Chapter 9 The Government and Fi scal Pol icy
Princi pl es of Macroeconomics, Case/ Fair, 8e
9. 1 Gover nment in the Economy

Multiple Choi ce
Fiscal pol icy refers to
A. the techni ques used by a busi ness firmto reduce its tax I i ability.
B. the behavi or of the nation's central bank, the Federal Reserve, regarding the nati on's money supply.
C. the spending and taxing policies used by the government to i nf I uence the economy.
D. the government's ability to regul ate a firms behavi or in the financial markets.
Answer: C
Whi ch of the foll owing is NOT a category of fiscal pol icy?
A. Government pol ici es regarding the purchase of goods and servi ces
B. Government pol icies regarding taxation
C. Government policies regarding money supply in the economy
D. Government policies regarding transfer payments and wel fare benef its
Answer : C
What determines tax revenues?
A. The income tax rate
B. The i ncome of househol ds
C. The noney supply in the economy
D. Both A and B are correct.

Answer : D
Whi ch of the foll owing is I NCORRECT regarding tax revenues?
A. They i ncrease during recessi ons.
$B$. They change with changes in the tax rate.
C. They are a revenue source in the government's budget.
D. None of the above.

Answer : A
During recessi ons, government spending usually
A. decreases because unempl oyment payments decrease.
B. increases because unempl oyment payments i ncrease.
C. decrease because unempl oyment payments i ncrease.
D. i ncreases because unempl oyment payments decrease.

Answer: B
Di sposabl e i ncome
A. i ncreases when net taxes increase.
B. increases when income increases.
C. decreases when saving increases.
D. All of the above

Answer : B
Bill's income is $\$ 1,000$ and his net taxes are $\$ 350$. His di sposable i ncome is
A. \$1, 350.
B. $\$ 650$.
C. $-\$ 350$.
D. $\$ 750$.

Answer : B
Wen the gover nment sect or is incl uded in the i ncome- expenditure model, the equat i on for aggregate income is
A. $Y=C+S-T$.
B. $Y=C+1$.
C. $Y=C+1+G$.
D. $Y=C+S+1$.

Answer : C
The difference between what a government spends and what it collects in taxes in a year is
A. net revenue.
B. net taxes.
C. the government budget deficit or surpl us.
D. the government debt.

Answer : C
In 1998, the city of Canfiel d collected $\$ 500$, 000 in taxes and spent $\$ 450,000$. In 1998, the city of Canfield had a
A. budget surpl us of $\$ 450,000$.
B. budget surpl us of $\$ 50,000$.
C. budget deficit of $\$ 50,000$.
D. budget surpl us of $\$ 5,000$.

Answer: B

In 1999, the city of $M$ ket own collected $\$ 250,000$ in taxes and spent $\$ 350,000$. I $n$ 1999, the city of $M$ ket own had a
A. budget surpl us of $\$ 100,000$.
B. budget surpl us of $57 \%$
C. budget deficit of $\$ 100,000$.
D. budget deficit of $\$ 200,000$.

Answer: C
When the gover nment sect or is incl uded in the i ncome- expenditure model, pl anned aggregate expenditure
A. i ncreases.
B. decreases.
C. stays the same.
D. depends.

Answer : A
After government is added to the i ncome- expenditure model, the formil a for the aggregate consumption function is
A. $C=a-b(Y-T)$.
B. $C=a-b(T-Y)$.
C. $C=a+b(Y+T)$.

Ans. $C=a+b(Y-T)$.
The aggregate consumption function is $C=100+.6 Y \mathrm{Y}$. If income is $\$ 1,000$ and net $t$ axes are $\$ 300$, consumpti on equal s
A. 800.
B. 520.
C. 580.
D. 700.

Answer: B
The aggr egate consumpt i on function is $C=800+.8 Y$. If income is $\$ 2,000$ and net $t$ axes are $\$ 500$, consumpti on equal s
A. 2, 000.
B. 1, 500 .
C. 2, 150.
D. 2, 050 .

Answer : A
The aggregate consumption function is $C=100+.8 Y$. If income is $\$ 600$ and net taxes are zero, consumption equal s
A. zero.
B. 460.
C. 580.
D. 360 .

Answer: C

The aggregate consumption function is $C=1,000+.9 Y d$. If income is $\$ 3,600$ and net $t$ axes are $\$ 600$, consumpti on equal s
A. 3, 400.
B. 3, 700.
C. 2, 400 .
D. 4, 000 .

Answer : B
If out put is less than pl anned aggregate expenditure, there will be A. an unpl anned increase in invent ori es.
B. an unpl anned decrease in i nvent ories.
C. no change in invent ori es.
D. a pl anned increase in invent ories.

Answer : $B$
Ref er to the i nf or mati on provi ded in Table 9. 1 bel ow to answer the questi ons that follow.

Table 9.1

| All Numbers are in \$ Billion |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Output <br> (Income) | Consumption <br> Spending | Net | Investment |  |
| 200 | 100 | Taxes | Spending | Spending |
| 400 | 300 | 100 | 200 | 100 |
| 600 | 400 | 100 | 200 | 100 |
| 800 | 500 | 100 | 200 | 100 |
| 1,000 | 600 | 100 | 200 | 100 |

Ref er to Table 9.1. At an out put level of $\$ 600$ billion, the level of aggr egate expendi ture is
A. $\$ 500$ billi on.
B. $\$ 600$ billion.
C. $\$ 700$ billion.
D. $\$ 900$ billi on.

Answer : C
Ref er to Table 9.1. At an out put level of $\$ 600$ billion, there is an unpl anned i nvent ory change of
A. positive $\$ 10$ billion.
B. zero.
C. negati ve $\$ 100$ billi on.
D. positive $\$ 100$ billion.

Answer: C

Ref er to Table 9.1. At an out put level of $\$ 1000$ billion, the level of aggregate expendi ture is
A. $\$ 700$ billion.
B. $\$ 800$ billion.
C. $\$ 900$ billi on.
D. $\$ 1,000$ billion.

Answer : C
Ref er to Table 9.1. At an out put level of $\$ 1000$ billion, there is an unpl anned i nvent ory change of
A. positive $\$ 100$ billion.
B. positive $\$ 10$ billion.
C. negative $\$ 100$ billi on.
D. zero.

