Chapter 8 Aggregate Expenditure and Equilibrium Output

8.1 The Keynesian Theory of Consumption

1) *The MPC* is
A) the change in consumption divided by the change in income.
B) consumption divided by income.
C) the change in consumption divided by the change in saving.
D) the change in saving divided by the change in income.
Answer: A

2) The MPS is
A) the change in saving divided by the change in income.
B) 1 + MPC
C) income divided by saving.
D) total saving divided by total income.
Answer: A

3) Saving equals
A) Y - C.
B) Y - planned I.
C) Y - actual I.
D) Inventory changes.
Answer: A

4) If the *MPS* is .60, *MPC*
A) is 1.60.
B) is .30.
C) is .40.
D) cannot be determined by the given information.
Answer: C

5) If you earn additional $500 in disposable income one week for painting your neighbor's house,
A) the total of your consumption and saving will increase by more than $500.
B) the total of your consumption and saving will increase by $500.
C) the total of your consumption and saving will increase by less than $500.
D) your consumption will increase by more than $500, even if your *MPS* is 0.1.
Answer: B

6) If Logan received a $2,500 bonus and his *MPS* is 0.20, his consumption rises by $_____ and his saving rises by $_____.
A) 500; 100 B) 2,500; 200 C) 2,000; 500 D) 2,500; 20
Answer: C

7) Saving is a _____ variable and savings is a _____ variable.
A) flow; flow B) stock; stock C) flow; stock D) stock; flow
Answer: C

8) Uncertainty about the future is likely to
A) increase current spending.
B) have no impact on current spending.
C) decrease current spending.
D) either increase or decrease current spending.

Answer: C

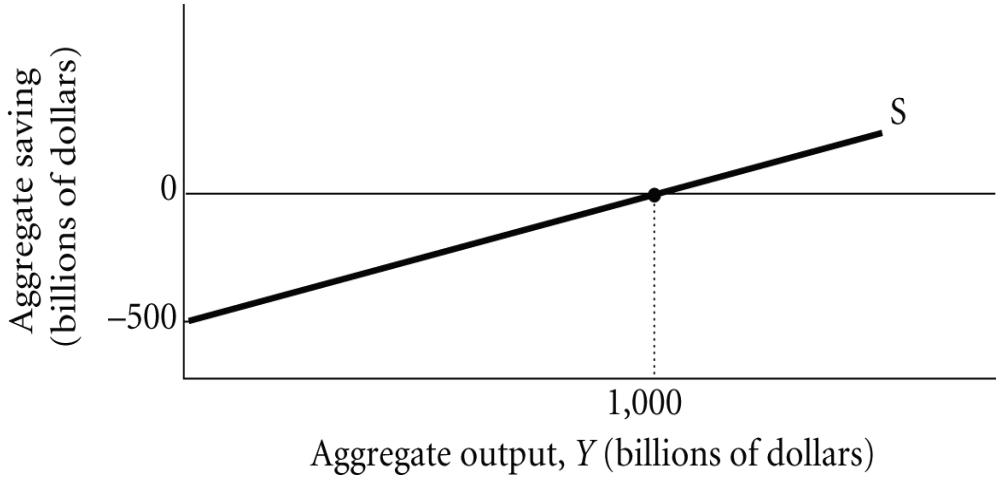
9) Higher interest rates are likely to
A) have no effect on consumer spending or saving.
B) decrease consumer spending and increase consumer saving.
C) decrease both consumer spending and consumer saving.
D) increase consumer spending and decrease consumer saving.
Answer: B

10) Consumption is
A) positively related to household income and wealth and households′ expectations about the future, but negatively related to interest rates.
B) negatively related to household income and wealth, interest rates, and households′ expectations about the future.
C) determined only by income.
D) positively related to household income and wealth, interest rates, and households′ expectations about the future.
Answer: A

11) In a closed economy with no government, aggregate expenditure is
A) consumption plus investment. B) saving plus investment.
C) consumption plus the MPC. D) MPC + MPS.
Answer: A

12) If Wanda′s income is reduced to zero after she loses her job, her consumption will be _____ and her saving will be _____.
A) less than zero; less than zero B) greater than zero; greater than zero
C) less than zero; greater than zero D) greater than zero; less than zero
Answer: D

Refer to the information provided in Figure 8.1 below to answer the questions that follow.
Figure 8.1



13) Refer to Figure 8.1. The *MPS* for this household is _____ and the *MPC* is _____.
A) 0.4; 0.6
B) 0.5; 0.5
C) 0.2; 0.8
D) 0.3; 0.7
Answer: B

14) Refer to Figure 8.1. The equation for this household's saving function is
A) S = -200 + .8Y.
B) S = -300 + 0.25Y.
C) S = -500 + .5Y.
D) S = -1,000 + 0.8Y.
Answer: C

15) Refer to Figure 8.1. At income level $1,500, this household's saving is _____ than (to) zero and this household's consumption is _____ zero.
A) less than; greater than B) equal to ; equal to
C) greater than; less than D) greater than; greater than
Answer: D

16) Refer to Figure 8.1. This household's consumption function is
A) C = 200 + 0.2Y.
B) C = 300 + 0.75Y.
C) C = 500 + 0.5Y.
D) C = 1,000 + 0.2Y.
Answer: C

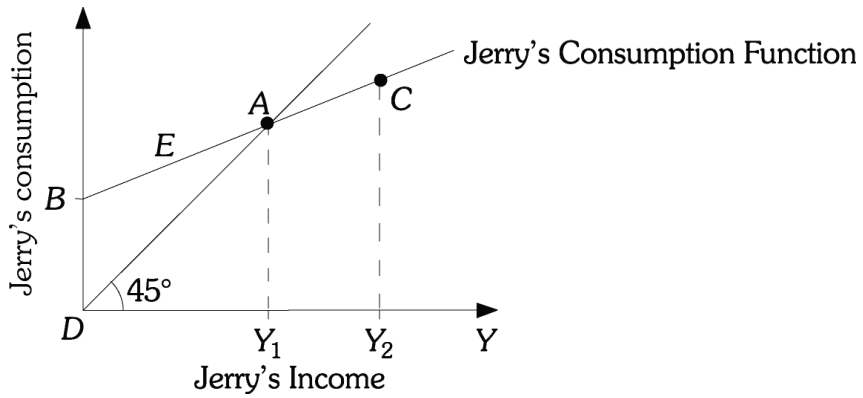
17) Refer to Figure 8.1. This household saves -$300 at an income level of
A) $400. B) $300 C) $250. D) $125.
Answer: A

18) Refer to Figure 8.1. This household consumes $2,000 at an income level of
A) $3,000. B) $2,000. C) $2,275. D) $1,840.
Answer: A

19) Refer to Figure 8.1. An increase in the amount of consumption this household makes when this household′s income is zero
A) makes the consumption function steeper.
B) makes the saving function flatter.
C) shifts the consumption function downward.
D) shifts the saving function downward.
Answer: D

