

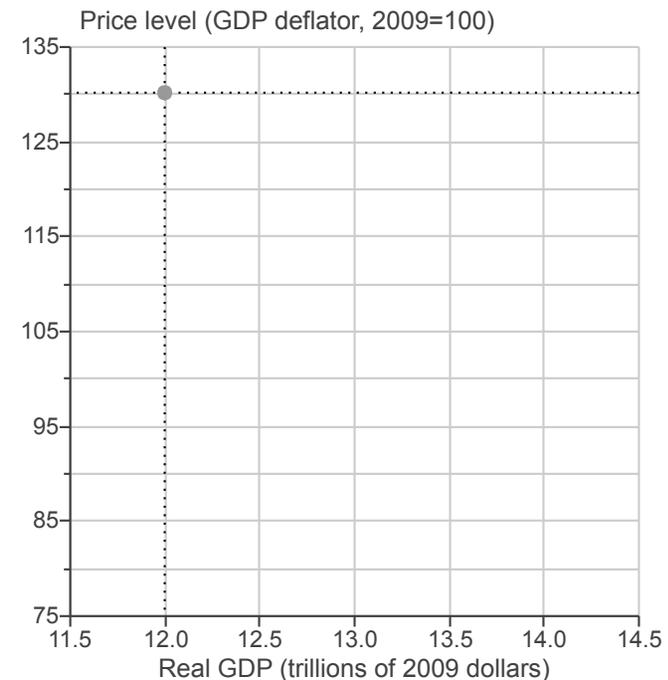
1. If the price level and the money wage rate rise by the same percentage, the quantity of real GDP supplied \_\_\_\_\_ and there is a movement up along the \_\_\_\_\_ aggregate supply curve.
- A. does not change; short-run
  - B. decreases; long-run
  - C. increases; short-run
  - D. does not change; long-run

2. If the price level rises and the money wage rate remains constant, the quantity of real GDP supplied \_\_\_\_\_ and there is a movement up along the \_\_\_\_\_ aggregate supply curve.
- A. increases; short-run
  - B. does not change; long-run
  - C. decreases; long-run
  - D. does not change; short-run

3. Draw the long-run aggregate supply curve when potential GDP is \$14.0 trillion. Label it.

As we move up along the long-run aggregate supply curve, \_\_\_\_\_.

- A. the real wage rate remains constant
- B. the money wage rate remains constant
- C. the prices of goods and services remain constant
- D. the prices of goods and services increase and the money wage rate decreases



(12,130)

>>> Draw only the objects specified in the question.

4. Potential GDP increases for all of the following reasons *except* \_\_\_\_\_.
- A. the quantity of capital increases
  - B. the money wage rate decreases
  - C. technology advances
  - D. the full-employment quantity of labor increases
- 
5. The quantity of real GDP supplied depends on all of the following *except* the \_\_\_\_\_.
- A. state of technology
  - B. quantity of labor employed
  - C. quantity of real GDP demanded
  - D. quantity of physical and human capital
- 
6. Choose the statement that is *incorrect*.
- A. Along the *LAS* curve the money wage rate is constant and the real wage rate rises as the price level rises.
  - B. A movement along the *LAS* curve is accompanied by a change in the prices of goods and services and the prices of the factors of production.
  - C. The *LAS* curve shows the relationship between potential GDP and the price level.
  - D. The long-run aggregate supply curve is vertical because potential GDP is independent of the price level.
- 
7. A rise in the money wage rate \_\_\_\_\_.
- A. decreases potential GDP because the full-employment quantity of labor decreases
  - B. does not change the *LAS* curve because along the *LAS* curve a rise in the money wage rate is accompanied by an equal percentage change in the price level
  - C. does not change short-run aggregate supply because along the *SAS* curve relative prices remain constant
  - D. increases short-run aggregate supply because a rise in the money wage rate increases costs, so firms are willing to supply more only at a higher price level
-

8. **Short-run aggregate supply** is the relationship between the quantity of \_\_\_\_\_ supplied and the \_\_\_\_\_ when the money wage rate, the prices of other resources, and potential GDP remain constant.
- A. real GDP; interest rate
  - B. nominal GDP; exchange rate
  - C. potential GDP; price level
  - D. real GDP; price level
- 
9. Examples of fiscal policy that increase aggregate demand include \_\_\_\_\_.
- A. an increase in government expenditure, a decrease in taxes, and an increase in transfer payments
  - B. a decrease in taxes and a decrease in interest rates
  - C. an increase in transfer payments and an increase in interest rates
  - D. a decrease in taxes and an increase in the quantity of money
- 
10. Examples of monetary policy that decrease aggregate demand include \_\_\_\_\_.
- A. an increase in taxes and a decrease in the quantity of money
  - B. a decrease in the quantity of money and an increase in interest rates
  - C. an increase in transfer payments and an increase in interest rates
  - D. a decrease in taxes and a decrease in interest rates
- 
11. **Aggregate demand** is the relationship between the quantity of \_\_\_\_\_ demanded and the \_\_\_\_\_ when all other influences on expenditure plans remain the same.
- A. real GDP; exchange rate
  - B. real GDP; price level
  - C. nominal GDP; quantity of output supplied
  - D. nominal GDP; interest rate
-

12. In the graph, the initial aggregate supply curve is  $SAS_0$  and the initial aggregate demand curve is  $AD_0$ . The events which could have changed short-run aggregate supply from  $SAS_0$  to  $SAS_1$  are \_\_\_\_\_.

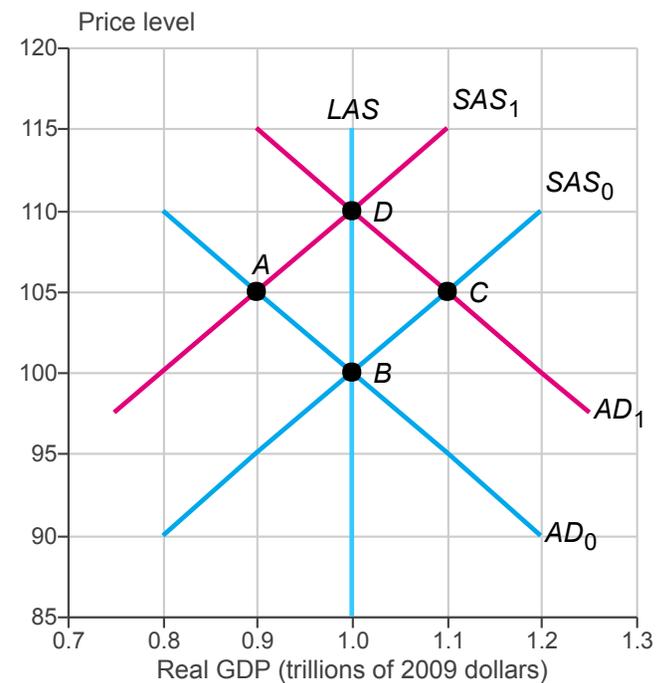
- A. a rise in the interest rate or a decrease in the quantity of money
- B. an increase in taxes or a decrease in government expenditures
- C. a rise in the money wage rate or a rise in the money price of any other factor of production
- D. a decrease in expected future profits or an increase in expected inflation

Following the change in aggregate supply, the new macroeconomic equilibrium is at \_\_\_\_\_.

- A. point A
- B. point B
- C. point C
- D. point D

If potential GDP is \$1 trillion, the economy has (1) \_\_\_\_\_ gap.

- (1)  an inflationary  
 a recessionary  
 no output

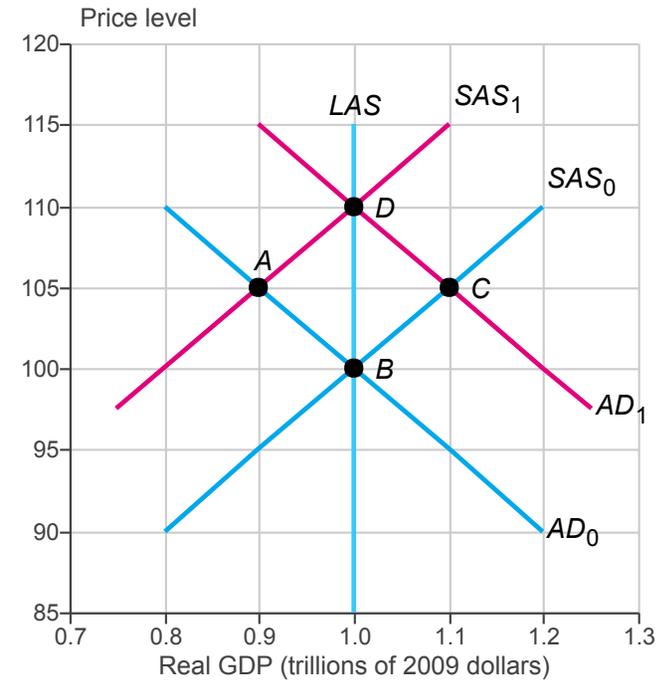


13. The initial short-run aggregate supply curve is  $SAS_0$  and the initial aggregate demand curve is  $AD_0$ .

Some events change aggregate demand from  $AD_0$  to  $AD_1$ , and short-run aggregate supply from  $SAS_0$  to  $SAS_1$ .