Answer : A
Ref er to Table 9. 1. The equilibriumlevel of out put is $\qquad$ billion.
A. $\$ 600$

B . $\$ 700$
C . $\$ 800$
D. $\$ 1,000$

Answer: C
Refer to Table 9. 1. At an out put level of $\$ 400$ billi on, di sposable i ncome equal s $\qquad$ billion.
A . $\$ 400$
B. \$300
C. $\$ 200$
D. $\$ 100$

Answer : B

Ref er to Table 9.1. At an output level of $\$ 1,000$ billion, the val ue of saving
A. cannot be det ermined from the gi ven information.
B. is $\$ 300$ billion.
C. is $\$ 200$ billion.
D. is $\$ 100$ billion.

Answer : B
Ref er to Table 9.1. At the equilibriuml evel of income, I eakages equal billion.
A. $\$ \overline{0}$
B. $\$ 100$
C. \$200
D. $\$ 300$

Answer : D

Ref er to Table 9.1 At an output level of $\$ 600$ billion, there is a tendency for out put
A. to fall.
B. to increase.
C. to remai n constant.
D. to ei ther i ncrease or decrease.

Answer : B
Ref er to the inf or mati on provi ded in Table 9.2 bel ow to answer the questions that follow.

Table 9.2

| Output <br> (Income) | Net <br> Taxes | Consumption <br> Spending | Planned <br> Investment <br> Spending | Government <br> Purchases |
| :---: | :---: | :---: | :---: | :---: |
| $Y$ | $T$ | $C$ | $I$ | $G$ |
| 500 | 100 | 400 | 150 | 50 |
| 1,000 | 100 | 800 | 150 | 50 |
| 1,500 | 100 | 1,200 | 150 | 50 |
| 2,000 | 100 | 1,600 | 150 | 50 |
| 2,500 | 100 | 2,000 | 150 | 50 |

Ref er to Table 9. 2. At an out put I evel of $\$ 1,500$ billi on, the level of aggregate expenditure is
A. \$1, 300
B. \$1, 400
C. \$1,500
D. $\$ 1,600$

Answer : B

Ref er to Table 9.2. At an out put level of $\$ 1,500$ billion, there is an unpl anned i nvent ory
A. decrease of $\$ 200$ billi on.
B. change of $\$ 0$.
C. increase of $\$ 100$ billi on.
D. increase of $\$ 150$ billi on.

Answer : C
Ref er to Table 9. 2. At an out put level of $\$ 2,500$, the level of aggr egate expendi ture is $\qquad$ billion.
A. \$1, 500
B. \$2,000
C. $\$ 2,300$
D. $\$ 2,200$

Answer : D

Ref er to Table 9. 2. At an out put level of $\$ 2,500$, there is an unpl anned i nvent ory
B. decrease of $\$ 200$ billi on.
C. change of $\$ 0$.
D. i ncrease of $\$ 200$ billi on.

Answer : A
Ref er to Table 9. 2. The equilibriumlevel of out put is
billion.
A . $\$ 1000$
B. \$1,500
C. $\$ 2,000$
D. $\$ 2,500$

Answer : A
Ref er to Table 9. 2. At an out put level of $\$ 1,500$, di sposable i ncome
A. i s \$1, 000.
B. is \$1, 200.
C. is \$1, 400.
D. cannot be det er mi ned from this i nf ormation.

Answer : C

Ref er to Table 9.2. At an out put level of $\$ 2,500$, the level for savi ng
A. is $\$ 300$.
B. is $\$ 400$.
C. is $\$ 500$.
D. cannot be determi ned fromthis i nf ormation.

Answer : B
Ref er to Table 9.2 At the equili briumlevel of income, I eakages equalbillion.
A. $\$ \overline{0}$
B. $\$ 300$
C. \$500
D. \$200

Answer : D
Ref er to Table 9.2. At an out put level of $\$ 2,500$, there is a tendency for out put
A. to increase.
B. to remai n constant.
C. to ei ther increase or decrease.
D. to fall.

Answer : D
The Italian economy can be characterized by Equation 9. 1.
EQUATI ON 9. 1:

$$
\begin{aligned}
& C=200+.75 \mathrm{Yd} \\
& \mathrm{G}=500 \\
& \mathrm{~T}=200 \\
& \mathrm{I}=200
\end{aligned}
$$

Refer to Equation 9.1. The equilibriumlevel of output for the Ital ian economy is
A. $\$ 2,533.3$.
B. $\$ 3,000$.
C. $\$ 2,678.9$.
D. $\$ 3,500$.

Answer : B

Ref er to Equation 9.1. At the equilibriumlevel of out put inltaly, consumpt i on equal s
A. \$2, 300 .
B. $\$ 2,500$.
C. \$1, 833. 3.
D. $\$ 2,010.2$

Answer : A
Ref er to Equation 9.1. At the equilibriumlevel of out put in Italy, saving equal s
A. $\$ 450$.
B. $\$ 400$.
C. $\$ 550$.
D. $\$ 500$.

Answer : D
Ref er to Equation 9.1. At the equilibriumlevel of out put in ltaly, I eakages equal
A. $\$ 650$.
B. $\$ 600$.
C. $\$ 750$.
D. $\$ 700$.

Answer : D
The Canadi an economy can be characterized by Equation 9. 2 .
EQUATI ON 9. 2 :

```
C = 500 +. 5Yd
Taxes = 600
Equi I i bri um Out put = $4,000
```

Ref er to Equation 9.2. At equilibrium the sum of investrent and government purchases in Canada is
A. \$1, 800.
B. \$1,500.
C. \$1, 750 .
D. cannot be determi ned from the gi ven i nf or mation.

Answer : A

Refer to Equation 9.2. At equilibrium government purchases in Canada is
A. \$1, 500.
B. $\$ 1,000$.
C. $\$ 1,250$.
D. Cannot be det ermi ned from the gi ven i nf ormation.

Answer : D
Ref er to Equation 9. 2. At equilibrium saving in Canada equal s
A. \$1, 200.
B. \$1, 600 .
C. \$1, 350 .
D. 1,250 .

Answer : A
Ref er to Equation 9.2. At equili briumleakages in Canada equal
A. \$1, 750.
B. \$1, 800 .
C. $\$ 2,100$.
D. \$1, 700.

Answer : B
Assuming there is no forei gn trade in the econony, the econony is in equi li bri um when
A. $S+T=C+I$.
B. $I+G=S+T$.
C. $I T=S+G$.
D. $G+T=S+I$.