20) Refer to Figure 8.1. An increase in the *MPC*
A) makes the consumption function flatter.
B) makes the saving function flatter.
C) shifts the consumption function upward.
D) shifts the saving function downward.
Answer: B

Refer to the information provided in Figure 8.2 below to answer the questions that follow.
Figure 8.2



21) Refer to Figure 8.2. The line segment *BD* represents Jerry′s
A) consumption when income equals *Y*1.
B) saving when income equals zero.
C) saving when income is *Y*1.
D) consumption when income equals zero.
Answer: D

22) Refer to Figure 8.2. Jerry′s consumption equals his income at Point
A) *B*.
B) *A*.
C) *D*.
D) *C*.
Answer: B

23) Refer to Figure 8.2. Jerry′s saving equals zero at income level
A) zero.
B) *Y*1.
C) *Y*2.
D) *Y*2 - *Y*1.
Answer: B

24) Refer to Figure 8.2. Along the line segment *AC*, Jerry′s
A) consumption equals his income.
B) consumption is greater than his income.
C) saving is zero.
D) saving is positive.
Answer: D

25) Refer to Figure 8.2. Along the segment *AB*, Jerry′s
A) consumption is less than his income. B) saving is positive.
C) consumption equals his income. D) saving is negative.
Answer: D

26) Refer to Figure 8.2. Positive saving occurs along the line segment
A) *BC*.
B) *DC*.
C) *AC*.
D) *BA*.
Answer: C

27) Refer to Figure 8.2. An increase in Jerry′s income is represented by
A) an upward shift in Jerry′s consumption function.
B) an increase in the slope of Jerry′s consumption function.
C) a movement from Point *B* to *A*.
D) none of the above
Answer: C

28) Refer to Figure 8.2. Suppose Jerry′s *MPC* increases. At income *Y*1, Jerry′s
A) consumption will be greater than his income.
B) consumption will be less than his income.
C) saving will be zero.
D) all of the above
Answer: A

29) The fraction of a change in income that is consumed or spent is called
A) the marginal propensity of income. B) the marginal propensity to save.
C) the marginal propensity to consume. D) average consumption.
Answer: C

30) If you save $80 when you experience a $400 rise in your income,
A) your *MPS* is 0.25.
B) your *MPC* is 0.80.
C) your *MPC* is 0.85.
D) your *MPS* is 0.40.
Answer: B

31) If consumption is $30,000 when income is $35,000, and consumption increases to $36,000 when income increases to $43,000, the *MPC* is
A) 0.65. B) 0.80. C) 0.75. D) 0.95.
Answer: C

32) If consumption is $10,000 when income is $10,000, and consumption increases to $11,000 when income increases to $12,000, the *MPS* is
A) 0.10. B) 0.25. C) 0.50. D) 0.90.
Answer: C

33) Suppose consumption is $5,000 when income is $8,000 and the *MPC* equals 0.9. When income increases to $10,000, consumption is
A) $4,500. B) $2,700. C) $6,800. D) $7,200.
Answer: C

34) Suppose saving is $1,400 when income is $10,000 and the *MPC* equals 0.8. When income increases to $12,000, saving is
A) $1,680. B) $1,800. C) $2,200. D) $3,000.
Answer: B

35) Suppose consumption is $60,000 when income is $90,000 and the *MPS* equals 0.25. When income increases to $100,000, consumption is
A) $70,000. B) $85,000. C) $67,500. D) $90,250.
Answer: C

36) If the *MPS* is .22, the *MPC* is
A) -0.22.
B) 0.78.
C) 1.22.
D) 0.66.
Answer: B

37) If the *MPS* is .05, the *MPC* is
A) -0.05.
B) 2.25.
C) 0.95.
D) 1.05.
Answer: C

38) If the consumption function is of the form $C = 80 + 0.4Y$, the *MPS* equals
A) -0.4.
B) 0.4.
C) 0.6.
D) -0.6.
Answer: C

39) If the saving function is of the form $S = -20 + 0.3Y$, consumption at an income level of 200 is
A) 80. B) 120. C) 160. D) 180.
Answer: C

40) If Lily′s consumption function is of the form $C = 100 + 0.8Y$, her saving equals zero at an income level of
A) 180.
B) 500.
C) 800.
D) cannot be determined from the given information
Answer: B

41) If Zander′s saving function is of the form $S = -150 + 0.5Y$, his consumption equals his income at an income level of
A) 150. B) 225. C) 1,500. D) 300.
Answer: D

Refer to the information provided in Table 8.1 below to answer the questions that follow.
Table 8.1

Table 8.1

Aggregate Income ($ billion)	Aggregate Consumption ($billion)
0	80
50	125
100	170
150	215
200	260

42) Refer to Table 8.1. The equation for the aggregate consumption function is
A) $C = 80 + .95Y$.
B)$C = 80 + .9Y$.
C) $C = 80 + .75Y$.
D)$C = -80 + .45Y$.
Answer: B

43) Refer to Table 8.1. Society′s *MPC* is
A) 0.90. B) 0.95. C) 0.80. D) 0.05.
Answer: A

44) Refer to Table 8.1. Society′s *MPS* is
A) 0.05. B) 0.10. C) 0.20. D) 0.95.
Answer: B

45) Refer to Table 8.1. At an aggregate income level of $100, aggregate saving would be
A) -$30. B) $30. C) -$70. D) $50.
Answer: C

46) Refer to Table 8.1. Assuming society′s *MPC* is constant at an aggregate of income of $300, aggregate consumption would be _____.
A) $325. B) $350. C) $305. D) $425.
Answer: B

Refer to the information provided in Table 8.2 below to answer the questions that follow.
Table 8.2

Table 8.2

Aggregate Income ($ billions)	Aggregate Saving ($ billion)
0	−100
150	−85
300	−70
450	−55
600	−40

47) Refer to Table 8.2. The equation for the aggregate saving function is
A) S = -100 + .15Y.
B) S = -100 + .1Y.
C) S = -150 + .2Y.
D) S = -150 + .85Y.
Answer: B

