B) firms will leave this industry until the remaining firms are earning a normal profit.
  - C) firms will leave this industry until the firms that remain are earning a positive economic profit.
  - D) the government will subsidize the losses incurred by these firms so as to maintain competition in the industry.

Answer: B

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 52) As new firms enter a monopolistically competitive industry, the demand curve facing each existing firm will
- A) shift to the left and become more elastic because there are now more substitutes for its product.
  - B) shift to the left and become less elastic because there are now more substitutes for its product.
  - C) not be affected because the new firms do not produce a perfect substitute for its product.
  - D) shift to the left, but the elasticity of demand will not be affected.

Answer: A

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 53) If firms in a monopolistically competitive industry are earning economic profits, then in the long run
- A) these firms can continue earning economic profits because entry into the industry is blocked.
  - B) new firms producing close substitutes will enter the industry and this entry will continue until economic profits are eliminated.
  - C) new firms producing the exact same product will enter the industry and this entry will continue until economic profits are eliminated.
  - D) the government will most likely regulate firms in this industry to reduce these economic profits.

Answer: B

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 54) As new firms enter a monopolistically competitive industry, the demand
- A) and marginal revenue curves facing each firm begin to shift to the right.
  - B) curve facing each firm begins to shift to the right but the marginal revenue curve remains constant.
  - C) and marginal revenue curves facing each firm begin to shift to the left.
  - D) curve facing each firm shifts to the left, but the marginal revenue curve remains constant.

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 55) For a monopolistically competitive firm in long-run equilibrium,
- A) the demand curve must intersect the average total cost curve at the ATC curve minimum.
  - B) the demand curve must be tangent to the average total cost curve at the ATC curve minimum.
  - C) at the profit-maximizing quantity, the demand curve must intersect the average total cost curve.
  - D) at the profit-maximizing quantity, the demand curve must be tangent to the average total cost curve.

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

Refer to the information provided in Figure 15.6 below to answer the questions that follow.

Demand and cost conditions facing Trollio's T-shirts

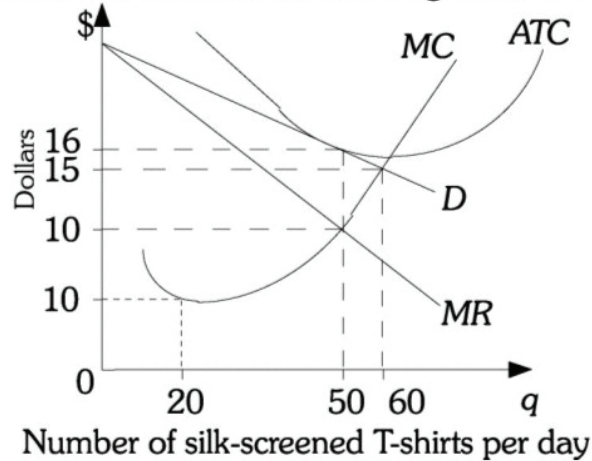


Figure 15.6

- 56) Refer to Figure 15.6. If Trollio's T-shirts is in long-run equilibrium it is producing \_\_\_\_\_ silk-screened T-shirts and selling each T-shirt at a price of \_\_\_\_\_.
- A) 20; \$5                      B) 50; \$10                      C) 50; \$16                      D) 60; \$15

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 57) Refer to Figure 15.6. If Trollio's T-shirts is producing 50 silk-screened T-shirts and selling each T-shirt at \$16, then in the long run this firm should
- A) exit the industry, as it is earning a zero economic profit.  
 B) increase output to 60 silk-screened T-shirts.  
 C) reduce output to try to increase profits.  
 D) continue to produce 50 silk-screened T-shirts and sell each T-shirt for \$16.

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 58) In long run monopolistic competition equilibrium, there can be
- A) economic profits, but not losses.                      B) economic profits or losses.  
 C) no economic profits, but losses.                      D) neither economic profits nor losses.

Answer: D

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

59) Monopolistically competitive firms prevent the efficient use of resources because in long-run equilibrium

- A) price is less than marginal cost.
- B) price is greater than marginal cost.
- C) price equals marginal cost.
- D) marginal cost is greater than average total cost.

Answer: B

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

60) When monopolistically competitive firms earn \_\_\_\_\_ economic profits, other firms \_\_\_\_\_ an industry in the long run.

- A) positive; enter
- B) zero; enter
- C) negative; enter
- D) zero; exit

Answer: A

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

61) Firms will \_\_\_\_\_ a monopolistically competitive market until \_\_\_\_\_ are eliminated.

- A) enter; losses
- B) enter; profits
- C) exit; short run profits
- D) exit; long run profits

Answer: B

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

62) When  $MR = MC$  and  $P = ATC$  for a monopolistically competitive firm, the firm is in

- A) short-run disequilibrium.
- B) long-run disequilibrium.
- C) long-run equilibrium.
- D) neither short-run nor long-run equilibrium.

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

63) In long-run equilibrium for a monopolistically competitive firm, the firm's demand curve is \_\_\_\_\_ its average total cost curve.

- A) above
- B) below
- C) just tangent to
- D) either above or below

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

64) When some firms exit a monopolistic competitive industry, the demand curves of the remaining firms in the industry \_\_\_\_\_.

- A) do not change
- B) shift to the left
- C) shift downward
- D) shift to the right

Answer: D

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

65) In long-run equilibrium for a monopolistically competitive industry \_\_\_\_\_ firms earn \_\_\_\_\_ economic profits.

- A) some; positive
- B) some; negative
- C) no; zero
- D) no; positive or negative

Answer: D

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

## 2 True/False

1) A monopolistically competitive firm maximizes profit by producing where marginal revenue equals marginal cost.

Answer: TRUE

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

2) Since a monopolistically competitive firm has a monopoly over the particular product it produces, the firm is guaranteed a profit in the long run.

Answer: FALSE

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

3) In general, the demand curve facing the monopolistically competitive firm is more elastic than the demand curve facing the monopoly.

Answer: TRUE

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

4) In general, the demand curve facing the monopolistically competitive firm is more elastic than the demand curve facing the perfectly competitive firm.

Answer: FALSE

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

5) Average total cost is minimized in long run equilibrium for a monopolistically competitive firm.

Answer: FALSE

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

6) If a monopolistically competitive firm is producing an output level where its marginal cost is equal to its marginal revenue but it still earns a loss, then it should always shutdown in the short run.

Answer: FALSE

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

7) In long run equilibrium for a monopolistically competitive firm, economic profit equals zero and thus the outcome is efficient.

Answer: FALSE

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

## 15.4 Economic Efficiency and Resource Allocation

### 1 Multiple Choice

1) Compared to a perfectly competitive firm having the same cost curves, a monopolistically competitive firm \_\_\_\_\_ output and \_\_\_\_\_ prices.

A) reduces; raises

B) raises; reduces

C) reduces; reduces

D) raises; raises

Answer: A

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

2) We know that monopolistically competitive firms prevent the efficient use of resources because they produce where

A)  $P > ATC$ .

B)  $P > MC$ .

C)  $MR > P$ .

D)  $P = MC$ .

Answer: B

Diff: 2

Topic: Economic Efficiency and Resource Allocation

Skill: Conceptual

- 3) Monopolistically competitive firms in long-run equilibrium produce at \_\_\_\_\_ the optimal scale.
- A) more than
  - B) exactly
  - C) less than
  - D) sometimes more and sometimes less than

Answer: C

Diff: 1

Topic: Economic Efficiency and Resource Allocation

Skill: Fact

- 4) Monopolies can earn positive economic profits in the long run while monopolistically competitive firms cannot due to
- A) economies of scale in monopolies but not in monopolistic competition.
  - B) barriers to entry in monopoly but not in monopolistic competition.
  - C) market power of monopolies while monopolistically competitive firms have no market power.
  - D) the less elastic demand faced by monopolies as compared to monopolistically competitive firms.

Answer: B

Diff: 1

Topic: Economic Efficiency and Resource Allocation

Skill: Fact

## 2 True/False

- 1) Monopolistically competitive firms fail to fully realize their economies of scale.

Answer: TRUE

Diff: 2

Topic: Economic Efficiency and Resource Allocation

Skill: Conceptual

- 2) Monopolistically competitive firms experience "excess capacity" in the short run but not in the long run.

Answer: FALSE

Diff: 2

Topic: Economic Efficiency and Resource Allocation

Skill: Conceptual

- 3) The long run equilibrium for a monopolistically competitive firm is efficient because its profits equal zero in the long run.

Answer: FALSE

Diff: 2

Topic: Economic Efficiency and Resource Allocation

Skill: Conceptual

# Chapter 16 Externalities, Public Goods, Imperfect Information, and Social Choice

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## 16.1 Externalities and Environmental Economies

### 1 Multiple Choice

- 1) The field of environmental economics is concerned with \_\_\_\_\_.
- A) externalities
  - B) public goods
  - C) government inefficiency
  - D) economies of scale

Answer: A

Diff: 1

Topic: Externalities and Environmental Economies

Skill: Fact

- 2) Second hand cigarette smoke is an example of a(n) \_\_\_\_\_.
- A) economy of scale
  - B) externality
  - C) public good
  - D) government failure

Answer: B

Diff: 1

Topic: Externalities and Environmental Economies

Skill: Fact

- 3) Vaccinations convey \_\_\_\_\_ to third parties.
- A) positive externalities
  - B) negative externalities
  - C) economies of scale
  - D) public goods

Answer: A

Diff: 1

Topic: Externalities and Environmental Economies

Skill: Fact

- 4) The many types of pollution do NOT include \_\_\_\_\_ pollution.
- A) air
  - B) price
  - C) water
  - D) sound

Answer: B

Diff: 1

Topic: Externalities and Environmental Economies

Skill: Fact

- 5) An externality is
- A) a cost or benefit resulting from some activity or transaction that is imposed or bestowed on parties outside the activity or transaction.
  - B) the total cost to society of producing an additional unit of a good or service.
  - C) the amount a consumer pays to consume an additional amount of a particular good.
  - D) a problem intrinsic to public goods: The good or service is so costly that its provision generally does not depend on whether or not any single person pays.

Answer: A

Diff: 2

Topic: Externalities and Environmental Economies

Skill: Definition



- 6) Air pollution generated by a steel mill is an example of
- A) a positive production externality.
  - B) a negative production externality.
  - C) a public good.
  - D) the free-rider problem.

Answer: B

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 7) A well-maintained house and yard is an example of
- A) a positive externality.
  - B) a negative externality.
  - C) a public good.
  - D) logrolling.

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 8) Assuming no externalities exist, if a good's price is less than its marginal cost, then the benefits consumers derive are
- A) greater than the cost of resources needed to produce it and less should be produced.
  - B) greater than the cost of resources needed to produce it and more should be produced.
  - C) less than the cost of resources needed to produce it and less should be produced.
  - D) less than the cost of resources needed to produce it and more should be produced.

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 9) Assuming there are no externalities, if a firm is producing at an output level where the benefits to consumers exceed the cost to the suppliers to produce it, then price
- A) equals marginal cost.
  - B) is greater than marginal cost.
  - C) is less than marginal cost.
  - D) is less than marginal revenue.

Answer: B

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 10) Assuming there are no externalities, if a firm is producing at an output level where the benefits to consumers are less than the cost to the suppliers to produce it, then price
- A) equals marginal cost.
  - B) is greater than marginal cost.
  - C) is less than marginal cost.
  - D) is less than marginal revenue.

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

Refer to the information provided in Figure 16.1 below to answer the questions that follow.

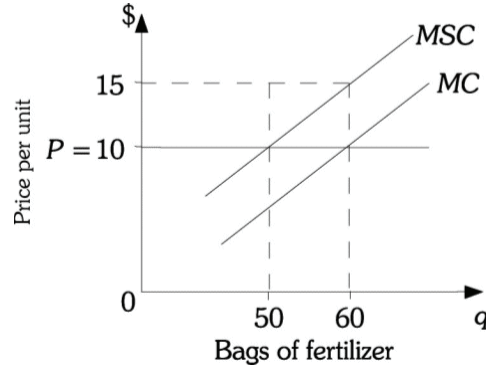


Figure 16.1

- 11) Refer to Figure 16.1. The efficient amount of fertilizer is
- A) zero because any level of production involves an external cost.
  - B) 50 bags.
  - C) 60 bags.
  - D) indeterminate from this information.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 12) Refer to Figure 16.1. Absent government intervention, how much fertilizer will be produced?
- A) zero because any level of production involves an external cost.
  - B) 50 bags.
  - C) 60 bags.
  - D) indeterminate from this information.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 13) Refer to Figure 16.1. What is the total damage imposed as a result of producing the market (unregulated) level of fertilizer?
- A) \$250
  - B) \$300
  - C) \$500
  - D) \$600

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

14) Refer to Figure 16.1. What is the total damage imposed as a result of producing the efficient level of fertilizer?

- A) \$0                                      B) \$250                                      C) \$300                                      D) \$500

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

15) Refer to Figure 16.1. The marginal damage cost imposed as a result of producing fertilizer is

- A) \$5.00 per bag of fertilizer.                                      B) \$10.00 per bag of fertilizer.  
C) \$15.00 per bag of fertilizer.                                      D) indeterminate from this information.

Answer: A

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

16) Refer to Figure 16.1. To force this firm to produce the efficient level of output, the government should impose a tax of

- A) \$5.00 per bag of fertilizer.  
B) \$10.00 per bag of fertilizer.  
C) \$15.00 per bag of fertilizer.  
D) an amount that is indeterminate from this information.

Answer: A

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Figure 16.2 below to answer the questions that follow.

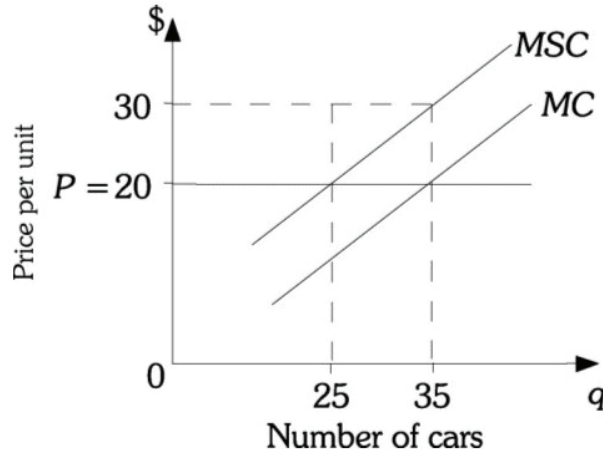


Figure 16.2

- 17) Refer to Figure 16.2. The marginal damage cost imposed as a result of producing automobiles is
- A) \$5.00 per car.
  - B) \$10.00 per car.
  - C) \$15.00 per car.
  - D) indeterminate from this information.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 18) Refer to Figure 16.2. To force this firm to produce the efficient level of output, the government should impose a tax of
- A) \$5.00 per car.
  - B) \$10.00 per car.
  - C) \$15.00 per car.
  - D) an amount that is indeterminate from this information.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 19) Refer to Figure 16.2. The efficient amount of cars is
- A) 25.
  - B) 35.
  - C) zero because any production results in an external cost.
  - D) indeterminate from the information given.

Answer: A

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

20) Refer to Figure 16.2. The unregulated (market) amount of cars is

- A) 25.
- B) 35.
- C) zero because any production results in an external cost.
- D) indeterminate from the information given.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

21) Refer to Figure 16.2. What is the total damage imposed as a result of producing the market (unregulated) level of fertilizer?

- A) \$250
- B) \$350
- C) \$500
- D) \$700

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

22) Refer to Figure 16.2. What is the total damage imposed as a result of producing the efficient level of fertilizer?

- A) \$0
- B) \$250
- C) \$350
- D) \$500

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

23) The total cost to society of producing an additional unit of a good or service is the marginal

- A) external cost.
- B) damage cost.
- C) social cost.
- D) private cost.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Definition

24) If a profit-maximizing perfectly competitive firm does not have to compensate society for a negative externality, the firm will choose to produce where

- A) price equals marginal cost.
- B) price equals marginal social cost.
- C) marginal cost equals marginal social cost.
- D) marginal revenue equals marginal social cost.

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact



29) Refer to Table 16.1. This salt processing firm is perfectly competitive and is forced to take damage costs into account. If the market price of the product is \$30 a ton and the firm behaves as a profit-maximizer, how much total damage will result?

- A) \$0                                      B) \$20                                      C) \$30                                      D) \$50

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

30) Refer to Table 16.1. To force this salt processing firm to produce the efficient level of output, the government should impose a tax

- A) of \$10 per ton.  
 B) of \$12.50 per ton.  
 C) of \$40 per ton.  
 D) that depends on the level of output that the firm produces to maximize profits.

Answer: A

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

Refer to the data provided in Table 16.2 below to answer the following questions.

Table 16.2

Tons of Glass	MC	MSC
1	20	40
2	30	50
3	40	60
4	50	70
5	60	80

31) Refer to Table 16.2. The marginal damage costs imposed on society from processing 4 tons of glass are

- A) \$2.50 per ton of glass.                                      B) \$10 per ton of glass.  
 C) \$20 per ton of glass.                                      D) indeterminate from this output.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

32) Refer to Table 16.2. This glass-recycling firm is perfectly competitive and is not forced to take damage costs into account. If the market price of glass is \$50 a ton, the firm will produce

- A) 0 tons of glass.                                      B) 2 tons of glass.  
 C) 3 tons of glass.                                      D) 4 tons of glass.

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 33) Refer to Table 16.2. This glass-recycling firm is perfectly competitive and is NOT forced to take damage costs into account. If the market price of glass is \$50 a ton and the firm behaves as a profit-maximizer, then total damage will be \_\_\_\_\_ .
- A) \$40                      B) \$80                      C) \$220                      D) \$1000

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 34) Refer to Table 16.2. This glass-recycling firm is perfectly competitive and is forced to take damage costs into account. If the market price of the product is \$50, the firm will produce
- A) 0 tons of glass.                      B) 2 tons of glass.  
C) 3 tons of glass.                      D) 4 tons of glass.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 35) Refer to Table 16.2. This glass-recycling firm is perfectly competitive and is forced to take damage costs into account. If the market price of the product is \$50 a ton and the firm behaves as a profit-maximizer, then total damage will be \_\_\_\_\_ .
- A) \$0                      B) \$40                      C) \$50                      D) \$90

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 36) Refer to Table 16.2. To force this glass-recycling firm to produce the efficient level of output, the government should impose a tax
- A) of \$10 per ton.  
B) of \$12.50 per ton.  
C) of \$20 per ton.  
D) that depends on the level of output that the firm produces to maximize profits.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 37) If there are external costs of production not accounted for, then marginal
- A) cost equals marginal social cost.  
B) cost is less than marginal social cost.  
C) cost is greater than marginal social cost.  
D) social cost is zero.

Answer: B

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact



- 38) If there are external costs in production and firms do not have to account for these costs, then firms will produce
- A) at the efficient level.
  - B) an output level that is below the efficient level.
  - C) an output level that is above the efficient level.
  - D) an output level that is either above or below the efficient level.

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

- 39) If there are external costs of production and perfectly competitive firms do not account for these costs, at the equilibrium level of output
- A)  $P = MC = MSC$ .
  - B)  $P = MC$  and  $P < MSC$ .
  - C)  $P = MC$  and  $P > MSC$ .
  - D)  $P > MC$  and  $P = MSC$ .

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 40) It is assumed that the marginal benefit of consumption
- A) remains constant as more units of the good are consumed.
  - B) increases as more units of the good are consumed.
  - C) decreases as more units of the good are consumed.
  - D) could either increase or decrease as more units of the good are consumed.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

Refer to the information provided in Figure 16.3 below to answer the questions that follow.

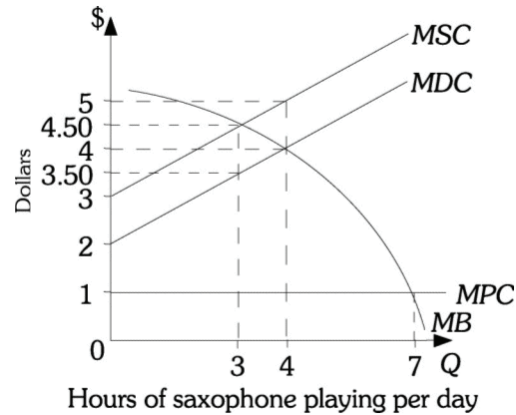


Figure 16.3

- 41) Refer to Figure 16.3. When Bill plays his saxophone he imposes costs on his wife. If Bill does not take these costs into consideration he will play his saxophone for \_\_\_\_\_ hours per day.
- A) zero                      B) three                      C) four                      D) seven

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 42) Refer to Figure 16.3. If Bill is forced to take into consideration the costs he imposes on his wife by playing the saxophone, he will play his saxophone for \_\_\_\_\_ hours per day.
- A) zero                      B) three                      C) four                      D) seven

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 43) Refer to Figure 16.3. Bill and his wife are able to bargain with one another so that Bill plays his saxophone for the efficient number of hours. This is an example of
- A) Arrow's impossibility theorem.                      B) the free-rider problem.  
C) the drop-in-the-bucket problem.                      D) the Coase theorem.

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 44) The amount that a consumer pays to consume an additional unit of a particular good is the marginal
- A) private cost.                      B) damage cost.                      C) positive cost.                      D) social cost.

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

- 45) Marginal private cost is the
- A) additional cost to society resulting from a consumer consuming one more unit of a good.
  - B) additional cost to society resulting from a privately owned firm producing one more unit of a product.
  - C) amount that a consumer pays to produce an additional unit of a good.
  - D) the amount that a consumer pays to consume an additional unit of a particular good.

Answer: D

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

- 46) Marginal damage cost is the
- A) additional harm done by increasing the level of an externality-producing activity by one unit.
  - B) additional cost to society resulting from a privately owned firm producing one more unit of a product.
  - C) amount a consumer pays to produce an additional unit of a good.
  - D) additional cost to society resulting from a consumer consuming one more unit of a good.

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

- 47) The marginal private cost to a firm of producing the 10th unit of output is \$100. The marginal social cost of the 10th unit of output is \$150. The marginal damage cost of the tenth unit of output is
- A) \$5.00.
  - B) \$25.00.
  - C) \$50.00.
  - D) \$250.00.

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

- 48) The marginal private cost to a firm of producing the 10th unit of output is \$100. The marginal damage cost of the 10th unit of output is \$40. The marginal social cost of the tenth unit of output is
- A) \$40.
  - B) \$60.
  - C) \$140.
  - D) Indeterminate from the given information.

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

- 49) As production increases, it is most likely that the marginal damage costs  
 A) remain constant. B) increase.  
 C) decrease. D) decrease or increase.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 50) A person will continue to pursue an activity until his or her marginal \_\_\_\_\_ equals his or her marginal \_\_\_\_\_ cost.  
 A) benefit; damage B) benefit; social  
 C) social cost; external D) benefit; private cost

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 51) If the government levies a tax on a chemical company that created an external social cost, the tax should equal marginal \_\_\_\_\_ to ensure an efficient correction.  
 A) private cost B) social cost C) benefit D) damage cost

Answer: D

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

Refer to the information provided in Figure 16.4 below to answer the questions that follow.

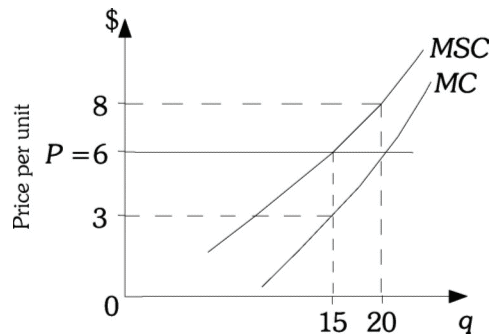


Figure 16.4

- 52) Refer to Figure 16.4. The efficient level of output of this product is  
 A) 0. B) 15.  
 C) 20. D) indeterminate from this information.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 53) Refer to Figure 16.4. If this firm is maximizing profits and is not required to take into account damages, it will produce
- A) 0 units of output.
  - B) 6 units of output.
  - C) 15 units of output.
  - D) 20 units of output.

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 54) Refer to Figure 16.4. At 20 units of output there are external
- A) costs of \$2 per unit.
  - B) benefits of \$2 per unit.
  - C) costs of \$5 per unit.
  - D) benefits of \$5 per unit.

Answer: A

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 55) If the government taxes a steel company by an amount equal to the damages of each marginal ton of steel, then the steel company's marginal cost curve is the same as the marginal
- A) damage cost curve.
  - B) social cost curve.
  - C) private cost curve.
  - D) benefit cost curve.

Answer: B

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 56) If a firm's production process generates external costs, the firm will produce the socially efficient level of the output if the government imposes a tax equal to the marginal
- A) damage cost.
  - B) private cost.
  - C) benefit.
  - D) social cost.

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 57) In the presence of negative externalities, \_\_\_\_\_ is produced and in the presence of positive externalities, \_\_\_\_\_ is produced.
- A) too little of the good; too much of the good
  - B) too much of the good; too little of the good
  - C) too much of the good; the right amount of the good
  - D) the right amount of the good; too little of the good

Answer: B

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Conceptual

58) If the government wishes to encourage firms to internalize externalities, they should \_\_\_\_\_ activities resulting in negative externalities and \_\_\_\_\_ activities resulting in positive externalities

A) tax; subsidize

B) subsidize; tax

C) ban; generate

D) place an injunction against; tax

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Conceptual

Refer to Scenario 16.1 below to answer the questions that follow.

SCENARIO 16.1: The marginal benefit for a particular food is described by  $MB = 30 - q$ , where  $q$  refers to the quantity of the food. The marginal cost of producing the food is described by  $MC = 2q$ . There is a negative externality associated with food production and the marginal social cost of food production is  $MSC = 4q$ .

59) Refer to Scenario 16.1. The marginal damage cost is \_\_\_\_\_ .

A)  $MDC = 2q$

B)  $MDC = 6q$

C)  $MDC = 8q$

D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

60) Refer to Scenario 16.1. The competitive output level is \_\_\_\_\_ and the competitive price is \_\_\_\_\_.

A) 10 units of food; \$20

B) 6 units of food; \$24

C) 0 units of food; \$0

D) 4.29 units of food; \$25.71

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

61) Refer to Scenario 16.1. The efficient output level is \_\_\_\_\_ and the efficient price is \_\_\_\_\_.

A) 10 units of food; \$20

B) 6 units of food; \$24

C) 0 units of food; \$0

D) 4.29 units of food; \$25.71

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

- 62) When the government taxes a firm that generates external costs, the firm will produce
- A) more units of output than before the tax was imposed in order to continue maximizing profits.
  - B) the same number of units of output as before the tax was imposed to continue maximizing profits.
  - C) fewer units of output than before the tax was imposed in order to continue maximizing profits.
  - D) either more or fewer units of output than before the tax was imposed depending upon what happens to the profit maximizing level of output.

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 63) Once a firm is made to internalize a negative externality, the price will
- A) increase and output will decrease.
  - B) increase and output will increase.
  - C) decrease and output will decrease.
  - D) decrease and output will increase.

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 64) When the government imposes a tax on a firm that generates external costs, the tax is
- A) always borne entirely by the firm.
  - B) always borne entirely by the consumer.
  - C) usually borne by both the firm and the consumer.
  - D) borne only by the government.

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 65) If a tax is imposed on externality-producing activities by perfectly competitive firms so that the market is producing the efficient level of output, then
- A)  $P = MSC$  and  $MDC = 0$ .
  - B)  $P = MSC$  and  $MDC > 0$ .
  - C)  $P = MC$  and  $MDC = 0$ .
  - D)  $P = MC$  and  $MDC > 0$ .

Answer: B

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 66) For the efficient level of output to be produced, marginal
- A) damage cost must equal zero.
  - B) benefit must equal marginal private cost.
  - C) social cost must be zero.
  - D) benefit must equal marginal social cost.

Answer: D

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 67) Taxes on a producing firm's spillovers
- A) are designed to make it easier for economists to measure spillovers.
  - B) will lead to a zero level of output.
  - C) are simply meant to force decision makers to consider the full costs of their actions.
  - D) are designed primarily as a way to raise money so that the government can compensate the victims of the externality.

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 68) If a tax is placed on perfectly competitive firms that impose external costs on society, the firm's marginal cost curve will shift \_\_\_\_\_ and the industry supply curve will shift to the \_\_\_\_\_.
- A) down; left
  - B) down; right
  - C) up; right
  - D) up; left

Answer: D

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 69) Suppose that you rent a house next to a factory. The factory legally emits a chemical into the air that smells like feet. You now have to spend \$300 more per month on air fresheners because the firm pollutes the air. You could move to another house far enough away from the factory, but the rent for that house is \$200 more than you now pay. The efficient solution to this problem is that
- A) the factory owner should compensate you \$300 so that you can pay for the additional expenses you incur.
  - B) you should move to the new house because the additional rent on that new house is less than the additional expenses you incur from living next to the factory.
  - C) the factory owner should reimburse you \$100, the difference between your expenses and the higher rent on the new house.
  - D) the firm should be able to continue to pollute because only one person is being harmed by the factory's pollution.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 70) If a subsidy is granted to perfectly competitive firms that provide external benefits to society, the firm's marginal cost curve will shift \_\_\_\_\_ and the industry supply curve will shift to the \_\_\_\_\_.
- A) down; left
  - B) down; right
  - C) up; right
  - D) up; left

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual



- 71) Education generates external benefits. When these external benefits are not considered, the market will produce
- A) an efficient level of education.
  - B) more than the efficient level of education.
  - C) less than the efficient level of education.
  - D) zero units of education.