Answer : B

Assuming there is no forei gn trade in the economy, equilibriumis achi eved when gover nment purchases equal
A. saving mi nus net taxes mi nus consumption.
B. savi ng pl us net taxes mi nus i nvest ment.
C. net taxes pl us i nvest ment mi nus saving.
D. net taxes mi nus i nvest ment mi nus savi ng.

Answer : B

Ref er to the information provided in Figure 9.1 bel ow to answer the questions that follow.


Figure 9.1
Ref er to Figure 9.1. The equilibriumlevel of aggregate expenditure is \$_-billion.
A. $\overline{3}, \overline{0} 0 \overline{0}^{-}$
B. 2, 000
C. 4,000
D. 1, 500

Answer: B
Refer to Figure 9.1. The MPC in this economy is
A. 0.4 .
B. 0.6 .
C. 0.5 .
D. Cannot be determined from the gi ven information.

Answer: C

Refer to Figure 9.1. At equilibrium inj ections
A. can be greater than $\$ 1,000$ billion.
B. equal $\$ 1,500$ billion.
C. equal I eakages.
D. equal $\$ 2,000$ billion.

Answer : C

Ref er to Figure 9.1. At equilibrium the part of consumption that is dependent on i ncome equal s \$ $\qquad$ billion.
A. \$1, 500

B . \$1, 000
C. \$2,000
D. Cannot be determi ned from the gi ven i nf ormation.

Answer : B
Ref er to Figure 9.1. Suppose that the consumption function is $C=$ $400+0.5 Y d$ and taxes are $\$ 200$ billion, at equilibrium the val ue of i nj ections are
A. $\$ 700$ billion.
B. $\$ 500$ billi on.
C. $\$ 650$ billi on.
D. $\$ 350$ billi on.

Answer : A
Ref er to Fi gure 9.1. Suppose that the consumption function is $\mathrm{C}=$ $400+0.5 Y d$ and taxes are $\$ 200$ billion, at equilibriumthe val ue of aut onomous consumption is
A. $\$ 400$ billion.
B. $\$ 300$ billion.
C. $\$ 100$ billion.
D. $\$ 200$ billi on.

Answer : B
Refer to Figure 9. 1. Suppose that the consumption function is C $=$ $400+0.5 Y d$ and taxes are $\$ 200$ billion, at equilibrium what is the val ue of consumption?
A. \$1, 350
B. \$2,000
C. \$1, 300
D. $\$ 1,150$

Answer : C
If planned i nj ections exceed I eakages, out put will
A. decrease.
B. increase.
C. remai $n$ constant.
D. either increase or decrease.

Answer : B

```
For the economy to be in equili bri um
    A. government purchases must equal tax revenue and saving must
        equal i nvest ment.
    B. government purchases must equal the sum of tax revenue, saving
        and i nvest ment.
    C. government purchases pl us i nvestment must equal savi ng pl us
        tax revenue.
    D. i nvestment pl us tax revenue must equal government purchases
        pl us savi ng.
Answer : C
```


## True/False

1) The economy is in equilibrium when aggregate output equals consumption spending. Answer: True $\bigcirc$ False
Diff: 1
Skill: D
2) For the economy to be in equilibrium, the following condition must be satisfied: $G+I=S+$ $T$.

Answer: ${ }^{\circ}$ True False
Diff: 1
Skill: D
3) When investment is greater than planned investment, output grows.

Answer: True ○ False
Diff: 2
Skill: C
4) Disposable income is income less net taxes.

Answer: ${ }_{\circ}$ True False
Diff: 1
Skill: D
9.2 Fiscal Policy at Work: Multiplier Effect

Multiple Choice
If the government wants to reduce unempl oyment, government purchases should be and/ or taxes should be $\qquad$ .
A. incrēās̄ed;-increased
B. decreased; decreased
C. decreased; i ncreased
D. i ncreased; decreased

Answer : D

The Presi dent of Vul can hi res you as an economic consultant. He is concer ned that the out put level in Vul can is too high and that this will cause prices to rise. He feel sthat it is necessary to reduce out put by $\$ 10$ billion. He tells you that the MPC in Vul can is . 6. Wi ch of the following would be the best advice to give to the Vul can presi dent?
A. Reduce government purchases in Vul can by $\$ 4$ billion.
B. Increase taxes in Vulcan by $\$ 10$ billion.
C. Reduce government purchases in Vul can by $\$ 10$ billion.
D. Increase taxes in Vul can by $\$ 2.5$ billion.

Answer : A
The leader of Atlantis hires you as an economic consultant. He is concerned that the out put level in Atlantis is too low and that this will cause prices to fall. He feel s that it is necessary to increase out put by $\$ 200$ billion. He tells you that the MPC in Atlantis is . 8 . Whi ch of the following would be the best advice to give to the Atlantis president?
A. Reduce government spending in Atlantis by $\$ 100$ billion.
B. Decease taxes in At antis by $\$ 50$ billi on.
C. Increase government spending in Atlantis by $\$ 200$ billion.
D. Increase government spending in Atlantis by $\$ 100$ billion.

Answer : B

Refer to the information provided in Table 9.3 bel ow to answer the questions that follow.

Table 9.3
All Numbers are in \$ Million

| Output <br> (Income) | Net <br> Taxes | Consumption |  | Planned <br> Savings <br> Investment | Planned <br> Government <br> Spending |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1,000 | 200 | 680 | - | 200 | 200 |
| 1,100 | 200 | 760 | - | 200 | 200 |
| 1,200 | 200 | - | 160 | 200 | 200 |
| 1,300 | 200 | 920 | 180 | 200 | 200 |
| 1,400 | 200 | 1,000 | 200 | 200 | 200 |
| 1,500 | 200 | - | 220 | 200 | 200 |
| 1,600 | 200 | 1,160 | 240 | 200 | 200 |

Refer to Table 9.3. Assuming constant MPC, at i ncome of \$1,200 million, consumption is \$ million, consumption is \$ $\qquad$ million, and at income of $\$ 1,500$
A. 800; 1, 100
B. 790; 1, 150
C. 840; 1, 080
D. 900; 1, 150

Answer: C

Refer to Table 9. 3. Assuming constant MPC, at i ncome of $\$ 1,000$ milli on, saving is $\$$ saving is \$ miTTion.
A. 100; $\overline{11} \overline{0}$
B. 120; 140
C. 130; 150
D. 140; 150