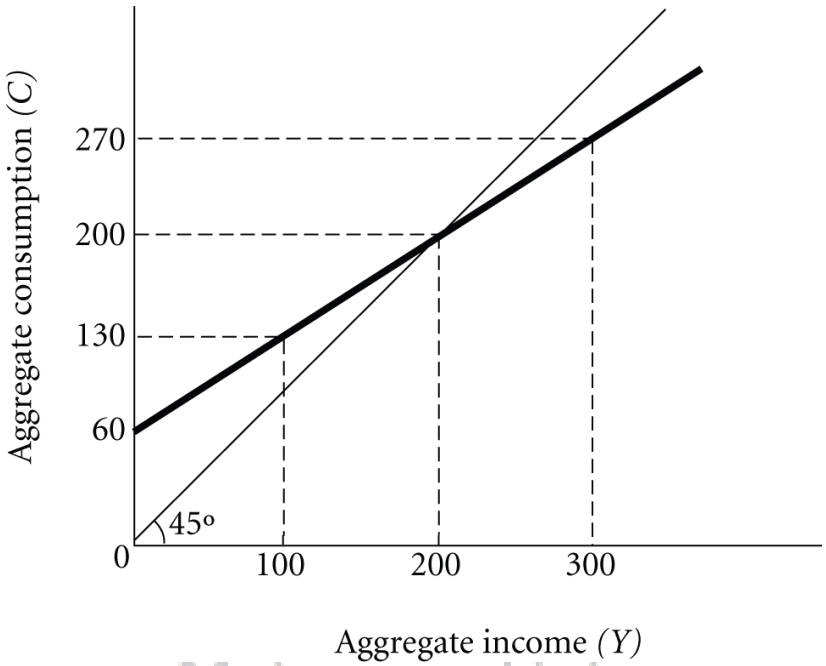
48) Refer to Table 8.2. Society's *MPC* is
A) 0.1.
B) 0.2.
C) 0.8.
D) 0.9.
Answer: D

49) Refer to Table 8.2. Society's *MPS* is
A) 0.2. B) 0.3. C) 0.1. D) 0.9.
Answer: C

50) Refer to Table 8.2. Assuming society's MPC is constant, at an aggregate income level of $900, aggregate consumption would be
A) $665. B) $910. C) $1,200. D) $1,750.
Answer: B

51) Refer to Table 8.2. Assuming society's *MPC* is constant, at an aggregate income of $1,200 aggregate saving would be _____.
A) $0 B) $20 C) $55 D) $150
Answer: B

Refer to the information provided in Figure 8.3 below to answer the questions that follow.
Figure 8.3



52) Refer to Figure 8.3. The equation for the aggregate consumption function is
A) $C = 140 + .5Y$. B) $C = 60 + .7Y$. C) $C = 80 + .6Y$. D) $C = 60 + .4Y$.
Answer: B

53) Refer to Figure 8.3. The equation for the aggregate saving function is
A) $S = -60 + .3Y$. B) $S = -200 + .6Y$. C) $S = -140 + .5Y$. D) $S = -80 + .4Y$
Answer: A

54) Refer to Figure 8.3. In this economy, aggregate saving will be zero if income is
A) $100 billion. B) $200 billion. C) $300 billion. D) $400 billion.
Answer: B

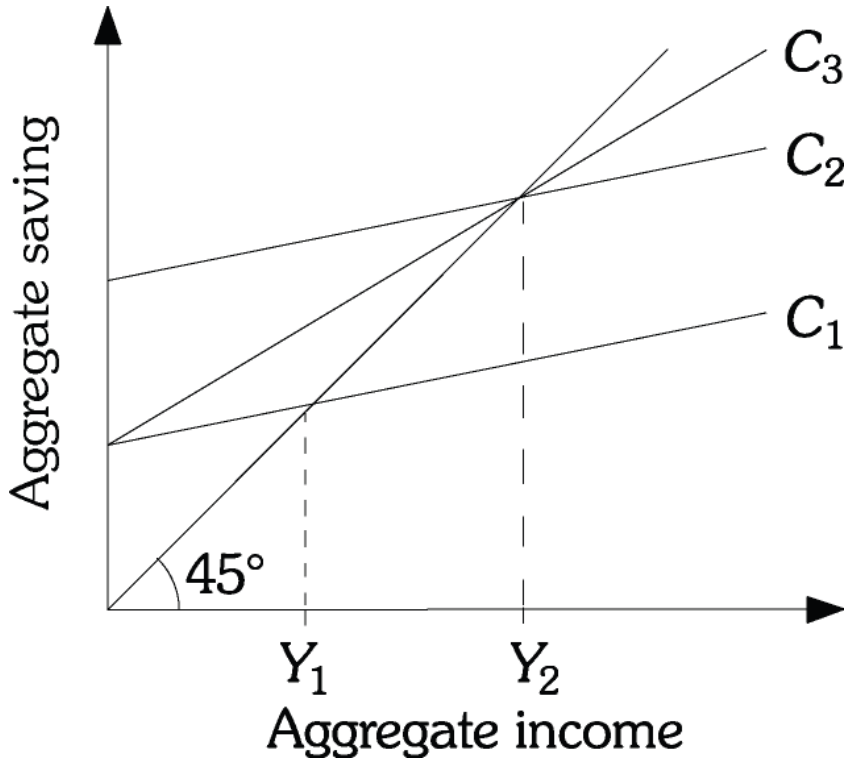
55) Refer to Figure 8.3. For this society, aggregate saving is positive if aggregate income is
A) above zero. B) between $0 and $150 billion.
C) equal to $200 billion. D) above $200 billion.
Answer: D

56) Refer to Figure 8.3. If aggregate income is $1,000 billion, then in this society aggregate saving is _____ billion.
A) $300 B) $320 C) $240 D) $550
Answer: C

57) Refer to Figure 8.3. Which of the following statements is FALSE?
A) Aggregate saving is negative for all income levels below $400 billion.
B) For all aggregate income levels above $200 billion, aggregate consumption is less than aggregate income.

C) If consumption is the only expenditure, this economy would be in equilibrium at an aggregate income level of $200 billion.
D) Saving is negative at all income levels below $200 billion.
Answer: A

Refer to the information provided in Figure 8.4 below to answer the questions that follow.
Figure 8.4



58) Refer to Figure 8.4. The aggregate consumption functions *C*1 and *C*2
A) have the same *MPC* values.
B) imply a different *MPS* values.
C) have the same autonomous consumption values.
D) have the same break-even values.
Answer: A

59) Refer to Figure 8.4. Which consumption function has the largest *MPC*?
A) *C*1. B) *C*2.
C) *C*3. D) cannot be determined from the figure
Answer: C

60) Refer to Figure 8.4. Suppose the consumption function for $C1 = 10 + 0.8Y$, the consumption function that best fits *C*2 is
A) $C2 = 20 + 0.8Y$. B) $C2 = 10 + 0.4Y$.
C) $C2 = 40 + 0.5Y$. D) $C2 = 20 + 0.1Y$.
Answer: A

61) Refer to Figure 8.4. Suppose the consumption function for $C1 = 20 + 0.5Y$, the consumption