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 72) If the production of a good generates external benefits, the government could increase efficiency by
- A) taxing the production of the good to reduce the amount produced.
  - B) subsidizing production of the good to increase the amount produced.
  - C) regulating production of the good to reduce the amount produced.
  - D) requiring all producers of the product to be licensed to produce the product.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 73) You spend \$300 every month to keep your lawn and garden maintained. Your neighbor has told you that she derives \$50 a month in enjoyment from being able to look at your beautiful yard. Which of the following is TRUE?
- A) You are spending too much on your yard, because your neighbor derives only \$50 worth of benefits.
  - B) You should refuse to spend anything on your yard unless your neighbor pays you \$50 a month.
  - C) If you took into consideration the benefits your neighbor derived, the efficient level of lawn maintenance would be greater than \$300 a month.
  - D) If you took into consideration the benefits your neighbor derived, the efficient level of lawn maintenance would be less than \$300 a month.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 74) When a perfectly competitive firm weighs price and marginal cost and no externalities exist, it is weighing the full benefits to \_\_\_\_\_ of additional production against the full costs to \_\_\_\_\_ of that production.
- A) society; society
  - B) buyers; sellers
  - C) sellers; buyers
  - D) government; government

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 75) An external cost is  
A)  $MSC + MC$ .                      B)  $MSC - MC$ .                      C)  $MSC / MC$ .                      D)  $MSC * MC$ .

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

- 76) If there are external costs of production and firms do not have to account for these costs, then the firms will \_\_\_\_\_ and \_\_\_\_\_ compared with the efficient values.  
A) underproduce; underprice                      B) underproduce; overprice  
C) overproduce; underprice                      D) overproduce; overprice

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 77) The Coase theorem states that  
A) the private sector will fail to produce the efficient amount of a public good because of the free-rider problem.  
B) under certain conditions, private parties can arrive at the efficient solution without government involvement.  
C) if there are external costs in production, the government must intervene in the market to assure that the efficient level of output is produced.  
D) public goods should be produced up to the point where the additional benefit received by society equals the additional cost of producing the good.

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

- 78) If private bargaining to resolve an externality is to result in an efficient outcome,  
A) rights must be protected by liability rules.  
B) there must be tradable pollution rights.  
C) there must be direct regulation of externalities.  
D) the initial assignment of rights must be clear to both parties.

Answer: D

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Fact

- 79) For the Coase theorem to apply, all of the following conditions must be satisfied EXCEPT  
A) The basic rights of the individuals must be clearly understood.  
B) There must be no impediments to bargaining.  
C) Only a few people can be involved.  
D) Liability rules must be established and enforced.

Answer: D

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

- 80) Property rights are protected by
- A) taxes and subsidies.
  - B) bargaining and negotiation.
  - C) injunctions and liability rules.
  - D) rivalry and excludability.

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 81) The Coase theorem will apply only if
- A) the courts can be used to determine the amount of compensation that must be made to the damaged party.
  - B) the amount of compensation that must be made to the damaged party is small.
  - C) the number of people involved is small.
  - D) an individual who is not affected by the externality can negotiate a settlement between the parties imposing the externality and the parties that are harmed by the externality.

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

- 82) Your roommate has the right to play her stereo during the day. But you find the best time to study is during the day, and the stereo playing makes it hard for you to concentrate. You tell your roommate that you will do her laundry every week if she does not play the stereo during the day and she agrees to this. This is an example of the
- A) free rider problem.
  - B) drop-in-the-bucket problem.
  - C) Coase theorem.
  - D) fallacy of composition.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 83) There are 1,000 families in a neighborhood that is affected by noise pollution from a local factory. The noise level is within legal limits, but could be reduced further if the company spent \$5,000 on technological improvements. The company agrees to make these improvements if the affected families contribute the \$5,000. A committee starts to collect donations to pay for the improvements. Which of the following is most likely to occur?
- A) Because there are relatively few families involved and the individual contribution is so small, all families will voluntarily contribute.
  - B) Because each individual contribution is so small and individuals will benefit from the reduction in noise whether they contribute or not, most people will not contribute and the firm will not make the improvements.
  - C) Even if the families raise the \$5,000, the firm will not reduce its noise pollution because it is within legal limits.
  - D) The courts will force the firm to spend the \$5,000 regardless of whether or not the families contribute the money.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 84) There are 10 families in a neighborhood that are affected by noise pollution from a local factory. The noise could be reduced if the company spent \$5,000 on technological improvements. The company agrees to make these improvements if the affected families contribute the \$5,000. Since there are no legal restrictions governing the factory's noise the negotiations fail. This outcome is an example of the
- A) free rider problem.
  - B) drop-in-the-bucket problem.
  - C) Coase theorem.
  - D) problem that arises when property rights are not defined.

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 85) There are 10,000 families in a neighborhood that are affected by noise pollution from a local factory. The noise could be reduced if the company spent \$5,000 on technological improvements. The company agrees to make these improvements if the affected families contribute the \$5,000. Since there are so many families they fail to come to a resolution to which they will all agree. This outcome is an example of the
- A) free rider problem.
  - B) drop-in-the-bucket problem.
  - C) Coase theorem.
  - D) collective action problem (that arises when there are too many parties involved).

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 86) There are 1,000 families in a neighborhood that are affected by noise pollution from a local factory. The noise could be reduced if the company spent \$5,000 on technological improvements. The company agrees to make these improvements if the affected families contribute the \$5,000. However, because individuals will benefit from the reduction in noise whether they contribute or not, most people will not contribute and the firm will not make the improvements.. This outcome is an example of the
- A) free rider problem.
  - B) drop-in-the-bucket problem.
  - C) Coase theorem.
  - D) collective action problem (that arises when there are too many parties involved).

Answer: A

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 87) You accidentally run into your next door neighbor's fence and destroy it. Your neighbor sues you and you are required to pay \$1,000 to repair the fence. This is an example of
- A) the Coase theorem.
  - B) a liability rule.
  - C) an injunction.
  - D) the free-rider problem.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

88) You love Christmas and elaborately decorate your home and yard. It is such a spectacle that hundreds of people drive by your house each day to enjoy the display. The noise and traffic disturb your neighbors who sue you and you are required to take down your display permanently. This is an example of

- A) the Coase theorem.
- B) a liability rule.
- C) an injunction.
- D) the free-rider problem.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

89) \_\_\_\_\_ is(are) an example of selling externality rights.

- A) Auctioning the right to buy a car each year
- B) Direct regulation of externalities
- C) Having the damaged party avoid the damage
- D) Government imposed taxes and subsidies

Answer: A

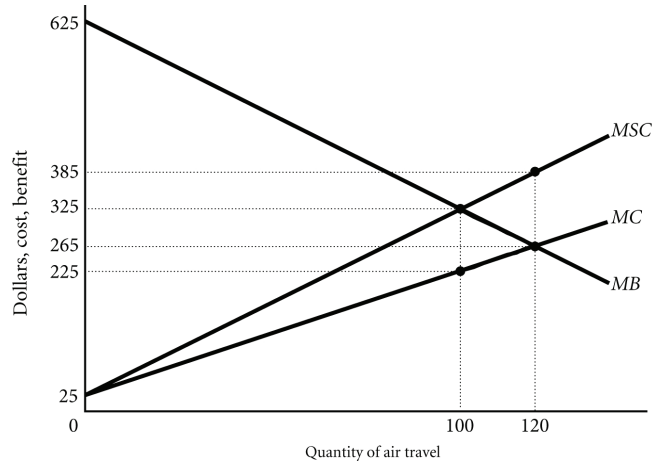
Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

Refer to the information provided in Figure 16.5 below to answer the questions that follow.

Los Angeles International Airport (LAX) is located next to Playa Del Rey. The noise from air traffic negatively affects individuals living in Playa Del Rey, however, this cost is not considered by airlines or air travelers. The airlines feel they have a right to use the airspace while the individuals living in Playa Del Rey feel they have the right to quiet. The following diagram depicts the marginal costs and marginal benefits associated with air travel.



**Figure 16.5**

- 90) Refer to Figure 16.5. Suppose the government assigns property rights to the airlines. No negotiations occur between the parties. The resulting level of air travel is \_\_\_\_\_.
- A) 0 units
  - B) 100 units
  - C) 120 units
  - D) Indeterminate from the given information.

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

- 91) Refer to Figure 16.5. Suppose the government assigns property rights to the airlines. No negotiations occur between the parties. The marginal damage cost associated with the resulting level of air travel is \_\_\_\_\_.
- A) \$25
  - B) \$120
  - C) \$265
  - D) \$385

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

92) Refer to Figure 16.5. Suppose the government assigns property rights to the airlines, then the airlines and the residents engage in negotiations. The resulting efficient level of air travel is \_\_\_\_\_.

- A) 0 units
- B) 100 units
- C) 120 units
- D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

93) Refer to Figure 16.5. The marginal damage cost associated with the efficient level of air travel is \_\_\_\_\_.

- A) \$0
- B) \$100
- C) \$225
- D) \$265

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

94) Refer to Figure 16.5. The marginal damage cost \_\_\_\_\_ as the quantity of air travel increases.

- A) increases
- B) decreases
- C) remains constant
- D) becomes negative

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

95) Refer to Figure 16.5. Suppose the government assigns property rights to the residents of Playa Del Rey. No negotiations occur between the parties. The resulting level of air travel is \_\_\_\_\_.

- A) 0 units
- B) 100 units
- C) 120 units
- D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

- 96) Refer to Figure 16.5. Suppose the government assigns property rights to the residents of Playa Del Rey, then the airlines and the residents engage in negotiations. The resulting efficient level of air travel is \_\_\_\_\_.
- A) 0 units
  - B) 100 units
  - C) 120 units
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

- 97) Governments often \_\_\_\_\_ activities that generate external \_\_\_\_\_.
- A) tax; benefits
  - B) subsidize; benefits
  - C) subsidize; costs
  - D) simultaneously tax and subsidize; costs

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 98) My neighbor \_\_\_\_\_ is an example of an external benefit.
- A) smoking a cigarette in my presence
  - B) playing loud music on his radio that I can hear
  - C) dumping hazardous chemicals on a stream that passes through my property
  - D) keeping the leaves from his trees away from my yard

Answer: D

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 99) When the government pays part of my university education, it is
- A) internalizing an external cost.
  - B) using taxes to discourage an external cost.
  - C) subsidizing an external benefit.
  - D) using direct regulation to discourage an external cost.

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Fact





Refer to the data provided in Table 16.4 below to answer the following questions.

Table 16.4 shows the situation facing two firms, both of which are polluting. Assume that each firm emits 5 units of pollution.

**Table 16.4**

Firm A	Firm A	Firm A	Firm B	Firm B	Firm B
Reduction of Pollution by Firm A	MC of reducing pollution for Firm A	TC of reducing pollution for Firm A	Reduction of Pollution by Firm B	MC of reducing pollution for Firm B	TC of reducing pollution for Firm B
1	\$1	\$1	1	\$8	\$8
2	3	4	2	12	20
3	6	10	3	16	36
4	10	20	4	20	56
5	15	35	5	24	80

103) Refer to Table 16.4. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are not allowed to trade permits, what is the total cost of the pollution reduction?

- A) \$24                                      B) \$46                                      C) \$76                                      D) \$115

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

104) Refer to Table 16.4. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are allowed to trade permits, what is the total cost of the pollution reduction?

- A) \$24                                      B) \$40                                      C) \$43                                      D) \$81

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

105) Refer to Table 16.4. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are allowed to trade permits, how many permits will be traded between the two firms?

- A) A will buy two permits from B                                      B) B will buy two permits from A  
 C) A will buy one permit from B                                      D) B will buy one permit from A

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

106) Refer to Table 16.4. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are allowed to trade permits and all possible trades are made, Firm A will reduce its pollution by a total of \_\_\_\_\_ units.

- A) 2                                      B) 3                                      C) 4                                      D) 5

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

107) Refer to Table 16.4. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are allowed to trade permits and all possible trades are made, Firm B will reduce its pollution by a total of \_\_\_\_\_ unit(s).

- A) 0                                      B) 1                                      C) 2                                      D) 3

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

108) Relating to the *Economics in Practice* on page 326: Crying babies on an airplane impose a negative externality on those sitting around them. Which of the following policies would help to internalize the externality?

- A) Provide discount tickets for babies and young children.
- B) Evenly disperse the babies and young children throughout the plane so as to minimize the impact of their crying on any one passenger.
- C) Impose a minimum flying age of 5 years old.
- D) Charge a higher ticket fee for babies and young children (under 5 years of age) than for all other passengers.

Answer: D

Diff: 2

Topic: Externalities and Environmental Economics: Economics in Practice

Skill: Conceptual

AACSB: Analytic Skills

109) Related to the *Economics in Practice* box on p. 326: All of the following could be externalities caused by a neighbor's spectacular holiday display EXCEPT:

- A) a higher electric bill caused by using large quantities of lights
- B) increased traffic caused by visitors coming to see the display
- C) difficulty sleeping caused by loud holiday music
- D) enjoyment of the festive display

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics: Economics in Practice

Skill: Conceptual

AACSB: Analytic Skills

- 110) Relating to the *Economics in Practice* on page 331: The Kyoto Protocol is an international treaty aimed at
- A) reducing behavior that leads to negative externalities.
  - B) encouraging behavior that leads to positive externalities.
  - C) reducing the production of public goods.
  - D) encouraging free trade.

Answer: A

Diff: 2

Topic: *Externalities and Environmental Economics: Economics in Practice*

Skill: *Fact*

- 111) Relating to the *Economics in Practice* on page 331: Which of the following is a true statement about global warming?
- A) There is no general agreement about the most accurate ways to measure its costs.
  - B) Rising temperatures will have no significant effect on water supply.
  - C) The community of climate scientists is divided on the question of whether the Earth is getting warmer.
  - D) Steel producers currently have economic incentives to limit the amount of carbon dioxide they release into the atmosphere.

Answer: A

Diff: 2

Topic: *Externalities and Environmental Economics: Economics in Practice*

Skill: *Fact*

## 2 True/False

- 1) Ronald Coase argued that property rights should always be assigned to the party that is harmed by the negative externality.

Answer: FALSE

Diff: 1

Topic: *Externalities and Environmental Economics*

Skill: *Fact*

- 2) An efficient outcome can always be reached by requiring the individual who produces the externality to fully compensate individuals for any damage inflicted.

Answer: FALSE

Diff: 1

Topic: *Externalities and Environmental Economics*

Skill: *Fact*

- 3) According to the Coase theorem, bargaining will bring the contending parties to the correct solution only if the rights are initially assigned to the party causing the externality.

Answer: FALSE

Diff: 2

Topic: *Externalities and Environmental Economics*

Skill: *Definition*

- 4) In any case where there is a negative externality, it is better to form a government agency to solve the problem.  
Answer: FALSE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Fact
- 5) If there are no externalities, producing where price is greater than marginal cost is inefficient because for every unit produced, consumers derive benefits that are less than the cost of the resources needed to produce it.  
Answer: FALSE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Fact
- 6) Subsidies can be used to internalize positive externalities.  
Answer: TRUE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Conceptual
- 7) Acid rain is an example of a negative externality.  
Answer: TRUE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Fact
- 8) Marginal damage cost is the difference between marginal social cost and marginal cost.  
Answer: TRUE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Definition
- 9) For the Coase Theorem to work three conditions must be satisfied: the basic rights must be clearly understood, there must be no impediments to bargaining, and only a few parties are involved.  
Answer: TRUE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Conceptual
- 10) Liability rules are laws that require party A to compensate party B for damages imposed.  
Answer: TRUE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Definition

- 11) Externalities always involve the imposition of costs on parties outside an activity or transaction.  
Answer: FALSE  
Diff: 2  
Topic: Externalities and Environmental Economics  
Skill: Definition
- 12) Marginal social cost is the difference between the marginal cost and the marginal damage cost.  
Answer: FALSE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Definition
- 13) Marginal damage costs are easily measured.  
Answer: FALSE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Fact
- 14) Taxes, tradeable pollution permits, and direct regulation of pollution are all market approaches to dealing with pollution.  
Answer: FALSE  
Diff: 2  
Topic: Externalities and Environmental Economics  
Skill: Definition
- 15) An injunction is a court order that forbids the continuation of behavior that leads to benefits.  
Answer: FALSE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Definition
- 16) When a firm imposes an external social cost, the government should impose a tax exactly equal to the marginal social cost to ensure that the efficient level of output will be produced.  
Answer: FALSE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Fact

## 16.2 Public (Social) Goods

### 1 Multiple Choice

- 1) Public goods are
- A) rival in consumption and their benefits are excludable.
  - B) nonrival in consumption and their benefits are excludable.
  - C) nonrival in consumption and their benefits are nonexcludable.
  - D) rival in consumption and their benefits are nonexcludable.

Answer: C  
Diff: 2  
Topic: Public (Social) Goods  
Skill: Definition

- 2) Public goods represent a market failure because
- A) they are provided by firms with market power.
  - B) positive externalities are created through their production.
  - C) by their very nature they are nonexcludable and nonrival which makes it difficult for the private sector to supply them profitably.
  - D) there is incomplete information regarding their quality.

Answer: C

Diff: 2

Topic: Public (Social) Goods

Skill: Definition

- 3) Private goods are
- A) rival in consumption and their benefits are excludable.
  - B) nonrival in consumption and their benefits are excludable.
  - C) nonrival in consumption and their benefits are nonexcludable.
  - D) rival in consumption and their benefits are nonexcludable.

Answer: A

Diff: 2

Topic: Public (Social) Goods

Skill: Definition

- 4) Which of the following contains most of the characteristics of a public good?
- A) Education
  - B) Trash collection
  - C) A public library
  - D) National defense

Answer: D

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

- 5) A radio signal broadcast through the air is \_\_\_\_\_ in consumption and listeners are \_\_\_\_\_.
- A) rival; excludable
  - B) nonrival; excludable
  - C) nonrival; nonexcludable
  - D) rival; nonexcludable

Answer: C

Diff: 2

Topic: Public (Social) Goods

Skill: Fact

- 6) A television signal sent by cable is \_\_\_\_\_ in consumption and viewers are \_\_\_\_\_.
- A) rival; excludable
  - B) nonrival; excludable
  - C) nonrival; nonexcludable
  - D) rival; nonexcludable

Answer: A

Diff: 2

Topic: Public (Social) Goods

Skill: Fact

- 7) If one person's enjoyment of the benefits of a good does not interfere with another's consumption of it, the good is
- A) excludable.
  - B) nonexcludable.
  - C) rival in consumption.
  - D) nonrival in consumption.

Answer: D

Diff: 1

Topic: Public (Social) Goods

Skill: Definition

- 8) If, at a low cost, you can not prevent a person from benefiting from the consumption of a good you produced, the good is
- A) excludable.
  - B) nonexcludable.
  - C) rival in consumption.
  - D) nonrival in consumption.

Answer: B

Diff: 1

Topic: Public (Social) Goods

Skill: Definition

- 9) Because people can enjoy the benefits of public goods whether they pay for them or not, they are usually unwilling to pay for them. This is known as the
- A) drop-in-the-bucket problem.
  - B) nonexcludable problem.
  - C) nonrival problem.
  - D) free-rider problem.

Answer: D

Diff: 2

Topic: Public (Social) Goods

Skill: Definition

- 10) The free-rider problem arises
- A) when people feel their contribution is so small relative to the total amount needed that it won't make a difference whether they contribute or not.
  - B) when people realize they will still receive the benefits of a good whether they pay for it or not.
  - C) whenever the government produces a good or service.
  - D) whenever there is a surplus of the product in the market.

Answer: B

Diff: 2

Topic: Public (Social) Goods

Skill: Definition

- 11) You will still be able to listen to NPR (National Public Radio) whether or not you contribute to their fund-raising campaign, so you decide not to contribute. This is an example of the
- A) private good problem.
  - B) free-rider problem.
  - C) rival in consumption problem.
  - D) drop-in-the-bucket problem.

Answer: B

Diff: 1

Topic: Public (Social) Goods

Skill: Fact



- 12) A national campaign is asking for contributions of \$1.00 per citizen to fund the building of the September 11th memorial in New York City. The total cost of the memorial is estimated to be \$260 million. You decide not to contribute, because your contribution would be small relative to the total that it won't make any difference whether you contribute or not. This is an example of the \_\_\_\_\_ problem.
- A) nonexcludable  
 B) nonrival in consumption  
 C) free-rider  
 D) drop-in-the-bucket

Answer: D

Diff: 3

Topic: Public (Social) Goods

Skill: Conceptual

- 13) For private goods, market demand is the \_\_\_\_\_ summation of individual demand curves and for public goods, market demand is the \_\_\_\_\_ summation of individual demand curves.
- A) horizontal; vertical  
 B) vertical; horizontal  
 C) horizontal; horizontal  
 D) vertical; vertical

Answer: A

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

Refer to the information given in Table 16.5 below to answer the question that follows.

Table 16.5

Units of Public Good	Person A's Willingness to Pay	Person B's willingness to Pay
1	\$50	\$60
2	30	50
3	0	30

- 14) Refer to Table 16.5. A point on the market demand curve for this public good would be: at a price of \_\_\_\_\_ quantity demanded would be \_\_\_\_\_.
- A) \$30; 5  
 B) \$50; 3  
 C) \$100; 1  
 D) \$110; 1

Answer: D

Diff: 2

Topic: Public (Social) Goods

Skill: Conceptual

AACSB: Analytic Skills

- 15) Assume there are two people in a society. Person A is willing to pay \$70 to have one unit of a public good produced and Person B is willing to pay \$80 to have one unit of a public good produced and \$70 to have two units produced. As a result, for \_\_\_\_\_ unit(s) of this public good society would be willing to pay a price of \_\_\_\_\_.
- A) 1; \$150  
 B) 3; \$100  
 C) 1; \$100  
 D) 5; \$80

Answer: A

Diff: 2

Topic: Public (Social) Goods

Skill: Conceptual

AACSB: Analytic Skills

- 16) The marginal cost of producing 25 units of a public good is \$100. There are two individuals in the society. Person A is willing to pay \$40 for 25 units of the public good. If 25 units of the public good are provided, then Person B must be willing to pay \_\_\_\_\_ .
- A) \$0                      B) \$40                      C) \$60                      D) \$75

Answer: C

Diff: 2

Topic: Public (Social) Goods

Skill: Analytic

AACSB: Analytic Skills

- 17) Education is a \_\_\_\_\_ good that creates a \_\_\_\_\_ externality.
- A) public; positive                      B) private; positive  
C) public; negative                      D) private; negative

Answer: B

Diff: 2

Topic: Public (Social) Goods

Skill: Fact

- 18) To find the optimal level of provision for a public good, the government must know \_\_\_\_\_.
- A) the marginal revenue of selling the good  
B) the supply curve of the government  
C) everyone's preferences  
D) the price elasticity of demand of each buyer

Answer: C

Diff: 3

Topic: Public (Social) Goods

Skill: Conceptual

- 19) Once a public good is produced, everyone
- A) can consume a different amount depending on their willingness to buy the good.  
B) consumes the same amount and everyone's willingness to pay is the same.  
C) consumes the same amount, but the willingness to pay will be different for different individuals.  
D) can consume a different amount and pay different prices for the product.

Answer: C

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

- 20) When it comes to public goods, it is important to remember
- A) that government intervention necessarily solves the market failure.  
B) only one level of output can be realized and consumers are willing to pay different amounts for that level.  
C) the free rider problem is difficult to overcome, but the drop-in-the-bucket problem is not.  
D) all goods provided by the government are public goods.

Answer: B

Diff: 2

Topic: Public (Social) Goods

Skill: Conceptual

Refer to the information provided in Figure 16.6 below to answer the questions that follow.

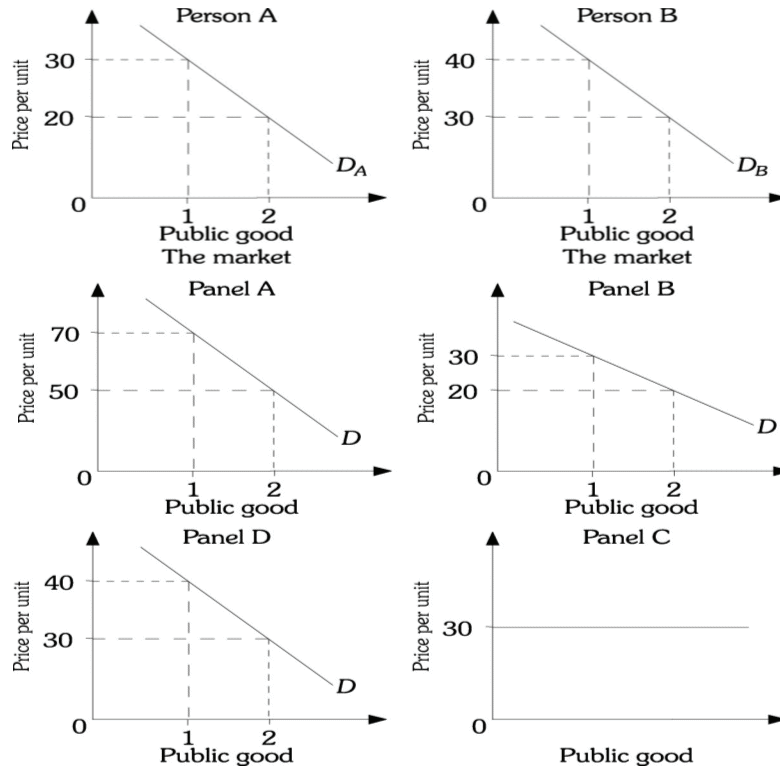


Figure 16.6

- 21) Refer to Figure 16.6. In the top portion of the figure are the demand curves of two people in this society for a public good. Which of the panels represents the market demand curve for the public good?

A) Panel A                      B) Panel B                      C) Panel C                      D) Panel D

Answer: A

Diff: 3

Topic: Public (Social) Goods

Skill: Conceptual

AACSB: Analytic Skills

- 22) The optimal level of provision of public goods is where society's total willingness to pay per unit is equal to the

A) total cost of producing the good.                      B) average cost of producing the good.  
 C) variable cost of producing the good.                      D) marginal cost of producing the good.

Answer: D

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

- 23) If the marginal cost of producing a public good is greater than society's total willingness to pay per unit, then
- A) the optimal amount of the public good is being produced.
  - B) less than the optimal amount of the public good is being produced.
  - C) more than the optimal amount of the public good is being produced.
  - D) the amount of output being produced could be either greater than or less than the optimal amount.

Answer: C

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

Refer to the information given in Table 16.6 below to answer the question that follows.

Number of Police Officers	Tim's Willingness to Pay	Al's willingness to Pay
1	\$100	\$60
2	80	20
3	50	0

- 24) Refer to Table 16.6. Assume that the marginal cost of hiring a police officer is \$100. If A and B are the only two people in the society, the optimal number of police officers is
- A) 1.
  - B) 2
  - C) 3.
  - D) indeterminate from this information.

Answer: B

Diff: 3

Topic: Public (Social) Goods

Skill: Conceptual

AACSB: Analytic Skills

- 25) Samuelson's theory of public expenditure demonstrates that
- A) government is inefficient and will always engage in too much spending.
  - B) an optimal (or most efficient) level of output exists for every public good.
  - C) an efficient mix of public goods is produced when local land/housing prices and taxes come to reflect consumer preferences.
  - D) through government regulation of private industry the optimal level of public good provision is achieved.

Answer: B

Diff: 2

Topic: Public (Social) Goods

Skill: Definition

26) According to \_\_\_\_\_, an efficient mix of public goods is produced when local land/housing prices and taxes reflect consumer preferences.

- A) Samuelson's theory  
B) the Tiebout hypothesis  
C) the Theory of Public Choice  
D) the Coase theorem

Answer: B

Diff: 2

Topic: Public (Social) Goods

Skill: Definition

## 2 True/False

1) Every good that the government provides is an example of a public good.

Answer: FALSE

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

2) At the optimal level of public goods provision, society's total willingness to pay per unit is equal to the marginal cost of producing the good.

Answer: TRUE

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

3) One of the most important characteristics of information is that it is essentially a private good.

Answer: FALSE

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

## 16.3 Social Choice

### 1 Multiple Choice

1) The idea that a voting scheme cannot be devised that respects individual preferences and gives consistent, nonarbitrary results is known as

- A) the impossibility theorem.  
B) the independence of irrelevant alternatives.  
C) logrolling.  
D) Samuelson's theory.

Answer: A

Diff: 2

Topic: Social Choice

Skill: Definition

2) Which of the following is an example of the impossibility theorem?

- A) voting paradox  
B) logrolling  
C) free rider problem  
D) social choice

Answer: A

Diff: 1

Topic: Social Choice

Skill: Definition

- 3) Social choice involves all of the following EXCEPT
- A) deciding what society wants.
  - B) aggregating over individual preferences.
  - C) understanding the incentives facing politicians and public servants.
  - D) consistently efficient decisions through the use of majority rule voting.

Answer: D

Diff: 1

Topic: Social Choice

Skill: Definition

- 4) You and two friends are going to the movies and are going to one of three movies: A, B, or C. You prefer movie A to movie B and movie B to movie C. One of your friends prefers movie B to movie C and movie C to movie A. Your other friend prefers movie C to movie A and movie A to movie B. The three of you decide to use majority rule voting to decide which movie you will see. If you first have a vote between movies A and B and then between the winner of that vote and movie C, then movie \_\_\_\_\_ will win. However, if you first vote between movies A and C and then between the winner of that vote and movie B, then movie \_\_\_\_\_ will win. This is an example of the \_\_\_\_\_.
- A) C; B; voting paradox
  - B) B; C; impossibility theorem
  - C) A; C; voting paradox
  - D) A; B; majority rule voting

Answer: A

Diff: 2

Topic: Social Choice

Skill: Conceptual

AACSB: Analytic Skills

- 5) Voting as a mechanism for public choice is associated with a number of problems including
- A) majority rule voting can lead to contradictory and inconsistent results.
  - B) logrolling.
  - C) disengaged voters with very little incentive to inform themselves of the issues.
  - D) All of the above.