The new macroeconomic equilibrium is at \_\_\_\_\_.

- A. point A
- B. point B
- C. point C
- D. point D



14. The graph shows an economy in long-run equilibrium.

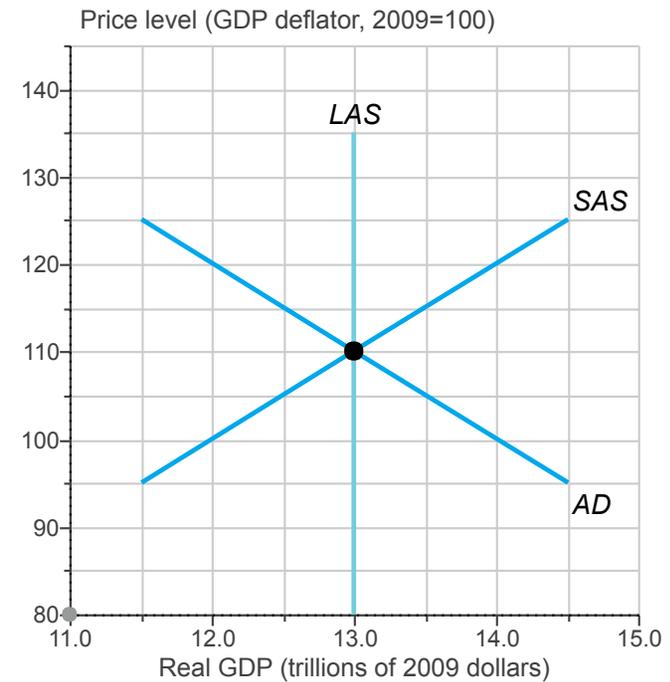
The world economy goes into an expansion, U.S. businesses expect future profits to rise, and the government increases its expenditure on goods and services in a time of war or increased international tension.

Draw one new curve that shows the combined effect of the three events. Label it.

Draw a point at the new short-run macroeconomic equilibrium.

Everything else remaining the same, an increase in aggregate demand increases \_\_\_\_\_.

- A. long-run aggregate supply
- B. short-run aggregate supply
- C. potential GDP
- D. the quantity of real GDP supplied



>>> Draw only the objects specified in the question.

15. The table shows aggregate demand and short-run aggregate supply in Japan. Potential GDP is 600 trillion yen.

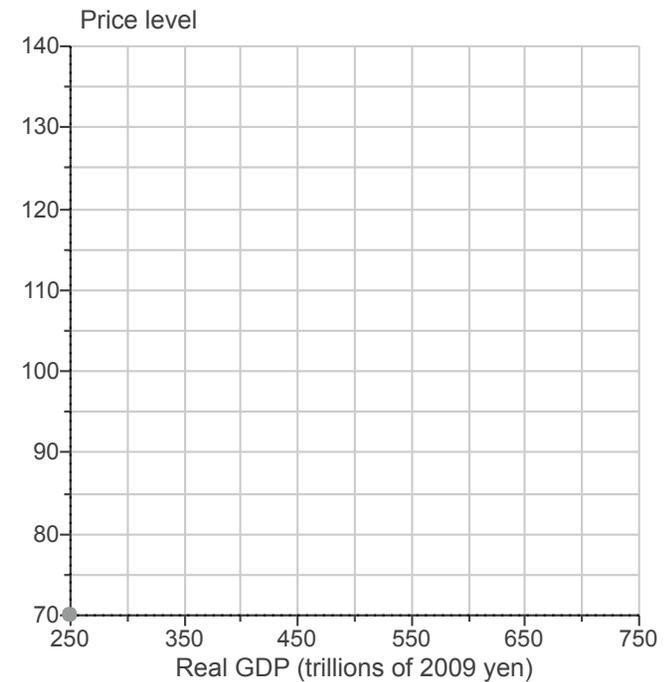
Price level	Real GDP demanded (trillions of 2009 yen)	Real GDP supplied in the short run
75	600	400
105	450	550
135	300	700

Using the data above, draw the *AD* curve and the *SAS* curve. Label the curves.

Draw a point at the short-run equilibrium.

The short-run macroeconomic equilibrium real GDP is  
¥ \_\_\_\_\_ trillion.

The short-run equilibrium price level is \_\_\_\_\_.



>>> Draw only the objects specified in the question.

16. The International Monetary Fund's World Economic Outlook database provides the data given in the table for India in 2004, 2005, and 2006.

The numbers in the table are consistent with \_\_\_\_\_.

- A. decreases in long-run and short-run aggregate supply and even greater decreases in aggregate demand.
- B. increases in long-run and short-run aggregate supply and even larger decreases in aggregate demand
- C. increases in short-run aggregate supply and increases in aggregate demand, but the increases in aggregate demand are smaller than the increases in short-run aggregate supply
- D. increases in long-run and short-run aggregate supply and even greater increases in aggregate demand

	2004	2005	2006
Real GDP growth rate	8.1	8.3	7.3
Inflation	4.2	4.7	4.6

17. <sup>1</sup> Click on the icon to read the news clip, then complete the following steps.

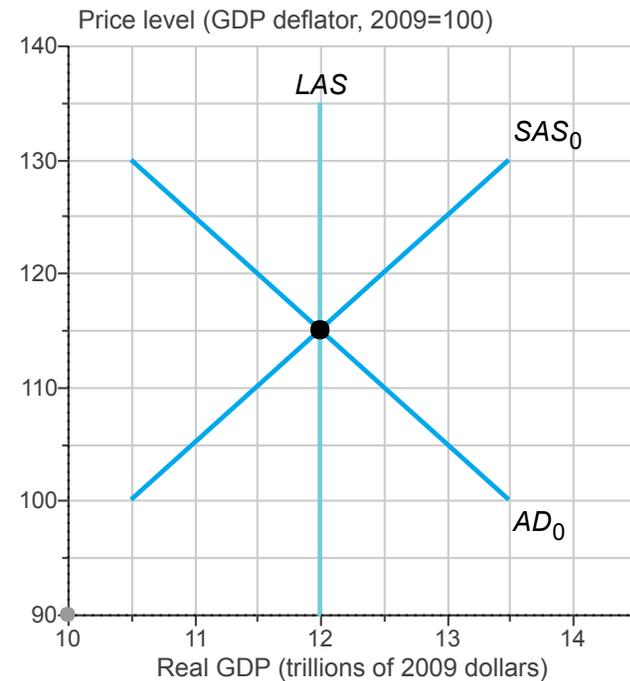
The graph shows the long-run aggregate supply curve, short-run aggregate supply curve, and aggregate demand curve when the U.S. economy is at a full-employment equilibrium.

Draw a curve that shows the effect of the increase in the price of oil, gasoline, wheat, and steel. Label it.

Draw a point at the new short-run macroeconomic equilibrium.

A stagflation \_\_\_\_\_.

- A. is a combination of expansion and inflation
- B. occurs when aggregate demand decreases
- C. is a combination of recession and deflation
- D. is a combination of recession and inflation



>>> Draw only the objects specified in the question.

1: News clip

### That '70s Look: Stagflation

Lately, many people are hearing an echo—faintly perhaps but distinctly audible—of the stagflation of the 1970s. Even as economic growth sags, oil and gasoline prices are surging to new heights. Gold is on the rise, along with the prices of such basic commodities as wheat and steel. And on Wednesday, with the latest government report on consumer prices, there are signs that overall inflation, after years of only modest increases, may be breaking out of its box.

*The New York Times*, February 21, 2008

18. Automotive firms in the United States switch to a new technology that raises The U.S. price level rises.

This event \_\_\_\_\_.

- A. increases aggregate demand
- B. decreases the quantity of real GDP demanded
- C. decreases aggregate demand
- D. increases the quantity of real GDP demanded

Autoworkers agree to a lower money wage rate.

This event \_\_\_\_\_.