Answer : B

Ref er to Table 9.3. The MPC in thi s economy is $\qquad$ and the MPS is
A.- $\overline{0} . \overline{5} ;-\dot{0} 5$
B. $0.7 ; 0.5$
C. 0.9; 0. 1
D. 0.8; 0. 2

Answer : D

Ref er to Table 9. 3. The equilibriuml evel of aggregate out put is \$ million.
A.-- $\overline{1}, \overline{2} 00$
B. 1, 300
C. 1, 400
D. 1, 500

Answer : C
Refer to Table 9. 3. Whi ch of the following variables is NOT consi dered aut onomous?
A. Saving
B. Pl anned i nvest ment
C. Pl anned gover nment spendi ng
D. None of the above

Answer : A
Ref er to Table 9. 3. Suppose the economy is in equilibri um and the government increases spending by $\$ 50 \mathrm{milli}$ on, the new equilibrium out put is $\$$ $\qquad$ million
A. 1, 650
B. 1, 450
C. 1, 750
D. 1, 350

Answer : A

Ref er to Table 9.3. Suppose the economy is in equilibrium and the government rai ses taxes from $\$ 100$ million to $\$ 120$ million, equilibrium out put will $\qquad$ by $\$$ $\qquad$ million.
A. decrease; 20
B. increase; 20
C. decrease; 80
D. increase; 80

Answer: C
Refer to the information provided in Table 9.4 bel ow to answer the questions that follow.

Table 9.4
All Figures in Billions of Dollars

| Output <br> (Income) | Net <br> Taxes | Consumption <br> Spending <br> $(\mathrm{C}=100+.9 \mathrm{Yd})$ | Planned <br> Snvestment |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2,400 | 100 | 2,170 | 150 | 130 | 200 |
| Sovernment |  |  |  |  |  |
| Purchases | Spending |  |  |  |  |
| 3,800 | 100 | 2,530 | 170 | 130 | 200 |
| 3,200 | 100 | 2,710 | 190 | 130 | 200 |
| 3,400 | 100 | 2,890 | 210 | 130 | 200 |
| 3,600 | 100 | 3,070 | 230 | 130 | 200 |
| 3,800 | 100 | 3,250 | 250 | 130 | 200 |

Refer to Table 9. 4. The equilibriumlevel of incore is
A. $\$ 3400$ billion.
B. $\$ 3,800$ billion.
C. $\$ 2,000$ billion.
D. $\$ 3,600$ billion.

Answer: A
Refer to Table 9.4. The MPS
A. is. 8.
B. is . 1 .
C. is . 2
D. cannot be determined fromthe available information.

Answer : B
Refer to Table 9.4. The val ue of the government spending multiplier
A. is 10 .
B. is 9 .
C. is 5
D. Cannot be determined from the avail able information

Answer : A
Refer to Table 9.4. The econony is at the equilibriumlevel of out put. If government spending increases to $\$ 400$ billion, the new equilibriuml evel of out put is
A. $\$ 5,400$ billion.
B. $\$ 2,100$ billion.
C. $\$ 6,040$ billion.
D. $\$ 6,600$ billion.

Answer: A
Ref er to Table 9.4. The econony is at the equilibriumlevel of out put. If government spending decreases by $\$ 100$ billion, the new equilibriumlevel of output is
A. $\$ 3,100$ billion.
B. $\$ 2,400$ billion.
C. $\$ 1,450$ billion.
D. $\$ 1,550$ billion.

Answer : B

Refer to Table 9.4. If taxes are reduced from $\$ 100$ billion to $\$ 50$
billion, the new equilibriumlevel of output is
A. $\$ 4,050$ billion.
B. $\$ 1,600$ billion.
C. $\$ 3,850$ billion.
D. $\$ 2,100$ billion.

Answer : C
Ref er to Table 9.4. If taxes are reduced from $\$ 100$ billion to $\$ 50$
billion and government spending is reduced from $\$ 200$ billion to $\$ 150$
billion, the new equilibriumlevel of income
A. is $\$ 3,350$ billion.
B. is $\$ 3,550$ billion.
C. is $\$ 1,600$ billion.
D. cannot be determined fromthis inf ormation.

Answer: A

The government purchases multiplier is
A. the difference between the ol d equilibriumlevel of out put and the new equilibriumlevel of output.
$B$. the ratio of the change in government purchases to the change in the equilibrium level of out put.
C. the ratio of the change in the equilibriumlevel of out put to a change in government purchases.
D. the difference bet ween the new and old levels of government pur chases.
Answer : C
The formula for the government spending maltiplier is
A. $1 /(1+\mathrm{MPC})$.
B. 1/ MPS.
C. 1/MPC.
D. $1 /(1+\mathrm{MPS})$.

Answer: B

If the MPS is.2, the government spending multiplier is A. 4 .
B. 1. 11.
C. 9 .
D. 5 .

Answer: D
If the MPS is .1, the government spending multiplier is A. 10 .
B. 1. 11 .
C. 5 .
D. 2 .

Answer : A
If the MPC is.6, the government spending multiplier is A. 1. 10 .
B. 2.5 .
C. 1.5 .
D. 8. 5 .

Answer: B

```
If the MPC is . 5, the tax multiplier is
```

    A. - 2. 5 .
    B. -2 .
    C. -1 .
    D. -1.666 .
    Answer : C
If the government spending multipl i er is 5 and government purchases
i ncrease by $\$ 100$ billi on, out put will increase by
A. $\$ 100$ billion.
B. $\$ 400$ billi on.
C. $\$ 1,600$ billi on.
D. $\$ 500$ billion.
Answer : D
If the government spending multiplier is 4 and government spending
decreases by $\$ 50$ billion, output will__ by $\$ \ldots \ldots$ billion.
A. i ncrease; 200
B. decrease; 200
C. decrease; 50
D. decrease; 100
Answer : B

The economy of Bananal and can be characterized by Equation 9. 3.
EQUATI ON 9. 3:
$C=2,000+.75 \mathrm{Yd}$
$T=200$
$\mathrm{G}=400$
$1=500$
Ref er to Equation 9. 3. The equilibriumlevel of income in Bananal and is

A . 4, 800.
B. 11,000 .
C. 10,000 .
D. 5,600 .