Answer: D

Diff: 2

Topic: Social Choice

Skill: Conceptual

- 6) Logrolling occurs when
- A) congressional representatives trade votes.
  - B) voters are limited to voting on bundles of goods.
  - C) voters are uninformed about issues and thus simply vote with a given party.
  - D) lumberjacks roll logs downhill to their trucks.

Answer: A

Diff: 1

Topic: Social Choice

Skill: Definition

## 2 True/False

- 1) In the presence of market failure, government involvement will lead to efficient outcomes.

Answer: FALSE

Diff: 1

Topic: Social Choice

Skill: Conceptual

- 2) Logrolling is a questionable practice that always leads to decidedly inefficient results

Answer: FALSE

Diff: 1

Topic: Social Choice

Skill: Conceptual

- 3) The impossibility theorem, demonstrated by Paul Samuelson, shows that it is impossible to have public officials behave in a manner consistent with the best interests of society.

Answer: FALSE

Diff: 1

Topic: Social Choice

Skill: Definition

- 4) The voting paradox demonstrates that positional voting systems can lead to contradictory and inconsistent results.

Answer: FALSE

Diff: 1

Topic: Social Choice

Skill: Definition

- 5) The public choice field in economics views public officials as having a significant capacity to make inefficient choices and to produce bureaucratic waste.

Answer: TRUE

Diff: 1

Topic: Social Choice

Skill: Definition

- 6) Industries that lobby public officials for favorable treatment, softer regulation, and or antitrust exemption are engaged in rent-seeking.

Answer: TRUE

Diff: 1

Topic: Social Choice

Skill: Definition

## 16.4 Government and the Market

### 1 Multiple Choice

- 1) Markets fail to produce an efficient allocation of resources, but governments also fail because
- A) the managers of government agencies are trying to maximize the profit of their agency and they ignore the implications that this has on other departments.
  - B) the optimal level of public goods may be too expensive for the society to produce.
  - C) elected officials will act selflessly for the good of society and ignore their own self-interest.
  - D) the measurement of social damages and benefits is difficult and imprecise.

Answer: D

Diff: 1

Topic: Government and the Market

Skill: Fact

- 2) Relevant questions with respect to government include all of the following EXCEPT:
- A) How much government involvement?
  - B) What kind of government involvement?
  - C) Should there be government?
  - D) How can government efficiency be improved?

Answer: A, D

Diff: 2

Topic: Government and the Market

Skill: Conceptual

### 2 True/False

- 1) Governments will likely achieve the optimal level of public goods, but not the correct amount of control over externalities.

Answer: FALSE

Diff: 1

Topic: Government and the Market

Skill: Conceptual

- 2) In the presence of externalities and public goods, we get closer to the efficient allocation of resources through government intervention than by leaving everything to the market.

Answer: TRUE

Diff: 2

Topic: Government and the Market

Skill: Conceptual



# Chapter 17 Uncertainty and Asymmetric Information

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## 17.1 Decision Making Under Uncertainty: The Tools

### 1 Multiple Choice

- 1) Consider the following game. You roll a six-sided die and each time you roll a 6, you get \$30. For all other outcomes you pay \$6. The \$30 when you "win" and the -\$6 when you "lose" are called \_\_\_\_\_ .

A) payoffs  
B) tradeoffs  
C) incentives  
D) expected values

Answer: A

Diff: 1

Topic: Decision Making Under Uncertainty: The Tools

Skill: Definition

- 2) Consider the following game. You roll a six-sided die and each time you roll a 6, you get \$30. For all other outcomes you pay \$6. What is the expected value of the game?

A) -\$6  
B) \$0  
C) \$6  
D) \$30

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 3) Consider the following game. You roll a six-sided die and each time you roll a 6, you get \$30. For all other outcomes you pay \$6. Since the expected value of this game is \$0, the game is called a(n) \_\_\_\_\_ .

A) gamble  
B) fair bet  
C) even game  
D) zero sum game

Answer: B

Diff: 1

Topic: Decision Making Under Uncertainty: The Tools

Skill: Definition

- 4) Consider the following game. You pick a card from a deck and each time you select an ace, you get \$260. For all other cards you must pay \$13. What is the expected value of the game?

A) -\$12  
B) \$0  
C) \$8  
D) \$32

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 5) For most people, as their income increases, their utility from that income \_\_\_\_\_ at a(n) \_\_\_\_\_ rate.
- A) increases; increasing  
B) decreases; decreasing  
C) increases; decreasing  
D) decreases; increasing

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

- 6) The sum of the utilities from each possible outcome of a situation weighted by the probability of that outcome is known as \_\_\_\_\_ .
- A) expected utility  
B) total utility  
C) marginal utility  
D) expected value

Answer: A

Diff: 1

Topic: Decision Making Under Uncertainty: The Tools

Skill: Definition

Refer to the information provided in Figure 17.1 below to answer the questions that follow.

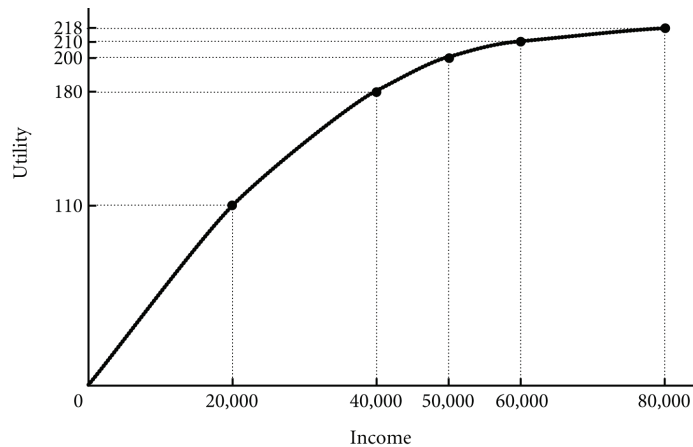


Figure 17.1

- 7) Refer to Figure 17.1. John has two job offers when he graduates from college. John views the offers as identical, except for the salary terms. The first offer is at a fixed annual salary of \$50,000. The second offer is at a fixed salary of \$20,000 plus a possible bonus of \$60,000. John believes that he has a 50–50 chance of earning the bonus. What is the expected value of John's income for each job offer?
- A) \$50,000 for the first offer and \$80,000 for the second offer  
B) \$50,000 for the first offer and \$50,000 for the second offer  
C) \$50,000 for the first offer and \$30,000 for the second offer  
D) \$25,000 for the first offer and \$50,000 for the second offer

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Figure 17.1. John has two job offers when he graduates from college. John views the offers as identical, except for the salary terms. The first offer is at a fixed annual salary of \$50,000. The second offer is at a fixed salary of \$20,000 plus a possible bonus of \$60,000. John believes that he has a 50–50 chance of earning the bonus. What is John's expected utility for each job offer?
- A) Expected utility of 200 for the first offer and expected utility of 218 for the second offer
  - B) Expected utility of 200 for the first offer and expected utility of 110 for the second offer
  - C) Expected utility of 200 for the first offer and expected utility of 164 for the second offer
  - D) Expected utility of 100 for the first offer and expected utility of 164 for the second offer

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 17.1. John has two job offers when he graduates from college. John views the offers as identical, except for the salary terms. The first offer is at a fixed annual salary of \$50,000. The second offer is at a fixed salary of \$20,000 plus a possible bonus of \$60,000. John believes that he has a 50–50 chance of earning the bonus. If John takes the offer that maximizes his expected utility and is risk averse, which job offer will he choose?
- A) John will take the first offer.
  - B) John will take the second offer.
  - C) John is indifferent between the offers -- both yield the same expected utility.
  - D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Figure 17.1. Suppose John's utility from income is given in the figure. From this we would say that John is \_\_\_\_\_ .
- A) risk neutral
  - B) risk averse
  - C) risk loving
  - D) a risk taker

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

- 11) Mark has two job offers when he graduates from college. Mark views the offers as identical, except for the salary terms. The first offer is at a fixed annual salary of \$40,000. The second offer is at a fixed salary of \$20,000 plus a possible bonus of \$40,000. Mark believes that he has a 50–50 chance of earning the bonus. If Mark takes the offer that maximizes his expected utility and is risk loving, which job offer will he choose?
- A) Mark will take the first offer.
  - B) Mark will take the second offer.
  - C) Mark is indifferent between the offers -- both yield the same expected utility.
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 12) Mark has two job offers when he graduates from college. Mark views the offers as identical, except for the salary terms. The first offer is at a fixed annual salary of \$50,000. The second offer is at a fixed salary of \$20,000 plus a possible bonus of \$60,000. Mark believes that he has a 50–50 chance of earning the bonus. If Mark takes the offer that maximizes his expected utility and is risk neutral, which job offer will he choose?
- A) Mark will take the first offer.
  - B) Mark will take the second offer.
  - C) Mark is indifferent between the offers -- both yield the same expected utility.
  - D) Indeterminate from the given information.

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 17.2 below to answer the questions that follow.

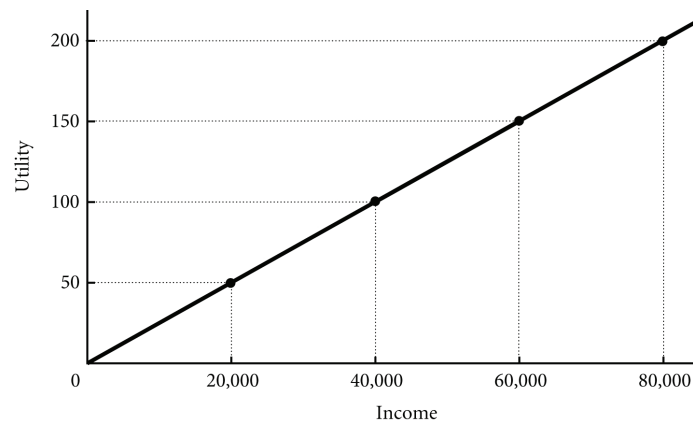


Figure 17.2

- 13) Refer to Figure 17.2. Suppose Sam's utility from income is given in the diagram. From this we would say that Sam is \_\_\_\_\_ .
- A) risk neutral
  - B) risk loving
  - C) risk averse
  - D) a risk taker

Answer: A

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

- 14) Refer to Figure 17.2. Sam has two job offers when he graduates from college. Sam views the offers as identical, except for the salary terms. The first offer is at a fixed annual salary of \$60,000. The second offer is at a fixed salary of \$30,000 plus a possible bonus of \$60,000. Sam believes that he has a 50–50 chance of earning the bonus. If Sam takes the offer that maximizes his expected utility and is risk neutral, which job offer will he choose?
- A) Sam will take the first offer.
  - B) Sam will take the second offer.
  - C) Sam is indifferent between the offers -- both yield the same expected utility.
  - D) Indeterminate from the given information.

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

Refer to the data provided in Table 17.1 below to answer the following questions. The table shows the relationship between income and utility for Jane.

Table 17.1

Income	Total Utility
\$0	0
\$20,000	25
\$40,000	45
\$60,000	60
\$80,000	70

- 15) Refer to Table 17.1. From the table, we can see that Jane is \_\_\_\_\_ .
- A) risk averse
  - B) risk loving
  - C) risk neutral
  - D) We cannot determine Jane's attitude toward risk from the table.

Answer: A

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 16) Refer to Table 17.1. Suppose Jane has a 1/3 chance of becoming disabled in any given year. If she does become disabled, she will earn \$0. If Jane does not become disabled, she will earn her usual salary of \$60,000. Jane has the opportunity to purchase disability insurance which will pay her her full salary in the event she becomes disabled. On average, how much would such a contract cost the insurance company (per person)?
- A) \$20,000
  - B) \$30,000
  - C) \$40,000
  - D) \$60,000

Answer: A

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 17) Refer to Table 17.1. Suppose Jane has a  $\frac{1}{3}$  chance of becoming disabled in any given year. If she does become disabled, she will earn \$0. If Jane does not become disabled, she will earn her usual salary of \$60,000. Jane has the opportunity to purchase disability insurance for \$20,000 which will pay her her full salary in the event she becomes disabled. Jane's utility per year with the policy is \_\_\_\_\_ and her expected utility without the policy is \_\_\_\_\_ .
- A) 45; 40                      B) 45; 45                      C) 60; 40                      D) 20; 45

Answer: A

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Table 17.1. Suppose Jane has a  $\frac{1}{3}$  chance of becoming disabled in any given year. If she does become disabled, she will earn \$0. If Jane does not become disabled, she will earn her usual salary of \$60,000. Jane has the opportunity to purchase disability insurance which will pay her her full salary in the event she becomes disabled. How much would such an insurance policy be worth to Jane?

- A) \$0    B) \$20,000 or less  
 C) more than \$20,000 but less than \$40,000                      D) \$40,000 or more

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

*Refer to the data provided in Table 17.2 below to answer the following questions. The table shows the relationship between income and utility for Sue.*

**Table 17.2**

Income	Total Utility
\$0	0
\$20,000	20
\$40,000	40
\$60,000	60
\$80,000	80

- 19) Refer to Table 17.2. From the table, we can see that Sue is \_\_\_\_\_ .
- A) risk averse  
 B) risk loving  
 C) risk neutral  
 D) We cannot determine Jane's attitude toward risk from the table.

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 20) Refer to Table 17.2. Sue earns \$40,000 annually. She has the opportunity to bet her entire salary on the upcoming super bowl. If Sue takes the bet, she will pick the Patriots. She believes that the Patriots have a 50–50 chance of winning the game. If the Patriots win, Sue will double her money (\$80,000) but if they lose she loses her entire salary (\$0). This bet can be characterized as \_\_\_\_\_ .
- A) risk neutral                      B) an unfair bet                      C) a fair bet                      D) risk loving

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 21) Refer to Table 17.2. Sue earns \$40,000 annually. She has the opportunity to bet her entire salary on the upcoming super bowl. If Sue takes the bet, she will pick the Patriots. She believes that the Patriots have a 50–50 chance of winning the game. If the Patriots win, Sue will double her money (\$80,000) but if they lose she loses her entire salary (\$0). Sue's utility if she does not take the bet is \_\_\_\_\_ and her expected utility from the bet is \_\_\_\_\_ .
- A) 40; 80                      B) 40; 40                      C) 40; 0                      D) 80; 20

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 22) Refer to Table 17.2. Sue earns \$40,000 annually. She has the opportunity to bet her entire salary on the upcoming super bowl. If Sue takes the bet, she will pick the Patriots. She believes that the Patriots have a 50–50 chance of winning the game. If the Patriots win, Sue will double her money (\$81,000) but if they lose she loses her entire salary (\$0). Will Sue take the bet?
- A) Yes  
B) No  
C) Maybe  
D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

Refer to the data provided in Table 17.3 below to answer the following questions. The table shows the relationship between income and utility for Terri.

Table 17.3

Income	Total Utility
\$0	0
\$20,000	10
\$40,000	25
\$60,000	45
\$80,000	75

- 23) Refer to Table 17.3. From the table, we can see that Terri is \_\_\_\_\_ .
- A) risk averse
  - B) risk loving
  - C) risk neutral
  - D) We cannot determine Jane's attitude toward risk from the table.

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 24) Refer to Table 17.3. Suppose Terri has a 25% chance of becoming disabled in any given year. If she does become disabled, she will earn \$0. If Terri does not become disabled, she will earn her usual salary of \$80,000. Terri has the opportunity to purchase disability insurance for \$20,000 which will pay her her full salary in the event she becomes disabled. Terri's utility with the policy is \_\_\_\_\_ and her expected utility without the policy is \_\_\_\_\_ .
- A) 56.25; 45
  - B) 45; 56.25
  - C) 45; 18.75
  - D) 18.75; 37.5

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 25) Refer to Table 17.3. Suppose Terri has a 25% chance of becoming disabled in any given year. If she does become disabled, she will earn \$0. If Terri does not become disabled, she will earn her usual salary of \$80,000. Terri has the opportunity to purchase disability insurance which will pay her her full salary in the event she becomes disabled. How much would such an insurance policy be worth to Terri?
- A) \$0
  - B) less than \$20,000 but more than \$0
  - C) \$20,000 or more
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills



- 26) Refer to Table 17.3. Suppose Terri has a 25% chance of becoming disabled in any given year. If she does become disabled, she will earn \$0. If Terri does not become disabled, she will earn her usual salary of \$80,000. Terri has the opportunity to purchase disability insurance for \$20,000 which will pay her her full salary in the event she becomes disabled. Would Terri purchase such a policy?
- A) Yes
  - B) No
  - C) Maybe
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 27) The maximum price a risk-averse person will pay to avoid taking a risk is known as the \_\_\_\_\_.

A) risk premium

B) risk aversion fee

C) payoff

D) expected value

Answer: A

Diff: 1

Topic: Decision Making Under Uncertainty: The Tools

Skill: Definition

## 2 True/False

- 1) Consider the following game. You pick a card from a deck and each time you select an ace, you get \$260. For all other cards you must pay \$13. This game is a fair bet.

Answer: FALSE

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 2) Expected value and expected utility are synonyms.

Answer: FALSE

Diff: 1

Topic: Decision Making Under Uncertainty: The Tools

Skill: Definition

- 3) If a game is a fair bet, then people will be willing to play the game regardless of the payoffs.

Answer: FALSE

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

- 4) For a risk averse individual, marginal utility of income does not diminish.

Answer: FALSE

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

5) A diagram of an individual's utility from income will be a line with a constant slope if the individual is risk neutral.

Answer: TRUE

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

6) A diagram of an individual's utility from income will be a line with an increasing slope if the individual is risk averse.

Answer: FALSE

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

7) In general, risk averse individuals experience diminishing marginal utility from income.

Answer: TRUE

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

## 17.2 Asymmetric Information

### 1 Multiple Choice

1) All of the following statements about asymmetric information are true EXCEPT:

- A) Asymmetric information occurs when one party to a transaction has relevant information to the transaction that the other party does not have.
- B) Asymmetric information creates market failures because it makes it harder for individuals to engage in transactions that would take place in the presence of perfect information.
- C) Asymmetric information can only be solved through government intervention.
- D) Asymmetric information occurs in the market for used cars and in the insurance market.

Answer: C

Diff: 2

Topic: Asymmetric Information

Skill: Conceptual

2) Adverse selection and moral hazard are examples of

- A) asymmetric information .
- B) selection problems.
- C) risk aversion.
- D) mechanism designs for dealing with informational problems.

Answer: A

Diff: 1

Topic: Asymmetric Information

Skill: Definition

3) You are in the market for a used 2006 Honda Accord. You know that half of the 2006 Accords are lemons and half are peaches. If you could be assured that the Accord you were buying were a peach, you would be willing to pay up to \$10,000. On the other hand, you would only be willing to pay \$2,000 for a lemon. You have no ability to discern whether any particular Accord is a lemon or a peach. Sellers of Accords, on the other hand, are likely to know whether their particular car is a lemon or a peach. Suppose sellers of lemons will sell their cars for \$1,500 or more and peach sellers will be willing to sell their cars for \$8,500 or more. You are willing to offer \_\_\_\_\_ for a car of unknown quality and \_\_\_\_\_ are willing to sell you their car.

- A) \$2,000; lemon owners only
- B) \$5,000; lemon owners only
- C) \$6,000; lemon owners only
- D) \$8,500; both lemon and peach owners

Answer: C

Diff: 2

Topic: *Asymmetric Information*

Skill: *Analytic*

AACSB: *Analytic Skills*

4) You are in the market for a used 2006 Honda Accord. You know that half of the 2006 Accords are lemons and half are peaches. If you could be assured that the Accord you were buying were a peach, you would be willing to pay up to \$10,000. On the other hand, you would only be willing to pay \$2,000 for a lemon. You have no ability to discern whether any particular Accord is a lemon or a peach. Sellers of Accords, on the other hand, are likely to know whether their particular car is a lemon or a peach. Suppose sellers of lemons will sell their cars for \$1,500 or more and peach sellers will be willing to sell their cars for \$8,500 or more. Over time the price in the market for 2006 Accords will \_\_\_\_\_ and \_\_\_\_\_ will be traded.

- A) be between \$8,500 and \$10,000 for peaches and between \$1,500 and \$2,000 for lemons; both lemons and peaches
- B) be between \$8,500 and \$10,000 ; only peaches
- C) be between \$1,500 and \$2,000 for lemons; only lemons
- D) be between \$1,500 and \$10,000; both lemons and peaches

Answer: C

Diff: 2

Topic: *Asymmetric Information*

Skill: *Analytic*

AACSB: *Analytic Skills*

5) As a result of adverse selection problems in the health insurance market, it is likely that over time

- A) fewer healthy people will be insured.
- B) fewer unhealthy people will be insured.
- C) fewer healthy and unhealthy people will be insured.
- D) more healthy people will be insured.

Answer: A

Diff: 2

Topic: *Asymmetric Information*

Skill: *Conceptual*

- 6) Universal health coverage, lemon laws, and dealer warranties are all examples of tools used to reduce \_\_\_\_\_ .
- A) moral hazard
  - B) risk premiums
  - C) market efficiency
  - D) adverse selection

Answer: D

Diff: 1

Topic: Asymmetric Information

Skill: Conceptual

- 7) If a buyer or seller enters into an exchange with another party who has more information, there is
- A) symmetric information and moral hazard.
  - B) asymmetric information and adverse selection.
  - C) a negative externality imposed.
  - D) a free-rider problem.

Answer: B

Diff: 1

Topic: Asymmetric Information

Skill: Definition

- 8) In the market for used motorcycles there are high-quality motorcycles and low-quality motorcycles. Potential buyers cannot determine prior to purchase whether the motorcycle is high quality or low quality. Which of the following statements best describes what is likely to happen in this market?
- A) The price of a used motorcycle will be very close to the value of a high-quality motorcycle, which will encourage people to sell high-quality motorcycles.
  - B) The price of a used motorcycle will be between the value of a high-quality and low-quality motorcycle. This will encourage people to withdraw high-quality motorcycles from the market.
  - C) This is an example of adverse selection, as the buyer will have more information about the quality of the used motorcycle than the seller will.
  - D) Over time the price of a used motorcycle will increase in this market, as there is more of an incentive for owners of high-quality motorcycles to sell than owners of low-quality motorcycles.

Answer: B

Diff: 3

Topic: Asymmetric Information

Skill: Conceptual

- 9) Life insurance companies require that prospective policy holders have a medical check-up before the companies will sell the policy because of a(n) \_\_\_\_\_ problem in which the insured could be \_\_\_\_\_ than expected.
- A) moral hazard; healthy and live longer
  - B) moral hazard; unhealthy and die sooner
  - C) adverse selection; healthy and live longer
  - D) adverse selection; unhealthy and die sooner

Answer: D

Diff: 3

Topic: Asymmetric Information

Skill: Conceptual

10) You cause an automobile liability insurance company to face a moral hazard problem when you take \_\_\_\_\_ driving precautions \_\_\_\_\_ you buy automobile liability insurance from the company.

- A) fewer; after
- B) more; after
- C) fewer; before
- D) the same; before and after

Answer: A

Diff: 2

Topic: Asymmetric Information

Skill: Fact

11) A lender faces a(n) \_\_\_\_\_ problem if borrowers with a greater chance of defaulting on their loans get loans from the lender.

- A) adverse selection
- B) moral hazard
- C) external cost
- D) free-rider

Answer: A

Diff: 1

Topic: Asymmetric Information

Skill: Definition

12) A lender faces a(n) \_\_\_\_\_ problem when the lender lends funds to a borrower for a specific purpose and the borrower then opportunistically uses the funds for another purpose.

- A) adverse selection
- B) moral hazard
- C) external cost
- D) free-rider

Answer: B

Diff: 1

Topic: Asymmetric Information

Skill: Definition

13) In the area of market signaling, education is a strong signal in the job market because

- A) it tells employers that you have gained skills that will be useful in the work place.
- B) education is not costly to obtain.
- C) education is less costly to obtain for highly productive individuals who are also likely to be highly productive in the work place.
- D) firms can easily verify your level of education.

Answer: C

Diff: 1

Topic: Asymmetric Information

Skill: Conceptual

14) Market signals are

- A) actions taken by buyers and sellers to communicate quality in the presence of perfect information.
- B) only strong if obtaining the signal is more costly for individuals with valued traits than for those with non-valued traits.
- C) used to differentiate those who will drive equally carefully whether or not they have auto insurance from those who drive less carefully when they have insurance.
- D) used to distinguish between high and low quality and help correct the adverse selection problem.

Answer: D

Diff: 1

Topic: Asymmetric Information

Skill: Definition

15) Warranties, education, extracurricular activities are all examples of

- A) market signals.
- B) risk premiums.
- C) tools that can correct the moral hazard problem.
- D) incentives.

Answer: A

Diff: 1

Topic: *Asymmetric Information*

Skill: *Conceptual*

16) You own a car dealership and pay all of your sales people a flat salary. As a result, they don't work very hard to generate sales. This is an example of \_\_\_\_\_ .

- A) adverse selection
- B) moral hazard
- C) logrolling
- D) an externality

Answer: B

Diff: 1

Topic: *Asymmetric Information*

Skill: *Conceptual*

17) Relating to the *Economics in Practice* on page 352: The purpose of lemon laws is to deal with the problem of

- A) moral hazard in the used car market.
- B) adverse selection in the grocery market.
- C) adverse selection in the used car market.
- D) risk aversion in the automobile market.

Answer: C

Diff: 2

Topic: *Asymmetric Information: Economics in Practice*

Skill: *Fact*

18) Relating to the *Economics in Practice* on page 352: Which of the following is a new business opportunity made possible by automobile "lemon laws?"

- A) auto repair for vehicles that frequently require service
- B) search services that help consumers avoid buying cars previously identified as "lemons."
- C) leasing arrangements that allow the customer to drive a new car every few years
- D) used car evaluations conducted by mechanics that help consumers avoid buying cars that would later qualify as "lemons."

Answer: B

Diff: 2

Topic: *Asymmetric Information: Economics in Practice*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 19) Relating to the *Economics in Practice* on page 354: Which of the following is an example of an advertisement in which the fact that something is NOT mentioned indicates that the product is unlikely to be desirable?
- A) an advertisement for hot dogs that mentions that it meets certain religious dietary requirements but fails to explain those requirements in a way that would be understood by most people
  - B) an advertisement for a sneaker that mentioned the endorsement of one sports star but fails to mention the sports stars that have endorsed competing products
  - C) an advertisement for a 30-year old lawn tractor that mentions the color of its paint and the number of cup holders it has but makes no mention of the condition of its engine
  - D) an advertisement for ice cream that describes the variety of flavors available and the way it tastes but makes no mention of the ice cream's nutritional content

Answer: C

Diff: 3

Topic: *Asymmetric Information: Economics in Practice*

Skill: *Conceptual*

AACSB: *Analytic Skills*

## 2 True/False

- 1) Adverse selection is a situation in which asymmetric information results in low-quality goods or low-quality consumers being squeezed out of transactions because they are unable to demonstrate their quality.

Answer: FALSE

Diff: 1

Topic: *Asymmetric Information*

Skill: *Definition*

- 2) Moral hazard occurs when one party to a contract changes their behavior in response to that contract and thus passes on costs of that behavior to the other party.

Answer: TRUE

Diff: 1

Topic: *Asymmetric Information*

Skill: *Definition*

- 3) Adverse selection and moral hazard are problems that arise in the presence of asymmetric information.

Answer: TRUE

Diff: 1

Topic: *Asymmetric Information*

Skill: *Definition*

- 4) The insurance industry is susceptible to adverse selection problems, but not problems of moral hazard.

Answer: FALSE

Diff: 1

Topic: *Asymmetric Information*

Skill: *Conceptual*

5) Jim used to be very careful with his car. However, once he bought full auto insurance on it, he stopped turning on his alarm or even locking it when parking it. This is an example of adverse selection.

Answer: FALSE

Diff: 1

Topic: Asymmetric Information

Skill: Conceptual

6) Annie, a high school student, baby sits to earn extra cash. In order to differentiate herself from other baby sitters, Annie took a baby sitting course from the Red Cross. This is an example of a market signal.

Answer: TRUE

Diff: 1

Topic: Asymmetric Information

Skill: Conceptual

7) Refer to the Economics in Practice on page 354. Advertisements provide information in two ways -- what they say and what they omit.

Answer: TRUE

Diff: 2

Topic: Asymmetric Information: Economics in Practice

Skill: Conceptual

## 17.3 Incentives

### 1 Multiple Choice

1) Mechanism design is used to

- A) align the interests of two parties in a transaction.
- B) give individuals the incentive to reveal the truth about themselves.
- C) correct inefficiencies associated with asymmetric information.
- D) All of the above are correct.

Answer: D

Diff: 2

Topic: Incentives

Skill: Conceptual

2) Which of the following is an example of mechanism design?

- A) An employer pays all sales people a fixed salary.
- B) Welfare reform that limits the amount of time a person can collect benefits.
- C) Health insurance with zero co-pays.
- D) Reduced prices on bulk purchases.

Answer: B

Diff: 1

Topic: Incentives

Skill: Conceptual



- 3) In the labor market, contracts are often designed to include a variable salary component that is tied to some measure of performance. Why?
- A) Such contracts provide workers with the incentive to work hard.
  - B) Most people are risk-loving and thus variability in their compensation leads to higher total utility.
  - C) Labor unions demand a variable salary component.
  - D) The variable component reduces wages paid by firms.

Answer: A

Diff: 1

Topic: Incentives

Skill: Conceptual

- 4) All of the following statements are true EXCEPT:
- A) Since individuals tend to be risk averse, they generally wish to purchase health insurance if they can afford it.
  - B) Insurance programs have co-pays and deductibles in order to reduce the adverse selection problem associated with the health insurance industry.
  - C) Health insurance blunts the rationing function of price with respect to health care.
  - D) Private employers pay premiums on behalf of their employees that are based upon the medical claims of their employees. Thus, employers have an incentive to provide employees with programs that will improve their health (and reduce medical claims).