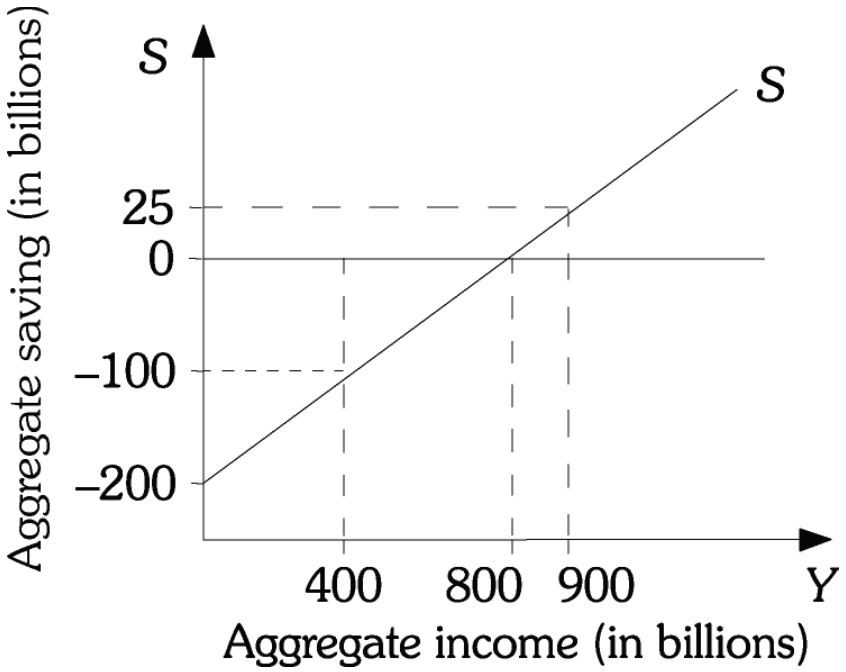
function that best fits $C3$ is
A) $C3 = 20 + 0.8Y$.
B) $C3 = 20 + 0.4Y$.
C) $C3 = 40 + 0.5Y$.
D) $C3 = 40 + 0.4Y$.
Answer: A

62) Refer to Figure 8.4. If income is $Y1$, aggregate consumption is the greatest when the aggregate consumption function is
A) $C3$. B) $C2$.
C) $C1$. D) cannot be determined from the figure
Answer: B

63) Refer to Figure 8.4. If income is $Y2$
A) the society′s saving is negative along $C1$, $C2$, and $C3$.
B) the society′s consumption is equal along $C2$ and $C3$.
C) the society′s saving is positive along $C2$ and $C3$.
D) the society′s savings is negative along $C1$.
Answer: B

64) If the consumption function is below the 45-degree line,
A) consumption is less than income and saving is positive.
B) consumption is less than income and saving is negative.
C) consumption exceeds income and saving is positive.
D) consumption exceeds income and saving is negative.
Answer: A

Refer to the information provided in Figure 8.5 below to answer the questions that follow.
Figure 8.5

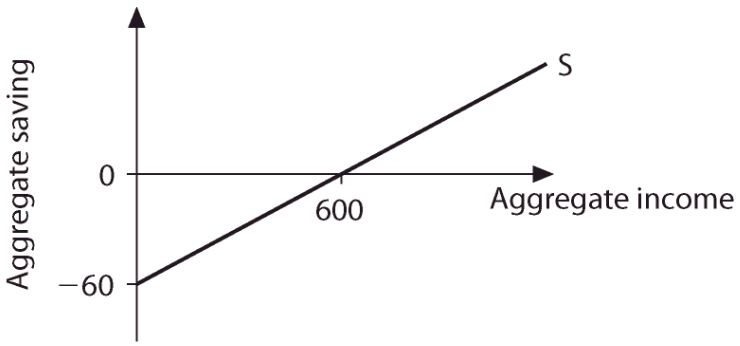


65) Refer to Figure 8.5. The *MPS* for this saving function is
A) 5. B) 0.25. C) 0.5. D) 4.
Answer: B

66) Refer to Figure 8.5. If aggregate income is $400 billion, aggregate saving is _____ billion.
A) -$300 B) -$100 C) $0 D) $500
Answer: B

67) Refer to Figure 8.5. If aggregate income is $900 billion, aggregate consumption
A) is $25 billion.
B) is $800 billion.
C) is $875 billion.
D) cannot be determined from this information.
Answer: C

Refer to the information provided in Figure 8.6 below to answer the questions that follow.
Figure 8.6



68) Refer to Figure 8.6. The *MPS* for this saving function is
A) .4. B) .2. C) .25. D) .1.
Answer: D

69) Refer to Figure 8.6. If aggregate income is $800, aggregate saving is _____.
A) -$100 B) -$20 C) $40 D) $20
Answer: D

70) Refer to Figure 8.6. If aggregate income is $1,000, aggregate consumption is
A) $850. B) $960. C) $910. D) $920.
Answer: B

2 True/False
1) As interest rates fall, spending decreases.
Answer: FALSE
2) Uncertainty about the future is likely to increase current spending.
Answer: FALSE
3) The marginal propensity to consume is the change in consumption per change in income.
Answer: TRUE
4) If the marginal propensity to consume is .8, the marginal propensity to save is 8.
Answer: FALSE

8.2 Planned Investment

1) The Tiny Tots Toy Company manufactures only sleds. In 2007 Tiny Tots manufactured 10,000 sleds, but sold only 8,000 sleds. In 2007 Tiny Tots′ change in inventory was
A) -2,000 sleds. B) 1,000 sleds. C) 2,000 sleds. D) 3,000 sleds.
Answer: C

2) The Jackson Tool Company manufactures only tools. In 2008 Jackson Tools manufactured 20,000 tools, but sold 21,000 tools. In 2008 Jackson Tools′ change in inventory was
A) -2,000 tools. B) 1,000 tools. C) -1,000 tools. D) 3,000 tools.
Answer: C

3) Which of the following is NOT considered investment?
A) The acquisition of capital goods B) The purchase of government bonds
C) The increase in planned inventories D) The construction of a new factory
Answer: B

4) Which of the following is an investment?
A) the purchase of a new printing press by a business
B) the purchase of a corporate bond by a household
C) the purchase of a share of stock by a household
D) a leveraged buyout of one corporation by another
Answer: A

5) Over which component of investment do firms have the least amount of control?
A) purchases of new equipment B) construction of new factories
C) changes in inventories D) building new machines

Answer: C

6) Assume that in Scandia, planned investment is $80 billion but actual investment is $60 billion. Unplanned inventory investment is
A) -$10 billion. B) $140 billion. C) -$20 billion. D) $70 billion.
Answer: C

7) Assume that in Jabara, planned investment is $30 billion, but actual investment is $45 billion. Unplanned inventory investment is
A) $75 billion. B) -$15 billion. C) $15 billion. D) -$75 billion.
Answer: C