Answer: B

Ref er to Equation 9. 3. If government spending in Bananal and i ncreases by \$100, equili brium out put increases by
A. $\$ 100$.
B. $\$ 200$.
C. $\$ 400$.
D. $\$ 800$.

Answer : C
Ref er to the inf ormation provi ded in Fi gure 9.3 bel ow to answer the questions that follow.


Aggregate output (\$ billions)

Figure 9.3
Refer to Figure 9. 3. At equilibrium aut onomous pl anned expenditures equal \$ billion.
A. 200
B. 100
C. 150
D. 300

Answer : A
Ref er to Figure 9.3. The expenditure multiplier is
A. 4.
B. 3 .
C. 2 .
D. 10.

Answer : C

Refer to Figure 9. 3. If aut onomous planned expenditure increases by $\$ 10$ billion, equilibrium aggregate out put $\qquad$ to \$ $\qquad$ billion.
A. decreases; 360
B. increases; 550
C. increases; 420
D. increases; 440

Answer : C
Ref er to the inf or mation provi ded in Fi gure 9.4 bel ow to answer the questions that follow.


Figure 9.4
Refer to Fi gure 9.4. Al ong aggregate expenditure $\mathrm{AE}_{1}$, the MPC is
A. . 6.
B. 7.
C. 8.
D. . 9.

Answer : C
Refer to Figure 9.4. What is the val ue of Point A?
A. $\$ 3,500$ billion.
B. $\$ 6,000$ billion.
C. $\$ 7,000$ billion.
D. . Cannot be determined fromthe gi ven information.

Answer: A

Ref er to Fi gure 9.4. What is the val ue of Poi nt $B$ ?
A. \$7,000 billion
B. \$3, 500 billi on
C. \$6, 000 billi on
D. Cannot be det ermined from the gi ven i nf ormation.

Answer : B
Ref er to Figure 9.4. What is the val ue of the expenditure mul tiplier?
A. 8
B. 10
C. 5
D. 20

Answer : C
Refer to Fi gure 9.4. Al ong $A E_{1}$, injections equal leakages when aggregate out put equals $\$$ $\qquad$ billion.
A. 1, 500

B . 3, 000
C. 2, 500
D. 2, 000

Answer : D
Refer to Fi gure 9.4. If aggregate expenditures are represented by AE2 and government spending increases by $\$ 20$ billion, equilibrium aggregate out put i ncreases by $\$$ $\qquad$ billion.
A. 100
B. 200
C. 400
D. 800

Answer : A
Government spending increases by $\$ 50$ billi on and the equili bri um l evel of output i ncreases by $\$ 200$ billi on. The government spending multipl i er
A. is 5.
B. is 4.
C. cannot be determined fromthis information, because the MPC is not gi ven.
D. is 6 .

Answer: B

Assure an economy is in equilibrium at an out put level of $\$ 1,000$ billion. If government spendi ng increases by $\$ 100$ billion, then at the out put l evel of $\$ 1,000$ billi on, there is
A. an unpl anned rise in i nvent ories.
B. an unpl anned fall in i nvent ories.
C. an unpl anned i nvent ory change of zero.
D. ei ther an unpl anned i ncrease or decrease in i nventories depending on the val ue of the MPC.
Answer : B
Assume an economy is in equilibrium at an out put level of $\$ 400$ billion. If government purchases decrease by $\$ 50$ billion, then at the output level of $\$ 400$ billion, there is
A. an unpl anned increase in invent ori es.
B. an unpl anned i nvent ory change of zero.
C. ei ther an unpl anned i ncrease or decrease in invent ories depending on the val ue of the MPC.
D. an unplanned decrease in invent ories.

Answer : A
A decrease in lump-sumtaxes will
A. nake the consumption function flatter.
B. make the consumption functi on st eeper.
C. shift the consumpti on function downward.
D. shift the consumption function upward.

Answer : D
The tax multiplier is
A. the ratio of the change in taxes to the change in the equili brium level of out put.
B. the MPC multiplied by the MPS.
C. the difference in taxes multiplied by the change in the equili briuml evel of out put.
D. the ratio of the change in the equilibriumlevel of out put to the change in taxes.
Answer : D
The formul a for the tax multiplier is
A. - (MPS/ MPC).
B. MPS/ MPC.
C. - ( MPC MPS) .
D. $-1 / \mathrm{MPS}$.

Answer: C

If the MPC is .9, the tax multiplier is
A. - 9.
B. -10 .
C. -1.10.
D. 10.

Answer : A
If the MPC is . 55, the tax moltiplier is
A. - 2.22.
B. -1.22.
C. - 2. 33.
D. - 3. 33.

Answer : B
If the MPS is.3, the tax multiplier is A. - 2.5 .
B. -1.67.
C. - 1.5 .
D. - 2. 33.

Answer : D
If the MPS is . 25, the tax moltiplier is A. -9 .
B. -4 .
$\begin{array}{ll}\text { C. } & -3 . \\ \text { D. } & -5 .\end{array}$
Answer : C
Taxes are reduced by $\$ 50$ billi on and i ncome increases by $\$ 200$
billion. The val ue of the tax multiplier is
A. -4 .
B. -20.
C. -10 .
D. -5 .

Answer: A

Taxes are reduced by $\$ 100$ billion and incore increases by $\$ 1,000$ billion. The val ue of the tax multiplier is
A. -4 .
B. 9 .
C. -10 .
D. -5 .

Answer: C
If the tax maltiplier is -6 and taxes are reduced by $\$ 100$ billion, out put
A. falls by $\$ 100$ billion.
B. falls by $\$ 600$ billion.
C. increases by $\$ 600$ billion.
D. increases by $\$ 100$ billion.

Answer : C
If the tax multiplier is -5 and taxes are increased by $\$ 10$ billion, out put
A. falls by $\$ 10$ billion.
B. falls by $\$ 50$ billion.
C. increases by $\$ 500$ billion.
D. increases by $\$ 50$ billion.

Answer : B

Ref er to the information provided in Fi gure 9.5 bel ow to answer the questions that follow.


Figure 9.5
Refer to Fi gure 9.5. Which of the following equations best represents the aggregate expenditure function?
A. $A E=600+.5 Y$.
B. $A E=600+.8 Y$.
C. $\mathrm{AE}=750+.75 \mathrm{Y}$.
D. $A E=2,250+.2 \dot{Y}$.