Answer: B

Diff: 2

Topic: Incentives

Skill: Conceptual

## 2 True/False

- 1) Labor market compensation contracts can be designed to screen out poor quality workers as well as provide employees with incentives to work hard.

Answer: TRUE

Diff: 1

Topic: Incentives

Skill: Conceptual

- 2) Performance compensation that is tied to outcomes out of the employee's control will provide employees with the incentive to work hard.

Answer: FALSE

Diff: 1

Topic: Incentives

Skill: Conceptual

- 3) Co-pays and deductibles reduce the moral hazard problem associated with the health insurance industry.

Answer: TRUE

Diff: 1

Topic: Incentives

Skill: Conceptual

- 4) Since insured individuals do not pay the full price for medical services that they consume, they tend to under consume medical services.

Answer: FALSE

*Diff: 1*

*Topic: Incentives*

*Skill: Conceptual*

- 5) Mechanism design can be used to provide employers and employees with the right incentives in labor and health care markets.

Answer: TRUE

*Diff: 1*

*Topic: Incentives*

*Skill: Conceptual*

# Chapter 18 Income Distribution and Poverty

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## 18.1 The Utility Possibilities Frontier

### 1 Multiple Choice

- 1) An equitable distribution of income means that \_\_\_\_\_ .
- A) income is equally distributed
  - B) income is fairly distributed
  - C) income is efficiently distributed
  - D) there is a long-run equilibrium distribution

Answer: B

Diff: 2

Topic: The Utility Possibilities Frontier

Skill: Definition

- 2) The utility possibilities frontier is a graphic representation of a two-person world that shows all points at which A's utility can be \_\_\_\_\_ .
- A) increased only if B's utility is increased
  - B) decreased only if B's utility is decreased
  - C) increased only if B's utility is decreased
  - D) held constant as B's utility is either increased or decreased

Answer: C

Diff: 2

Topic: The Utility Possibilities Frontier

Skill: Definition

- 3) Any point on the utility possibilities frontier is \_\_\_\_\_ .
- A) inefficient because both people could be made better off simultaneously
  - B) inefficient because it is only possible to make one person better off by making the other person worse off
  - C) efficient because it is only possible to make one person better off by making the other person worse off
  - D) efficient because both people could be made better off simultaneously

Answer: C

Diff: 1

Topic: The Utility Possibilities Frontier

Skill: Fact

- 4) Any point inside the utility possibilities frontier is \_\_\_\_\_ .
- A) inefficient because both people could be made better off simultaneously
  - B) inefficient because it is only possible to make one person better off by making the other person worse off
  - C) efficient because it is only possible to make one person better off by making the other person worse off
  - D) efficient because both people could be made better off simultaneously

Answer: A

Diff: 1

Topic: The Utility Possibilities Frontier

Skill: Fact

Refer to the information provided in Figure 18.1 below to answer the questions that follow.

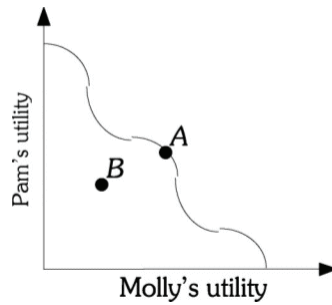


Figure 18.1

- 5) Refer to Figure 18.1. At Point A the distribution of goods is  
 A) equitable.                      B) efficient.                      C) equal.                      D) just.

Answer: B

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 6) Refer to Figure 18.1. Point B is  
 A) inefficient because both people could be made better off simultaneously.  
 B) inefficient because it is only possible to make one person better off by making someone else worse off.  
 C) efficient because both people could be made better off simultaneously.  
 D) efficient because to make one person better off the other person must be made worse off.

Answer: A

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 7) Refer to Figure 18.1. In order to reach point A or any other point on the utility possibilities frontier, \_\_\_\_\_ .  
 A) all the assumptions of perfectly competitive market theory must hold  
 B) the government must redistribute income between Molly and Pam  
 C) the initial endowments of wealth, skills, etc. between Molly and Pam must be equitable  
 D) the distributions of income and wealth must be equitable

Answer: A

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 8) All points along the utility possibilities frontier are \_\_\_\_\_ equally desirable.  
 A) inefficient but                      B) inefficient but may not be  
 C) efficient and                      D) efficient but may not be

Answer: D

Diff: 1

Topic: The Utility Possibilities Frontier

Skill: Fact

- 9) If it is possible to make person A better off without making person B worse off, then the distribution of goods must be \_\_\_\_\_ .  
 A) efficient                      B) inefficient                      C) equitable                      D) inequitable

Answer: B

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 10) If it is possible to make person A better off only by making person B worse off, then the distribution of goods must be \_\_\_\_\_ .  
 A) efficient                      B) inefficient                      C) equitable                      D) inequitable

Answer: A

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 11) A distribution of goods between person A and person B is efficient if \_\_\_\_\_ .  
 A) it is possible to make both person A and person B better off  
 B) person A can be made better off only if person B is also made better off  
 C) person A can be made better off only if person B is made worse off  
 D) any change in the distribution would make both person A and person B worse off

Answer: C

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

Refer to the information provided in Figure 18.2 below to answer the questions that follow.

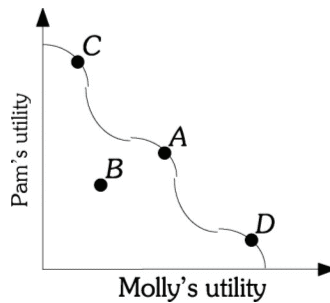


Figure 18.2

- 12) Refer to Figure 18.2. Which point represents an INEFFICIENT outcome?  
 A) A                      B) B                      C) C                      D) D

Answer: B

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

13) Refer to Figure 18.2. Efficiency is achieved

A) only at Point B.

C) at Points A, C, and D.

B) only at Point D.

D) all Points A, B, C, and D.

Answer: C

Diff: 3

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

14) Refer to Figure 18.2. Based on this diagram, which of the following statements is TRUE?

A) To both Pam and Molly, Point B is clearly preferable to Point C.

B) Point D is the best point that this society can obtain.

C) Both Pam and Molly are better off at Point C than at Point B.

D) From this information, it is impossible to determine if society is better off at Point A or Point C.

Answer: D

Diff: 3

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

15) Refer to Figure 18.2. Ultimately, Molly and Pam will be at point \_\_\_\_\_ .

A) A

B) C

C) D

D) The actual point reached will depend upon Molly and Pam's initial endowments of wealth, skills, etc. and it is impossible to determine which point will be achieved from the given information.

Answer: D

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

Refer to the information provided in Figure 18.3 below to answer the questions that follow.

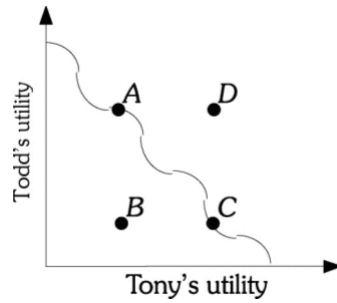


Figure 18.3

- 16) Refer to Figure 18.3. If society is at Point A, the distribution is
- A) inefficient, because Todd's utility is zero.
  - B) inefficient, because both Todd and Tony can be made better off.
  - C) efficient because it is impossible to make Todd better off without making Tony worse off.
  - D) efficient because the distribution of income is equitable.

Answer: C

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 17) The best measurement of individual well-being is
- A) wealth.
  - B) income.
  - C) occupation.
  - D) utility.

Answer: D

Diff: 2

Topic: The Utility Possibilities Frontier

Skill: Definition

- 18) Individuals usually behave to as to maximize their
- A) wealth.
  - B) income.
  - C) utility.
  - D) opportunities.

Answer: C

Diff: 1

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 19) In practice, the market outcome is usually
- A) equitable but inefficient.
  - B) efficient and equitable.
  - C) inefficient and inequitable.
  - D) unfair but efficient.

Answer: C

Diff: 2

Topic: The Utility Possibilities Frontier

Skill: Fact

- 20) Income or wealth are often used to measure individual well-being because
- A) they are assumed to be related to utility and are easily measured while the best measurement, utility, is not.
  - B) they are the best measures of well-being since the more you have of either of them the better-off you are.
  - C) as income and wealth increase, individuals are able to consume more and thus must be better-off.
  - D) both can be redistributed to improve equity.

Answer: A

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

## 2 True/False

- 1) If the assumptions of competitive market theory hold, the market system would lead to one and only one point on the utility possibilities frontier.

Answer: FALSE

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Definition*

- 2) If the assumptions of competitive market theory hold, the market system would lead to an efficient outcome.

Answer: TRUE

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

- 3) If income is equally distributed to the members of society, then there is an equitable distribution.

Answer: FALSE

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Definition*

- 4) Well-being is best measured by income or wealth.

Answer: FALSE

Diff: 1

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

- 5) All points along a utility possibilities frontier are efficient and equally desirable.

Answer: FALSE

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*



## 18.2 The Sources of Household Income

### 1 Multiple Choice

- 1) Both Amy and Tom are trained as nurses. Amy makes \$35,000 a year working as a nurse in an emergency room in a New York City hospital. Tom makes \$20,000 working as a community health nurse in New York City. Which of the following is TRUE?
- A) Tom is clearly worse off than Amy, because he earns \$15,000 a year less.
  - B) Tom must be better off than Amy if he is willing to take a job at \$15,000 a year less than Amy.
  - C) From this information it cannot be determined who is better off because income is an imperfect measure of well-being.
  - D) Even though income is an imperfect measure of well-being, Amy and Tom must be equally well off because either is free to switch jobs.

Answer: C

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 2) Wages and salaries (including wage supplements) accounted for \_\_\_\_\_ of personal income in the United States in 2007.
- A) 37%
  - B) 50%
  - C) 64%
  - D) 90%

Answer: C

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 3) Households derive the majority of their income from \_\_\_\_\_ .
- A) wages and salaries
  - B) property
  - C) inherited wealth
  - D) government transfers

Answer: A

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 4) Paula was born with an aptitude for learning languages. This aptitude is an example of \_\_\_\_\_ .
- A) a compensating differential
  - B) human capital
  - C) property
  - D) natural capital

Answer: B

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 5) Earning a master's degree in Engineering is an example of \_\_\_\_\_ .
- A) a Pareto good
  - B) a compensating differential
  - C) economic income
  - D) an investment in human capital

Answer: D

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 6) On-the-job-training is an example of \_\_\_\_\_ .
- A) an investment in human capital
  - B) a compensating wage differential
  - C) economic income
  - D) income redistribution

Answer: A

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 7) Households acquire property through \_\_\_\_\_ .
- A) inheritance only
  - B) savings and inheritance
  - C) savings only
  - D) supplying labor in the labor market

Answer: B

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 8) Property income takes the form of \_\_\_\_\_ .
- A) transfer payments
  - B) wages and salaries
  - C) profits, interest, dividends, and rents
  - D) compensating differentials

Answer: C

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Definition*

- 9) Professional female basketball players make far less income than do professional male basketball players. Why?
- A) Gender discrimination
  - B) The supply of female players is far greater than the supply of male players.
  - C) The demand for female players is far less than the demand for male players.
  - D) Compensating differentials

Answer: C

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Conceptual*

- 10) Upon graduation, Ellie had two job offers. The jobs were identical in every way with two exceptions. One job was located in San Diego, CA and offered an annual salary of \$50,000. The other job was located in Omaha, NE and offered an annual salary of \$60,000. The salary difference is due to
- A) compensating differentials.
  - B) discrimination.
  - C) transfer payments.
  - D) the firm in California had a higher demand for workers than the firm in Nebraska.

Answer: A

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Conceptual*

11) All of the following statements are true EXCEPT:

- A) In the United States, the minimum wage was first nationally adopted in 1932.
- B) The first minimum wage law was adopted in New Zealand.
- C) The minimum wage is one strategy used to reduce wage inequality.
- D) The minimum wage is the lowest wage firms can legally pay their workers.

Answer: A

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Conceptual*

12) By the summer of 2009, the United States federal minimum wage will be raised to \$7.25.

According to theory, what will likely be the result of the increase?

- A) Some workers will leave the labor market.
- B) Firms will hire more workers.
- C) All workers prior to the wage increase will now earn at least \$7.25 per hour.
- D) Unemployment will increase as firms lay off workers.

Answer: D

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Conceptual*

13) Individuals with more experience tend to earn more than individuals with less experience.

This is because

- A) experience is a compensating differential.
- B) experience on the job increases an individual's human capital.
- C) it is only fair that a more-experienced worker be paid more than a less-experienced worker.
- D) the government requires that more-experienced workers be paid more than less-experienced workers.

Answer: B

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

14) All Pittsburgh police officers must go through the same training program, but police officers assigned to the narcotics squad earn 10% more than police officers assigned to guard the city courthouse. This 10% difference in pay is an example of a

- A) human capital differential.
- B) compensating differential.
- C) transfer payment.
- D) utility differential.

Answer: B

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 15) Which of the following is an example of a compensating differential?
- A) A plastic surgeon must train for five more years than an internist and on average plastic surgeons earn 40% more per year than internists.
  - B) A bank hires both men and women who have just graduated from college. The women are assigned positions as bank tellers, and the men are assigned to the management training program.
  - C) It takes the same amount and type of training to be either a prison guard or a parole officer. Prison guards earn about 15% more than parole officers with the same amount of experience. About 3% of prison guards, but only 1% of parole officers, are injured on the job each year.
  - D) Bill was injured on the job and as a result of his injuries he can no longer work. He now qualifies for \$1,000 a month in disability payments.

Answer: C

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 16) The demand for Alaskan fishermen is the same as the demand for deep-sea divers in Hawaii. The annual earnings of Alaskan fishermen is 30% higher than the earnings of Hawaiian deep-sea divers. What is a possible explanation for this?
- A) Alaskan fishermen can work only part of the year, but deep-sea divers can work year round in Hawaii.
  - B) The amount of human capital needed to be a deep-sea diver must be greater than the amount of human capital necessary to be a fisherman in Alaska.
  - C) Alaskan fishermen must face discrimination that is not encountered by Hawaiian deep-sea divers.
  - D) Being a fisherman in Alaska must be more dangerous than being a deep-sea diver in Hawaii.

Answer: D

Diff: 3

Topic: *The Sources of Household Income*

Skill: *Conceptual*

- 17) The idea that individuals who work for companies should receive at least an equitable hourly income is known as
- A) minimum wage.
  - B) compensating differential.
  - C) economic income.
  - D) transfer payment.

Answer: A

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 18) Critics of minimum wage laws argue that such laws will end up hurting people with lower skills because
- A) lower skilled workers will be forced into taking jobs that they would not freely choose.
  - B) compensating differentials will not be applied.
  - C) property income is a better way to measure hourly rates.
  - D) these laws interfere with the smooth functioning of the labor market and create unemployment.

Answer: D

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 19) The \$1,000 you earned last year on your money market fund is an example of
- A) property income.
  - B) transfer income.
  - C) inheritance income.
  - D) human capital income.

Answer: A

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 20) In the United States most people's wealth comes from
- A) inheritance.
  - B) transfer payments.
  - C) saving.
  - D) profits.

Answer: C

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 21) In 2007 about 14% of personal income in the United States came from
- A) wages and salaries.
  - B) property income.
  - C) transfer payments.
  - D) profits.

Answer: C

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 22) In 2007 about 22% of personal income in the United States came from
- A) wages and salaries.
  - B) property income.
  - C) transfer payments.
  - D) profits.

Answer: B

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 23) The biggest single transfer program at the federal level is
- A) farm subsidies.
  - B) unemployment compensation.
  - C) Social Security.
  - D) the agricultural support program.

Answer: C

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

## 2 True/False

- 1) All transfer payments are made to people with low incomes.  
Answer: FALSE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Fact*
- 2) In theory, a minimum wage should lead to unemployment, but there is no evidence of such an effect.  
Answer: FALSE  
Diff: 2  
Topic: *The Sources of Household Income*  
Skill: *Fact*
- 3) All government payments to individuals are called transfer payments.  
Answer: FALSE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Definition*
- 4) The stock of knowledge, skills, and talents that people possess is called personal capital.  
Answer: FALSE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Definition*
- 5) American workers in Iraq earn hazard pay. This is an example of a compensating differential.  
Answer: TRUE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Definition*
- 6) Human capital is a combination of inborn and acquired skills, talent, and knowledge.  
Answer: TRUE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Definition*
- 7) Household income comes from two main sources: wages/salaries and property.  
Answer: TRUE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Definition*
- 8) About 50 percent of American women over the age of 16 are in the labor force.  
Answer: FALSE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Fact*

## 18.3 The Distribution of Income

### 1 Multiple Choice

- 1) Economic income is
- A) the amount of money a household can spend during a given time period without increasing or decreasing its net assets.
  - B) income from the ownership of real property and financial holdings.
  - C) differences in wages that result from differences in working conditions.
  - D) payments by government to people who do not currently supply goods or services in exchange.

Answer: A

Diff: 2

Topic: The Distribution of Income

Skill: Definition

- 2) The amount of money a household can spend during a given time period without increasing or decreasing its net assets is called \_\_\_\_\_ income.
- A) economic
  - B) money
  - C) after-tax
  - D) property

Answer: A

Diff: 2

Topic: The Distribution of Income

Skill: Definition

- 3) In the United States, in 2006, the most evenly distributed income source was
- A) property income.
  - B) total income.
  - C) labor income.
  - D) transfer income.

Answer: D

Diff: 2

Topic: The Distribution of Income

Skill: Fact

- 4) For the bottom 10% of families in the income distribution, transfer payments account for approximately \_\_\_\_\_ of income.
- A) 3%
  - B) 38%
  - C) 52%
  - D) 80%

Answer: D

Diff: 1

Topic: The Distribution of Income

Skill: Fact

- 5) The top 1% of families in the income distribution receive most of their income from \_\_\_\_\_ income.
- A) labor
  - B) property
  - C) transfer
  - D) profit

Answer: B

Diff: 1

Topic: The Distribution of Income

Skill: Fact

- 6) The bottom fifth of families in the income distribution receive most of their income from \_\_\_\_\_ income.  
A) labor                      B) property                      C) transfer                      D) gambling

Answer: C

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

- 7) The difference between money income and economic income is \_\_\_\_\_ .  
A) money income excludes but economic income includes cash and noncash transfer payments and capital gains income  
B) economic income excludes but money income includes cash and noncash transfer payments and capital gains income  
C) money income excludes but economic income includes noncash transfer payments and capital gains  
D) economic income excludes but money income includes noncash transfer payments and capital gains

Answer: C

Diff: 2

Topic: *The Distribution of Income*

Skill: *Definition*

- 8) An equal distribution of income would yield a Lorenz curve that was a \_\_\_\_\_ .  
A) line lying directly on the horizontal axis  
B) line lying directly on the vertical axis at 0%  
C) 45-degree line between 0 and 100%  
D) line lying directly on the vertical axis at 100%

Answer: C

Diff: 3

Topic: *The Distribution of Income*

Skill: *Conceptual*

- 9) As income becomes more unequally distributed, the Lorenz curve \_\_\_\_\_ and \_\_\_\_\_ .  
A) moves further down to the right; the shaded area increases  
B) moves further up to the left; the shaded area decreases  
C) moves further up to the left rising about the 45 degree line; the shaded area increases  
D) moves further down to the right; the shaded area decreases

Answer: A

Diff: 2

Topic: *The Distribution of Income*

Skill: *Conceptual*



Refer to the information provided in Figure 18.4 below to answer the questions that follow.

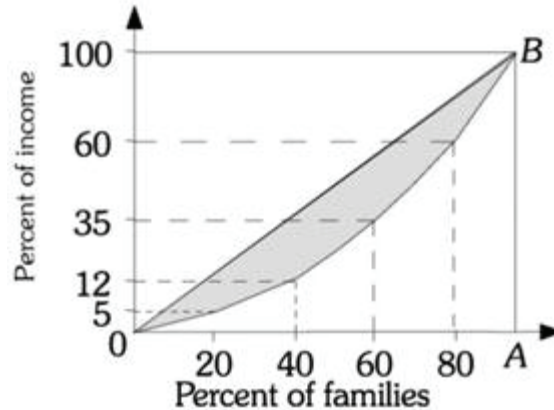


Figure 18.4

- 10) Refer to Figure 18.4. The wealthiest fifth of families earned \_\_\_\_\_% of income in Outland.  
 A) 20                                      B) 40                                      C) 60                                      D) 95

Answer: B

Diff: 3

Topic: The Distribution of Income

Skill: Conceptual

AACSB: Analytic Skills

- 11) Refer to Figure 18.4. The second poorest fifth of families earned \_\_\_\_\_% of income in Outland.  
 A) 5    B) 7    C) 12    D) 17

Answer: B

Diff: 3

Topic: The Distribution of Income

Skill: Conceptual

AACSB: Analytic Skills

- 12) Refer to Figure 18.4. Suppose that the Lorenz curve were the same as the 45-degree line OB. This would mean that  
 A) the distribution of income is perfectly equitable.  
 B) the distribution of income is completely inequitable.  
 C) only one family earned all the income.  
 D) the distribution of income is equal.

Answer: D

Diff: 3

Topic: The Distribution of Income

Skill: Conceptual

- 13) Refer to Figure 18.4. Suppose that the Lorenz curve ran along the horizontal axis to 100% of families, then became vertical to 100% of income. This would mean that \_\_\_\_\_ .
- A) the distribution of income is perfectly equitable
  - B) the distribution of income is completely inequitable
  - C) only one family earned all the income
  - D) the distribution of income is equal

Answer: C

Diff: 3

Topic: *The Distribution of Income*

Skill: *Conceptual*

- 14) The Gini coefficient is \_\_\_\_\_ .
- A) the most common way of representing the income distribution graphically
  - B) a commonly used measure of the degree of inequality in an income distribution
  - C) a commonly used measure of the degree of inequity in a property distribution
  - D) the ratio of the percentage of total income received by the top 20% of families to the percentage of total income received by the bottom 20% of families

Answer: B

Diff: 2

Topic: *The Distribution of Income*

Skill: *Definition*

- 15) A Gini coefficient of zero means that \_\_\_\_\_ .
- A) the income is equally distributed
  - B) one person has all the income and everyone else has nothing
  - C) all the income is received by the top 20% of families
  - D) the income is split equally between the top 20% and the rest of the distribution

Answer: A

Diff: 2

Topic: *The Distribution of Income*

Skill: *Definition*

- 16) A Gini coefficient of one means that \_\_\_\_\_ .
- A) income is distributed equally
  - B) one family has all the income and everyone else has nothing
  - C) all the income is received by the top 20% of families
  - D) the income is split equally between the top 20% and the rest of the distribution

Answer: B

Diff: 2

Topic: *The Distribution of Income*

Skill: *Definition*

- 17) Evidence suggests that in the last several decades, technology has played a role in driving inequality. Thus, \_\_\_\_\_ may be key to reducing inequality in the future.
- A) education
  - B) savings
  - C) research and development
  - D) investment

Answer: A

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

18) The only advanced country to experience decreasing inequality in their income distribution is \_\_\_\_\_.

- A) the United States
- B) Great Britain
- C) France
- D) Canada

Answer: C

Diff: 1

Topic: The Distribution of Income

Skill: Fact

19) The official poverty line in the United States is set \_\_\_\_\_.

- A) equal to one-half the average income in the United States
- B) at three times the cost of the Department of Agriculture's minimum food budget
- C) at three times the cost of the Department of Housing's minimum housing allowance
- D) at the amount necessary to allow an individual to buy the same market basket of goods that the average urban wage earner can afford

Answer: B

Diff: 1

Topic: The Distribution of Income

Skill: Fact

20) If the cost of the Department of Agriculture's minimum food budget for two people is \$3,000 per year, the official poverty line for a family of two would be

- A) \$1,000.
- B) \$3,000.
- C) \$9,000.
- D) \$18,000.

Answer: C

Diff: 2

Topic: The Distribution of Income

Skill: Analytic

AACSB: Analytic Skills

21) If the official poverty line for a family of four is \$15,000, then the Department of Agriculture's minimum food bundle costs a family of four \_\_\_\_\_ per year.

- A) \$1,500
- B) \$3,000
- C) \$5,000
- D) \$15,000

Answer: C

Diff: 2

Topic: The Distribution of Income

Skill: Analytic

AACSB: Analytic Skills

22) When measuring income for the purpose of classifying people as poor, the measurement of income used is

- A) economic income.
- B) comprehensive income.
- C) cash income and noncash transfer payments.
- D) money income.

Answer: D

Diff: 1

Topic: The Distribution of Income

Skill: Fact

- 23) In 2004, the highest incidence of poverty was
- A) women living in households with no husband present.
  - B) individuals over 65.
  - C) Hispanic families.
  - D) black men.

Answer: A

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

- 24) The bottom 40% of families ranked by income control about \_\_\_\_\_ of the nation's net worth.
- A) 1.8%
  - B) 2.6%
  - C) 5.4%
  - D) 10.2%

Answer: B

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

## 2 True/False

- 1) The income distribution has become more unequal in the United States over the last 30 years.

Answer: TRUE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

- 2) Counting the total number of individuals on any assistance program and dividing by the population determine the poverty line.

Answer: FALSE

Diff: 2

Topic: *The Distribution of Income*

Skill: *Definition*

- 3) Recent data suggests that the percentage of the population in poverty for African-American families is approximately three times that of white families.

Answer: FALSE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

- 4) The top 10% of the population own over 90% of the stocks and bonds in the country.

Answer: TRUE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

- 5) As the distribution of income becomes more equal, the Lorenz curve comes closer to the 45-degree line.

Answer: TRUE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

6) If economic income rather than money income were used to determine whether or not an individual is poor, the poverty rate would increase.

Answer: FALSE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

7) Economic income is measured "after-tax".

Answer: FALSE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Definition*

8) Total income is more evenly distributed than labor income.

Answer: FALSE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

9) An individual's economic income is generally larger than their money income.

Answer: TRUE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Definition*

10) A Gini coefficient of 0.25 represents less inequality in income distribution than a Gini coefficient of 0.4.

Answer: TRUE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Definition*

11) Disaggregating the distribution of income by race shows that the mean household income for the top 20% of African-American households was very similar to that of the top 20% of Hispanic households.

Answer: TRUE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

12) Disaggregating the distribution of income by race shows that the mean household income for the bottom 20% of African-American households was very similar to that of the bottom 20% of white households.

Answer: FALSE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

13) The United States is the only country to face increasing inequality in their income distribution in the last several decades.

Answer: FALSE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

14) Poverty rates among the elderly have risen in the past few decades.

Answer: FALSE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

15) Nearly one in four African-Americans live in poverty.

Answer: TRUE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

16) In the United States, the distribution of wealth is more unequal than the distribution of income.

Answer: TRUE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

## 18.4 The Redistribution Debate

### 1 Multiple Choice

1) The most common argument for income redistribution is that

A) it works — it reduces the poverty rate.

B) it improves efficiency in the economy.

C) it provides more incentive for people to try to better themselves.

D) a society as wealthy as the United States has a moral obligation to provide its members with the basic necessities of life.

Answer: D

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

2) Philosophical issues regarding income redistribution deal with all of the following EXCEPT:

A) What is and is not possible?

B) What is fair?

C) What is just?

D) What is the ideal distribution of income?

Answer: A

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Conceptual*

- 3) Opponents of income redistribution argue that \_\_\_\_\_ .
- A) redistribution violates the proposition that "one is entitled to the fruits of one's efforts".
  - B) property income is less just than labor income and thus redistribution of that income is justified.
  - C) redistribution encourages too much competition.
  - D) Both (A) and (C) are correct.

Answer: D

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Conceptual*

- 4) Proponents of income redistribution argue that redistribution \_\_\_\_\_ .
- A) increases the welfare of all members of society
  - B) will not take place absent government intervention as the market for charity, a private good, is imperfect
  - C) would be agreed to by all members of society if they were risk-loving and contracting from the "original position"
  - D) helps those who, through no fault of their own, are unable to earn an adequate income

Answer: D

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Conceptual*

- 5) The labor theory of value was developed by \_\_\_\_\_ .
- A) John Stuart Mill
  - B) John Rawls
  - C) Karl Marx
  - D) Jeremy Bentham

Answer: C

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

- 6) The theory of distributional justice was developed by \_\_\_\_\_ .
- A) John Stuart Mill
  - B) John Rawls
  - C) Karl Marx
  - D) Jeremy Bentham

Answer: B

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

- 7) The idea of utilitarian justice was first proposed by \_\_\_\_\_ .
- A) John Stuart Mill
  - B) John Rawls
  - C) Karl Marx
  - D) None of the above are correct.

Answer: A

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*





- 13) The notion of utilitarian justice is that
- A) through income redistribution, the rich sacrifice a little and the poor gain a lot.
  - B) any change that makes some people better off without making anyone worse off should be undertaken.
  - C) income should be distributed so that the well-being of the worse-off member of society should be maximized.
  - D) income should be distributed according to an individual's needs.

Answer: A

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Definition*

- 14) A theory of distributional justice that concludes that the social contract emerging from the original position would call for an income distribution that would maximize the well-being of the worst-off member of society is known as
- A) utilitarian justice.
  - B) Rawlsian justice.
  - C) maxi-min justice.
  - D) relative justice.

Answer: B

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Definition*

- 15) Any society bound by a contract calling for an income distribution that would maximize the well-being of the worst-off member of society would allow for inequality if that inequality
- A) was justified by differences in individuals' productivity.
  - B) had the effect of improving the lot of the very poor.
  - C) could not be reduced without making someone worse off.
  - D) was justified by the needs of individuals.