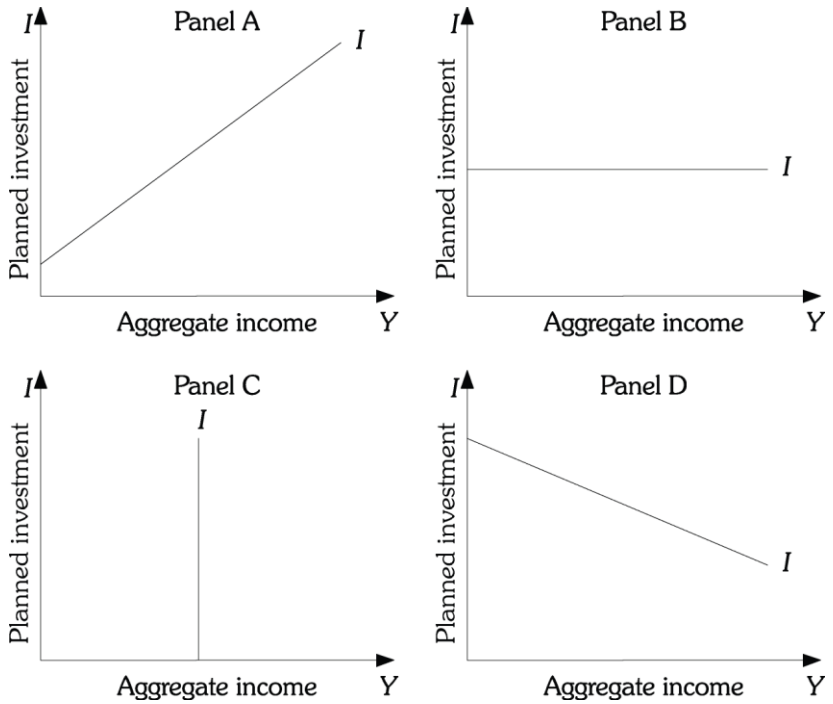
8) If unplanned business investment is $20 million and planned investment is $20 million, then actual investment is
A) $20 million. B) $40 million. C) -$20 million. D) $200 million.
Answer: B

9) In 2006 Happyland′s planned investment was $90 billion and its actual investment was $140 billion. In 2006 Happyland′s unplanned inventory change was
A) -$50 billion. B) -$115 billion. C) $50 billion. D) $230 billion.
Answer: C

10) If planned investment exceeds actual investment,
A) there will be an accumulation of inventories.
B) there will be no change in inventories.
C) there will be a decline in inventories.
D) none of the above
Answer: C

11) If Inventory investment is higher than firms planned,
A) actual and planned investment are equal.
B) actual investment is less than planned investment.
C) actual investment is greater than planned investment.
D) actual investment must be negative.
Answer: C

Refer to the information provided in Figure 8.7 below to answer the questions that follow.
Figure 8.7



12) Refer to Figure 8.7. In Azora, planned investment does not vary with income. Azora′s planned investment function is represented by
A) Panel A. B) Panel B. C) Panel C. D) Panel D.
Answer: B

13) Refer to Figure 8.7. In Farley, planned investment varies inversely with income. Farley′s planned investment function is represented by
A) Panel A. B) Panel B. C) Panel C. D) Panel D.
Answer: D

14) Without the government or the foreign sector in the income-expenditure model, planned aggregate expenditure equals
A) consumption plus actual investment.
B) consumption plus inventory adjustment.
C) consumption minus planned investment.
D) consumption plus planned investment.
Answer: D

2 True/False
1) If actual investment is greater than planned investment, unplanned inventories decline.
Answer: FALSE

2) Firms react to an unplanned inventory investment by increasing output.
Answer: FALSE

3) Firms react to negative inventory investment by increasing output.
Answer: TRUE

4) If planned saving exceeds planned investment, injections are greater than leakages.
Answer: FALSE

5) If planned investment increases, equilibrium will be restored only when saving has increased by exactly the amount of the initial increase in planned investment, assuming there is no government or foreign sector.
Answer: TRUE

8.3 The Determination of Equilibrium Output (Income)
1 Multiple Choice
1) In macroeconomics, equilibrium is defined as that point at which
A) saving equals consumption.
B) planned aggregate expenditure equals aggregate output.
C) planned aggregate expenditure equals consumption.
D) aggregate output equals consumption minus investment.
Answer: B

2) The economy can be in equilibrium if, and only if,
A) planned investment is zero.
B) actual investment is zero.
C) planned investment is greater than actual investment.
D) planned investment equals actual investment.
Answer: D

3) If aggregate output is greater than planned spending, then
A) unplanned inventory investment is zero.
B) unplanned inventory investment is negative.
C) unplanned inventory investment is positive.
D) actual investment equals planned investment.
Answer: C

4) If unplanned inventory investment is positive, then
A) planned investment must be zero.
B) planned aggregate spending must be greater than aggregate output.
C) planned aggregate spending must be less than aggregate output.
D) planned aggregate spending must equal aggregate output.
Answer: C

5) If aggregate output equals planned aggregate expenditure, then
A) unplanned inventory investment is zero.
B) unplanned inventory adjustment is negative.
C) unplanned inventory adjustment is positive.
D) actual investment is greater than planned investment.
Answer: A

Refer to the information provided in Table 8.3 below to answer the questions that follow.
Table 8.3

Table 8.3

All Figures in Billions of Dollars		
Aggregate Output	Aggregate Consumption	Planned Investment
200	300	100
400	450	100
600	600	100
800	750	100
1,000	900	100

6) Refer to Table 8.3. At an aggregate output level of $400 billion, planned expenditure equals
A) $550 billion. B) $450 billion. C) $500 billion. D) $850 billion.
Answer: A

7) Refer to Table 8.3. At an aggregate output level of $800 billion, aggregate saving
A) equals -$50 billion.
B) equals $0.
C) equals $50 billion.
D) cannot be determined from this information.
Answer: C

8) Refer to Table 8.3. At an aggregate output level of $200 billion, the unplanned inventory change is
A) -$150 billion. B) -$200 billion. C) -$50 billion. D) $100 billion.
Answer: B

9) Refer to Table 8.3. At an aggregate output level of $600 billion, the unplanned inventorychange is
A) -$100 billion. B) -$50 billion. C) $0. D) $50 billion.
Answer: A

10) Refer to Table 8.3. If aggregate output equals _____, there will be a $100 billion unplanned decrease in inventories.
A) $200 billion B) $400 billion C) $600 billion D) $800 billion
Answer: C

11) Refer to Table 8.3. The equilibrium level of aggregate output equals
A) $400 billion. B) $600 billion. C) $800 billion. D) $1,000 billion.
Answer: D

12) Refer to Table 8.3. Which of the following statements is FALSE?
A) At output levels greater than $800 billion, there is a positive unplanned inventory change.
B) If aggregate output equals $1000 billion, then aggregate saving equals $100.
C) The *MPC* for this economy is .75.
D) At an output level of $400 billion, there is a $150 billion unplanned inventory decrease.
Answer: A
13) Refer to Table 8.3. Planned saving equals planned investment at an aggregate output level
A) of $1000 billion.
B) of $600 billion.
C) of $800 billion.
D) that cannot be determined from this information.