Answer : B
Refer to Figure 9.5. At aggregate out put of $\$ 4,000$ billion, unpl anned i nventori es equal \$ $\qquad$ billion.
A. 200
B. 250
C. -250
D. $-1,000$

Answer : A
Ref er to Figure 9.5. The government spending multiplier equal s and the tax multiplier equal s $\qquad$ _.
-- A.- ${ }^{2}$. $5 ;-1.5$
B. $4 ;-3$
C. 5; -4
D. 9; - 8

Answer: C

Ref er to Figure 9.5. If the econom is in equilibrium and the government increases spending by $\$ 100$ billion, equilibrium aggregate expenditures increase to $\$$ billi on.
A. 3,400
B. 3,100
C. 3,500
D. 3,600

Answer: C

Ref er to Figure 9.5. If the econom is in equilibrium and the government decreases spending by $\$ 200$ billion, equilibrium aggregate out put decreases to \$ $\qquad$ billion.
A. 2, 800
B. 2, 400
C. 2,200
D. 2, 000

Answer: D
Ref er to Figure 9.5. If the economy is in equilibrium and the government increases taxes by $\$ 50$ billi on, equilibrium aggregate out put to \$ billion.
A. i $\bar{n} \bar{c} \bar{r}$ eaas $\bar{s}$ ē; $3,05 \overline{0}$
B. decreases; 2,950
C. decreases; 2,800
D. decreases; 2, 850

Answer : C
Ref er to Figure 9.5. If the economy is in equilibrium and the government increases spending by $\$ 100$ billion and increases taxes by $\$ 100$ billion, equilibrium aggregate out put
A. does not change.
B. increases by $\$ 100$ billion.
C. increases by less than $\$ 100$ billion.
D. increases by more than $\$ 100$ billion.

Answer: B
If the government spending multiplier is 10, then the tax multiplier A. i s -5 .
B. is - 4.
C. is -9.
D. cannot be determined because the MPS is not given.

Answer: C

If the tax multiplier is -6.66, then the government purchases multiplier
A. is 6.66.
B. is 7.66 .
C. is 3. 34.
D. cannot be determined because the MPS is not gi ven. Answer : B

If gover nment spending is increased by $\$ 400$, taxes are reduced by $\$ 400$, and the MPS is .5, equilibrium out put will change by
A. $-\$ 400$.
B. \$0.
C. $\$ 1,200$.
D. an anount that cannot be determined fromthis information. Answer : C

If government purchases are increased by \$100, taxes are reduced by \$100, and the MPC is .8, equilibrium out put will change by

A . 400.
B. 800.
C. 900 .
D. an amount that cannot be determined fromthis information.

Answer : C
If government spending is increased by $\$ 700$ and taxes are increased by $\$ 700$, the equilibriumlevel of income will
A. decrease by $\$ 700$.
B. not change.
C. increase by $\$ 700$.
D. increase by $\$ 1,400$.

Answer: C
If government purchases are decreased by $\$ 800$ and taxes are decreased by $\$ 800$, the equilibriumlevel of income will
A. decrease by $\$ 800$.
B. increase by $\$ 800$.
C. not change.
D. decrease by $\$ 1600$

Answer : A

Assume that the MPC is . 75. If government spending increases by $\$ 400$, equi $I$ ibrium out put equi li bri um out put
$\qquad$ ; and if taxes increase by $\$ 400$,
A. increases by $\overline{\$ 1} \overline{1} \overline{6} \overline{0} \overline{0} ;{ }^{-}$decreases by $\$ 1,600$
B. increases by \$1,600; decreases by $\$ 1,200$
C. increases by $\$ 1,200$; decreases by $\$ 1,600$
D. increases by $\$ 400$; decreases by $\$ 400$

## Answer: B

Assume that the MPC is .9. If government purchases increase by $\$ 100$, equi I i brium out put equi I i bri um out put
A. increases by $\overline{\$ 1}, \overline{0} \overline{0} \overline{0} ;{ }^{-}$decreases by $\$ 1,000$
B. increases by $\$ 900$; decreases by $\$ 1,000$
C. increases by $\$ 1,000$; decreases by $\$ 900$
D. increases by $\$ 400$; decreases by $\$ 400$

Answer: C
You are hi red by the Council of Economic Advi sors (CEA) as an economic consultant. The Chairperson of the CEA tells you that she bel $i$ eves the current unemployment rate is too high. The unempl oyment rate can be reduced if aggregate output increases. She wants to know what policy to pursue to increase aggregate out put by $\$ 300$ billion. The best estimate she has for the MPC is.8. Which of the following policies should you recommend?
A. Increase government purchases by $\$ 60$ billion.
B. Increase government purchases by $\$ 150$ billion.
C. Cut taxes by $\$ 60$ billion.
D. Cut taxes by $\$ 60$ billion and to increase government purchases by $\$ 60$ billion.
Answer : A
You are hi red by the Bureau of Economic Anal ogi es (BEA) as an economic consultant. The Chairperson of the BEA tells you that he bel i eves the current unempl oyment rate is toolow. The unempl oyment rate can be increased if aggregate out put decreases. He wants to know what pol icy to pursue to decrease aggregate out put by $\$ 100$ billion. The best estimate he has for the MPC is .9. Which of the following polici es should you recommend?
A. Decrease government spending by $\$ 10$ billion.
B. Decrease government spending by $\$ 100$ billion.
C. Increase taxes by $\$ 100$ billion.
D. Cut taxes by $\$ 60$ billion and to increase government spending by $\$ 60$ billion.
Answer : A

You are hi red by the Council of Economic Advi sors (CEA) as an economi c consultant. The chai rperson of the CEA tells you that she bel i eves the current unempl oyment rate is too hi gh. The unemployment rate can be reduced if aggregate out put increases. She wants to know what pol icy to pursue to increase aggregate out put by $\$ 300 \mathrm{billi}$ on. The best estimate she has for the MPC is. Which of the following pol i ci es shoul d you recommend?
A. I ncrease gover nment purchases by $\$ 75$ billion.
B. Reduce taxes by $\$ 75$ billion.
C. Reduce taxes by $\$ 75$ billi on and to i ncrease government purchases by $\$ 75$ billi on.
D. Reduce the budget deficit by $\$ 300$ billion.