Answer: B

Diff: 3

Topic: *The Redistribution Debate*

Skill: *Conceptual*

- 16) The primary assumption made in Rawlsian justice is that
- A) people are risk averse.
  - B) the marginal utility of income is decreasing.
  - C) each individual tries to maximize his or her own well-being at the expense of everyone else.
  - D) each person will produce according to his or her ability regardless of the reward.

Answer: A

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Definition*

- 17) The labor theory of value states that
- A) if all markets are competitive, then labor will be paid its marginal revenue product.
  - B) under capitalism all workers will be paid a subsistence wage.
  - C) the value of a commodity depends only on the amount of labor required to produce it.
  - D) labor should be paid what is left over after all other factors of production have been paid.

Answer: C

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Definition*

- 18) According to Karl Marx, property income is
- A) the primary source of inequality in the income distribution.
  - B) a legitimate payment to entrepreneurs for risk taking.
  - C) the determinant of the value of all products.
  - D) the difference between what a worker is paid and the value of what a worker produces.

Answer: A

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Definition*

- 19) According to Karl Marx, the value of a commodity depends only on the amount of
- A) capital needed to produce it.
  - B) labor needed to produce it.
  - C) natural resources needed to produce it.
  - D) time needed to produce it.

Answer: B

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

- 20) Karl Marx saw profits as
- A) a necessary return to risk taking.
  - B) necessary for innovation to occur.
  - C) an expropriation by capitalists of the fruits of labor's efforts.
  - D) the difference between what a product sells for and the value of the labor embedded in the product.

Answer: C

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

## 2 True/False

- 1) The argument most often used in favor of redistribution is that a society as wealthy as the United States has a moral obligation to provide all its members with the basic necessities of life.

Answer: TRUE

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

- 2) According to Karl Marx the value of any product is dependent upon the labor, capital, and land inputs used in production.

Answer: FALSE

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

## 18.5 Redistribution Programs and Policies

### 1 Multiple Choice

- 1) A progressive income tax means that those with a higher income pay \_\_\_\_\_ .
- A) a lower percentage of their income in taxes than low-income people
  - B) a higher percentage of their income in taxes than low-income people
  - C) the same percentage of their income in taxes as low-income people
  - D) all the taxes in the economy

Answer: B

Diff: 2

Topic: *Redistribution Programs and Policies*

Skill: *Definition*

- 2) A proportional income tax means that those with a higher income pay \_\_\_\_\_ .
- A) a lower percentage of their income in taxes than low-income people
  - B) a higher percentage of their income in taxes than low-income people
  - C) the same percentage of their income in taxes as low-income people
  - D) all the taxes in the economy

Answer: C

Diff: 2

Topic: *Redistribution Programs and Policies*

Skill: *Definition*

- 3) Studies of the income tax show that its burden as a percentage of income
- A) remains about the same as income increases.
  - B) decreases as income rises.
  - C) rises slightly as income rises.
  - D) initially increases and then decreases as income increases.

Answer: C

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 4) Comparing the after-tax distribution of income to the before-tax distribution of income, it is true that the after-tax distribution of income is \_\_\_\_\_ the before-tax distribution of income.
- A) more equally distributed than
  - B) less equally distributed than
  - C) more equitably distributed than
  - D) virtually the same as

Answer: D

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 5) In the Social Security system, the tax receipts from today's workers are \_\_\_\_\_ .
- A) paid into the federal government's general revenue to be used for any government expenditure
  - B) paid into an account in the employee's name and saved and invested for that individual until he or she retires
  - C) used to pay benefits to retired and disabled workers and their dependents today
  - D) all paid into Medicare

Answer: C

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 6) The largest income redistribution program in the United States is(are) the \_\_\_\_\_ .
- A) Social Security System
  - B) Public Assistance (Welfare) Program
  - C) Medicare and Medicaid Programs
  - D) Supplemental Security Income Program

Answer: A

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 7) The Social Security System includes three separate programs. They are \_\_\_\_\_ .
- A) Old Age and Survivors Insurance, Disability Insurance, and Health Insurance
  - B) Old Age and Survivors Insurance, Medicare, and Medicaid
  - C) Disability Insurance, Medicare, and Public Assistance (Welfare)
  - D) Old Age and Survivors Insurance, Medicare, and Unemployment Compensation

Answer: A

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 8) The largest in-kind transfer program in the United States is \_\_\_\_\_ .
- A) Medicare
  - B) the Housing Program
  - C) Food Stamps
  - D) Welfare

Answer: A

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 9) Unemployment compensation is a \_\_\_\_\_ government transfer program.
- A) state
  - B) federal
  - C) local
  - D) municipal

Answer: A

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 10) Food stamps are \_\_\_\_\_ .
- A) only available to low-income families with children
  - B) fully funded through state tax revenues
  - C) vouchers that have a face value greater than their cost and that can be used to purchase food at grocery stores
  - D) bought and sold in a perfectly competitive market.

Answer: C

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 11) The Earned Income Tax Credit is \_\_\_\_\_ .
- A) a non-refundable tax credit
  - B) available only to low-income families
  - C) a very simple program that is widely understood
  - D) only a small program and claimed by very few households annually

Answer: B

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 12) The Social Security system is financed through \_\_\_\_\_ .
- A) private insurance contributions
  - B) general revenues
  - C) the income tax
  - D) a payroll tax

Answer: D

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 13) The Food Stamp program is financed through \_\_\_\_\_ .
- A) private insurance contributions
  - B) general revenues
  - C) the income tax
  - D) a payroll tax

Answer: B

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 14) The Supplemental Security Income program is designed to take care of \_\_\_\_\_ .
- A) the very poor who have dependent children
  - B) the elderly who are poor
  - C) individuals who have been laid off from jobs
  - D) people who work, but whose income is below the poverty level

Answer: B

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 15) The Supplemental Security Income program is financed out of \_\_\_\_\_ .
- A) private insurance contributions
  - B) general revenues
  - C) the income tax
  - D) a payroll tax

Answer: B

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 16) Unemployment benefits are
- A) paid regardless of a person's income from other sources and regardless of assets.
  - B) reduced by an amount that is equal to an individual's income from other sources.
  - C) not paid to individuals with assets valued over \$200,000.
  - D) paid to individuals the entire time they are unemployed regardless of how long they are unemployed.

Answer: A

Diff: 2

Topic: Redistribution Programs and Policies

Skill: Definition

- 17) Relating to the *Economics in Practice* on page 376: The "signal" explanation of the effects of matching gift commitment suggests that:
- A) the status of the donor offering a matching gift influences others to contribute.
  - B) offering a matching gift reduces the cost of charitable giving.
  - C) charitable donations to one cause often lead donors to contribute to other causes.
  - D) charitable donations are an important means of enhancing the donor's social status.

Answer: A

Diff: 2

Topic: Redistribution Programs and Policies: Economics in Practice

Skill: Conceptual

AACSB: Analytic Skills

## 2 True/False

- 1) The primary function of Temporary Assistance for Needy Families has been to provide funds for reuniting families.

Answer: FALSE

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 2) The biggest single transfer program at the federal level is Social Security.

Answer: TRUE

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 3) After-tax income is much more equally distributed than before-tax income.

Answer: FALSE

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

4) Unemployment benefits are paid only if a person's income from all sources and assets is below a certain level.

Answer: FALSE

*Diff: 1*

*Topic: Redistribution Programs and Policies*

*Skill: Fact*

5) If an aid program is mandated at the federal level, all states must abide by federal law and pay the same amount of benefits.

Answer: FALSE

*Diff: 1*

*Topic: Redistribution Programs and Policies*

*Skill: Fact*

# Chapter 19 Public Finance: The Economics of Taxation

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## 19.1 The Economics of Taxation

### 1 Multiple Choice

- 1) The measure or value upon which a tax is levied is the  
A) tax base.                      B) tax rate.                      C) tax structure.                      D) tax incidence.

Answer: A

Diff: 1

Topic: The Economics of Taxation

Skill: Definition

- 2) Every tax has two parts: a(n) \_\_\_\_\_ and a(n) \_\_\_\_\_ .  
A) base; rate structure                      B) incidence; rate  
C) base; incidence                      D) rate structure; excess burden

Answer: A

Diff: 1

Topic: The Economics of Taxation

Skill: Definition

- 3) A local property tax is a tax on \_\_\_\_\_ , while a tax on your salary is a tax on \_\_\_\_\_ .  
A) a flow; a stock                      B) a stock; a flow  
C) a flow; income                      D) a residential holding; a flow

Answer: B

Diff: 1

Topic: The Economics of Taxation

Skill: Definition

- 4) The tax rate structure is the \_\_\_\_\_ .  
A) measure or value upon which a tax is levied  
B) measure of who pays the tax  
C) study of how taxes change over time  
D) percentage of a tax base that must be paid in taxes

Answer: D

Diff: 1

Topic: The Economics of Taxation

Skill: Definition

- 5) A tax whose burden, expressed as a percentage of income, falls as income increases is a  
A) regressive tax.                      B) progressive tax.  
C) proportional tax.                      D) benefits-received tax.

Answer: A

Diff: 1

Topic: The Economics of Taxation

Skill: Definition



- 6) A tax whose burden is the same proportion of income for all households is
- A) a regressive tax.
  - B) a progressive tax.
  - C) a proportional tax.
  - D) an equal tax.

Answer: C

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 7) A tax whose burden, expressed as a percentage of income, increases as income increases is
- A) a regressive tax.
  - B) a progressive tax.
  - C) a proportional tax.
  - D) an ability-to-pay tax.

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 8) The excise tax is \_\_\_\_\_ .
- A) progressive
  - B) regressive
  - C) proportional
  - D) an ability-to-pay tax

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 9) The U.S. individual income tax is designed to be \_\_\_\_\_ .
- A) progressive
  - B) regressive
  - C) proportional
  - D) an ability-to-pay tax

Answer: A

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 10) The largest portion of federal government revenues comes from \_\_\_\_\_ .
- A) the individual income tax
  - B) excise taxes
  - C) social insurance payroll taxes
  - D) corporate income taxes

Answer: A

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Fact*

- 11) A family that earns \$20,000 a year pays \$400 a year in taxes on clothing. A family that earns \$40,000 a year pays \$200 a year in taxes on clothing. The tax on clothing is
- A) a progressive tax.
  - B) a regressive tax.
  - C) a proportional tax.
  - D) a benefits-received tax.

Answer: B

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 12) A family that earns \$20,000 a year pays \$1,000 a year in payroll taxes. A family that earns \$40,000 a year pays \$2,000 a year in payroll taxes. The payroll tax is
- A) a progressive tax.
  - B) a regressive tax.
  - C) a proportional tax.
  - D) a benefits-received tax.

Answer: C

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 13) A family that earns \$20,000 a year pays \$200 a year in city wage taxes. A family that earns \$40,000 a year pays \$1,600 a year in city wage taxes. The city wage tax is
- A) a progressive tax.
  - B) a regressive tax.
  - C) a proportional tax.
  - D) a benefits-received tax.

Answer: A

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 14) A comprehensive tax of 15% on all forms of income with no deductions or exclusions is an example of a
- A) proportional tax.
  - B) progressive tax.
  - C) regressive tax.
  - D) rate tax.

Answer: A

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 15) The total amount of tax you pay divided by your total income is the
- A) marginal tax rate.
  - B) average tax rate.
  - C) total tax rate.
  - D) proportional tax rate.

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 16) The \_\_\_\_\_ tax rate is the tax rate paid on any additional income earned.
- A) average
  - B) total
  - C) marginal
  - D) proportional

Answer: C

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

Refer to the information provided in Table 19.1 below to answer the questions that follow.

**Table 19.1**

Total Income	Total Taxes
\$10,000	\$1,000
20,000	2,400
30,000	4,500
40,000	8,000

- 17) Refer to Table 19.1. At an income level of \$10,000, the average tax rate is  
A) 1%.                      B) 5%.                      C) 10%.                      D) 20%.

Answer: C

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Table 19.1. At an income level of \$40,000, the average tax rate is  
A) 2%.                      B) 5%.                      C) 15%.                      D) 20%.

Answer: D

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Table 19.1. At an income level of \$20,000, the average tax rate is  
A) 1.2%.                      B) 8.3%.                      C) 12%.                      D) 24%.

Answer: C

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 20) Refer to Table 19.1. If income increases from \$20,000 to \$30,000, the marginal tax rate is  
A) 3%.    B) 15%.  
C) 21%.    D) indeterminate from this information.

Answer: C

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 21) Refer to Table 19.1. If income increases from \$30,000 to \$40,000, the marginal tax rate is  
A) 5%.    B) 20%.  
C) 35%.    D) indeterminate from this information.

Answer: C

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 22) Refer to Table 19.1. The tax rate structure in this example is  
 A) proportional.      B) progressive.      C) regressive.      D) marginal.

Answer: B

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Table 19.2 below to answer the question that follows.

Table 19.2

Total Income	Total Taxes	Average Tax Rate	Marginal Tax Rate
\$5,000	\$750	0.15	0.15
\$10,000	\$1,200	0.12	0.09
\$15,000	\$1,500	0.10	0.06
\$20,000	\$1,600	0.08	0.0

- 23) Refer to Table 19.2. The tax rate structure in this example is  
 A) proportional.      B) progressive.      C) regressive.      D) marginal.

Answer: C

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Table 19.3 below to answer the question that follows.

Table 19.3

Total Income	Total Taxes	Average Tax Rate	Marginal Tax Rate
\$10,000	\$1,000	0.1	0.1
\$20,000	\$2,000	0.1	0.1
\$30,000	\$3,000	0.1	0.1
\$40,000	\$4,000	0.1	0.1

- 24) Refer to Table 19.3. The tax rate structure in this example is  
 A) proportional.      B) progressive.      C) regressive.      D) marginal.

Answer: A

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Table 19.4 below to answer the question that follows.

**Table 19.4**

Total Income	Total Taxes	Average Tax Rate	Marginal Tax Rate
\$10,000	\$500	0.050	0.05
\$20,000	\$1,500	0.075	0.10
\$30,000	\$3,000	0.100	0.15
\$40,000	\$8,000	0.200	0.50

- 25) Refer to Table 19.4. The tax rate structure in this example is  
A) proportional.      B) progressive.      C) regressive.      D) marginal.

Answer: B

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 26) After subtracting all deductions and exemptions from total income, you are left with  
A) taxable income.      B) marginal income.  
C) standardized income.      D) the tax base.

Answer: A

Diff: 2

Topic: The Economics of Taxation

Skill: Definition

Refer to Scenario 19.1 below to answer the questions that follow.

SCENARIO 19.1: An individual earning \$60,000 pays \$12,000 in taxes. The marginal tax rate on any income earned above \$60,000 is 25%.

- 27) Refer to Scenario 19.1. When this person earns \$60,000, her average tax rate is  
A) 5%.      B) 20%.  
C) 25%.      D) indeterminate from this information.

Answer: B

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 28) Refer to Scenario 19.1. When this person earns \$70,000, her tax payment would be  
A) \$2,500.      B) \$14,500  
C) \$17,500.      D) indeterminate from this information.

Answer: B

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 29) Refer to Scenario 19.1. When this person earns \$70,000, her average tax rate is
- A) 20.7%.
  - B) 22.5%.
  - C) 25%.
  - D) indeterminate from this information.

Answer: A

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 30) Refer to Scenario 19.1. Suppose this person earns \$70,000 and gives a \$1,000 tax deductible donation to charity. The donation reduces her tax payment by \_\_\_\_\_ .
- A) \$200
  - B) \$207
  - C) \$250
  - D) \$1000

Answer: C

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 31) If the marginal tax rate exceeds the average tax rate, the tax would be
- A) proportional.
  - B) regressive.
  - C) progressive.
  - D) uniform.

Answer: C

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 32) If the average tax rate exceeds the marginal tax rate, the tax would be
- A) proportional.
  - B) regressive.
  - C) progressive.
  - D) uniform.

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 33) If the marginal tax rate equals the average tax rate, the tax would be
- A) proportional.
  - B) regressive.
  - C) progressive.
  - D) uniform.

Answer: A

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 34) Which of the following statements is TRUE?
- A) Economists believe that average tax rates have a greater influence on behavior than marginal tax rates.
  - B) Economists believe that marginal tax rates have a greater influence on behavior than average tax rates.
  - C) Economists believe that marginal and average tax rates influence behavior to the same extent.
  - D) Economists believe that neither marginal nor average tax rates have any influence on behavior.

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Fact*

- 35) A theory of fairness that holds that taxpayers should contribute to the government in proportion to the benefits they receive from public expenditures is the
- A) ability-to-pay principle.
  - B) equity principle.
  - C) benefits-received principle.
  - D) equality-for-all principle.

Answer: C

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 36) If the government used the revenue from the excise tax on alcohol to fund research on alcoholism treatment programs, this would be an example of
- A) an ability-to-pay tax.
  - B) a benefits-received tax.
  - C) a vertical equity tax.
  - D) a user fee.

Answer: B

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 37) Which of the following is a tax based on the benefits-received principle?
- A) A property tax, if the revenue is used to finance public education.
  - B) A tax on imports that is used to finance job retraining for workers who have lost their jobs because of the competition from imported products.
  - C) A progressive income tax that is used to finance national defense.
  - D) A tax added to the camping fee at national parks that is used to maintain and upgrade camping facilities at national parks.

Answer: D

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 38) The benefits-received principle of taxation is not often used because
- A) if tax payments are linked to the benefits received, taxpayers tend to overstate the benefits that they receive from public goods.
  - B) it leads to an overproduction of public goods.
  - C) it is difficult to determine the values individual taxpayers place on goods and services that are produced using tax revenue.
  - D) it leads to less equality in the after-tax distribution of income.

Answer: C

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Fact*

- 39) A theory of taxation that states that citizens should bear tax burdens in line with their ability to pay taxes is the
- A) ability-to-pay principle.
  - B) equity principle.
  - C) benefits-received principle.
  - D) equal payment principle.

Answer: A

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Definition*

- 40) The progressive income tax is a tax based on the
- A) benefits–received principle.
  - B) tax equity principle.
  - C) efficiency tax principle.
  - D) ability–to–pay principle.

Answer: D

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 41) Vertical equity holds that
- A) those with equal ability to pay should bear equal tax burdens.
  - B) those who benefit the most from governmental services should bear the higher tax burden.
  - C) those with greater ability to pay should pay more.
  - D) those with equal ability to pay should bear unequal tax burdens.

Answer: C

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 42) Horizontal equity holds that
- A) those with equal ability to pay should bear unequal tax burdens.
  - B) those with equal ability to pay should bear equal tax burdens.
  - C) those who benefit the most from government services should bear the higher tax burden.
  - D) those who benefit the most from government services should have the greatest voice in determining what gets produced.

Answer: B

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Definition*

- 43) Individuals are allowed to deduct a percentage of their expenditures for health care from their taxable income if these expenditures are above a certain amount. This reduces the amount that must be paid in taxes. Allowing for these deductions would improve \_\_\_\_\_ of the federal income tax.
- A) the horizontal equity
  - B) the vertical equity
  - C) both vertical and horizontal equity
  - D) the progressivity

Answer: C

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 44) Economic income is the sum of consumption and
- A) net worth.
  - B) the change in net worth.
  - C) wealth.
  - D) transfer payments.

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*



- 45) During 2008, Sean's consumption equals \$25,000 and the change in his net worth is -\$5,000. Sean's economic income for 2008 is
- A) \$5,000.                      B) \$20,000.                      C) \$25,000.                      D) \$30,000.

Answer: B

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 46) Your employer pays for the maintenance on your car. The monetary value of this car maintenance is
- A) included in your economic income, but not your money income.  
B) not included in your economic income, but included in your money income.  
C) not included in either economic income or money income.  
D) included in both economic and money income.

Answer: A

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 47) You own stock that increases in value by \$3,000 but you do not cash in the stock. The \$3,000 is
- A) counted as part of economic income but not part of taxable income.  
B) counted as both economic and taxable income.  
C) counted as taxable income but not economic income.  
D) counted as neither taxable nor economic income.

Answer: A

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 48) You own a house in Malibu, CA. During the recent downturn in the house values in the area your house's value declined by \$100,000. If you do not sell your home during this period, your economic income \_\_\_\_\_ and your taxable income \_\_\_\_\_.
- A) was unchanged; fell                      B) fell; was unchanged  
C) fell; fell                                      D) was unchanged; was unchanged

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 49) Wealth or net worth is equal to
- A) assets plus liabilities.  
B) assets minus liabilities.  
C) consumption plus changes in net worth.  
D) income minus savings.

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 50) During 2008, Tony's assets equal \$300,000 and his net worth is \$50,000. Tony's liabilities are
- A) \$50,000.
  - B) \$150,000.
  - C) \$200,000.
  - D) \$250,000.

Answer: D

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 51) During 2008, Tony's assets equal \$200,000 and his liabilities are \$250,000. Tony's net worth is
- A) -\$50,000.
  - B) \$50,000.
  - C) \$300,000.
  - D) \$550,000.

Answer: A

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 52) Irving Fisher argued for a tax on consumption instead of on income because
- A) the standard of living depends not on income, but on how much is consumed.
  - B) consumption is the best indication of ability to pay.
  - C) a tax on income discourages saving by taxing savings twice.
  - D) a tax on consumption raises more revenue than a tax on income.

Answer: C

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Fact*

- 53) Thomas Hobbes argued for a tax on consumption instead of on income because
- A) the standard of living depends not on income, but on how much income is spent.
  - B) consumption is the best indication of ability to pay.
  - C) a tax on income discourages saving by taxing savings twice.
  - D) a tax on consumption raises more revenue than a tax on income.

Answer: A

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Fact*

- 54) Double taxation of saving may
- A) reduce the saving rate.
  - B) increase the rate of investment.
  - C) increase the rate of economic growth.
  - D) increase the budget deficit.

Answer: A

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Fact*

55) Which of the following statements is FALSE?

- A) An income tax taxes savings twice only if consumption is the measure used to gauge a person's ability to pay.
- B) Proponents of income as a tax base argue that you should not be taxed on what you draw out of the common pot, but rather on the basis of your ability to draw from the pot.
- C) The double taxation of saving tends to increase the saving rate because people have to save more to keep the after-tax yield constant.
- D) At this time, there is not clear consensus on what the best tax base is.

Answer: C

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Fact*

56) Relating to the *Economics in Practice* on page 387: Which of the following, if true, would most weaken the argument that federal taxpayers should NOT be able to deduct state and local taxes from taxable income?

- A) State and local government already have adequate incentives to reduce wasteful spending.
- B) Some states have progressive income tax programs, whereas some states have no income tax at all.
- C) For the richest Americans, the combined burden of federal, state, and local taxes is less than it was in the 1970s.
- D) Millions of workers pay more in payroll taxes than they pay in income taxes.

Answer: A

Diff: 3

Topic: *The Economics of Taxation: Economics in Practice*

Skill: *Conceptual*

AACSB: *Analytic Skills*

## 2 True/False

1) A tax that exacts a higher proportion of income from higher-income people than it does from lower-income households is a regressive tax.

Answer: FALSE

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

2) A retail sales tax is a proportional tax with respect to income.

Answer: FALSE

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Fact*

3) Vertical equity holds that those with greater ability to pay should pay more.

Answer: TRUE

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 4) Horizontal equity hold that those with greater ability to pay should pay less.  
Answer: FALSE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Definition*
- 5) For the purpose of defining economic income, capital gains count as income only when they are realized.  
Answer: FALSE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Fact*
- 6) A person's wealth is the total value of all the things they own.  
Answer: FALSE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Definition*
- 7) Consumption is the total value of all goods that a household consumes in a given period.  
Answer: FALSE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Definition*
- 8) Assets minus liabilities equals net worth.  
Answer: TRUE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Definition*
- 9) Wealth is a flow measure.  
Answer: FALSE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Definition*

## 19.2 Tax Incidence: Who Pays?

### 1 Multiple Choice

- 1) Tax incidence is the \_\_\_\_\_ .  
A) behavior of shifting the tax to another party  
B) ultimate distribution of a tax's burden  
C) structure of the tax  
D) measure of the impact the tax has on employment and output

Answer: B  
Diff: 1  
Topic: *Tax Incidence: Who Pays?*  
Skill: *Definition*

- 2) Tax shifting \_\_\_\_\_ .
- A) is the way in which a tax is structured
  - B) is the ultimate distribution of a tax's burden
  - C) occurs when taxes cause prices to increase, but wages to fall
  - D) occurs when taxed agents can alter their behavior and do something to avoid paying a tax

Answer: D

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Definition

- 3) A household is hurt, on the \_\_\_\_\_ side, when its net profits or wages fall and is hurt, on the \_\_\_\_\_ side when the prices of goods and services increase.
- A) sources; uses
  - B) uses; sources
  - C) flow; stock
  - D) input; output

Answer: A

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Definition

- 4) Which of the following taxes is most easily shifted?
- A) an income tax that allows for no deductions or exemptions
  - B) a retail sales tax
  - C) a uniform tax on land
  - D) a tax on imported rice

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

- 5) As a result of an increase in the payroll tax that employers must pay on their employees' wages, employers reduce the starting wage for new employees. This is an example of
- A) tax shifting.
  - B) tax incidence.
  - C) a regressive tax.
  - D) tax avoidance.

Answer: A

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

- 6) The government imposes a luxury tax on automobiles that cost more than \$40,000. As a result, fewer individuals purchase cars that cost more than \$40,000. This is an example of
- A) tax equity.
  - B) tax shifting.
  - C) tax evasion.
  - D) tax incidence.

Answer: B

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

- 7) Firms may react to a payroll tax by
- A) substituting labor for capital.
  - B) increasing their output.
  - C) shifting to more capital intensive techniques.
  - D) increasing worker's wages.

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

Refer to the information provided in Figure 19.1 below to answer the questions that follow.

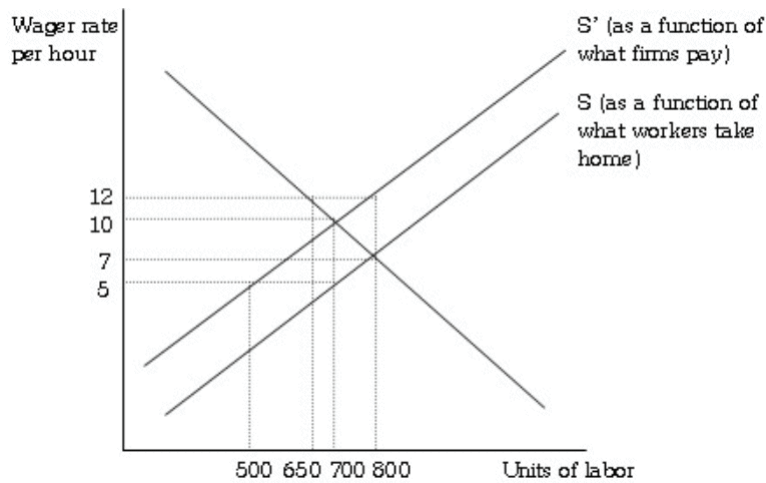


Figure 19.1

- 8) Refer to Figure 19.1. Prior to the imposition of a payroll tax, this labor market was in equilibrium at a wage of \_\_\_\_\_ and employment of \_\_\_\_\_ workers.
- A) \$5.00; 500
  - B) \$7.00; 800
  - C) \$10.00; 700
  - D) \$12.00; 650

Answer: B

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 19.1. The payroll tax imposed is \_\_\_\_\_ per unit of labor.
- A) \$2
  - B) \$3
  - C) \$5
  - D) \$10

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

AACSB: Analytic Skills

- 10) Refer to Figure 19.1. Initially after the payroll tax is imposed, the firms' cost per unit of labor is \_\_\_\_\_ per hour and the workers' take home pay is \_\_\_\_\_ per hour.
- A) \$10; \$9                      B) \$9; \$9                      C) \$10; \$10                      D) \$12; \$7

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

AACSB: Analytic Skills

- 11) Refer to Figure 19.1. Initially after the payroll tax is imposed, there will be
- A) an equilibrium in the labor market.  
B) an excess demand for labor of 100 units.  
C) an excess supply of labor of 150 units.  
D) an excess supply of labor of 100 units.

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

AACSB: Analytic Skills

- 12) Refer to Figure 19.1. After firms can respond to the payroll tax, the total wage paid by firms equals
- A) \$12.                      B) \$10.                      C) \$7.                      D) \$5.

Answer: B

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

AACSB: Analytic Skills

- 13) Refer to Figure 19.1. After firms can respond to the payroll tax, the workers will take home a wage of
- A) \$12.                      B) \$10.                      C) \$7.                      D) \$5.

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

AACSB: Analytic Skills

- 14) Refer to Figure 19.1. After firms can respond to the payroll tax, employment will be
- A) 500.                      B) 650.                      C) 700.                      D) 800.

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

AACSB: Analytic Skills

15) Refer to Figure 19.1. The workers' share of the tax burden is \_\_\_\_\_ and the employers' share of the tax burden is \_\_\_\_\_.

- A) \$2,100; \$1,400      B) \$1,400; \$2,100      C) \$700; \$1,400      D) \$0; \$2,100

Answer: B

Diff: 3

Topic: Tax Incidence: Who Pays?

Skill: Analytic

AACSB: Analytic Skills

16) Refer to Figure 19.1. The total tax collections from this payroll tax are:

- A) \$700.      B) \$1,400.      C) \$2,100.      D) \$3,500.

Answer: D

Diff: 3

Topic: Tax Incidence: Who Pays?

Skill: Analytic

AACSB: Analytic Skills

17) If labor supply is very elastic, the payroll tax is

- A) borne mostly by the employer.  
B) borne entirely by the employer.  
C) borne mostly by the workers.  
D) split evenly between the employer and the workers.

Answer: A

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

18) When the labor supply is very inelastic, the payroll tax is

- A) borne mostly by the employer.  
B) borne entirely by the employer.  
C) borne mostly by the employee.  
D) split fairly evenly between the employer and the employee.