- A. decreases the quantity of real GDP demanded
- B. increases the quantity of real GDP demanded
- C. increases aggregate demand
- D. decreases aggregate demand

This event \_\_\_\_\_.

- A. increases the quantity of real GDP demanded
- B. increases aggregate demand
- C. decreases aggregate demand
- D. decreases the quantity of real GDP demanded

19. The table shows the aggregate demand and short-run aggregate supply schedules of a country in which potential GDP is \$1,050 billion.

What is the short-run equilibrium real GDP and price level?

The short-run equilibrium real GDP is \$ \_\_\_\_\_ billion.

The price level in the short run is \_\_\_\_\_.

Price level	Real GDP demanded	Real GDP supplied in the short run
	(billions of 2009 dollars)	
100	1,150	850
110	1,100	900
120	1,050	950
130	1,000	1,000
140	950	1,050
150	900	1,100
160	850	1,150

20. Economic growth is the persistent increase in \_\_\_\_\_.

Economic growth is accompanied by inflation when the \_\_\_\_\_.

- A. short-run aggregate supply;  
AD curve shifts rightward at a slower rate than the SAS curve shifts rightward
- B. aggregate demand;  
LAS curve shifts rightward at a faster rate than the AD curve shifts rightward
- C. potential GDP;  
AD curve shifts rightward at a faster rate than the LAS curve shifts rightward
- D. aggregate demand and potential GDP;  
AD curve shifts rightward at a slower rate than the LAS curve shifts rightward

21. Draw an aggregate demand curve. Label it AD.

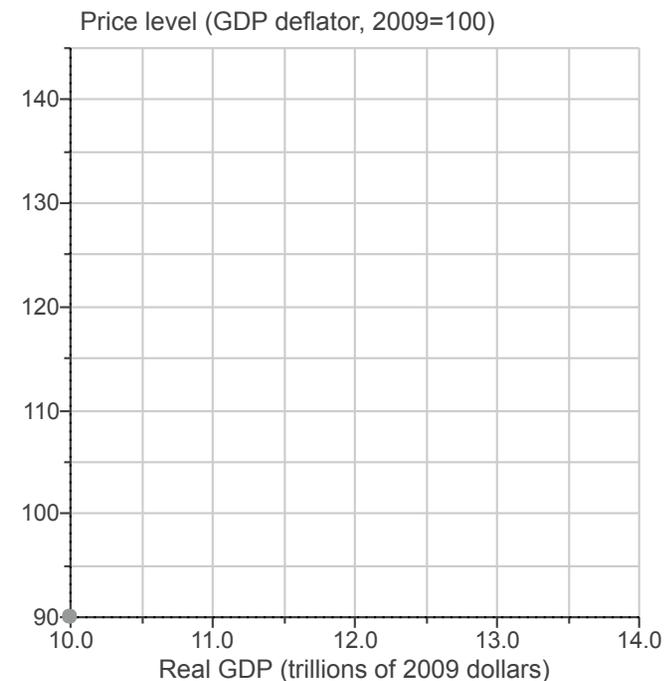
Draw a short-run aggregate supply curve. Label it SAS.

Draw a point at the short-run macroeconomic equilibrium. Label it 1.

Draw a point on the SAS curve at which firms are unable to meet the demand for their output. Label it 2.

When firms are unable to meet the demand for their output, \_\_\_\_\_. Prices \_\_\_\_\_.

- A. the quantity of real GDP supplied is greater than the quantity of real GDP demanded; fall
- B. the quantity of real GDP demanded is greater than the quantity of real GDP supplied; rise
- C. short-run aggregate supply is greater than long-run aggregate supply; rise
- D. aggregate demand is greater than short-run aggregate supply; rise



>>> Draw only the objects specified in the question.

22. Long-run macroeconomic equilibrium \_\_\_\_\_.

- A. occurs when the quantity of real GDP demanded equals the quantity of real GDP supplied, at the point of intersection of the *AD* curve and the *SAS* curve
  - B. comes about because the real wage rate adjusts
  - C. occurs when real GDP equals potential GDP, and the *LAS*, *SAS*, and *AD* curves intersect
  - D. occurs when real GDP equals potential GDP and the money wage rate equals the real wage rate
- 

23. **Short-run macroeconomic equilibrium** occurs when the quantity of \_\_\_\_\_ demanded equals the quantity of \_\_\_\_\_ supplied at the point of intersection of the \_\_\_\_\_ curve and the \_\_\_\_\_ curve.

- A. loanable funds; loanable funds; *DLF*; *SLF*
  - B. real GDP; real GDP; *AD*; *SAS*
  - C. output; output; *MD*; *MS*
  - D. reserves; reserves; *RD*; *RS*
- 

24. **Long-run macroeconomic equilibrium** occurs when real GDP \_\_\_\_\_ potential GDP - equivalently, when the economy is on its \_\_\_\_\_ curve.

- A. exceeds; *SAS*
  - B. equals; *LAS*
  - C. is less than; *AD*
  - D. exceeds; *LAS*
- 

25. An **above full-employment equilibrium** is an equilibrium when real GDP \_\_\_\_\_.

- A. equals the price level
  - B. exceeds potential GDP
  - C. equals the interest rate
  - D. equals potential GDP
-

26. When \_\_\_\_\_ there is a **full-employment equilibrium**.

- A. real GDP equals potential GDP
- B. real GDP exceeds potential GDP
- C. the price level equals aggregate demand
- D. labor productivity exceeds the real wage rate

27. A **below full-employment equilibrium** is an equilibrium in which potential GDP \_\_\_\_\_ real GDP.

- A. equals
- B. is less than
- C. exceeds
- D. is the sum of aggregate demand and

28. The table gives the aggregate demand schedule, the short-run aggregate supply schedule, and the long-run aggregate supply schedule for an economy.

What is the quantity of real GDP at the short-run macroeconomic equilibrium?

The quantity of real GDP at the short-run macroeconomic equilibrium is \$ \_\_\_\_\_ billion.

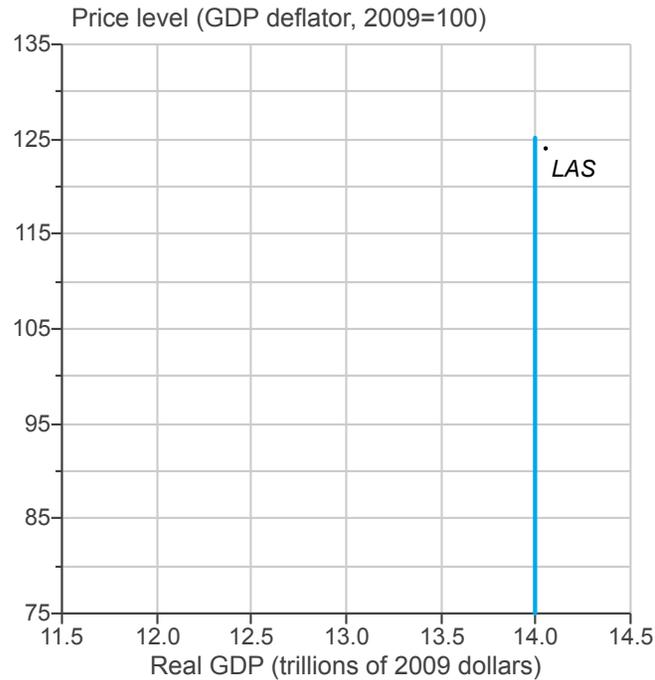
Price level (GDP deflator)	Real GDP		Real GDP
	Real GDP demanded	supplied in short run	supplied in long run
(billions of 2009 dollars)			
100	700	200	500
105	600	300	500
110	500	400	500
115	400	500	500

1. D. does not change; long-run

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2. A. increases; short-run

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3.

A. the real wage rate remains constant

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4. B. the money wage rate decreases

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5. C. quantity of real GDP demanded

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6. A. Along the *LAS* curve the money wage rate is constant and the real wage rate rises as the price level rises.