Answer: A

14) Refer to Table 8.3. Planned investment equals actual investment at
A) all income levels. B) all income levels above $600 billion.
C) all income levels below $600 billion. D) $1000 billion.
Answer: D

Refer to the information provided in Table 8.4 below to answer the questions that follow.
Table 8.4

Table 8.4

Aggregate Output ($ million)	Aggregate Consumption ($ million)	Planned Investment ($ million)
3,000	2,000	1,600
4,000	2,800	1,600
5,000	3,600	1,600
6,000	4,400	1,600
7,000	5,000	1,600

15) Refer to Table 8.4. At an aggregate output level of $3,000 million, planned expenditure equals
A) $3,000. B) $3,600. C) $2,800. D) $4,400.
Answer: B

16) Refer to Table 8.4. The *MPC* in this economy is
A) 0.5. B) 0.6. C) 0.7. D) 0.8.
Answer: D

17) Refer to Table 8.4. At an aggregate output level of $4,000 million, the unplanned inventory change is
A) $1,200 million. B) 0. C) $400 million. D) -$400 million.
Answer: D

18) Refer to Table 8.4. At an aggregate output level of $7,000 million, the unplanned inventory change is
A) 0. B) $400 million.
C) -$400 million. D) -$1,200 million.
Answer: B

19) Refer to Table 8.4. If aggregate output equals _____, there will be a $200 million unplanned decrease in inventories.
A) $3,000 million B) $4,000 million C) $5,000 million D) $6,000 million
Answer: C

20) Refer to Table 8.4. The equilibrium level of aggregate output equals
A) $3,000 million. B) $4,000 million. C) $5,000 million. D) $6,000 million.
Answer: D

21) Refer to Table 8.4. Which of the following statements is FALSE?
A) At an output level $4,000, there is a $400 million unplanned inventory decrease.
B) If aggregate output equals $4,000 million, then aggregate saving equals $1000 million.
C) The *MPC* for this economy is 0.8.
D) At an output level of $3,000 million, there is a $600 million unplanned inventory decrease.
Answer: B

22) Refer to Table 8.4. Planned saving equals planned investment at an aggregate output level of
A) $4,000 million. B) $5,000 million. C) $6,000 million. D) $7,000 million.
Answer: C

23) Refer to Table 8.4. Planned investment equals actual investment at
A) all income levels. B) all income levels above $6,000 million.
C) all income levels below $6,000 million D) an income level of $6,000 million.
Answer: D

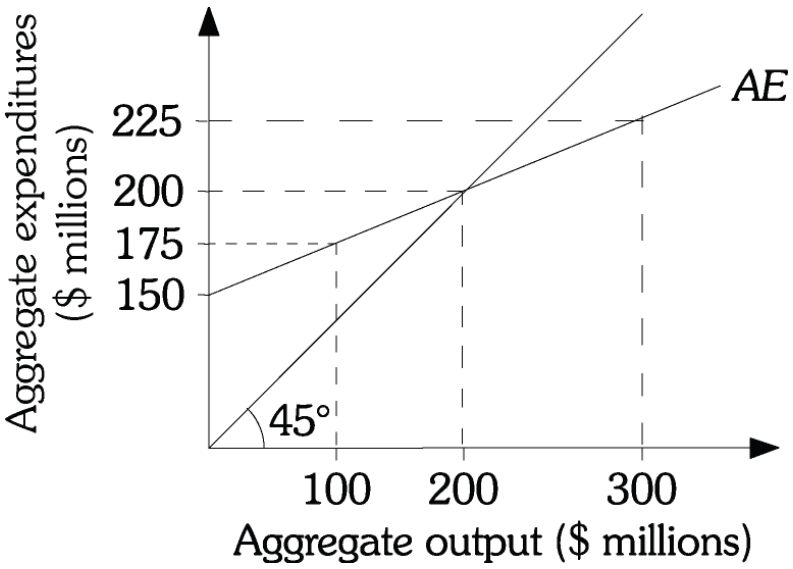
24) If $C = 100 + .8Y$ and $I = 50$, then the equilibrium level of income is
A) 600. B) 375. C) 187.5. D) 750.
Answer: D

25) If $C = 500 + .9Y$ and $I = 400$, then the equilibrium level of income is
A) 900. B) 1,800. C) 1,000. D) 9,000.
Answer: D

26) If $S = -200 + 0.2Y$ and $I = 100$, then the equilibrium level of income is
A) 3,000. B) 1,500. C) 4,000. D) 1,200.
Answer: B

27) If $C = 1,500 + .75Y$ and $I = 500$, then planned saving equals planned investment at aggregate output level of
A) 8,000. B) 20,000. C) 2,666.67. D) 10,000.
Answer: A

Refer to the information provided in Figure 8.8 below to answer the questions that follow.
Figure 8.8



28) Refer to Figure 8.8. What is the equation for the aggregate expenditure function (*AE*)?
A) *AE* = 200 + .5*Y*. B) *AE* = 150 + .25*Y*.
C) *AE* = 200 + .8*Y*. D) *AE* = 350 + .6*Y*.
Answer: B

29) Refer to Figure 8.8. Equilibrium output equals
A) 100. B) 200. C) 150. D) 300.
Answer: B

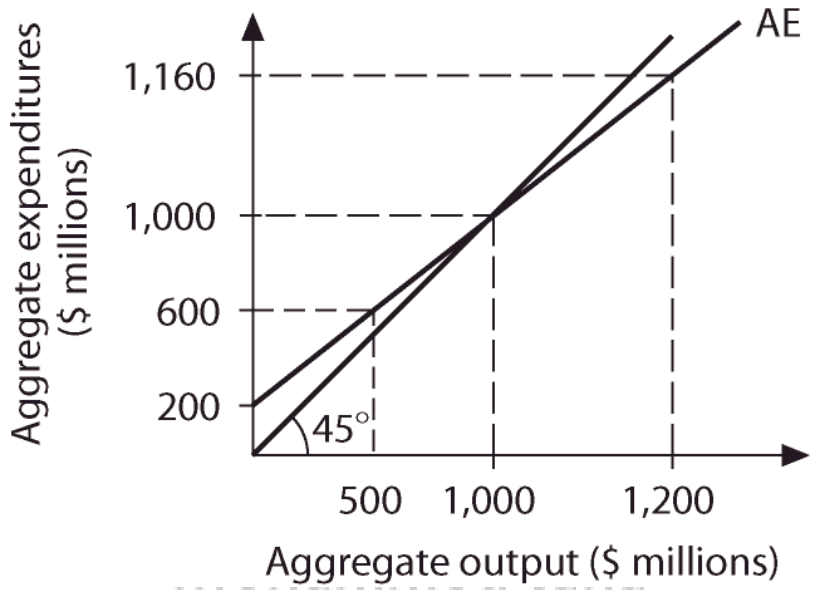
30) Refer to Figure 8.8. At aggregate output level $300 million, there is a
A) $75 million unplanned increase in inventories.
B) $75 million unplanned decrease in inventories.
C) $100 million decrease in inventories.
D) $100 million increase in inventories.
Answer: A

31) Refer to Figure 8.8. At aggregate output level $100 million, there is a
A) $75 million unplanned increase in inventories.
B) $75 million unplanned decrease in inventories.
C) $100 million decrease in inventories.
D) $100 million increase in inventories.
Answer: B