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

19) Employers will bear the full burden of the payroll tax if labor supply is

- A) perfectly inelastic.      B) perfectly elastic.  
C) backward bending.      D) upward sloping.

Answer: B

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact



- 20) A payroll tax is imposed on two types of labor: carpenters and laborers. In the short run, the elasticity of labor supply of carpenters is much less elastic than the elasticity of labor supply of laborers. Which of the following is TRUE?
- A) In the short run, carpenters will bear a larger share of the payroll tax than laborers.
  - B) In the short run, laborers will bear a larger share of the payroll tax than carpenters.
  - C) In the short run, carpenters and laborers will bear the same share of the payroll tax, but in the long run, laborers will bear a larger share of the payroll tax than carpenters.
  - D) There is not enough information to determine the relative shares of the payroll tax for carpenters and laborers in either the short run or the long run.

Answer: A

Diff: 3

Topic: Tax Incidence: Who Pays?

Skill: Analytic

AACSB: Analytic Skills

- 21) The payroll tax for Social Security in the United States is
- A) progressive.
  - B) regressive.
  - C) proportional.
  - D) uniform.

Answer: B

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 22) The payroll tax is regressive because
- A) most of the tax does not apply to wages and salaries above \$97,500.
  - B) wages and salaries are a larger percentage of total income for those higher on the income scale.
  - C) the elasticity of labor supply is close to zero.
  - D) wealthy individuals have more deductions from the payroll tax.

Answer: A

Diff: 3

Topic: Tax Incidence: Who Pays?

Skill: Analytic

AACSB: Analytic Skills

- 23) Empirical studies of labor supply behavior in the United States suggest that the elasticity of labor supply is close to zero and therefore
- A) most of the payroll tax in the United States is borne by workers.
  - B) most of the payroll tax in the United States is borne by employers.
  - C) most of the payroll tax in the United States is borne by consumers in the form of higher prices.
  - D) the payroll tax is split equally between employers and workers.

Answer: A

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 24) The corporation income tax causes
- A) capital to flow into the corporate sector from the noncorporate sector.
  - B) capital to flow from the corporate sector to the noncorporate sector.
  - C) less capital to be used in both the corporate sector and the noncorporate sectors.
  - D) more capital to be used in both the corporate sector and the noncorporate sectors.

Answer: B

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 25) Assume that both the corporate and noncorporate sectors are in long-run equilibrium before the imposition of a corporate profits tax. In the short run, the imposition of a corporate profits tax will

- A) decrease profits in both the corporate and noncorporate sectors.
- B) not change profits in either the corporate or the noncorporate sector.
- C) not change profits in the noncorporate sector, but decrease profits in the corporate sector.
- D) not change profits in the corporate sector, but increase profits in the noncorporate sector.

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 26) In the long run, the corporate profits tax will lead to

- A) lower profits in the corporate sector, but higher profits in the noncorporate sector.
- B) higher profits in the corporate sector and higher profits in the noncorporate sector.
- C) higher profits in the corporate sector, but lower profits in the noncorporate sector.
- D) lower profits in the corporate sector and lower profits in the noncorporate sector.

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 27) In the long run the corporate profits tax may lead to

- A) higher prices for the products of corporations as well as higher prices for the products of partnerships and proprietorships.
- B) lower prices for the products of corporations as well as lower prices for the products of partnerships and proprietorships.
- C) higher prices for the products of corporations and lower prices for the products of partnerships and proprietorships.
- D) lower prices for the products of corporations and higher prices for the products of partnerships and proprietorships.

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 28) The ultimate burden of the corporate profits tax appears to depend on all of the following EXCEPT:
- A) the relative capital/labor intensity of the corporate and noncorporate sectors.
  - B) the ease with which capital and labor can be substituted in the corporate and noncorporate sectors.
  - C) the elasticities of demand for the products produced in the corporate and noncorporate sectors.
  - D) the tax rate structure of the corporate profits tax.

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 29) Arnold Harberger's study on the incidence of the corporate income tax concluded that the burden of the tax is borne
- A) by corporations in the form of lower profits and by consumers in the form of higher prices.
  - B) by consumers in the form of higher prices and by workers in the form of lower wages.
  - C) only by noncorporate firms in the form of higher capital prices.
  - D) by owners of corporations, proprietorships, and partnerships in rough proportion to profits.

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 30) State and local taxes seem as a group to be mildly \_\_\_\_\_ and federal taxes seem as a group to be mildly \_\_\_\_\_.
- A) regressive; regressive
  - B) progressive; regressive
  - C) progressive; progressive
  - D) regressive; progressive

Answer: D

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

## 2 True/False

- 1) Workers bear the bulk of the payroll tax when labor supply is very elastic.

Answer: FALSE

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 2) State and local taxes as a group seem to be mildly progressive, but federal taxes as a group seem to be mildly regressive.

Answer: FALSE

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 3) Broad-based taxes are less likely to be shifted than partial taxes are.  
Answer: TRUE  
Diff: 1  
Topic: Tax Incidence: Who Pays?  
Skill: Fact
- 4) Corporate taxes are levied on the profits of all firms.  
Answer: FALSE  
Diff: 1  
Topic: Tax Incidence: Who Pays?  
Skill: Fact
- 5) Payroll taxes are ultimately borne entirely by workers.  
Answer: FALSE  
Diff: 1  
Topic: Tax Incidence: Who Pays?  
Skill: Fact
- 6) Since the demand for gasoline is relatively inelastic, a gas tax is largely borne by consumers.  
Answer: TRUE  
Diff: 2  
Topic: Tax Incidence: Who Pays?  
Skill: Conceptual
- 7) The United States payroll tax is progressive.  
Answer: FALSE  
Diff: 1  
Topic: Tax Incidence: Who Pays?  
Skill: Fact
- 8) The United States corporate income tax is progressive.  
Answer: TRUE  
Diff: 1  
Topic: Tax Incidence: Who Pays?  
Skill: Fact

## 19.3 Excess Burden and the Principle of Neutrality

### 1 Multiple Choice

- 1) Excess burden is the
- A) ultimate distribution of a tax.
  - B) shifting of the tax from one burden to another.
  - C) amount by which the burden of a tax exceeds the total revenue collected.
  - D) differential impact the tax has on high- and low-income groups.
- Answer: C  
Diff: 1  
Topic: Excess Burdens and the Principle of Neutrality  
Skill: Definition

- 2) Excess burden is caused by the fact that taxes
- A) are spent in ways that taxpayers do not support.
  - B) distort economic decisions.
  - C) generate less revenue than the government spends.
  - D) are regressive instead of progressive.

Answer: B

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Fact

- 3) The \_\_\_\_\_ states that all else equal, taxes that are neutral with respect to economic decisions are generally preferable to taxes that distort economic decisions.
- A) the principle of neutrality.
  - B) the principle of second best.
  - C) the principle of excess burden.
  - D) the law of tax incidence.

Answer: A

Diff: 1

Topic: Excess Burdens and the Principle of Neutrality

Skill: Definition

- 4) Which of the following taxes would impose the smallest excess burden on an individual?
- A) A tax on Diet Pepsi
  - B) A tax on all diet beverages
  - C) A tax on all soft drinks
  - D) A tax on all types of beverages including water

Answer: D

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Conceptual

**Refer to Scenario 19.2 below to answer the questions that follow.**

SCENARIO 19.2: The current lowest cost method of producing brown paper bags is \$5.00 per 100 bags. The government imposes a \$0.50 tax per unit of labor. After the tax is imposed, paper bag producers will use two units of labor to produce 100 paper bags. This increases the cost of paper-bag production to \$6.50 per 100 bags.

- 5) Refer to Scenario 19.2. If 1,000 paper bags are sold, the total burden of the tax is
- A) \$1.50.
  - B) \$10.00.
  - C) \$15.00.
  - D) \$65.00

Answer: C

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 6) Refer to Scenario 19.2. If 1,000 paper bags are sold, the excess burden of the tax is
- A) \$5.00.
  - B) \$10.00.
  - C) \$15.00.
  - D) \$25.00.

Answer: A

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Scenario 19.2. If 1,000 paper bags are sold, the total tax revenue collected is  
 A) \$10.00.                      B) \$50.00.                      C) \$250.00.                      D) \$500.00.

Answer: A

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Table 19.5 below to answer the questions that follow.  
 Capital and labor each cost \$1 per unit. The firm produces 1000 units of output.

Table 19.5

Technology	Input Requirements per unit of Output	
	K	L
A	5	2
B	3	5

- 8) Refer to Table 19.5. Given the input prices, which technology will the firm use?  
 A) Technology A  
 B) Technology B  
 C) Either technology A or B -- the firm is indifferent between the two.  
 D) The answer is impossible to determine with the given information.

Answer: A

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Table 19.5. Suppose the government imposes a 100% tax on capital. Which technology will the firm use?  
 A) Technology A  
 B) Technology B  
 C) Either technology A or B -- the firm is indifferent between the two.  
 D) The answer is impossible to determine with the given information.

Answer: B

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Table 19.5. Suppose the government imposes a 100% tax on capital. What is the total tax revenue raised?
- A) \$2,000
  - B) \$3,000
  - C) \$5,000
  - D) The answer is impossible to determine with the given information.

Answer: B

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Table 19.5. Suppose the government imposes a 100% tax on capital. What is the total burden of the tax? Assume that the industry is perfectly competitive and thus price is equal to the marginal cost of production.
- A) \$1,000
  - B) \$3,000
  - C) \$4,000
  - D) \$11,000

Answer: C

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Table 19.5. Suppose the government imposes a 100% tax on capital. What is the excess burden of the tax? Assume that the industry is perfectly competitive and thus price is equal to the marginal cost of production.
- A) \$1,000
  - B) \$3,000
  - C) \$4,000
  - D) \$11,000

Answer: A

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 13) The total burden of the tax is
- A) the revenue collected from the tax minus the excess burden created by the tax.
  - B) the excess burden created by the tax minus the revenue collected from the tax.
  - C) the sum of the revenue collected by the tax and the excess burden created by the tax.
  - D) the ratio of the revenue collected and the excess burden created by the tax.

Answer: C

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Definition

- 14) Taxes levied on broad bases tend to distort choice \_\_\_\_\_ and impose \_\_\_\_\_ excess burden than taxes on more sharply defined bases.
- A) less; larger
  - B) less; smaller
  - C) more; larger
  - D) more; smaller

Answer: B

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Fact

- 15) The total burden of a tax is \$10,000 and the tax revenue from this tax is \$8,000. The excess burden of this tax is
- A) \$2,000.                      B) \$8,000.                      C) \$10,000.                      D) \$18,000.

Answer: A

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 16) The excess burden of a tax is \$5,000 and the tax revenue from this tax is \$15,000. The total burden of this tax is
- A) \$3,000.                      B) \$5,000.                      C) \$10,000.                      D) \$20,000.

Answer: D

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 17) There would be no excess burden from a tax if demand were
- A) unitarily elastic.                      B) perfectly elastic.  
C) perfectly inelastic.                      D) upward sloping.

Answer: C

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Fact

- 18) Your local government needs to increase tax revenue. To increase tax revenue it can either increase the property tax on residential property or increase the property tax on all property. The government wants to impose the smallest excess burden possible. What would your recommendation be?
- A) To increase the property tax only on residential property because this tax cannot be shifted
- B) To increase the property tax on all property because the demand for all property is less elastic than the demand for residential property
- C) To increase the property tax on all property, because this tax would be less regressive than a tax only on residential property
- D) To increase the property tax only on residential property because taxpayers are allowed to deduct property taxes from their federal income tax liability, thus reducing the amount they must pay in federal taxes.

Answer: B

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills



- 19) The principle of second best states that
- A) if previously existing distortions exist, a distortionary tax may actually improve efficiency.
  - B) the broader based the tax, the less distortionary it is.
  - C) the more inelastic the demand for a product, the less distortionary a tax on the product would be.
  - D) taxes should be constructed so that they are neutral.

Answer: A

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Definition*

- 20) What circumstances favor nonneutral taxes?
- A) only the presence of externalities
  - B) only the presence of other distortionary taxes
  - C) both the presences of externalities and other distorting taxes
  - D) both inelastic demand and the presence of externalities

Answer: C

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Fact*

- 21) Which of the following illustrates the principle of second best?
- A) The government imposes taxes on gasoline and the tax revenue collected is used to pay for road repair.
  - B) The government decides to impose taxes on all grains, rather than imposing a tax only on wheat.
  - C) The government imposes a tax on a paper manufacturer that equals the cost of cleaning the river damaged by the waste discharged into the river by the paper manufacturer.
  - D) A tax imposed on land, because this tax distorts economic decisions less than taxes on other factors of production.

Answer: C

Diff: 3

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 22) The least inefficient taxation system is a tax system that
- A) is highly progressive.
  - B) minimizes the overall excess burden.
  - C) minimizes the total tax burden.
  - D) maximizes tax revenues.

Answer: B

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Fact*

- 23) Related to the *Economics in Practice* on page 396: All of the following are accurate statements about the Federal Gift and Estate Tax EXCEPT:
- A) In a recent year, less than one percent of estates were required to pay estate tax.
  - B) Repealing it would help the families of the richest Americans.
  - C) It sets limit to the amount of wealth that can be given or passed down to others without a tax.
  - D) It is just as likely to apply to the estate of a middle-income person as it is to apply to the estate of a higher-income person.

Answer: D

Diff: 2

Topic: *Excess Burdens and the Principle of Neutrality: Economics in Practice*

Skill: *Fact*

- 24) Related to the *Economics in Practice* on page 396: Which of the following taxpayers would pay more under a system that eliminated the home mortgage deduction and replaced it with a 15 percent tax credit for home mortgage interest?
- A) a homeowner in the 25 percent marginal income tax bracket
  - B) a homeowner with no income
  - C) a renter in the 25 percent marginal income tax bracket
  - D) a renter in the 15 percent marginal income tax bracket

Answer: A

Diff: 3

Topic: *Excess Burdens and the Principle of Neutrality: Economics in Practice*

Skill: *Conceptual*

AACSB: *Analytic Skills*

## 2 True/False

- 1) A tax that distorts an economic decision always imposes an excess burden and decreases efficiency.

Answer: FALSE

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Fact*

- 2) Deadweight loss is another term for excess burden.

Answer: TRUE

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Definition*

- 3) Excess burden is the total burden of a tax minus the tax revenue generated by the tax.

Answer: TRUE

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Definition*

- 4) Neutral taxes do not impose excess burdens.

Answer: TRUE

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Conceptual*

5) A nonneutral tax cannot be used to reduce distortions created by another nonneutral tax.

Answer: FALSE

Diff: 1

Topic: Excess Burdens and the Principle of Neutrality

Skill: Conceptual

## 19.4 Measuring Excess Burdens

### 1 Multiple Choice

Refer to Scenario 19.3 below to answer the questions that follow.

SCENARIO 19.3: Suppose demand for widgets is given by the equation  $P = 20 - 0.5Q$ . Originally, the price of the good is \$10 per unit. When a tax of \$2 per unit is imposed, the price of the good rises to \$12 per unit.

1) Refer to Scenario 19.3. How much total tax revenue is raised by the tax?

- A) \$2                      B) \$20                      C) \$32                      D) \$40

Answer: C

Diff: 2

Topic: Measuring Excess Burdens

Skill: Analytic

AACSB: Analytic Skills

2) Refer to Scenario 19.3. What is the total burden of the tax?

- A) \$4                      B) \$36                      C) \$64                      D) \$100

Answer: B

Diff: 2

Topic: Measuring Excess Burdens

Skill: Analytic

AACSB: Analytic Skills

3) Refer to Scenario 19.3. What is the excess burden of the tax?

- A) \$4                      B) \$36                      C) \$64                      D) \$100

Answer: A

Diff: 2

Topic: Measuring Excess Burdens

Skill: Analytic

AACSB: Analytic Skills

4) Refer to Scenario 19.3. Prior to the imposition of the tax consumers purchased \_\_\_\_\_ widgets and after the tax was imposed they purchased \_\_\_\_\_ widgets.

- A) 16; 20                      B) 20; 16                      C) 10; 8                      D) 40; 32

Answer: B

Diff: 2

Topic: Measuring Excess Burdens

Skill: Analytic

AACSB: Analytic Skills

- 5) Refer to Scenario 19.3. Prior to the imposition of the tax consumer surplus was \_\_\_\_\_ and after the tax was imposed consumer surplus was \_\_\_\_\_ .
- A) \$100; \$64                      B) \$64; \$100                      C) \$200; \$128                      D) \$50; \$32

Answer: A

Diff: 2

Topic: *Measuring Excess Burdens*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

- 1) If demand were perfectly elastic, there would be no excess burden.

Answer: FALSE

Diff: 1

Topic: *Measuring Excess Burdens*

Skill: *Fact*

- 2) The more elastic is demand for a taxed good, the smaller the excess burden associated with the tax.

Answer: FALSE

Diff: 2

Topic: *Measuring Excess Burdens*

Skill: *Conceptual*

# Chapter 20 International Trade, Comparative Advantage, and Protectionism

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## 20.1 Trade Surpluses and Deficits

### 1 Multiple Choice

- 1) A country has a trade surplus when
- A) its exports exceed its imports.
  - B) its exports equal its imports.
  - C) its government spending exceeds its tax revenues.
  - D) its exports are less than its imports.

Answer: A

Diff: 1

Topic: Trade Surpluses and Deficits

Skill: Definition

- 2) A country's trade is balanced when
- A) its imports exceeds its exports.
  - B) its government expenditures are equal to its tax revenues.
  - C) its net exports equal to zero.
  - D) its net exports are greater than zero.

Answer: C

Diff: 1

Topic: Trade Surpluses and Deficits

Skill: Definition

- 3) A country has a trade deficit when
- A) its exports exceed its imports.
  - B) its exports equal its imports.
  - C) its exports are less than its imports.
  - D) government spending is greater than tax receipts.

Answer: C

Diff: 1

Topic: Trade Surpluses and Deficits

Skill: Definition

- 4) If a country has a trade surplus of \$40 billion, which of the following can be true?
- A) The country's exports are \$160 billion and its imports are \$120 billion.
  - B) The country's exports are \$110 billion and its imports are \$150 billion.
  - C) The country's exports are \$120 billion and its imports are \$140 billion.
  - D) The country's exports are \$140 billion and its imports are \$40 billion.

Answer: A

Diff: 1

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

5) If a country has a trade deficit of \$30 billion, which of the following can be true?

- A) The country's exports are \$150 billion and its imports are \$120 billion.
- B) The country's exports are \$110 billion and its imports are \$140 billion.
- C) The country's exports are \$120 billion and its imports are \$140 billion.
- D) The country's exports are \$140 billion and its imports are \$40 billion.

Answer: B

Diff: 1

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

6) In the year \_\_\_\_\_, the United States switched from running a trade surplus to running a trade deficit.

- A) 1950
- B) 1966
- C) 1976
- D) 1994

Answer: C

Diff: 1

Topic: Trade Surpluses and Deficits

Skill: Fact

## 2 True/False

1) If Belgium has exports of 50 billion euros and imports of 40 billion euros, then it is running a trade deficit.

Answer: FALSE

Diff: 2

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

2) If Japan has a exports of 70 billion yen and imports of 60 billion yen, it is running a trade surplus.

Answer: TRUE

Diff: 2

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

3) If a country's imports are greater than its exports, a country has a trade deficit.

Answer: TRUE

Diff: 2

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

4) A country's balance of trade must be balanced.

Answer: FALSE

Diff: 2

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

5) If a country's imports are less than its exports, a country has a trade surplus.

Answer: TRUE

Diff: 2

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

## 20.2 The Economic Basis for Trade: Comparative Advantage

### 1 Multiple Choice

1) The purpose of the Corn Laws was to

- A) encourage imports and discourage exports, and thus keep the price of food low.
- B) encourage both exports and imports in order to integrate the British economy with the rest of Europe.
- C) discourage both imports and exports in order to promote economic self-sufficiency in Britain.
- D) discourage imports and encourage exports, and thus keep the price of food high.

Answer: D

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Fact

2) The theory of comparative advantage is credited to

- A) Adam Smith.
- B) David Ricardo.
- C) John Maynard Keynes.
- D) Milton Friedman.

Answer: B

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Fact

3) Country A would have an absolute advantage compared to Country B in the production of corn if

- A) corn can be produced at lower cost in terms of other goods than it could be in Country B.
- B) Country A uses fewer resources to produce corn than Country B does.
- C) the demand for corn is higher in Country A than in Country B.
- D) corn sells for a higher price in Country A than in Country B.

Answer: B

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Conceptual

AACSB: Reflective Thinking

4) The advantage in the production of a product enjoyed by one country over another when it uses fewer resources to produce that product than the other country does is

- A) an absolute advantage.
- B) a comparative advantage.
- C) a relative advantage.
- D) a productive advantage.

Answer: A

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Definition

- 5) According to the theory of comparative advantage, a country
- A) exports the goods in which its has a comparative advantage.
  - B) imposes tariffs on goods in which it does not have comparative advantage.
  - C) imports the goods in which it has a comparative advantage.
  - D) exports goods in which it has absolute advantage.

Answer: A

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Fact*

- 6) China has a comparative advantage in textile and an absolute advantage in radios. Japan has a comparative advantage in radios and an absolute advantage in textiles. According to this scenario
- A) Japan should export both radios and textiles.
  - B) China should import both radios and textiles.
  - C) China should export textiles and import radios.
  - D) Japan should export textiles and import radios.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 7) Country A has a comparative advantage compared to Country B in the production of shoes, if
- A) Country A can produce shoes at a lower monetary cost than Country B can.
  - B) Country A can produce shoes using fewer resources than Country B can.
  - C) the demand for shoes is higher in Country A than in Country B.
  - D) Country A can produce shoes at a lower cost in terms of other goods than Country B can.

Answer: D

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 8) According to the theory of comparative advantage, a country should
- A) specialize and export goods with the highest opportunity cost.
  - B) specialize and export goods with the lowest production cost.
  - C) specialize and export goods with the lowest opportunity cost.
  - D) specialize and export goods with the lowest average cost.

Answer: C

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Fact*

- 9) When one country can produce a product at a lower cost in terms of other goods, that country is said to have
- A) an absolute advantage.
  - B) a comparative advantage.
  - C) a productive advantage.
  - D) an unfair advantage.

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Definition*



- 10) The United States imports televisions from Japan and Japan imports computer chips from the United States. If the theory of comparative advantage guides trade between the two countries, it must be true that
- A) the opportunity cost of producing televisions in Japan is higher than that in the United States.
  - B) the opportunity cost of producing computer chips in the United States is higher than that in Japan.
  - C) the United States has comparative advantage in producing computer chips.
  - D) the United States has comparative advantage in producing televisions.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 11) If Russia has an absolute advantage in the production of wheat and China has an absolute advantage in the production of textiles, then
- A) neither country has anything to gain from specialization and trade.
  - B) it is reasonable to expect that specialization will benefit both countries, but trade will not.
  - C) it is reasonable to expect that specialization and trade will benefit both countries.
  - D) it is reasonable to expect that trade will benefit both countries, but specialization will not.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 12) If Brazil has a comparative advantage in the production of coffee compared to the United States, then
- A) Brazil also has an absolute advantage in the production of coffee.
  - B) the United States has an absolute advantage in the production of coffee.
  - C) Brazil can produce coffee at a lower opportunity cost than the United States.
  - D) the United States cannot produce coffee.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 13) The United States has a comparative advantage in the production of wheat, and Haiti has a comparative advantage in the production of sugar. If both countries specialize based on the theory of comparative advantage,
- A) only the production of wheat will increase.
  - B) the production and consumption of both goods will increase.
  - C) only the production of both goods will increase.
  - D) only the consumption of both goods will increase.

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 14) Suppose that Japan and India are both engaged in the production of radios and rice, and that Japan has an absolute advantage in the production of both goods. If India has a lower opportunity cost for producing rice, then
- A) India has a comparative advantage in rice production, but there will be no gains from specialization and trade.
  - B) Japan has a comparative advantage in the production of both goods.
  - C) India has a comparative advantage in the production of rice, but it is outweighed by Japan's absolute advantage in rice production.
  - D) India has a comparative advantage in the production of rice, and specialization and trade between the two countries can be mutually beneficial.

Answer: D

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 15) If the slopes of the production possibility frontiers involving sugar and rice in countries A and B are equal,
- A) the opportunity cost of producing sugar is less in Country A.
  - B) the opportunity cost of producing rice is less in Country B.
  - C) specialization does not benefit either country.
  - D) each country will produce identical quantities of sugar and rice.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 16) Suppose that Argentina and Chile are both engaged in the production of copper and wheat, and that Argentina has an absolute advantage in the production of both goods. If Chile has a comparative advantage in the production of copper, then Chile
- A) has a lower opportunity cost for copper, which means that it should specialize in production of copper and engage in trade.
  - B) has a lower opportunity cost for producing copper, but specialization is not feasible because Argentina has a lower monetary cost of copper production.
  - C) has a higher opportunity cost for copper, which means it should specialize in the production of wheat and engage in trade.
  - D) should continue to produce copper, but only for domestic consumption, because trade is not a viable option.

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*



- 21) Refer to Table 20.1. The opportunity cost of producing a bushel of oranges in Mexico is
- A) twice as much as that in Guatemala.
  - B) half as much as that in Guatemala.
  - C) the same as that in Guatemala.
  - D) four times as much as that in Guatemala.

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 22) Refer to Table 20.1. Guatemala has
- A) a comparative advantage in orange production.
  - B) an absolute advantage in orange production.
  - C) an absolute advantage in banana production.
  - D) a comparative advantage in banana production.

Answer: D

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 23) Refer to Table 20.1. Guatemala has
- A) a comparative advantage but not an absolute advantage in orange production.
  - B) a comparative advantage but not an absolute advantage in banana production.
  - C) an absolute advantage and a comparative advantage in banana production.
  - D) an absolute advantage and a comparative advantage in orange production.

Answer: B

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 24) Refer to Table 20.1. Mexico has
- A) a comparative advantage but not an absolute advantage in orange production.
  - B) a comparative advantage but not an absolute advantage in banana production.
  - C) an absolute advantage and a comparative advantage in banana production.
  - D) an absolute advantage and a comparative advantage in orange production.

Answer: D

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

25) Refer to Table 20.1. Guatemala should specialize in and export \_\_\_\_\_, and Mexico should specialize in and export \_\_\_\_\_.

- A) oranges; oranges
- C) bananas; oranges

- B) bananas; bananas
- D) oranges; bananas

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

26) Refer to Table 20.1. Before specialization, Mexico produces 120 bushels of oranges and 80 bushels of bananas, and Guatemala produces 40 bushels of oranges and 20 bushels of bananas. After specialization, the increase in orange production is

- A) 10 bushels of oranges.
- C) 25 bushels of oranges.

- B) 20 bushels of oranges.
- D) 40 bushels of oranges.

Answer: D

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

27) Refer to Table 20.1. Before specialization, Mexico produces 160 bushels of oranges and 40 bushels of bananas, and Guatemala produces 30 bushels of oranges and 40 bushels of bananas. After specialization, the increase in banana production is

- A) 10 bushels of bananas.
- C) 20 bushels of bananas.

- B) 15 bushels of bananas.
- D) 40 bushels of bananas.

Answer: C

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

28) Refer to Table 20.1. For both countries to benefit from trade, the terms of trade must be between \_\_\_\_\_ bushel(s) of oranges to bushel(s) of bananas.

- A) 1:1/2 and 1:4

- B) 2:3 and 2:1

- C) 1:1 and 1:1/2

- D) 1:1 and 1:2.

Answer: D

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*



- 33) Refer to Table 20.2. The most that Thailand will be willing to pay for a tractor is
- A) 5 motorcycles.
  - B) 10 motorcycles.
  - C) 15 motorcycles.
  - D) 20 motorcycles.

Answer: C

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 34) Refer to Table 20.2. The most that China will be willing to pay for a motorcycle is
- A) 1/20 of a tractor.
  - B) 1/10 of a tractor.
  - C) 1/30 of a tractor.
  - D) 1/5 of a tractor.

Answer: B

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 35) Refer to Table 20.2. Which terms of trade benefits both countries?
- A) 1 tractor for 10 motorcycles
  - B) 1 tractor for 12.5 motorcycles
  - C) 1 motorcycle for 10 tractors
  - D) 1 motorcycle for 1/5 of a tractor

Answer: B

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 36) The terms of trade refers to
- A) the documents that two countries sign in order to facilitate trade.
  - B) the conditions imposed by the importing country regarding the quality of the imported goods.
  - C) the exchange rate determined by the exporting and the importing countries.
  - D) the ratio at which one country trades a domestic product for imported product.

Answer: D

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Definition*

- 37) Specialization and trade allow a country to
- A) produce and consume on its production possibility frontier.
  - B) produce and consume inside its production possibility frontier.
  - C) produce and consume outside its production possibility frontier.
  - D) produce on its production possibility frontier and consume outside it.

Answer: D

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 38) The main advantage of trade between two countries is that
- A) trade makes both countries more self-sufficient.
  - B) employment in both countries will increase.
  - C) both countries have consumption choices beyond their current resource and production constraints.
  - D) trade will lead to a more equitable distribution of income in both countries.

Answer: C

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 39) According to comparative advantage, trade between two countries
- A) maximizes the amount of inputs that are used in the production of all products.
  - B) guarantees that consumption levels will be equal in the two countries.
  - C) will benefit all the industries in each of the countries.
  - D) allows each of the trading countries to use its resources most efficiently.

Answer: D

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 40) When countries specialize in producing those goods in which they have a comparative advantage, they
- A) maximize their combined output, but they do not necessarily allocate their resources more efficiently.
  - B) maximize their combined output and allocate their resources more efficiently.
  - C) allocate their resources more efficiently, but they do not necessarily maximize their combined output.
  - D) do not necessarily maximize their combined output, and they also do not necessarily allocate their resources more efficiently.