Answer: B

You are hi red by the Bureau of Economi c Anal ogi es (BEA) as an economi c consultant. The chai rpers on of the BEA tell s you that he bel i eves the current unempl oyment rate is too hi gh. The unemployment rate can be reduced if aggregate output increases. He wants to know what pol i cy to pursue to increase aggregate out put by $\$ 500$ billi on. The best estimate he has for the MPC is .7. Whi ch of the following pol i ci es should you recommend?
A. Decrease government spending by $\$ 75$ billion.
B. Reduce taxes by $\$ 214.3$ billion.
C. Reduce taxes by $\$ 314.3$ billi on and to decrease government spendi ng by $\$ 500$ billi on.
D. Reduce the budget deficit by $\$ 300$ billion.

Answer : B

You are hi red by the Council of Economic Advi sors (CEA) as an economi c consultant. The chai rperson of the CEA tells you that she bel i eves the current unempl oyment rate is too high. The unempl oyment rate can be reduced if aggregate out put increases. She wants to know what pol icy to pursue to increase aggregate out put by $\$ 300$ billi on. The best estimate he has for the MPC is. . Whi ch of the following pol i ci es shoul d you recommend?
A. I ncrease government spending by $\$ 300$ billi on and reduce taxes by $\$ 300$ billi on.
B. Reduce government spending by $\$ 300$ billi on and increase taxes by $\$ 300$ billi on.
C. I ncrease both government spending and taxes by $\$ 300$ billion.
D. Decrease both government spending and taxes by $\$ 300$ billion.

Answer : C

You are hi red by the Bureau of Economic Anal ogi es (BEA) as an economic consultant. The chai rperson of the BEA tells you that he bel $i$ eves the current unempl oyment rate is too high. The unemployment rate can be reduced if aggregate output increases. He wants to know what policy to pursue to increase aggregate out put by $\$ 300$ billion. The best estimate he has for the MPC is . 8. Wi ch of the following pol ici es should you recommend?
A. Reduce government spending by $\$ 300$ billion and reduce taxes by $\$ 300$ billion.
B. Increase both government spendi ng and taxes by $\$ 300$ billion.
C. Increase government spending by $\$ 300$ billion and reduce taxes by $\$ 300$ billion.
D. None of the above

Answer : B
As the size of the MPC increases, the val ue of the bal anced-budget multiplier
A. i ncreases.
B. decreases.
C. remai ns const ant.
D. could either increase or decrease.

Answer : C
The bal anced-budget multiplier
A. equal s 0 .
B. is greater than 0 but less than 1 .
C. is greater than 1 .
D. equals 1 .

Answer : D
Suppose that in the begi nning of 2003 the federal debt was $\$ 4$ trillion. During 2003, the government bal anced its budget. At the end of 2003, the federal debt
A. i ncreased.
B. stayed the same.
C. decreased.
D. was el i min nat ed.

Answer: B

## True/False

1) As the MPC decreases, the government spending multiplier increases.

Answer: True ○ False
Diff: 1
Skill: F
2) If autonomous spending increases, the aggregate expenditure function becomes steeper.

Answer: True ○ False
Diff: 1
Skill: F
3) If the government increases taxes by $\$ 1$ billion and increases spending by $\$ 1$ billion, equilibrium output increases by $\$ 1$ billion.
Answer: $\varnothing_{\odot}$ True False
Diff: 2
Skill: C
4) A tax cut of $\$ 10$ billion will have less effect on the economy than an increase in government purchases of $\$ 10$ billion.
Answer: $\odot$ True False
Diff: 2
Skill: C
5) The balanced-budget multiplier works whenever the government increases spending and increases taxes by the same amount.
Answer: $\odot$ True False
Diff: 1
Skill: C

### 9.3 The Federal Budget

Multiple Choice
The total anount owed by the federal government to the public is the
A. federal budget deficit.
B. federal debt.
C. net tax revenue.
D. fiscal drag.

Answer: B
What is the Iargest expenditure source in the government's budget?
A. Consumption
B. Transfer payments
C. Net interest payments
D. Net subsidies

Answer : B
What is the I argest source of revenue in the government's budget?
A. Soci al insurance
B. Indi rect busi ness taxes
C. Corporate taxes
D. Personal taxes

Answer : D
A government's debt is reduced when it
A. bal ances is budget.
B. sells more bonds.
C. runs a deficit.
D. runs a surpl us.

Answer: D

When a government runs a deficit
A. its debt increases.
B. it must raise taxes
C. its debt decreases.
D. it must cut spending.

Answer : A

## True/False

1) The amount the government owes to the public is the deficit.

Answer: True $\quad$ False
Diff: 1
Skill: D
2) If tax receipts are less than government expenditures the government is running a deficit.

Answer: True False
Diff: 1
Skill: F
3) If the government runs a deficit, then the government debt increases.

Answer: True False
Diff: 2
Skill: C
4) defense spending is the largest part of the U.S. government spending.

Answer: True o False
Diff: 2
Skill: F
5) The government budget is balanced when tax receipts equal government spending. Answer: ${ }^{\circ}$ True False
Diff: 1
Skill: C

## Multiple Choice

Whi ch of the following is a CORRECT sequence of events during a recessi on?
A. Unempl oyment falls, income falls, tax revenue falls, unempl oyment benefits rise, and the budget deficit rises.
B. Unempl oyment rises, i ncome falls, tax revenue falls, unempl oyment benefits rise, and the budget deficit rises. C. Unempl oyment rises, income falls, tax revenue rises, unemployment benefits fall, and the budget deficit falls. D. Unempl oyment rises, income rises, tax revenue rises, unempl oyment benefits rise, and the budget deficit rises.
Answer : B

Whi ch of the following is a CORRECT sequence of events during an expansi on?
A. Unempl oyment falls, income falls, tax revenue falls, unempl oyment benefits rise, and the budget deficit falls.
B. Unempl oyment rises, income falls, tax revenue falls, unempl oyment benefits rise, and the budget deficit rises.
C. Unemployment rises, income falls, tax revenue rises, unempl oyment benefits fall, and the budget deficit falls.
D. Unemployment falls, income rises, tax revenue rises, unempl oyment benefits fall, and the budget deficit falls.
Answer : D
The presence of aut onatic stabilizers means that the federal deficit is than it ot herwi se woul d be in a recessi on and $\qquad$ than it ot her wi se would be in an expansion.
A. I arger; smaller
B. smaller; I arger
C. smaller; smaller
D. I arger; I arger

Answer : A
During a recession, aut omatic stabilizers cause the federal deficit to
A. decrease.
B. either increase or decrease.
C. remai $n$ unchanged.
D. i ncrease.