32) Refer to Figure 8.8. How will equilibrium aggregate expenditure and equilibrium aggregate output change as a result of a decrease in investment by $20 million?
A) *AE* line shifts down, increasing equilibrium output and equilibrium expenditure.
B) *AE* line shifts up, increasing equilibrium output and equilibrium expenditure.
C) *AE* line shifts down, decreasing equilibrium output and equilibrium expenditure.
D) *AE* line shifts down, increasing equilibrium output and decreasing equilibrium expenditure.
Answer: C

33) Refer to Figure 8.8. Leakages are greater than injections at an aggregate output level of
A) $300 million. B) $100 million.
C) $200 million. D) cannot be determined from the figure
Answer: A

Refer to the information provided in Figure 8.9 below to answer the questions that follow.
Figure 8.9



34) Refer to Figure 8.9. What is the equation for the aggregate expenditure function (*AE*)?
A) *AE* = 600 + .1*Y*. B) *AE* = 200 + .8*Y*.
C) *AE* = 550 + .8*Y*. D) *AE* = 100 + .9*Y*.
Answer: B

35) Refer to Figure 8.9. At an aggregate output level of $500 million, there is a
A) $100 million unplanned increase in inventories.
B) $175 million unplanned decrease in inventories.
C) $0 change in unplanned inventories.
D) $100 million unplanned decrease in inventories.
Answer: D

36) Refer to Figure 8.9. At aggregate output levels above $1,000 million, there are
A) unplanned increases in inventories and output increases.
B) unplanned decreases in inventories and output increases.
C) unplanned decreases in inventories and output decreases.
D) unplanned increases in inventories and output decreases.
Answer: D

37) Refer to Figure 8.9. At aggregate output levels below $1,000 million, there are
A) unplanned decreases in inventories and output increases.
B) unplanned increases in inventories and output increases.
C) unplanned increases in inventories and output decreases.
D) unplanned decreases in inventories and output decreases.
Answer: A

38) Refer to Figure 8.9. At aggregate output levels above $1,000 million,
A) leakages equal injections.
B) leakages are more than injections.
C) leakages are zero, but injections are positive.
D) leakages are less than injections.
Answer: B

39) Refer to Figure 8.9. At aggregate output levels below $1,000 million,
A) leakages equal injections.
B) leakages are greater than injections.
C) leakages are less than injections.
D) leakages are positive, but injections are negative.
Answer: C

40) Using the saving/investment approach to equilibrium, the equilibrium condition can be written as
A) $C + I = C + S$. B) $C = S + I$. C) $C - S = I$. D) $C + S = I$.
Answer: A

41) Firms react to unplanned inventory reductions by
A) reducing output. B) increasing output.
C) reducing planned investment. D) increasing consumption.
Answer: B

42) Firms react to unplanned increases in inventories by
A) reducing output. B) increasing output.
C) increasing planned investment. D) increasing consumption.
Answer: A

43) Aggregate output will increase if there is a(n)
A) increase in saving. B) unplanned rise in inventories.
C) unplanned fall in inventories. D) decrease in consumption.
Answer: C

44) A decrease in planned investment causes
A) output to increase.
B) output to decrease, but by a smaller amount than the decrease in investment.
C) output to decrease, but by a larger amount than the decrease in investment.
D) output to decrease by an amount equal to the decrease in investment.
Answer: C

2 True/False
1) When aggregate expenditure is greater than aggregate output, there will be an unplanned build up of inventories.
Answer: FALSE

2) When there is an unplanned draw down of inventories, firms will increase production.
Answer: TRUE

3) Actual investment equals planned investment plus unplanned changes in inventories.
Answer: TRUE

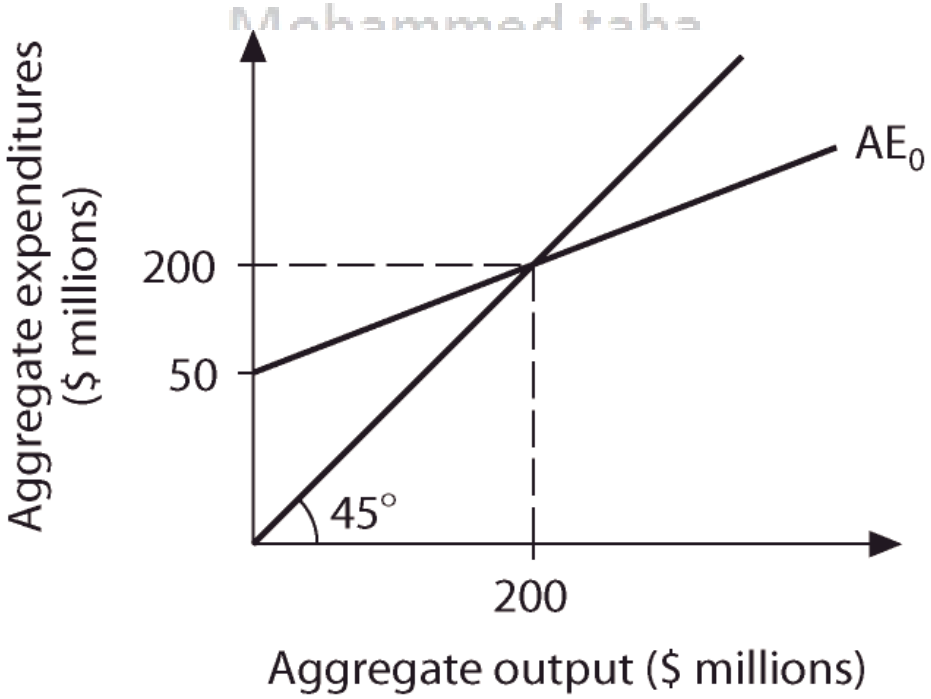
4) When the economy is in equilibrium, savings equals planned investment.
Answer: TRUE

5) If aggregate expenditure decreases, then equilibrium output increases.
Answer: FALSE

6) Assuming there is no government or foreign sector, the economy will be in equilibrium if, and only if, planned investment equals actual investment.
Answer: TRUE

8.4 The Multiplier
1 Multiple Choice
1) The ratio of the change in the equilibrium level of output to a change in some autonomous variable is the
A) elasticity coefficient.
B) multiplier.
C) automatic stabilizer.
D) marginal propensity of the autonomous variable.
Answer: B

Refer to the information provided in Figure 8.10 below to answer the questions that follow.
Figure 8.10



2) Refer to Figure 8.10. The equation for the aggregate expenditure function *AE*0 is
A) *AE*0 = 50 + .6*Y*. B) *AE*0 = 80 + .6*Y*.
C) *AE*0 = 50 + .75*Y*. D) *AE*0 = 50 + .4*Y*.
Answer: C

3) Refer to Figure 8.10. The value of the multiplier is
A) 2. B) 2.5. C) 3. D) 4.
Answer: D