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*



Refer to the information provided in Figure 20.1 below to answer the questions that follow.

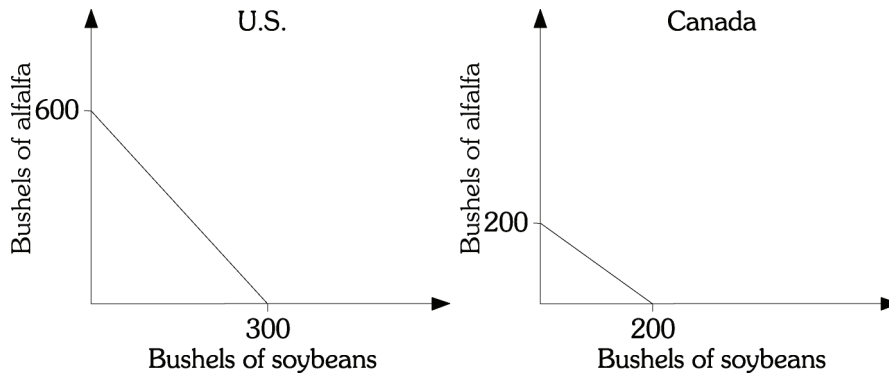


Figure 20.1

- 41) Refer to Figure 20.1. Which of the following statements is TRUE?
- A) The United States has both an absolute advantage and a comparative advantage in the production of soybeans and alfalfa.
  - B) The United States has an absolute advantage in the production of soybeans and alfalfa, but a comparative advantage only in the production of soybeans.
  - C) The United States has an absolute advantage in the production of soybeans and alfalfa, but a comparative advantage only in the production of alfalfa.
  - D) The United States has a comparative advantage in the production of both soybeans and alfalfa, but an absolute advantage only in the production of soybeans.

Answer: C

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 42) Refer to Figure 20.1. Which of the following statements is TRUE?
- A) Only Canada can benefit from trade because the United States has an absolute advantage in the production of both soybeans and alfalfa.
  - B) Trade will benefit both countries because the United States has a comparative advantage in the production of soybeans and Canada has a comparative advantage in the production of alfalfa.
  - C) Trade will benefit both countries because the United States has a comparative advantage in the production of alfalfa and Canada has a comparative advantage in the production of soybeans.
  - D) Trade will benefit neither country because the United States has an absolute advantage in the production of both soybeans and alfalfa, but Canada has a comparative advantage in the production of both soybeans and alfalfa.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 43) Refer to Figure 20.1. The opportunity cost of producing a bushel of alfalfa in the United States is
- A) twice as much as that in Canada.
  - B) half as much as that in Canada.
  - C) the same as that in Canada.
  - D) four times as much as that in Canada.

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 44) Refer to Figure 20.1. The opportunity cost of producing a bushel of alfalfa in the United States is
- A) half a bushel of soybeans.
  - B) 1 bushel of soybeans.
  - C) 2 bushels of soybeans.
  - D) 300 bushels of soybeans.

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 45) Refer to Figure 20.1. The opportunity cost of producing a bushel of alfalfa in Canada is
- A) half a bushel of soybeans.
  - B) 1 bushel of soybeans.
  - C) 2 bushels of soybeans.
  - D) zero.

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 46) Refer to Figure 20.1. The opportunity cost of producing a bushel of soybeans in the United States is
- A) half a bushel of alfalfa.
  - B) 1 bushel of alfalfa.
  - C) 2 bushels of alfalfa.
  - D) 300 bushels of alfalfa.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Figure 20.2 below to answer the questions that follow.

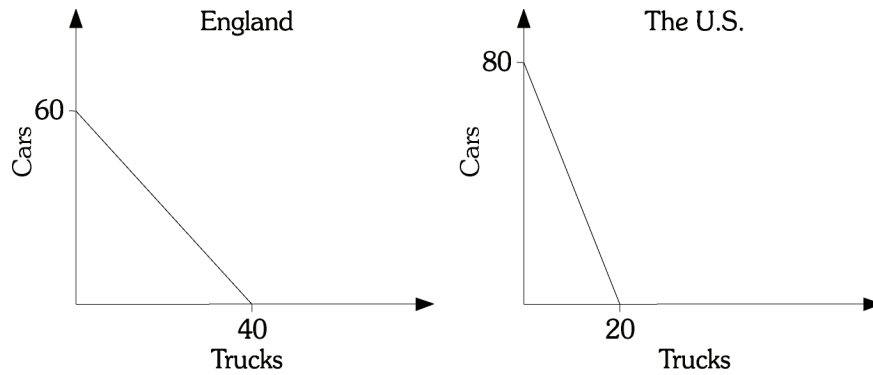


Figure 20.2

47) Refer to Figure 20.2. The opportunity cost of a truck is \_\_\_\_\_ car(s) in the United States and \_\_\_\_\_ car(s) in England.

- A) 6; 4                      B) 4; 1.5                      C) 4; 6                      D) .25; 1.5

Answer: B

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills

48) Refer to Figure 20.2. The theory of comparative advantage suggests that

- A) England should import trucks and export cars.  
 B) England should export both trucks and cars.  
 C) the United States should export both trucks and cars.  
 D) the United States should export cars and import trucks.

Answer: D

Diff: 2

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills

49) Refer to Figure 20.2. The opportunity cost of a car is \_\_\_\_\_ truck(s) in the United States and \_\_\_\_\_ truck(s) in England

- A) 6; 4                      B) 4; 1.5                      C) 4; 6                      D) .25; .67

Answer: D

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills

- 50) Refer to Figure 20.2. England has
- A) a comparative advantage in producing trucks.
  - B) an absolute advantage in producing cars.
  - C) a comparative advantage in producing cars.
  - D) no comparative advantage in producing either cars or trucks.

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 51) Refer to Figure 20.2. The U.S. has
- A) a comparative advantage in producing trucks.
  - B) an absolute advantage in producing trucks.
  - C) a comparative advantage in producing cars.
  - D) no comparative advantage in producing either cars or trucks.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 52) Assume that Blade Runner specializes in producing in-line skates and Hang Ten specializes in producing surfboards. After trade Blade Runner exports 800 pairs of in-line skates and imports 200 surfboards. The terms of trade
- A) are 1:4 in-line skates to surfboards.
  - B) are 4:1 in-line skates to surfboards.
  - C) are 1/4:1 in-line skates to surfboards.
  - D) cannot be determined from this information.

Answer: B

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 53) When trade is free, patterns of trade and trade flows result from
- A) the collective decisions of a few importers and exporters, as well as the governments of the countries in which they reside.
  - B) the collective decisions of a few importers and exporters, as well as millions of private households and firms.
  - C) the independent decisions of thousands of importers and exporters, as well as millions of private households and firms.
  - D) the independent decisions of thousands of importers and exporters, as well as the governments of the countries in which they reside.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 54) If you are traveling in China and you purchase a meal that costs 140 yuan and the current exchange rate is 7 yuan to the dollar, then the price of the meal in U.S. currency is
- A) \$200.                      B) \$20.                      C) \$10.                      D) \$2

Answer: B

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 55) Suppose a U.S. dollar exchanges for 2 British pounds, then each pound is worth
- A) \$.25.                      B) \$.50.                      C) \$1.                      D) \$4.

Answer: B

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 56) If the price of a car in the United States is \$26,000, and the exchange rate between the dollar and the British pound rises from \$1.50 to \$2.00 per pound, then the price of the American car in Britain will
- A) fall.  
B) rise.  
C) remain the same.  
D) be irrelevant, because the British government will impose restrictions on imports from the United States.

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 57) If the price of a car in the United States is \$22,000, and the exchange rate between the dollar and the Japanese yen falls from 125 yen to 105 yen per dollar, then the price of the American car in Japan will
- A) fall.  
B) rise.  
C) remain the same.  
D) be irrelevant, because the Japanese government will impose restrictions on imports from the United States.

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 58) For any pair of countries, there is
- A) a range of exchange rates that can lead automatically to both countries realizing the gains from specialization and comparative advantage.
  - B) one single exchange rate that will lead indirectly to one country realizing the gains from specialization and comparative advantage, but not the other country.
  - C) a range of exchange rates that can lead indirectly to one country realizing the gains from specialization and comparative advantage, but not the other country.
  - D) one single exchange rate that will lead automatically to both countries realizing the gains from specialization and comparative advantage.

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

*Refer to the information provided in Table 20.3 below to answer the questions that follow.*

	<b>United States</b>	<b>Belgium</b>
<b>Raspberries</b>	\$9	9 euros
<b>Chocolate</b>	\$12	27 euros

- 59) Refer to Table 20.3. If the exchange rate is \$1 = 1 euro, then
- A) the United States will import both raspberries and chocolate.
  - B) Belgium will import both raspberries and chocolate.
  - C) the United States will import chocolate and Belgium will import raspberries.
  - D) Belgium will import chocolate.

Answer: D

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 60) Refer to Table 20.3. If the exchange rate is \$1 = 3 euros, then
- A) the United States will import both raspberries and chocolate.
  - B) Belgium will import both raspberries and chocolate.
  - C) the United States will import chocolate and Belgium will import raspberries.
  - D) the United States will import raspberries and Belgium will import chocolate.

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 61) Refer to Table 20.3. If the exchange rate is  $\$1 = 2$  euros, then
- A) the United States will import both raspberries and chocolate.
  - B) Belgium will import both raspberries and chocolate.
  - C) the United States will import raspberries and Belgium will import chocolate.
  - D) Belgium will import chocolate.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 62) Refer to Table 20.3. Trade will flow in both directions between countries only if the price of the euro is between
- A) \$.40 and \$.50.
  - B) \$1.00 and \$2.25.
  - C) \$.60 and \$.75.
  - D) \$.44 and \$1.00

Answer: D

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 63) If the exchange rate between the United States and Japan changes from  $\$1 = 100$  yen to  $\$1 = 110$  yen, then, *ceteris paribus*, the price of American goods in Japan
- A) could either increase or decrease.
  - B) will decrease.
  - C) will remain the same.
  - D) will increase.

Answer: D

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 64) If the exchange rate between the United States and Mexico changes from  $\$1 = 100$  peso to  $\$1 = 5$  pesos, *ceteris paribus*,
- A) the United States imports from Mexico increase.
  - B) Mexican exports to the United States increase.
  - C) the United States exports to Mexico increase.
  - D) the trade deficit in the United States increases.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 65) If trade between the United States and Canada is balanced and the U.S. dollar appreciates against the Canadian dollar, *ceteris paribus*, we would expect
- A) a trade surplus in the United States.
  - B) a trade surplus in Canada.
  - C) a trade deficit in Canada.
  - D) a trade deficit in both countries.

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 66) Suppose that the United States and Italy both produce wine and shoes. In the United States, wine sells for \$10 a bottle and shoes sell for \$40 a pair. In Italy, wine sells for 15 euros a bottle and shoes sell for 20 euros a pair. If the current exchange rate is 0.8 euro to the dollar, then
- A) Italy will import both shoes and wine from the United States.
  - B) the United States will import both shoes and wine from Italy.
  - C) the United States will import shoes from Italy and Italy will import wine from the United States.
  - D) the United States will import wine from Italy and Italy will import shoes from the United States.

Answer: C

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 67) Suppose that the United States and Italy both produce wine and shoes. In the United States, wine sells for \$10 a bottle and shoes sell for \$40 a pair. In Italy, wine sells for 15 euros a bottle and shoes sell for 20 euros a pair. Given this information, trade will flow in both directions if the price of a dollar is between
- A) .5 and .75 euro.
  - B) .67 and 2 euros.
  - C) 1.5 and 2.5 euros.
  - D) 2.0 and 3.0 euros.

Answer: B

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

- 1) In general, for any two countries, there are many exchange rates that will lead to gains from trade, based on comparative advantage.

Answer: TRUE

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) Trade allows the people of a country to consume outside their production possibility curve.

Answer: TRUE

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 3) If the exchange rate between the United States and Greece changes from \$1 = 1 euro to \$1 = 2 euros, then holding everything else constant, the price of U.S. goods in Greece will increase.

Answer: TRUE

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*



- 4) If Spain decreases subsidies to its olive growers, the price of olives in the U.S. will fall.  
Answer: FALSE  
Diff: 2  
Topic: *The Economic Basis for Trade: Comparative Advantage*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 5) A country is said to enjoy a comparative advantage over another country in the production of a product if it uses fewer resources to produce that product than the other country does.  
Answer: FALSE  
Diff: 1  
Topic: *The Economic Basis for Trade: Comparative Advantage*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 6) A country enjoys a comparative advantage in the production of a good if that good can be produced at a lower cost in terms of other goods.  
Answer: TRUE  
Diff: 1  
Topic: *The Economic Basis for Trade: Comparative Advantage*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 7) For any pair of nations and goods, if each country has an absolute advantage in the production of one product, it is reasonable to expect that specialization and trade will benefit both countries.  
Answer: TRUE  
Diff: 1  
Topic: *The Economic Basis for Trade: Comparative Advantage*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 8) For any pair of countries, there is only one single exchange rate that can lead automatically to both countries realizing the gains from specialization and comparative advantage.  
Answer: FALSE  
Diff: 1  
Topic: *The Economic Basis for Trade: Comparative Advantage*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 9) Within the range of exchange rates that permits specialization and trade to take place, the exchange rate will determine which country gains the most from trade.  
Answer: TRUE  
Diff: 2  
Topic: *The Economic Basis for Trade: Comparative Advantage*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*

10) If exchange rates end up in the right ranges, the free market will drive each country to shift resources into those sectors in which it enjoys a comparative advantage.

Answer: TRUE

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

11) Only those products in which a country has an absolute advantage will be competitive in world markets.

Answer: FALSE

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

12) If the domestic price is below the world price of a certain product, the domestic country will export the product.

Answer: TRUE

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 20.3 The Sources of Comparative Advantage

### 1 Multiple Choice

- 1) The quantity and quality of labor, land, and natural resources of a country are its
- A) capital stock.
  - B) productive capacity.
  - C) factor endowments.
  - D) economic potential.

Answer: C

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Definition*

- 2) The software industry depends on highly trained workers, who are abundantly available in Country A. The heavy equipment industry depends on the availability of a large stock of physical capital with which Country B is well endowed. According to Heckscher - Ohlin theorem
- A) Country A should export heavy equipment.
  - B) Country B should import software.
  - C) Country B should import heavy equipment.
  - D) Country A should import software.

Answer: B

Diff: 2

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 3) A significant portion of actual world trade patterns results from
- A) different factor endowments between countries.
  - B) the different tastes and preferences of people in different countries.
  - C) the industrial policies of governments.
  - D) different sizes of the countries.

Answer: A

Diff: 2

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) An example of an acquired comparative advantage is
- A) the United States producing more agricultural products than other countries because land is more abundant in the United States than in other countries.
  - B) United States consumers buying television sets produced in Japan because Japanese companies have a reputation for producing a higher-quality TV than those produced in the United States.
  - C) United States companies selling to other countries chemical products that cannot be sold in the United States.
  - D) the United States purchasing coconuts from other countries, because they cannot be produced in the United States.

Answer: B

Diff: 2

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 5) An example of acquired comparative advantage is that
- A) the United States imports coffee beans because coffee beans cannot be grown in the United States.
  - B) some U.S. consumers prefer German cars over American cars because German cars have a reputation for being very safe.
  - C) China specializes in the production of labor-intensive goods because of the amount of labor available in the country relative to capital.
  - D) the U.S. government provides a subsidy to firms that are trying to increase their exports to other countries.

Answer: B

Diff: 2

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 6) Which of the following phenomena CANNOT be explained by the simple comparative advantage theory?
- A) A country that does not have much farmland tends to import agricultural goods.
  - B) A country with a lot of skilled labor tends to export highly technical goods.
  - C) A country tends to export the goods that it can produce at a lower opportunity cost.
  - D) A country imports and exports the same goods.

Answer: D

Diff: 2

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 7) The Heckscher–Ohlin theorem looks to \_\_\_\_\_ to explain trade flows.
- A) relative factor endowments
  - B) the existence of trade barriers
  - C) acquired comparative advantage
  - D) the differences in preferences among consumers

Answer: A

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Fact*

- 8) Which of the following is NOT a valid explanation for the existence of international trade?
- A) the existence of natural comparative advantage
  - B) the existence of acquired comparative advantage
  - C) some economies of scale that are available when producing for a domestic market may not be available when producing for a world market
  - D) industries may differentiate their products in order to please the wide variety of tastes that exist worldwide

Answer: C

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 2 True/False

- 1) A country with a lot of human capital is likely to have a comparative advantage in highly technical goods.

Answer: TRUE

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) The Heckscher–Ohlin theorem says that a country is likely to have a comparative advantage in a labor intensive product, if it has a large labor supply.

Answer: TRUE

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Fact*

3) The Heckscher–Ohlin theorem explains why the U.S. both imports and exports cars.

Answer: FALSE

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

4) International trade can be spurred by economies of scale giving a cost advantage to one large producer exporting to the whole world.

Answer: TRUE

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

5) Acquired comparative advantage come from factor endowments.

Answer: FALSE

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 20.4 Trade Barriers: Tariffs, Export Subsidies, and Quotas

### 1 Multiple Choice

1) A tariff is

A) a limit on the quantity of a good that can be imported into a country.

B) a tax on imports.

C) a government payment made to domestic firms to encourage exports.

D) a payment made by the government to producers of the product.

Answer: B

Diff: 1

Topic: *Trade Barriers: Tariffs, Export Subsidies, and Quotas*

Skill: *Definition*

2) Government payments made to domestic firms in order to encourage exports are called

A) tariffs.

B) bribes.

C) quotas.

D) subsidies.

Answer: D

Diff: 1

Topic: *Trade Barriers: Tariffs, Export Subsidies, and Quotas*

Skill: *Definition*

3) It costs a computer manufacturer \$3,000 to produce a personal computer. This manufacturer sells these computers abroad for \$2,500. This is an example of

A) a negative tariff.

B) export subsidy.

C) dumping.

D) a trade–related economy of scale.

Answer: C

Diff: 1

Topic: *Trade Barriers: Tariffs, Export Subsidies, and Quotas*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) If the United States decreases the tariff on imported tuna steaks, this will
- A) reduce the number of tuna steaks imported into the United States and reduce production of tuna steaks in the United States.
  - B) increase the number of tuna steaks imported in the United States and increase the production of tuna steaks in the United States.
  - C) reduce the number of tuna steaks imported in the United States and increase the production of tuna steaks in the United States.
  - D) increase the number of tuna steaks imported in the United States and reduce the production of tuna steaks in the United States.

Answer: D

Diff: 2

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

- 5) The United States placed a limit on the amount of cars that can be imported into the United States. This is an example of
- A) a tariff.
  - B) an export subsidy.
  - C) a quota.
  - D) dumping.

Answer: C

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

- 6) Which of the following is TRUE?
- A) An import quota generates government revenue.
  - B) Tariffs on imports generate government revenue as long as the domestic price is larger than the world price plus the tariff.
  - C) Tariffs on imports do not generate government revenue if the domestic price is larger than the world price plus the tariff.
  - D) Tariffs on imports never generate government revenue.

Answer: B

Diff: 2

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

- 7) Which of the following statements is FALSE?
- A) If the United States imposes a tariff on Japanese car imports, the price of cars in the United States is likely to increase.
  - B) If the United States imposes a quota on Japanese car imports, the price of cars in the United States is likely to increase.
  - C) If Japan imposes a subsidy on car exports to the United States, the price of cars in the United States is likely to increase.
  - D) If Japan imposes a "voluntary export restraint" on car exports to the United States, the price of cars in the United States is likely to increase.

Answer: C

Diff: 3

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

- 8) Dumping involves a country selling its exports
- A) at a price lower than its cost of production.
  - B) to nations without a comparative advantage in producing the products.
  - C) to nations that regularly impose tariffs.
  - D) to nations that have no need for the products.

Answer: A

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Definition

- 9) The U.S. tariff law that set off an international trade war in the 1930s was the
- A) Taft–Hartley tariff.
  - B) Bentsen–Gephardt tariff.
  - C) Smoot–Hawley tariff.
  - D) Landrum–Griffin tariff.

Answer: C

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

- 10) The international agreement signed by the United States and 22 other countries in 1947 to promote the liberalization of foreign trade is known by its initials as
- A) GATT.
  - B) START.
  - C) SALT.
  - D) IMF.

Answer: A

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

- 11) Every president who has held office since the General Agreement on Tariffs and Trade was signed has
- A) argued for free–trade policies, but only Eisenhower and Reagan successfully resisted all calls for protection from various sectors of the economy.
  - B) argued that certain domestic industries deserve protection, yet each one has been reluctant to use his powers to protect individual sectors of the economy.
  - C) argued for free–trade policies, yet each one has used his powers to protect various sectors of the economy.
  - D) argued for free–trade policies, but only Kennedy and Carter successfully resisted all calls for protection from various sectors of the economy.

Answer: C

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

- 12) In 2003, the WTO ruled that U.S. tariffs on \_\_\_\_\_ were unfair and allowed retaliatory tariffs on U.S. products.
- A) steel imported from the EU
  - B) beef imported from Argentina
  - C) automobiles imported from Japan
  - D) diamonds imported from South Africa

Answer: A

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

- 13) Over time, the general movement in the United States has been toward
- A) higher tariffs and stricter import quotas.
  - B) managed trade.
  - C) relatively more free trade.
  - D) complete elimination of tariffs, import quotas, and export subsidies.

Answer: C

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

- 14) If a nation has most-favored-nation status conferred on it, then exports from that country
- A) will be priced higher than products exported from countries without most-favored-nation status.
  - B) are exempt from all safety regulations.
  - C) are sold below cost.
  - D) are taxed at the lowest negotiated tariff rates.

Answer: D

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

- 15) Economic integration

- A) occurs when two or more nations join to form a free-trade zone.
- B) occurs when countries develop an acquired comparative advantage that makes their industries more competitive in international markets.
- C) occurs when countries are granted most-favored-nation status.
- D) occurs when one country voluntarily agrees to reduce its exports to another country.

Answer: A

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Definition

- 16) The idea of the U.S.-Canadian Free-Trade Agreement that removed all barriers to trade including tariffs and quotas between the United States and Canada by 1998 was to
- A) increase the price of Canadian goods sold in the United States.
  - B) increase the price of U.S. goods sold in Canada.
  - C) increase the amount that the United States exports to Canada and the amount that the United States imports from Canada.
  - D) increase the amount that the United States exports to Canada and decrease the amount that the United States imports from Canada.

Answer: C

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact



17) In 1991, what group of countries began the process of forming the largest free-trade zone in the world?

- A) the European Community
- B) the North Atlantic Treaty Organization
- C) the United States, Canada, and Mexico
- D) the Organization of Petroleum Exporting Countries

Answer: A

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

18) Which of the following can be considered a free-trade zone?

- A) countries that are members of GATT
- B) the United States
- C) all English-speaking nations
- D) the industrialized OECD nations

Answer: B

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

19) Related to the *Economics in Practice* on p. 366: A rise in global food prices would most likely result in pressure to:

- A) increase tariffs on imported food.
- B) decrease tariffs on imported food.
- C) decrease quotas on imported food.
- D) decrease export duties on food.

Answer: B

Diff: 2

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas: *Economics in Practice*

Skill: Conceptual

AACSB: Analytic Skills

## 2 True/False

1) An export subsidy raises the domestic price of the product.

Answer: TRUE

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

2) A tariff is a tax on imports.

Answer: TRUE

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Definition

3) Dumping refers to a country selling its exports at a price lower than its selling price at home.

Answer: FALSE

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Definition

4) A quota is a restriction that allows women and minorities to import a certain percentage of imports.

Answer: FALSE

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Definition

5) Tariffs, quotas and exports subsidies all increase domestic production.

Answer: TRUE

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

6) A quota on sugar harms domestic producers of sugar.

Answer: FALSE

Diff: 2

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

7) Related to the *Economics in Practice* on p. 366: To keep domestic food markets well-stocked, China has recently increased export duties on food products.

Answer: TRUE

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas: *Economics in Practice*

Skill: Fact

## 20.5 Free Trade or Protection?

### 1 Multiple Choice

1) The case for free trade is based on the

A) theory of balanced growth.

C) argument for a diversified economy.

B) theory of absolute advantage.

D) theory of comparative advantage.

Answer: D

Diff: 1

Topic: Free Trade or Protection?

Skill: Fact

2) Which of the following statements is NOT true?

A) Trade is beneficial because it allows more efficient production.

B) Trade is beneficial because it allows consumers to buy goods at cheaper prices.

C) Trade is beneficial because it allows all domestic industries to increase production.

D) Trade is beneficial because it allows consumption beyond the production possibility frontier.

Answer: C

Diff: 2

Topic: Free Trade or Protection?

Skill: Conceptual

AACSB: Reflective Thinking

- 3) A tariff imposed on imported shoes will cause the domestic price of shoes to \_\_\_\_\_ and the domestic production of shoes to \_\_\_\_\_.
- A) increase; increase  
 B) increase; decrease  
 C) decrease; increase  
 D) decrease; decrease

Answer: A

Diff: 1

Topic: Free Trade or Protection?

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 20.4 below to answer the questions that follow.

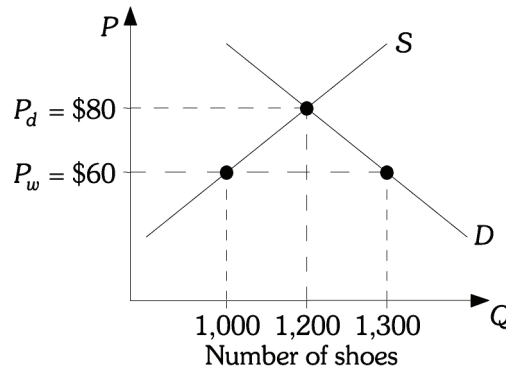


Figure 20.4

- 4) Refer to Figure 20.4. The domestic price of shoes is \$80. After trade the price of a pair of shoes is \$60. After trade this country will import
- A) 100 pairs of shoes.  
 B) 200 pairs of shoes.  
 C) 300 pairs of shoes.  
 D) 1,300 pairs of shoes.

Answer: C

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

- 5) Refer to Figure 20.4. The domestic price of shoes is \$80. After trade the price of a pair of shoes is \$60. Now domestic production costs fall so that the equilibrium domestic price of a pair of shoes is \$70. This would cause
- A) the number of pairs of shoes imported into this country to increase.  
 B) the number of pairs of shoes imported into this country to decrease.  
 C) the number of pairs of shoes exported from this country to increase.  
 D) the number of pairs of shoes exported from this country to decrease.

Answer: B

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

- 6) Refer to Figure 20.4. The domestic price of shoes is \$80. After trade the price of a pair of shoes is \$60. If shoes are a normal good and income in this country rises, then we would expect
- A) the number of pairs of shoes imported into this country to increase.
  - B) the number of pairs of shoes imported into this country to decrease.
  - C) the number of pairs of shoes exported from this country to increase.
  - D) the number of pairs of shoes exported from this country to decrease.

Answer: A

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 20.5 below to answer the questions that follow.

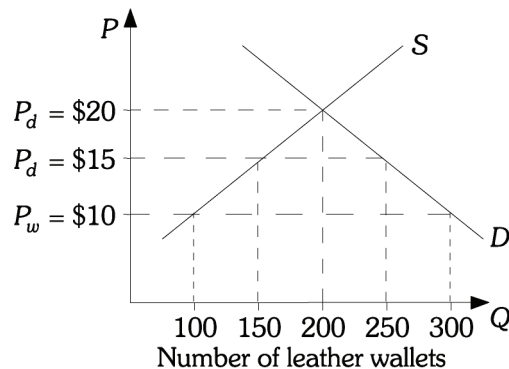


Figure 20.5

- 7) Refer to Figure 20.5. The domestic price of a leather wallet is \$20. With free trade the price of a leather wallet is \$10 and after a tariff is imposed the price is \$15. If there is free trade, this country will import \_\_\_\_\_ leather wallets.

- A) 50
- B) 100
- C) 200
- D) 300

Answer: C

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Figure 20.5. The domestic price of a leather wallet is \$20. With free trade the price of a leather wallet is \$10 and after a tariff is imposed the price is \$15. After the tariff is imposed, this country will import \_\_\_\_\_ leather wallets.

- A) 50
- B) 100
- C) 150
- D) 200

Answer: B

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 20.5. The domestic price of a leather wallet is \$20. With free trade the price of a leather wallet is \$10 and after a tariff is imposed the price is \$15. After the tariff is imposed, tariff revenue in this country will be
- A) \$50.                      B) \$250.                      C) \$500.                      D) \$750.

Answer: C

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Figure 20.5. The domestic price of a leather wallet is \$20. With free trade the price of a leather wallet is \$10 and after a tariff is imposed the price is \$15. After the tariff is imposed,
- A) domestic production and consumption will increase by 50 wallets and domestic consumption will increase by 50 wallets.
- B) domestic production will increase by 150 wallets and domestic consumption will decrease by 250 wallets.
- C) domestic production will increase by 100 wallets and domestic consumption will decrease by 100 wallets.
- D) domestic production will increase by 50 wallets and domestic consumption will decrease by 50 wallets.

Answer: D

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Figure 20.5. The domestic price of a leather wallet is \$20. With free trade the price of a leather wallet is \$10 and after a tariff is imposed the price is \$15. If the tariff is raised so that it now equals \$10, tariff revenue in this country will be
- A) \$0.                      B) \$1,000.                      C) \$2,000.                      D) \$3,000.

Answer: A

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Figure 20.5. The domestic price of a leather wallet is \$20. With free trade the price of a leather wallet is \$10 and after a tariff is imposed the price is \$15. With free trade domestic production is
- A) 0.                      B) 100.                      C) 150.                      D) 300.