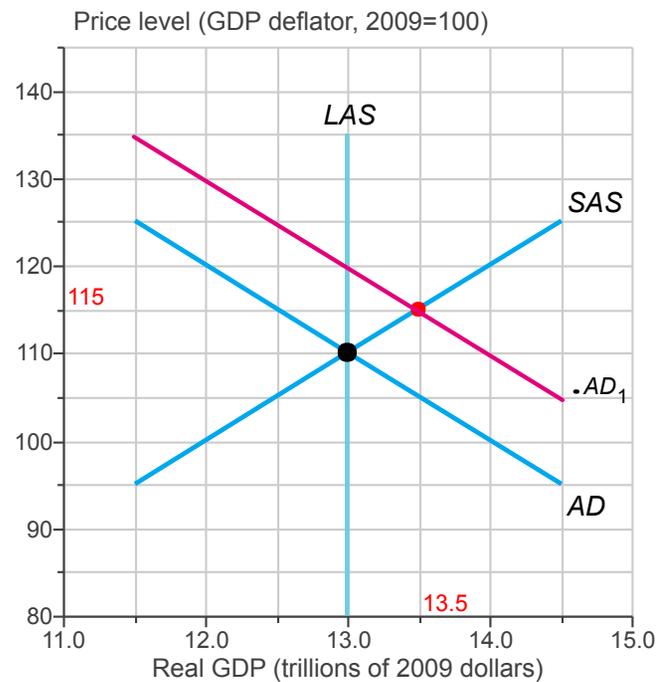
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7. B.

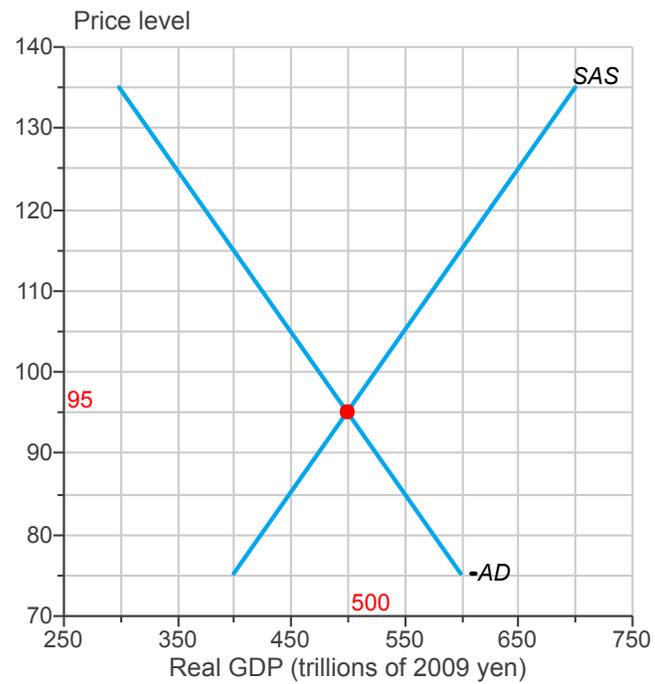
does not change the *LAS* curve because along the *LAS* curve a rise in the money wage rate is accompanied by an equal percentage change in the price level

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8. D. real GDP; price level
- 
9. A. an increase in government expenditure, a decrease in taxes, and an increase in transfer payments
- 
10. B. a decrease in the quantity of money and an increase in interest rates
- 
11. B. real GDP; price level
- 
12. C. a rise in the money wage rate or a rise in the money price of any other factor of production  
A. point *A*  
(1) a recessionary
- 
13. D. point *D*
- 



14. D. the quantity of real GDP supplied



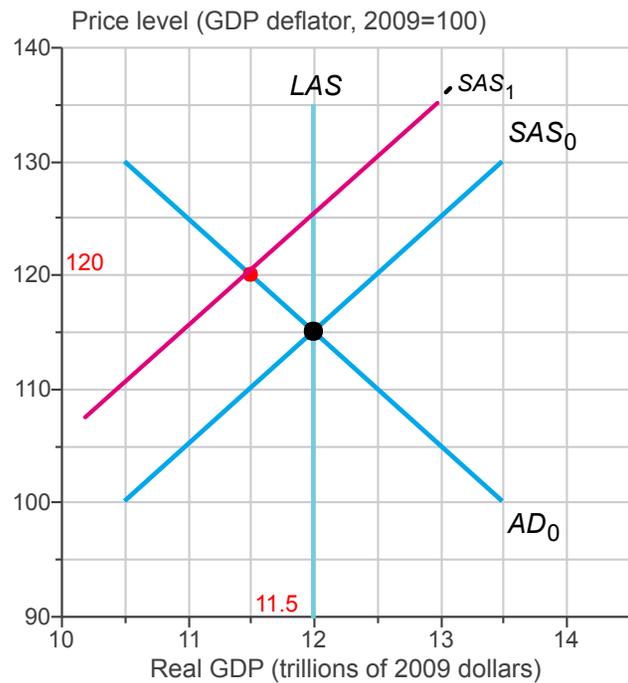
15.

500

95

16.

D. increases in long-run and short-run aggregate supply and even greater increases in aggregate demand



17.

D. is a combination of recession and inflation

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18.

D. increases the quantity of real GDP demanded

B. increases the quantity of real GDP demanded

D. decreases the quantity of real GDP demanded

---

19.

1,000

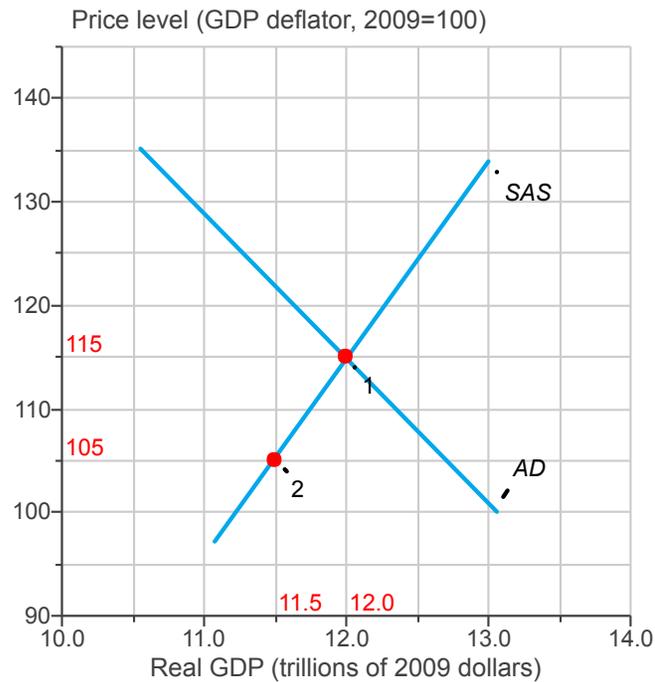
130

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20.

C. potential GDP;  $AD$  curve shifts rightward at a faster rate than the  $LAS$  curve shifts rightward

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21. B. the quantity of real GDP demanded is greater than the quantity of real GDP supplied; rise

---

22. C. occurs when real GDP equals potential GDP, and the *LAS*, *SAS*, and *AD* curves intersect

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23. B. real GDP; real GDP; *AD*; *SAS*

---

24. B. equals; *LAS*

---

25. B. exceeds potential GDP

---

26. A. real GDP equals potential GDP

---

27. C. exceeds

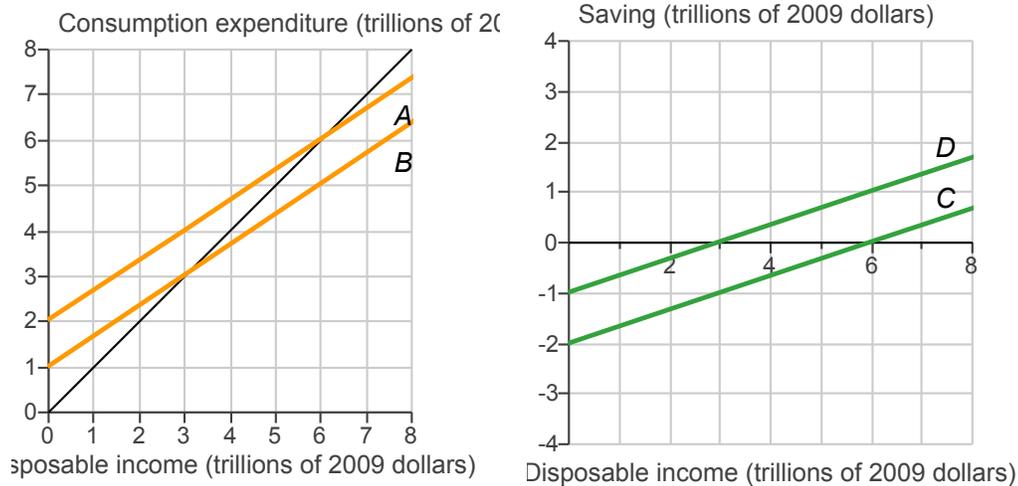
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28. 450

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1. <sup>1</sup> Click on the icon to read the news clip, then complete the following steps.  
The left graph shows the consumption function and the right graph shows the saving function.  
Suppose there is a decrease in household wealth.