Answer : D

An example of an automatic stabilizer is
A. the food stamp program
B. changing the tax l aws to increase the margi nal tax rates.
C. the indexation of social security benefits to the consumer price index.
D. the interest the government pays on loans.

Answer : A
If the economy is in a recession, the full-employment deficit is the actual deficit.

- $\bar{A}$.- Tār ger than
B. equal to
C. smaller than
D. equal to or larger than

Answer : C
If the economy's full-empl oyment out put is $\$ 9$ trillion, actual out put is $\$ 8.5$ trilli on, and the budget deficit is $\$ 50$ billion, the deficit in this case is known as a
A. nat ural empl oyment deficit.
B. cyclical deficit.
C. structural deficit.
D. debt deficit.

Answer : B
If the economy's full-employment out put is $\$ 9$ trillion, actual out put is $\$ 9$ trillion, and the budget deficit is $\$ 20$ billion, the deficit in thi s case is known as a
A. nat ural empl oyment deficit.
B. cyclical deficit.
C. structural deficit.
D. fiscal deficit.

Answer: C
Assume that in the United States the act ual deficit is $\$ 300$ billion. If the Uni ted St at es were at full employment, the deficit would be $\$ 100$ billion. The structural deficit in the United States is
A. $\$ 100$ billi on.
B. $\$ 200$ billi on.
C. $\$ 300$ billion.
D. $\$ 400$ billion.

Answer : A

Assume that in the Atlantis the actual deficit is $\$ 200$ billion. If the Atlantis were at full empl oyment, the deficit would be $\$ 50$ billion. The structural deficit in the Atlantis is
A. $\$ 100$ billi on.
B. $\$ 200$ billion.
C. $\$ 50$ billion.
D. $\$ 150$ billi on.

## Answer : C

If the economy is in a recessi on and the government lowers the tax rate, tax revenue
A. will definitel y increase.
B. will definitel y decrease.
C. may i ncrease, decrease or stay the same.
D. will not change.

Answer : C
In whi ch case will the government collect more tax revenue?
A. $40 \%$ tax rate and $\$ 40,000$ aver age i ncome
B. 90\% tax rate and \$10,000 aver age i ncome
C. $20 \%$ tax rate and $\$ 90,000$ aver age i ncome
D. 4\%tax rate and \$80,000 aver age i ncome

Answer: C

If taxes are a function of income, then the AE function is
A. flatter than if taxes are a lump-sum amount.
B. steeper than if taxes are a lump-sum anount.
C. vertical.
D. downward sl opi ng.

Answer : A

## True/False

1) During recessions, automatic stabilizers work to reduce government expenditures and increase government revenues.
Answer: True $\odot$ False
Diff: 2
Skill: C
2) The cyclical deficit of the full-employment budget is zero.

Answer: ${ }_{\circ}$ True False
Diff: 1
Skill: D
3) The structural deficit is the deficit at full employment.

Answer: ${ }_{\square}$ True False
Diff: 1
Skill: D
4) In an expansion the U.S. federal government deficit automatically grows.

Answer: True $\odot$ False
Diff: 1
Skill: C
5) Automatic stabilizers include those elements of government spending that automatically grow during a recession.
Answer: True False
Diff: 1
Skill: C
9.5 Appendix A

Multiple Choice
Assume that taxes depend on income. The MPC is . 8 and tis.25. The government spending multiplier is
A. 1. 67.
B. 2. 5.
C. 5 .
D. 10.

Answer : B
Assume that taxes depend on income. The MPC is . 9 and t is . 3 . The government spending mul tiplier is
A. 10.
B. 2. 7.
C. 1.17 .
D. 1.42.

Answer : $B$
Assume that taxes depend on income. The MPC is. 5 and $t$ is. 2 . If government spending increases by $\$ 10$ billion, the equilibriumlevel of output will increase by
A. \$16. 7 billion.
B. $\$ 25$ billion.
C. $\$ 50$ billion.
D. $\$ 100$ billion.

Answer : A

Assume that taxes depend on income. The MPC is . 8 and tis. 4 . If government purchases increase by $\$ 100$ billion, the equili briumlevel of out put will increase by
A. \$16. 7 billion.
B. $\$ 215.9$ billi on.
C. $\$ 57.5$ billion.
D. \$192. 31 billion.

Answer : D

If taxes depend on income and the MPC is . 8 and t is.5, the tax multiplier is
A. -1. 6.
B. -1.3 .
C. 75.
D. 67.

Answer : B
Assume that taxes depend on income and the MPC is . 8 and t is.5. An i ncrease in taxes of $\$ 10$ billi on will decrease equilibriumincome by
A. $\$ 16$ billion.
B. $\$ 13.3$ billi on.
C. $\$ 7.5$ billion.
D. $\$ 6.7$ billion.

Answer : B
If taxes depend on income, then the magnitude of the government spending miltiplier ______ it would be if taxes were a lump-sum amount.
A. could be either l arger than or smaller than
B. i s larger than
C. is equal to what
D. is smaller than

Answer : D
If taxes depend on income, then the absol ute val ue of the tax multiplier it would be if taxes were a lump- sum amount.

B. i s larger than
C. is equal to what
D. i s snaller than

Answer : D

As the tax rate increases, the government spending multiplier
A. increases.
B. decreases.
C. does not change.
D. could ei ther increase or decrease depending on the val ue of the MPC.
Answer : B
As the tax rate increases, the absol ute val ue of the tax multiplier A. i ncreases.
B. decreases.
C. does not change.
D. could ei ther increase or decrease depending on the val ue of the MPC.
Answer : B

## True/False

1) When taxes depend on incomes, a higher tax rate implies a higher government spending multiplier.
Answer: True $\odot$ False
Diff: 1
Skill: F
2) When the MPC is .9 and $t$ is .3 , then the government spending multiplier is about -2.4.

Answer: True False
Diff: 2
Skill: F
3) If the MPS is .2 and $t$ is .3 , then the tax multiplier is about -3.8 .

Answer: True $\odot$ False
Diff: 3
Skill: C
4) If the MPS is .4 and $t$ is .3 , then the tax multiplier is about -1.03 .

Answer: True False
Diff: 3
Skill: C
5) When the tax rate increases, the absolute value of the tax multiplier falls.

Answer: ${ }_{-}$True False
Diff: 1
Skill: F