4) Refer to Figure 8.10. A $10 million increase in investment changes equilibrium output to
A) $240 million. B) $90 million. C) $225 million. D) $175 million.
Answer: A

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5) Refer to Figure 8.10. A $20 million decrease in autonomous consumption
A) changes equilibrium expenditure to $120 million.
B) changes equilibrium output to $180 million.
C) will change the *MPC*.
D) will change the *MPS*.
Answer: A

6) Refer to Figure 8.10. If *MPC* increases to 0.8, equilibrium aggregate output
A) increases to $250 million.
B) remains at $200 million.
C) increases to $400 million.
D) cannot be determined from the given information.
Answer: A

7) Assuming no government or foreign sector, if the *MPC* is 0.9, the multiplier is
A) 0.1. B) 5. C) 9. D) 10.
Answer: D

8) Assuming no government or foreign sector, the formula for the multiplier is
A) 1/*MPC*. B) 1/*MPS*. C) 1/(1 + *MPC*). D) 1 - *MPC*.
Answer: B

9) Assuming there is no government or foreign sector, the formula for the multiplier is
A) 1/(1 - *MPC*). B) 1/*MPC*. C) 1/(1 + *MPC*). D) 1 - *MPC*.
Answer: A

10) Assuming there is no government or foreign sector, if the multiplier is 10, the *MPC* is
A) 0.9. B) 0.8. C) 0.5. D) 0.1.
Answer: A

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11) Assume there is no government or foreign sector. If the *MPS* is .05, the multiplier is
A) 0.95. B) 20. C) 10. D) 50.
Answer: B

12) Assume there is no government or foreign sector. If the multiplier is 10, a $10 billion increase in planned investment will cause aggregate output to increase by
A) $1 billion. B) $5 billion. C) $10 billion. D) $100 billion.
Answer: D

13) Assume there is no government or foreign sector. If the *MPS* is 0.2, a $40 billion decrease in planned investment will cause aggregate output to decrease by
A) $20 billion. B) $50 billion. C) $80 billion. D) $200 billion.
Answer: D

14) Assume there is no government or foreign sector. If the multiplier is 4, a $20 billion increase in investment will cause aggregate output to increase by
A) $5 billion. B) $20 billion. C) $40 billion. D) $80 billion.
Answer: D

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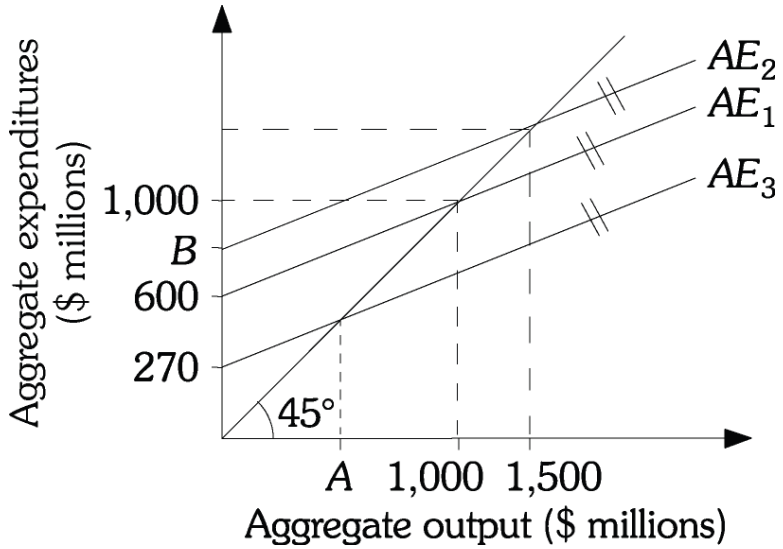
Refer to the information provided in Figure 8.11 below to answer the questions that follow.
Figure 8.11



15) Refer to Figure 8.11. What is the equation for aggregate expenditure *AE*1?
A) *AE*1 = 1,000 + .5*Y*. B) *AE*1 = 600 + .4*Y*.
C) *AE*1 = 1,000 + .6*Y*. D) *AE*1 = 400 + .4*Y*.
Answer: B

16) Refer to Figure 8.11. Suppose *AE*1, *AE*2 and *AE*3 are parallel. What is the value of Point *B*?
A) $750 million
B) $800 million
C) $900 million
D) cannot be determined from the given information
Answer: C

17) Refer to Figure 8.11. Suppose *AE*1, *AE*2 and *AE*3 are parallel. What is the value of Point *A*?
A) $450 million
B) $540 million
C) $510 million
D) cannot be determined from the given information
Answer: A

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18) Refer to Figure 8.11. Suppose the economy′s aggregate expenditure line is *AE*1. A $10 million increase in planned investment causes aggregate equilibrium output to increase to
A) $1,016.7 million. B) $1,010 million.
C) $1,125.5 million. D) $1,215.6 million.
Answer: A

19) As the *MPS* decreases, the multiplier will
A) increase.
B) decrease.
C) remain constant.
D) either increase or decrease depending on the size of the change in investment.
Answer: A

20) Midwest State University in Nebraska is trying to convince Nebraska taxpayers that the tax dollars spent at Midwest State University are well spent. One of the university′s arguments is that for every $1 spent by Midwest State University an additional $5 of expenditures are generated within Nebraska. Midwest State University is arguing that the multiplier for their expenditures is
A) 0.2. B) 1. C) 4. D) 5.
Answer: D

21) If autonomous consumption increases, the size of the multiplier would
A) increase.
B) decrease.
C) remain constant.
D) either increase or decrease depending on the size of the change in autonomous consumption.
Answer: C

22) In practice, the actual size of the multiplier is about
A) 1. B) 1.4. C) 2. D) 4.
Answer: B

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23) Related to the *Economics in Practice* on p. 154 [466]: According to the ″paradox of thrift,″ as individuals increase their saving,
A) income in the economy increases because there is more money available for firms to invest.
B) income in the economy increases because interest rates will fall and the economy will expand.
C) income in the economy will remain constant because the change in consumption equals the change in saving.
D) income in the economy will fall because the decreased consumption that results from increased saving causes the economy to contract.
Answer: D

24) Related to the *Economics in Practice* on p. 154 [466]: According to the ″paradox of thrift,″ increased efforts to save will cause a(n)

A) increase in income and an increase in overall saving.
B) increase in income but no overall change in saving.
C) decrease in income and an overall decrease in saving.
D) decrease in income but an increase in saving.
Answer: C

2 True/False

1) The larger the *MPC*, the smaller the multiplier.
Answer: FALSE

2) The smaller the MPS, the larger the multiplier.
Answer: TRUE

3) If the MPC is .75, then the multiplier is 4.
Answer: TRUE

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4) If the MPS is .1, then the multiplier is 10.
Answer: TRUE

5) An increase in the MPC, reduces the multiplier.
Answer: FALSE

6) Related to the *Economics in Practice* on p. 154 [466]: The paradox of thrift is that all people deciding to save more could lead to them saving less.
Answer: TRUE