- A. The consumption function shifts from A to B and the saving function shifts from C to D.
- B. The consumption function shifts from B to A and the saving function shifts from C to D.
- C. The consumption function shifts from B to A and the saving function shifts from D to C.
- D. The consumption function shifts from A to B and the saving function shifts from D to C.

1: News clip

### Americans \$2.4 Trillion Poorer

The Federal Reserve reported that household wealth decreased by \$2.4 trillion or \$21,000 per household in the third quarter of 2011. This drop is the steepest since 2008 and the second consecutive quarterly drop. Foreclosures lowered household debt slightly but credit card debt increased. Many households are struggling to buy the essentials and spending on food has decreased. Separately, the Bureau of Economic Analysis reported that consumption expenditure increased by \$39 billion in the third quarter of 2011.

Source: *The New American*, December 11, 2011 and the Bureau of Economic Analysis

2. Read the news clip, then answer the following questions. **Americans \$2.4 Trillion Poorer**

According to this news clip, consumption expenditure

(1) \_\_\_\_\_ as household wealth decreased.

This change in consumption expenditure could be attributed to \_\_\_\_\_ in disposable income or \_\_\_\_\_ in expected future income.

- A. a decrease; an increase
- B. an increase; a decrease
- C. a decrease; a decrease
- D. an increase; an increase

(1)  increased  
 decreased

The Federal Reserve reported that household wealth decreased by \$2.4 trillion or \$21,000 per household in the third quarter of 2011. This drop is the steepest since 2008 and the second consecutive quarterly drop. Foreclosures lowered household debt slightly but credit card debt increased. Many households are struggling to buy the essentials and spending on food has decreased. Separately, the Bureau of Economic Analysis reported that consumption expenditure increased by \$39 billion in the third quarter of 2011.

Source: *The New American*, December 11, 2011 and the Bureau of Economic Analysis

### 3. Real-Time Data Analysis Exercise\*

The table to the right shows the values of disposable income and consumption expenditure for each of the past four quarters.

Could these levels of disposable income and consumption expenditure be on the same consumption function?

\_\_\_\_\_ because consumption expenditure changed by \_\_\_\_\_ than disposable income in \_\_\_\_\_ .

- A. Yes; more; 2015, Q2
- B. No; less; no quarter
- C. Yes; less; no quarter
- D. No; more; 2015, Q2

Year, Quarter	Disposable Income	Consumption Expenditure
	(billions of 2005 dollars)	
2014, Q4	11,999	11,033
2015, Q1	12,115	11,081
2015, Q2	12,151	11,179
2015, Q3	12,256	11,269

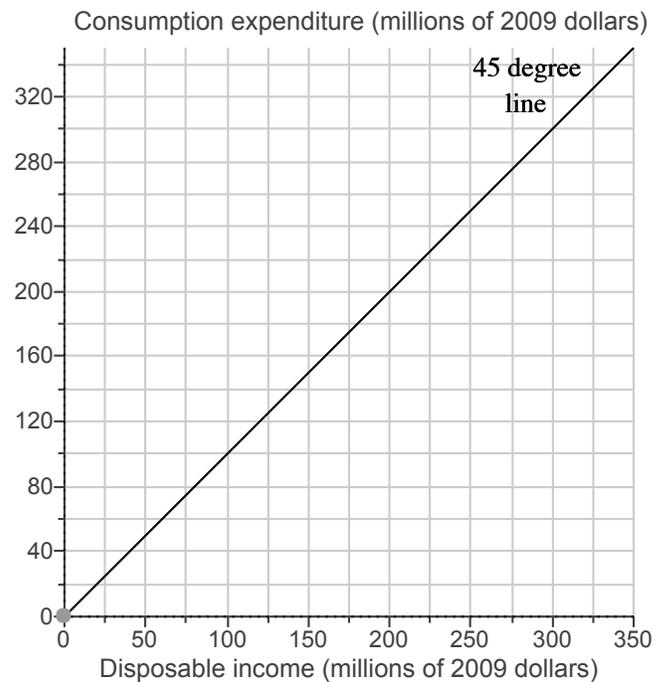
\*Real-time data provided by Federal Reserve Economic Data (FRED), Federal Reserve Bank of Saint Louis.

### 4. The table gives information about a consumption function.

Disposable income	Consumption expenditure
(millions of 2009 dollars)	
0	80
100	140
200	200
300	260

Draw the consumption function and label it *CF*.

The level of disposable income at which all disposable income is consumed is \$ \_\_\_\_\_ million.



>>> Draw only the objects specified in the question.

### 5. Aggregate planned expenditure is the sum of planned \_\_\_\_\_.

- A. consumption expenditure, investment, government expenditure, and exports minus imports
- B. consumption expenditure, savings, net taxes, and net exports
- C. borrowing in the loanable funds market by households, firms, government, and the rest of the world
- D. aggregate demand and aggregate supply

6. **Disposable income** is aggregate income minus taxes plus \_\_\_\_\_.

- A. transfer payments
- B. transfer payments minus consumption
- C. transfer payments minus saving and minus consumption
- D. transfer payments minus saving

7. The **consumption function** is the relationship between consumption expenditure and \_\_\_\_\_, other things remaining the same.

- A. saving
- B. aggregate demand
- C. the price level
- D. disposable income

8. The table gives an economy's aggregate expenditure schedule.

Real GDP	Aggregate planned expenditure (trillions of 2009 dollars)
0	1.0
3	2.5
6	4.0

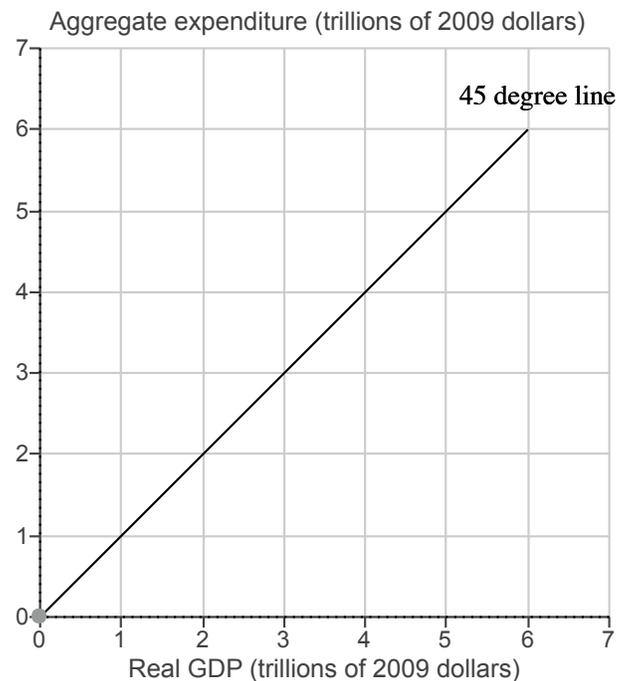
Draw the *AE* curve and label it.

Draw a point to show equilibrium expenditure.

Choose the option that is *incorrect*.

Equilibrium expenditure \_\_\_\_\_.

- A. determines real GDP when the price level is fixed
- B. is the level of aggregate expenditure at which aggregate planned expenditure equals real GDP
- C. is a level of aggregate expenditure and real GDP at which everyone's spending plans are fulfilled
- D. occurs when all expenditure is induced expenditure



>>> Draw only the objects specified in the question

9. If real GDP and aggregate expenditure are less than equilibrium expenditure, firms' inventories

(1) \_\_\_\_\_,

Firms \_\_\_\_\_ production, and real GDP \_\_\_\_\_.

- A. increase; increases
- B. decrease; increases
- C. increase; decreases
- D. decrease; decreases

(1)  decrease  
 increase

---

10. An increase in business investment at a constant price level \_\_\_\_\_.

- A. shifts the *AE* curve downward and decreases equilibrium expenditure
  - B. shifts the *AE* curve upward and increases equilibrium expenditure
  - C. decreases the slope of the *AE* curve and decreases equilibrium expenditure
  - D. increases the slope of the *AE* curve and increases equilibrium expenditure
- 

11. If aggregate planned expenditure exceeds real GDP, then \_\_\_\_\_.

- A. inventories increase, and as real GDP increases a movement up along the *AE* curve occurs
  - B. inventories decrease, and as real GDP increases a movement up along the *AE* curve occurs
  - C. inventories decrease, and the *AE* curve shifts downward
  - D. inventories increase, and the *AE* curve shifts upward
- 

12. Equilibrium expenditure is the level of aggregate expenditure that occurs when \_\_\_\_\_.

- A. real GDP is maximized
- B. aggregate planned expenditure is maximized
- C. inventory holdings are minimized
- D. aggregate planned expenditure equals real GDP

Choose the correct statement.