Answer: B

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills



- 16) Refer to Figure 20.6. The domestic price of oil is \$130 per barrel, and the world price of oil is \$120 per barrel. If the domestic government imposes a tariff of \$\_\_\_\_\_ per barrel, it will eliminate all oil imports and achieve tariff revenues of \$\_\_\_\_\_.
- A) 10; zero                      B) 5; 20 million                      C) 5; 45 million                      D) 10; 120 million

Answer: A

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 20.7 below to answer the questions that follow.

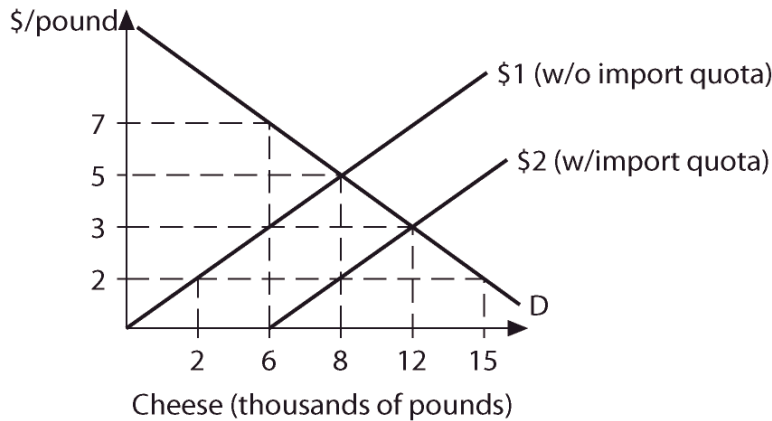


Figure 20.7

- 17) Refer to Figure 20.7. Before imposing an import quota, the equilibrium price of cheese is \$\_\_\_\_\_ per pound and the equilibrium quantity is \_\_\_\_\_ pounds.
- A) 3; 12,000                      B) 5; 8,000                      C) 5; 6,000                      D) 3; 6,000

Answer: B

Diff: 1

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Figure 20.7. Suppose the government imposes an import quota of 6,000 pounds of cheese. The equilibrium price changes to \$\_\_\_\_\_ per pound, and the equilibrium quantity changes to \_\_\_\_\_ pounds.
- A) 3; 12,000                      B) 3; 6,000                      C) 5; 8,000                      D) 7; 6,000

Answer: A

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

19) Refer to Figure 20.7. If the government does not impose an import quota of 6,000 pounds of cheese and the world price of cheese is \$2 per pound, this country will \_\_\_\_\_ pounds of cheese.

- A) import 7,000
- C) import 13,000

- B) import 10,000
- D) none of the above

Answer: C

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

20) Refer to Figure 20.7. From a no trade position, an import quota of 6,000 pounds

- A) increases domestic supply by 3,000 pounds and lowers the price by \$2 per pound.
- B) decreases domestic supply by 2,000 pounds and lowers the price by \$2 per pound.
- C) decreases domestic supply by 2,000 pounds and raises the price by \$1 per pound.
- D) decreases domestic supply by 3,000 pounds and lowers the price by \$2 per pound.

Answer: B

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

21) Related to the *Economics in Practice* on p. 369. If the candle makers in the petition were able to gain protection for their industry, the French economy would most likely

- A) benefit in the short run.
- B) become more efficient.
- C) benefit only if the protection was in the form of a tariff.
- D) have to pay higher prices for candles.

Answer: D

Diff: 1

Topic: Free Trade or Protection?: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

22) Related to the *Economics in Practice* on p. 369: Satirist Frederic Bastiat's essay arguing for a quota on sunlight in order to protect domestic candle makers suggests that it is pointless to:

- A) participate in international trade
- B) protect industries that cannot compete effectively
- C) legislate based on economic theory
- D) create barriers to trade in some markets but not others

Answer: B

Diff: 2

Topic: Free Trade or Protection?: Economics in Practice

Skill: Analytic

AACSB: Analytic Skills



## 2 True/False

- 1) It is a valid argument that industries need to be protected from foreign competition because foreign wages are substantially lower than wages paid to U.S. workers.

Answer: FALSE

Diff: 2

Topic: *Free Trade or Protection?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) Free trade allows the people of a country to consume outside their production possibility frontier.

Answer: TRUE

Diff: 2

Topic: *Free Trade or Protection?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 3) Free trade decreases world production and consumption.

Answer: FALSE

Diff: 2

Topic: *Free Trade or Protection?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) Protection is often temporary to help infant industries.

Answer: FALSE

Diff: 2

Topic: *Free Trade or Protection?*

Skill: *Fact*

- 5) Protection makes the people of a country better off.

Answer: FALSE

Diff: 2

Topic: *Free Trade or Protection?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 6) According to some environmental groups, free trade policies are potentially harmful to the environment.

Answer: TRUE

Diff: 1

Topic: *Free Trade or Protection?*

Skill: *Fact*

# Chapter 21 Economic Growth in Developing and Transitional Economies

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## 21.1 Life in the Developing Nations: Population and Poverty

### 1 Multiple Choice

- 1) Chronic food shortages, explosive population growth, and hyperinflations are problems facing
- A) industrial countries.
  - B) first world countries.
  - C) developing countries.
  - D) developed countries.

Answer: C

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 2) In developing countries,
- A) financial markets are well developed.
  - B) central banks are effective in controlling the macroeconomy.
  - C) labor productivity in agriculture is high.
  - D) infant mortality is high.

Answer: D

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 3) In 2006, per capita income was roughly \_\_\_\_\_ times lower in low-income countries than in high-income countries.
- A) 12
  - B) 31
  - C) 56
  - D) 181

Answer: C

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 4) In 2006, the infant mortality rate was \_\_\_\_\_ per 1,000 births in low-income countries.
- A) 6.9
  - B) 29.9
  - C) 39.8
  - D) 114

Answer: D

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 5) In 2005, the number of internet users was \_\_\_\_\_ per 1,000 people in high-income countries.
- A) 194
  - B) 523
  - C) 774
  - D) 851

Answer: B

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 6) The term "Fourth World" is used to describe countries that
- A) are stagnant and have fallen far behind the economic advances of the rest of the world.
  - B) have experienced rapid economic growth.
  - C) are more developed than "Third World" countries.
  - D) are closer to developed countries than transitional economies.

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Definition*

- 7) In 2006, the literacy rate of people over the age of 15 was 60.8% for people in countries classified as
- A) low-income.
  - B) lower middle-income.
  - C) upper middle-income.
  - D) high-income.

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 8) Which of the following statements is FALSE?
- A) Developing countries have a lower per capita income compared to developed countries.
  - B) Developing countries have a lower infant mortality rate compared to developed countries.
  - C) Developing countries have lower life expectancy compared to developed countries.
  - D) A smaller percentage of the population live in urban areas in developing countries compared to developed countries.

Answer: B

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 9) In the United States, the poorest 20% of the families receive under \_\_\_\_\_% of total income.
- A) 1
  - B) 5
  - C) 8
  - D) 10

Answer: B

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 10) The term "brain drain" means the tendency for
- A) talented people in developing countries to become educated and remain in developed countries.
  - B) talented people in developed countries to become educated and remain in developing countries.
  - C) harm to be done to citizens due to the lack of nutrition in developing countries.
  - D) developing countries to have limited social overhead capital.

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Definition*

- 11) Which of the following is NOT a characteristic that is associated with developed countries?
- A) a high per capita GNP
  - B) low infant mortality rates
  - C) high life expectancy
  - D) an income distribution that is very close to being equal

Answer: D

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 12) Characteristics of economic development include all of the following EXCEPT
- A) improvements in basic education.
  - B) an increase in the standard of living.
  - C) a decrease in the percentage of the labor force in urban areas.
  - D) an increase in life expectancy.

Answer: C

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 13) Which of the following characteristics is generally representative of developed countries relative to developing nations?
- A) A higher level of per capita GNI
  - B) A shorter life expectancy
  - C) A higher rate of infant mortality
  - D) A smaller percentage of children enrolled in school

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 14) Which of the following characteristics is generally representative of developing countries relative to developed countries?
- A) a smaller percentage of the labor force in urban areas
  - B) a lower infant mortality rate
  - C) a greater degree of equality in the income distribution
  - D) a lower rate of illiteracy

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 15) Which of the following characteristics is generally representative of developed countries relative to developing countries?
- A) a larger percentage of the labor force in rural areas
  - B) a lower infant mortality rate
  - C) lower productivity in the agriculture sector
  - D) a lower rate of literacy

Answer: B

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

16) Which of the following characteristics is generally representative of developing countries relative to developed countries?

- A) a greater degree of equality in the income distribution
- B) a larger percentage of the labor force in urban areas
- C) a lower infant mortality rate
- D) lower productivity in the agricultural sector

Answer: D

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

17) Which of the following statements is FALSE?

- A) Low productivity in the agricultural sector in developing countries means that farm output per person is barely sufficient to feed a farmer's own family.
- B) Income tends to be more equally distributed in developing countries than in developed countries.
- C) The percentage of the labor force employed in urban areas is greater in developed nations than in developing nations.
- D) Developed nations account for only about one-quarter of the world's population, but they consume about three-quarters of the world's output.

Answer: B

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

18) In the distribution of world income, the richest one-fifth of the world's population earns about \_\_\_\_\_ of the world income.

- A) 40%
- B) 65%
- C) 79%
- D) 98%

Answer: C

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

19) In the distribution of world income, the poorest one-fifth of the world's population earns about \_\_\_\_\_ of the world income.

- A) 0.5%
- B) 2%
- C) 5%
- D) 12%

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

20) Although the developed nations account for only about one-quarter of the world's population, they are estimated to consume what proportion of the world's output?

- A) one-quarter
- B) one-half
- C) two-thirds
- D) three-quarters

Answer: D

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 21) Although the developing nations account for about three-fourths of the world's people, they are estimated to receive what percentage of the world's income?  
A) one-fourth                      B) one-third                      C) two-fifths                      D) one-half

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 22) Recent studies suggest that \_\_\_\_\_ of the population of the developing nations have annual incomes insufficient to provide for adequate nutrition.  
A) 10%                                      B) 25%                                      C) 40%                                      D) 75%

Answer: C

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 23) In 2006, the largest population group (2.4 billion people) belonged to countries classified as  
A) low-income.                                      B) lower middle-income.  
C) upper middle-income.                                      D) high-income.

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 24) Which of the following factors has been suggested as an explanation for the lack of economic growth in many poor nations?  
A) insufficient capital formation  
B) the supply of human resources is too high.  
C) inadequate level of resources  
D) a lack of dependence on the already developed nations

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 25) The lack of capital in developing nations causes  
A) labor productivity to remain low.  
B) the savings rate to be too high.  
C) output to be low in the present but high in the future.  
D) consumption rates to be too high.

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 26) An economy is not able to develop because of a lack of capital. Which of the following strategies would you suggest this economy pursue?
- A) lower interest rates
  - B) impose quotas on how much capital can be imported from other countries to reduce dependency on foreign capital
  - C) increase the political stability of the economy
  - D) nationalize private enterprises because the government sector is not motivated by profit maximization

Answer: C

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 27) A developing economy is considering restricting the amount of money its citizens can invest abroad. What might the purpose of this restriction be?
- A) to increase the dependency of the economy on developed economics
  - B) to increase capital formation by forcing its citizens to invest in their own country
  - C) to reduce the nation's trade deficit so that interest rates will be reduced and capital formation will increase
  - D) to increase the degree of equality in the income distribution

Answer: B

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 28) India is on the World Bank's list of \_\_\_\_\_ countries and its capital city is one of the top ten centers of commerce in the world.
- A) low-income
  - B) lower middle-income
  - C) upper middle-income
  - D) high-income

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

## 2 True/False

- 1) Investment in social overhead capital refers to investment in areas like education and nutrition.

Answer: FALSE

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Definition*

- 2) The International Monetary Fund (IMF) makes loans to encourage economic development.

Answer: FALSE

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

3) Social overhead capital is basic infrastructure projects such as roads, power generation and irrigation systems.

Answer: TRUE

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Definition*

4) Income distributions in developing countries are often so skewed that the richest households of very poor nations surpass the living standards of many high-income families in the developed economies.

Answer: TRUE

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

5) Developing countries are characterized by low population growth rates.

Answer: FALSE

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

6) In 2006, low-income countries had the highest infant mortality rates and lowest literacy rates in the world.

Answer: TRUE

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

7) According to the World Bank, in 2006 the smallest population group (810 million people) belonged to countries classified as upper middle-income.

Answer: TRUE

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

8) Despite India being on the World Bank's list of low-income countries, its capital city, Mumbai, is one of the top ten centers of commerce in the world.

Answer: TRUE

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*



## 21.2 Economics Development: Sources and Strategies

### 1 Multiple Choice

- 1) All of the following are factors that limit a poor nation's economic growth EXCEPT
- A) insufficient capital formation.
  - B) insufficient controls on free trade.
  - C) lack of entrepreneurial ability.
  - D) lack of human capital.

Answer: B

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Conceptual

AACSB: Reflective Thinking

- 2) The vicious-circle-of-poverty hypothesis states that poor countries
- A) are unable to save and invest enough to accumulate capital stock that would help them grow.
  - B) cannot develop because they lack the ability to educate their workers.
  - C) cannot develop because their economic policies are ineffective.
  - D) cannot develop because people don't consume due to lack of goods and services.

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Definition

- 3) Capital flight refers to the fact that both human and financial capital
- A) flow into developing countries to build much needed infrastructure.
  - B) leave developing countries in search of a higher rate of return.
  - C) leave developed countries in search of a higher rate of return.
  - D) flow into developing countries to invest in risk free investments.

Answer: B

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Definition

- 4) A "brain drain" is
- A) the tendency of workers in developing countries to reject new technologies.
  - B) the tendency of talented people in developing countries to get education in developed countries and to stay there after graduation.
  - C) the impact of poverty on the productivity of workers in developing countries.
  - D) the impact of malnutrition on education and productivity in developing countries.

Answer: B

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Definition

- 5) Compensation sent back to family in the home country by recent emigrants is known as
- A) remittances.
  - B) transaction costs.
  - C) outsourcing.
  - D) capital flight.

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Definition

6) \_\_\_\_\_ is/are estimated at approximately \$100 billion per year.

- A) Remittances sent from the United States
- B) Capital flight from the United States
- C) Social overhead capital in the United States
- D) The value of brain drain flowing into the United States

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

7) In 2007, remittances from illegal immigrants in the United States to Mexico

- A) began to fall because of increased crackdowns on illegal immigration.
- B) continued to rise despite increased crackdowns on illegal immigration.
- C) began to fall despite a decrease in enforcement of immigration laws.
- D) continued to rise because of the decrease in enforcement of immigration laws.

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

8) Building roads, power generators, and irrigation systems are projects that are referred to as

- A) social overhead capital.
- B) human capital.
- C) physical capital.
- D) financial capital.

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Definition

9) The government's role in a developing country is important during the country's development process for all of the following reasons EXCEPT

- A) building social overhead capital cannot be taken on by the private sector.
- B) building infrastructure is a huge project that only the government can undertake.
- C) many social projects are associated with the free-rider problem, which minimizes the rate of return to the private sector.
- D) the government is the only institution with a vested interest in a country's development.

Answer: D

Diff: 2

Topic: Economics Development: Sources and Strategies

Skill: Conceptual

AACSB: Reflective Thinking

10) Statistics show that the less developed a country is

- A) the larger is the share of industrial output in its total output.
- B) the larger is the share of agricultural output in its total output.
- C) the larger is the per capita income.
- D) the larger is the GDP.

Answer: B

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

11) The process of developing local industries to manufacture goods to replace imports is known as

- A) export promotion.
- B) import substitution.
- C) export favoritism.
- D) import promotion.

Answer: B

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Definition

12) A decline in a country's terms of trade means

- A) the domestic price of its exports increases and the world price of its imports decreases.
- B) the domestic price of its imports increases and the world price of its exports decreases.
- C) the domestic price of its imports decreases and the world price of its exports decreases.
- D) the domestic price of both its imports and exports decreases.

Answer: B

Diff: 2

Topic: Economics Development: Sources and Strategies

Skill: Conceptual

AACSB: Reflective Thinking

13) A decrease in the domestic price of a country's imports and an increase in the world price of its exports

- A) decreases the country's terms of trade.
- B) has no effect on the country's terms of trade.
- C) increases the country's terms of trade.
- D) increases the country's imports and exports.

Answer: C

Diff: 2

Topic: Economics Development: Sources and Strategies

Skill: Analytic

AACSB: Analytic Skills

14) The policy in which industrial production is oriented towards foreign consumers is called

- A) import substitution.
- B) export promotion.
- C) export orientation.
- D) import promotion.

Answer: B

Diff: 2

Topic: Economics Development: Sources and Strategies

Skill: Definition

15) One of the most successful countries in implementing export promotion policies is

- A) the United States.
- B) Germany.
- C) China.
- D) Japan.

Answer: D

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 16) Which agency lends money to countries to promote their economic development?
- A) the International Monetary Fund
  - B) the Federal Reserve
  - C) the World Bank
  - D) the League of Nations

Answer: C

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 17) Which agency lends money to countries to help them stabilize their exchange rates?
- A) the International Monetary Fund
  - B) the World Bank
  - C) the Federal Reserve
  - D) the Bureau de Change

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 18) Which of the following is a goal of structural adjustment programs?
- A) decrease the size of the private sector through privatization
  - B) increase the budget deficit
  - C) control inflation and encourage saving
  - D) decrease literacy rates

Answer: C

Diff: 2

Topic: Economics Development: Sources and Strategies

Skill: Conceptual

AACSB: Reflective Thinking

- 19) The practice of lending very small amounts of money, without collateral, and accepting small savings deposits is known as
- A) microfinance
  - B) capital flight
  - C) debt rescheduling
  - D) a stabilization program

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Definition

- 20) With microfinance, the mechanism of \_\_\_\_\_ is a way to avoid the problem of imperfect information.
- A) requiring no collateral
  - B) peer lending
  - C) making only small loans
  - D) accepting savings deposits

Answer: B

Diff: 2

Topic: Economics Development: Sources and Strategies

Skill: Conceptual

AACSB: Reflective Thinking

- 21) Compared to traditional bank loans, microfinance loans have all of the following characteristics EXCEPT
- A) they are much smaller.
  - B) they require no collateral.
  - C) they are made more frequently to women than to men.
  - D) they have repayments that begin at a much later date.

Answer: D

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 22) From 1978 to 2003, \_\_\_\_\_ grew on average 8 percent per year, a rate faster than any other country in the world.
- A) India
  - B) China
  - C) the United States
  - D) Russia

Answer: B

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 23) China and India both have rapidly developing economies. Which of the following characteristics is shared by India and China?
- A) both have embraced free-market economies
  - B) property rights are well established in both countries
  - C) both are democratic countries
  - D) both have high literacy rates

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 24) Most of China's recent growth has been fueled by \_\_\_\_\_, and most of India's recent growth has been fueled by \_\_\_\_\_.
- A) manufacturing; services
  - B) services; manufacturing
  - C) manufacturing; manufacturing
  - D) services; services

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 25) Related to the *Economics in Practice* on p. 406: In Indonesia, children and allies of President Suharto were affiliated with many companies. When Suharto unexpectedly fell ill, the stock prices of these companies dropped significantly, suggesting that:
- A) these companies thrived under President Suharto despite their connection with Suharto's allies and relatives.
  - B) later regimes in Indonesia will be more concerned about economic efficiency and less corrupt.
  - C) President Suharto's removal from power was based not only on illness but also on concern over corruption.
  - D) investor opinion of many of these firms was based on their connections with President Suharto and not the economic efficiency of those companies.

Answer: D

Diff: 2

Topic: *Economics Development: Sources and Strategies: Economics in Practice*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

- 1) In a developing economy, scarcity of capital may have more to do with a lack of incentive for citizens to save and invest productively than with any absolute scarcity of income available for capital accumulation.

Answer: TRUE

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Fact*

- 2) The following situation is an example of an import substitution strategy. Costa Rica has a comparative advantage in the production of coffee and, as a result, the Costa Rican government grants incentives to coffee planters to improve their performance in the international marketplace.

Answer: FALSE

Diff: 3

Topic: *Economics Development: Sources and Strategies*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 3) In general, as a nation's income increases, fertility rates fall.

Answer: TRUE

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Fact*

- 4) Remittances can be used as investment capital for small businesses.

Answer: TRUE

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Fact*

- 5) Human capital shortages are NOT a barrier to economic growth in developing countries.  
Answer: FALSE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*
- 6) A frequently cited barrier to economic development is the apparent shortage of entrepreneurial activity in developing nations.  
Answer: TRUE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*
- 7) Most economists believe that import–substitution strategies have been quite successful around the world.  
Answer: FALSE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*
- 8) Policies designed to promote import substitution often encouraged labor–intensive production methods, which encouraged the creation of jobs.  
Answer: FALSE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*
- 9) Economic growth guarantees economic development.  
Answer: FALSE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 10) Developing countries often pursue agricultural policies that discourage farm production.  
Answer: TRUE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*
- 11) Economic theories of population growth suggest that fertility decisions made by poor families should be viewed as uninformed and uncontrolled.  
Answer: FALSE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*

12) Governments in many developing countries often maintain artificially low food prices because the direct political influence of the relatively large rural population outweighs the influence of the relatively small urban population.

Answer: FALSE

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Fact*

13) Export promotion policies try to encourage firms to produce more of products the country has a comparative advantage in.

Answer: TRUE

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Fact*

14) Microfinance is aimed at introducing entrepreneurs among the very poorest parts of the developing world to the capital market.

Answer: TRUE

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Fact*

15) India is a democratic country with a history of rule-of-law and an English speaking heritage, all factors thought to give a development advantage.

Answer: TRUE

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Fact*

16) China has developed a rapid approach to development.

Answer: FALSE

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Fact*

17) Related to the *Economic in Practice* on p. 406. Corruption often leads to more efficient firms producing the goods and services in a society.

Answer: FALSE

Diff: 1

Topic: *Economics Development: Sources and Strategies: Economics in Practice*

Skill: *Fact*



## 21.3 Issues in Economic Development

### 1 Multiple Choice

- 1) Studies by the World Bank during the 1970s indicate that
- A) growth in GDP always leads to economic development.
  - B) growth in GDP does not guarantee improvements in development indicators.
  - C) growth in GDP improves education, nutrition and health.
  - D) growth in GDP decreases the GDP per capita.

Answer: B

Diff: 2

Topic: Issues in Economic Development

Skill: Fact

- 2) The population in developing countries grows at a rate of \_\_\_\_\_% a year, whereas the population in developed countries grows at a rate of \_\_\_\_\_% a year.
- A) 1.7; 0.5                      B) 1; 2                      C) 2.5; 1.5                      D) 1.5; 0.1

Answer: A

Diff: 2

Topic: Issues in Economic Development

Skill: Fact

- 3) When rapid population growth changes the age composition of a population, which of the following is likely to happen?
- A) the percentage of dependent children decreases relative to productive working adults
  - B) saving rates decrease
  - C) investment increases
  - D) consumption decreases

Answer: B

Diff: 2

Topic: Issues in Economic Development

Skill: Conceptual

AACSB: Reflective Thinking

- 4) There are 100 million people in a country. On average, the number of births is 7 million and the number of deaths is 5 million. The natural rate of population increase in this country is
- A) 12%.                      B) 7%.                      C) 5%.                      D) 2%.

Answer: D

Diff: 1

Topic: Issues in Economic Development

Skill: Analytic

AACSB: Analytic Skills

- 5) In the Kerala region of India, fishermen used cell phones to help connect buyers and sellers, reducing waste. All of the following describe ways in which technology is likely to improve information flow and increase economic efficiency EXCEPT:
- A) Fax technology makes it possible to transmit signed contracts in seconds, allowing the parties to the contract to begin performing their contract duties more quickly.
  - B) High-speed Internet connections allow engineers in developing countries to collaborate with firms all around the world.
  - C) E-mail now makes criminals who commit certain kinds of fraud very difficult to identify and arrest.
  - D) Video conferencing decreases the need for expensive business travel.

Answer: C

Diff: 2

Topic: *Issues in Economic Development: Economics in Practice*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 6) Related to the *Economics in Practice* on p. 411. BY 2001, the majority of the fishing fleet in the Indian state of Kerala had mobile phones. As a result of the introduction of mobile phone service to this fishing industry, profits \_\_\_\_\_ and consumer prices \_\_\_\_\_.
- A) rose; fell
  - B) fell; rose
  - C) rose; rose
  - D) fell; fell

Answer: A

Diff: 1

Topic: *Issues in Economic Development: Economics in Practice*

Skill: *Fact*

## 2 True/False

- 1) Rapid population growth tends to make the population younger in developing economies.

Answer: TRUE

Diff: 1

Topic: *Issues in Economic Development*

Skill: *Fact*

- 2) GDP growth leads development.

Answer: FALSE

Diff: 1

Topic: *Issues in Economic Development*

Skill: *Fact*

- 3) Developed counties have a higher population growth than developing countries.

Answer: FALSE

Diff: 1

Topic: *Issues in Economic Development*

Skill: *Fact*

## 21.4 The Transition to a Market Economy

### 1 Multiple Choice

- 1) The tragedy of commons relates to the idea that
- A) central planning sets all production targets.
  - B) all wages, prices, and interest rates are controlled by government.
  - C) collective ownership may not provide the proper private incentives for efficiency because individuals do not bear the full costs of their own decisions, but enjoy the full benefits.
  - D) central planning sets all distribution targets.

Answer: C

Diff: 1

Topic: *The Transition to a Market Economy*

Skill: *Definition*

- 2) The tragedy of commons relates to the idea that
- A) central planning sets all production targets.
  - B) all wages, prices, and interest rates are controlled by government.
  - C) common owned resources tend to be overused.
  - D) central planning sets all distribution targets.

Answer: C

Diff: 1

Topic: *The Transition to a Market Economy*

Skill: *Definition*

- 3) The so-called tragedy of commons relates to the idea that
- A) no one has an incentive to maintain collectively owned property.
  - B) collectively owned resources tend to be under used.
  - C) collective ownership provides the proper private incentives for efficiency because individuals bear the full costs of their own decisions and enjoy the full benefits.
  - D) central planning sets all production and distribution targets.

Answer: A

Diff: 1

Topic: *The Transition to a Market Economy*

Skill: *Definition*

- 4) The Russian transition to a market economy required
- A) controls over prices.
  - B) market-supporting institutions such as a developed banking system, functional financial markets, a code of commercial law, and developed processes for insurability of business activities.
  - C) controls over wages and interest rates.
  - D) controls planning overall production.

Answer: B

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Fact*

- 5) In a centrally planned economy,
- A) unemployment has always been very widespread.
  - B) wages tend to be exceptionally high for low-skill jobs and low for high-skill jobs.
  - C) the labor market does not function freely and there is essentially no such thing as unemployment.
  - D) laborers have remained unemployed because of technology displacement.

Answer: C

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 6) Within a fully employed, centrally planned economy that provides basic housing, food, and clothing at very affordable levels for all,
- A) there is no need for unemployment insurance, welfare, or other social programs.
  - B) there is a real need for government social welfare programs.
  - C) there is a need for government to permit market-determined prices.
  - D) there is a need for government to permit market-determined wages.

Answer: A

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 7) The Russian transition to a market economy with free labor markets and uncontrolled prices means that
- A) prices will still be controlled by government.
  - B) full employment and low prices can be maintained.
  - C) wages will still be determined by government.
  - D) unemployment and higher prices are inevitable.

Answer: D

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 8) The transition to a market-oriented economy characterized by rising unemployment and higher prices suggests that
- A) government must continue to centrally plan all resource allocations to production.
  - B) a social safety net including unemployment compensation, and food, clothing, and housing subsidies for those in need will be politically popular.
  - C) government must set wages, prices, and interest rates.
  - D) government must continue to centrally plan the distribution of all output into consumption.

Answer: B

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 9) Most authorities agree that the transition to a market economy can be achieved
- A) without external financial and technical assistance.
  - B) only with forceful central planning by the government.
  - C) only with external financial and technical assistance.
  - D) only with government controls on wages and prices.

Answer: C

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 10) The transition from socialism to market capitalism by the shock therapy approach suggests that
- A) the transition proceed immediately and impact all economic variables at once.
  - B) government always centrally plan the economy.
  - C) the transition be gradual with sequential changes in government controls, etc.
  - D) government always control wages, prices, and interest rates.

Answer: A

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 11) The immediate and total deregulation of prices, liberalization of trade, privatization, and development of financial institutions represent
- A) the gradualism transition approach from socialism to a market economy.
  - B) a cooperative socialist model.
  - C) the shock therapy transition approach from socialism to a market economy.
  - D) an authoritarian socialist model.

Answer: C

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 12) Advocates of a gradualism transition approach from socialism to a market economy recommend
- A) moderate changes starting with the development of market institutions, the gradual decontrol of prices, and the privatization of only the cost efficient firms.
  - B) continued government controls over wages forever.
  - C) an immediate and total change in all economic conditions.
  - D) continued government controls over prices forever.

Answer: A

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 2 True/False

- 1) Collective ownership of resources leads to economic efficiency.

Answer: FALSE

Diff: 1

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) Collectively owned resources tend to be over used as no one has an incentive to conserve them or use them optimally.

Answer: TRUE

Diff: 1

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 3) Transition from socialism by shock therapy is a gradual process.

Answer: FALSE

Diff: 1

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) Moving from socialism to capitalism as fast as possible is known as shock therapy.

Answer: TRUE

Diff: 1

Topic: *The Transition to a Market Economy*

Skill: *Definition*

- 5) Market socialism is characterized by collective ownership of firms but market allocation of goods.

Answer: TRUE

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Definition*