Problem Set 3 due date: February 18 AGSC 212

Multiple choice Questions For each of the following questions choose the correct answer. There is exactly one correct answer.

- 1. Along the production possibility frontier, trade-offs exist because
 - (a) buyer will want to buy less when price goes up, but producers will want to sell more.
 - (b) even on the frontier itself, not all production levels are efficient
 - (c) at some levels, unemployment or inefficiency exists.
 - (d) the economy has only a limited quantity of resources to allocate between competing uses.
- 2. Which of the following is not an assumption underlying the production possibility frontier?
 - (a) Technological knowledge is fixed.
 - (b) Resources are fully employed.
 - (c) Resources are efficiently employed.
 - (d) The quantity of labor resources is variable.
- 3. The production possibility frontier represents
 - (a) the maximum amount of goods and services that can be produced with a given quantity of resources and technology.
 - (b) those combinations of goods and services that will be demanded as price changes.
 - (c) the maximum amount of resources that are available as the wage level changes.
 - (d) those combinations of goods and services that will be produced as the price level changes.
- 4. Lebanon experieces an improvement in productivity due to the introduction of improved technology. In terms of Lebanon's production possibility frontier, we would show this change as
 - (a) a movement along the frontier.
 - (b) a shift from a point inside the frontier to a point on the frontier.
 - (c) a shift from a point on the frontier to a point outside the frontier.
 - (d) a shift outwards by the entire frontier.
- 5. Because Lebanon is operating at a point inside its production possibility frontier, it
 - (a) has full employment
 - (b) has unemployment or inefficiently employed resources.
 - (c) must cut output of one good to increase production of another
 - (d) will be unable to experience economic growth

Short answers

1. Farmer Brown (the same guy from last week) has four other fields that can produce apples or oranges. Assume that the marginal rate of transformation between apples and oranges within each field is constant. The maximum yields for each field are given in the following table. Draw Farmer's Brown production possibility frontier. Explain the details.

Field	A	В	С	D
Apples	40	40	30	10
Oranges	10	40	20	30

2. Lebanon and France produce wine and cheese, and each has constant costs of production. The maximum amounts of the two goods for each country are given in the following table.

Goods	France	Lebanon	
Wine	120	40	
Cheese	30	20	

- (a) Draw the production possibility frontier for each country.
- (b) Calculate the opportunity cost of wine in both countries.
- (c) In which country, then, is wine production cheaper?
- (d) Answer questions (b) and (c) for cheese production.
- (e) Which country have an absolute advantage in producing cheese? What about wine?

Now Suppose that Lebanon become more efficient and can double its output of both wine and cheese.

- (f) Graph the new production possibility frontier for Lebanon on the same diagram as before
- (g) Which good Lebanon should produce and which good should be produced by France.