- A. The level of aggregate expenditure that occurs where the *AE* curve intersects the  $45^\circ$  line is equilibrium expenditure.
  - B. Equilibrium expenditure occurs at the point at which the *AE* curve intersects the *x*-axis.
  - C. Equilibrium expenditure occurs at all points along the  $45^\circ$  line.
  - D. Equilibrium expenditure occurs at all points along the *AE* curve.
-

13. Read the news clip, then answer the following question. **Obama's New Stimulus**

The slope of the  $AE$  curve is 0.75.

Calculate the immediate change in aggregate planned expenditure and the change in real GDP in the short run.

If the price level remains constant, the immediate change in aggregate planned expenditure and the change in real GDP in the short run is

\$ \_\_\_\_\_ billion.

The Obama recovery plan announced on Monday includes proposed spending of \$50 billion to rebuild 150,000 miles of roads, construct and maintain 4,000 miles of rail, and fix or rebuild 150 miles of runways.

Source: *USA Today*, September 10, 2010

14. The multiplier is greater than 1 because the change in autonomous expenditure leads to \_\_\_\_\_.

- A. less consumption expenditure
- B. more saving
- C. more investment
- D. more induced expenditure

15. An increase in income taxes \_\_\_\_\_, everything else remaining the same.

- A. makes the multiplier smaller
- B. sometimes increases the multiplier and sometimes decreases the multiplier
- C. makes the multiplier larger
- D. has no effect on the multiplier

16. The multiplier is the amount by which a change in \_\_\_\_\_ expenditure is magnified or multiplied to determine \_\_\_\_\_.

- A. consumption; the change in investment
- B. autonomous; the change in equilibrium expenditure and real GDP
- C. autonomous; the change in investment
- D. consumption; the change in equilibrium expenditure and real GDP

To calculate the multiplier, we divide \_\_\_\_\_ by \_\_\_\_\_.

- A. equilibrium expenditure; the change in autonomous expenditure
- B. the change in equilibrium expenditure; autonomous expenditure
- C. the change in equilibrium expenditure; the change in autonomous expenditure
- D. equilibrium expenditure; autonomous expenditure

17. In an economy without taxes and imports, an increase in investment of \$50 billion increases equilibrium expenditure by \$250 billion.

What are the values of the multiplier and the slope of the  $AE$  curve?

The multiplier is \_\_\_\_\_ and the slope of the  $AE$  curve is \_\_\_\_\_.

>>> Answers to 1 decimal place.

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18. Suppose that the economy is at full employment, the price level is 100, and the multiplier is 2.

Investment increases by \$50 billion.

What is the change in equilibrium expenditure if the price level remains at 100?

The change in equilibrium expenditure is \$ \_\_\_\_\_ billion.

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19. You are given the following data about an economy that has a fixed price level, no imports, and no taxes.

1. Calculate the marginal propensity to consume.

The marginal propensity to consume is \_\_\_\_\_.

>>> Answer to two decimal places.

2. Calculate autonomous consumption expenditure.

Autonomous consumption expenditure is \$ \_\_\_\_\_ billion.

3. Calculate saving at each level of disposable income and the marginal propensity to save. Fill in the saving numbers in the table below.

Disposable income (billions of dollars per year)	Saving
0	_____
100	_____
200	_____

The marginal propensity to save is \_\_\_\_\_.

4. Calculate the multiplier.

The multiplier is \_\_\_\_\_.

5. Calculate the increase in real GDP when autonomous spending increases by \$5 billion. Why does real GDP increase by more than \$5 billion?

The increase in real GDP when autonomous spending increases by \$5 billion is \$\_\_\_\_\_ billion. Real GDP increases by more than \$5 billion because the increase in real GDP increases \_\_\_\_\_.

- A. 18; induced consumption consumption
- B. 20; autonomous expenditure
- C. 20; induced consumption expenditure
- D. 10; income

Disposable income	Consumption expenditure
(billions of dollars per year)	
0	5
100	80
200	155
300	230
400	305

20. Choose the statement that is *incorrect*.

Starting from a full-employment equilibrium, the multiplier in the short run \_\_\_\_\_ the multiplier in the long run because \_\_\_\_\_.

- A. exceeds; the money wage rate is fixed in the short run but not in the long run
- B. is the same as; the money wage is the same in both the short run and the long run
- C. exceeds; the price level is fixed in the short run but not in the long run
- D. is the same as; the price level is not fixed in both the short run and the long run

21. Read the news clip, then answer the following question. **The New Deal**

Consider the \$600 billion mentioned in the news clip as \$600 billion worth of tax cuts.

Suppose that people spend \$180 billion of the \$600 billion worth of tax rebates in the first 3 months, and \$198 billion during the following three months.

Choose the statement that is *incorrect*.

The \$600 billion worth of tax cuts to American consumers increases aggregate expenditure by \_\_\_\_\_.

- A. more than \$600 billion if the multiplier is greater than 1.6
- B. exactly \$600 billion if the multiplier equals 1.6
- C. less than \$600 billion if the multiplier is less than 1.6
- D. \$378 billion regardless of the multiplier

Remember what was actually in the stimulus bill of 2009: slightly more than \$600 billion went toward poor and middle-class tax cuts, safety net spending (more unemployment assistance and food stamps), and aid to state governments with budget shortfalls. These are the most directly stimulative parts of the bill, bolstering demand and preventing lay-offs—and stimulate they did. Economists of differing ideological stripes generally agree that the economy would have as many as 3 million fewer jobs now were it not for the stimulus. The remaining sixth of the bill focused on longer-term investments, which included putting \$90 billion into green energy.

Source: *Financial Times*, September 2, 2012

22. An increase in investment shifts the *AE* curve upward by an amount equal to the \_\_\_\_\_, and shifts the *AD* curve rightward by an amount equal to the \_\_\_\_\_.

- A. change in investment times the multiplier; change in investment
- B. change in investment; change in investment times the multiplier
- C. change in investment times the multiplier; change in investment times the multiplier
- D. change in investment; change in investment

23. An economy with no income taxes or imports has a marginal propensity to consume of 0.75.

The multiplier in the long run is \_\_\_\_\_.

- A. 4
- B. 1.33
- C. 0
- D. greater than 1.33 and less than 4

24. An economy has a consumption function of  $C = 15 + 0.7Y$ , investment of 8, government expenditure of 12, exports of 20, and an import function of  $M = 0.2Y$ .

What is equilibrium real GDP?

- A. 55
- B. 79
- C. 110
- D. 275

25. An economy has a consumption function of  $C = 15 + 0.7Y$ , investment of 8, government expenditure of 12, exports of 20, and an import function of  $M = 0.2Y$ .

What is the multiplier for this economy?

- A. 1.43  
 B. 2  
 C. 3.33  
 D. 0.5
- 

26. An economy has a consumption function of  $C = 15 + 0.7Y$ , investment of 8, government expenditure of 12, exports of 20, and an import function of  $M = 0.2Y$ .

If government expenditure increases by 10, what is the increase in equilibrium expenditure?

- A. 20  
 B. 14.3  
 C. 33.3  
 D. 5
- 

27. An economy has a consumption function of  $C = 10 + 0.8Y$ , investment of 6, government expenditure of 10, exports of 10, and an import function of  $M = 0.1Y$ .

What is the equation of the aggregate expenditure curve?

- A.  $AE = 36 - 0.7Y$   
 B.  $AE = 36 + 0.9Y$   
 C.  $AE = 26 + 0.9Y$   
 D.  $AE = 36 + 0.7Y$
- 

28. An economy has a consumption function of  $C = 10 + 0.8Y$ , investment of 6, government expenditure of 10, exports of 10, and an import function of  $M = 0.1Y$ .

What is equilibrium real GDP?

- A. 360  
 B. 51  
 C. 36  
 D. 120

1. A. The consumption function shifts from *A* to *B* and the saving function shifts from *C* to *D*.

---

2. (1) increased

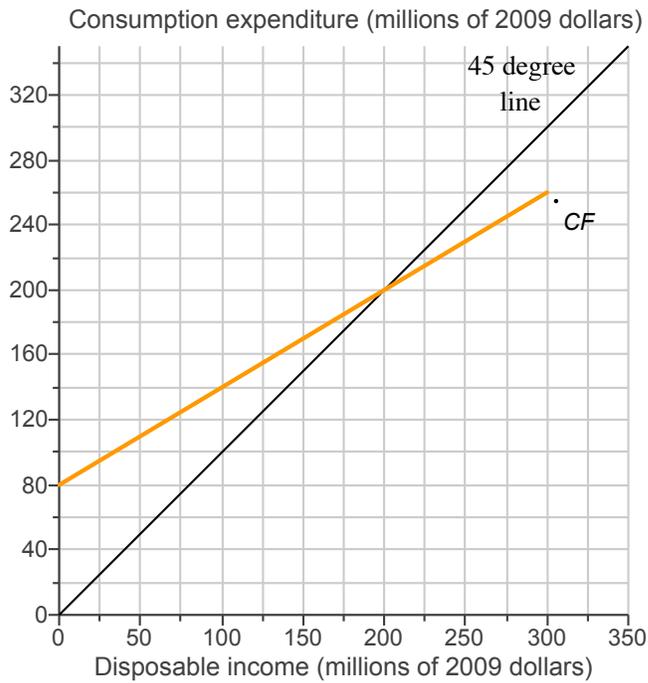
D. an increase; an increase

---

3. D. No; more; 2015, Q2

Answers given reflect the data available at the time the exam was printed, and thus are subject to change.

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4.

200

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5. A. consumption expenditure, investment, government expenditure, and exports minus imports

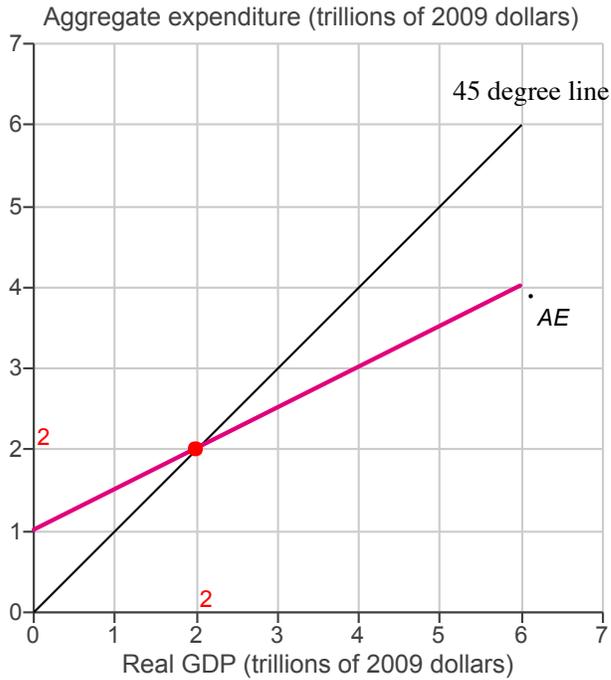
---

6. A. transfer payments

---

7. D. disposable income

---



8.

D. occurs when all expenditure is induced expenditure

---

9. (1) decrease

A. increase; increases

---

10. B. shifts the *AE* curve upward and increases equilibrium expenditure11. B. inventories decrease, and as real GDP increases a movement up along the *AE* curve occurs

12. D. aggregate planned expenditure equals real GDP

A.

The level of aggregate expenditure that occurs where the *AE* curve intersects the 45° line is equilibrium expenditure.

---

13. 200

14. D. more induced expenditure

15. A. makes the multiplier smaller

16. B. autonomous; the change in equilibrium expenditure and real GDP

C. the change in equilibrium expenditure; the change in autonomous expenditure

---

17. 5.0

0.8

18. 100

---

19. 0.75

5

- 5

20

45

0.25

4

C. 20; induced consumption expenditure

---

20. A. exceeds; the money wage rate is fixed in the short run but not in the long run

---

21. D. \$378 billion regardless of the multiplier

---

22. B. change in investment; change in investment times the multiplier

---

23. C. 0

---

24. C. 110

---

25. B. 2

---

26. A. 20

---

27. D.  $AE = 36 + 0.7Y$

---

28. D. 120

---

1. According to mainstream business cycle theory, \_\_\_\_\_ grows at a steady rate and \_\_\_\_\_ grows at a fluctuating rate.
- A. short-run aggregate supply; long-run aggregate supply
  - B. potential GDP; short-run aggregate supply
  - C. potential GDP; aggregate demand
  - D. aggregate demand; long-run aggregate supply
- 
2. In an expansion, an increase in the rate of technological change \_\_\_\_\_ investment demand.
- The real interest rate \_\_\_\_\_.
- A. decreases; rises
  - B. increases; rises
  - C. increases; falls
  - D. decreases; falls
- 
3. According to mainstream business cycle theory, \_\_\_\_\_.
- A. the money wage rate is sticky and consequently if aggregate demand grows faster than potential GDP, an inflationary gap emerges
  - B. in a business cycle expansion, short-run aggregate supply increases by more than aggregate demand
  - C. the money wage rate is sticky and consequently if aggregate demand grows faster than potential GDP, a recessionary gap emerges
  - D. the economy is always at full employment
- 
4. A demand-pull inflation begins with \_\_\_\_\_.
- A. a decrease in aggregate demand
  - B. an increase in aggregate demand
  - C. an increase in aggregate demand that is greater than the corresponding decrease in short-run aggregate supply
  - D. an increase in the money wage rate
-

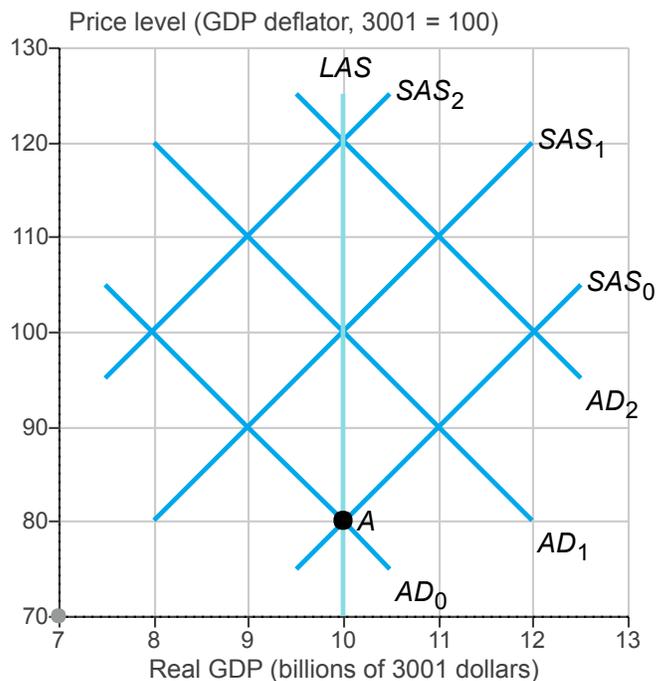
5. The graph shows the economy of Tomorrowland, which is currently at point A.

Draw a point to show the new equilibrium when the following events occur:

- 1) There is an increase in aggregate demand. Label it B.
- 2) Then the money wage rate rises. Label it C.
- 3) The Fed then increases the quantity of money. Label it D.
- 4) The money wage rises again. Label it E.

In a demand-pull inflation spiral, the economy moves from \_\_\_\_\_ to \_\_\_\_\_.

- A. an above full-employment equilibrium; a full-employment equilibrium
- B. an above full-employment equilibrium; a below full-employment equilibrium
- C. a below full-employment equilibrium; a full-employment equilibrium
- D. a period of low inflation; a period of higher inflation



>>> Draw only the objects specified in the question.

6. A cost-push inflation begins with \_\_\_\_\_ as the result of an increase in the money wage rate or an increase in the money prices of raw materials.

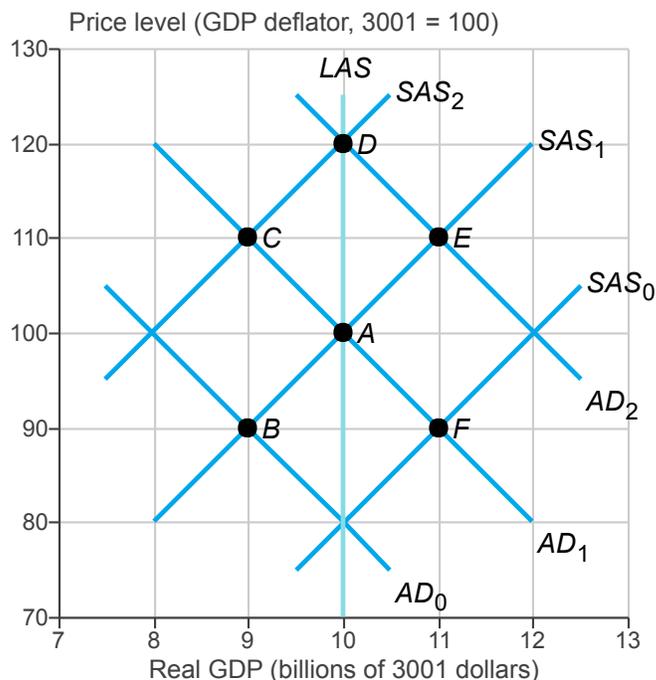
- A. an increase in short-run aggregate supply
- B. a decrease in aggregate demand
- C. an increase in aggregate demand
- D. a decrease in short-run aggregate supply

7. The figure shows the aggregate demand, short-run aggregate supply, and long-run aggregate supply curves for the economy of Tomorrowland.

The economy is currently at point A.

A cost-push rise in the price level will initially move the economy to point \_\_\_\_\_ and to point \_\_\_\_\_.

- A. F when the money wage rate rises; A when the money prices of raw materials change
- B. B when aggregate demand decreases; C when the money prices of raw materials rise
- C. C when the money prices of raw materials rise; D when aggregate demand increases
- D. E when aggregate demand increases; D when the money prices of raw materials rise



8. The graph shows an economy's aggregate demand curve, short-run aggregate supply curve, long-run aggregate supply curve, and equilibrium.

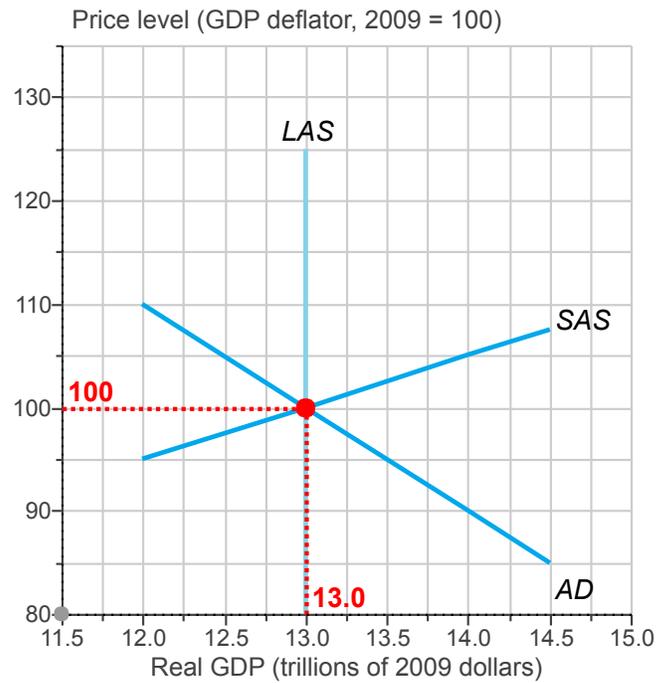
Draw the *AD* curve when it is correctly expected that the inflation rate will be 15 percent a year. Label it.

Draw the *SAS* curve when a change to the money wage rate occurs that correctly anticipates the increase in aggregate demand. Label it.

Draw a point at the new equilibrium.

As we move up along the *LAS* curve, the \_\_\_\_\_.

- A. real wage rate is decreasing
- B. real wage rate is constant
- C. real wage rate is increasing
- D. money wage rate is constant

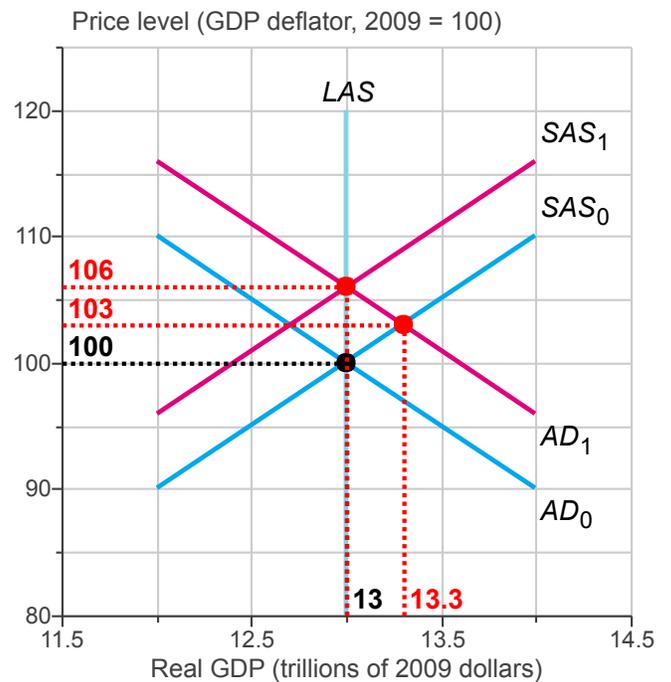


>>> Draw only the objects specified in the question.

9. An economy is at potential GDP and the price level is 100 in the figure.

If aggregate demand unexpectedly increases, the inflation rate is \_\_\_\_\_.

- A. 3 percent a year
- B. 0 percent a year
- C. 106 percent a year
- D. 6 percent a year



10. Read the news clip, then answer the following question. **Pakistan: Is it Cost-Push Inflation?**

Pakistan is experiencing \_\_\_\_\_ inflation.

- A. cost-pull  
 B. demand-pull  
 C. cost-push  
 D. demand-push

With CPI already spiking 11.8 percent for the first ten months of the fiscal year, the average CPI inflation for the same period last year stood at 22.35 percent. Some economists insist the current bout of inflationary pressures is spawned by increasing prices of fuel, food, raw materials, transportation, construction materials, elimination of energy subsidies, etc as indicated by the spike in the wholesale price index (WPI), which rose 21.99 per cent in April from a year earlier.

Source: *Daily the Pak Banker*, May 22, 2010

11. An economy at a full-employment equilibrium experiences an increase in aggregate demand.

The unemployment rate \_\_\_\_\_ its natural rate, and to return to the long-run equilibrium, the money wage rate begins to \_\_\_\_\_.

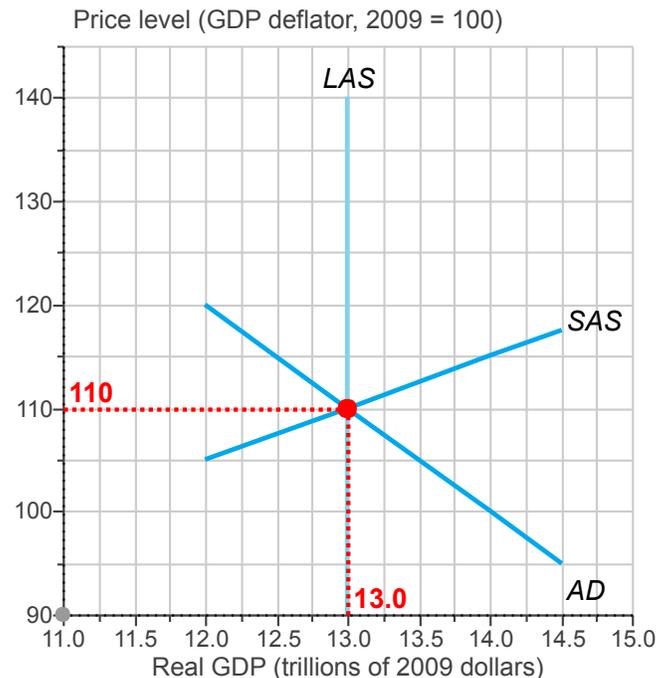
- A. rises above; fall  
 B. rises above; rise  
 C. falls below; fall  
 D. falls below; rise

12. The graph shows the aggregate demand curve, short-run aggregate supply curve, and long-run aggregate supply curve for this year.

Draw a point at the price level and real GDP next year, if an inflation is correctly expected.

If inflation is expected, \_\_\_\_\_.

- A. a cost-push inflation occurs  
 B. neither a cost-push inflation nor a demand-pull inflation occur  
 C. a demand-pull inflation occurs  
 D. either a cost-push inflation or a demand-pull inflation occurs



>>> Draw only the objects specified in the question.

13. The best forecast available, which is based on all the relevant information is called \_\_\_\_\_.

- A. a correct expectation
  - B. a rational forecast
  - C. a correct forecast
  - D. a rational expectation
- 

14. A rational expectation \_\_\_\_\_.

- A. will often turn out to be wrong, but no other forecast that could have been made with the information available could do better
  - B. is a correct forecast
  - C. predicts the inflation rate to be lower than it actually turns out to be
  - D. predicts the inflation rate to be higher than it actually turns out to be
- 

15. Money is any commodity or token that is generally acceptable as a \_\_\_\_\_.

- A. means of payment
- B. tool in the absence of a double coincidence of wants
- C. store of value
- D. unit of account

Choose the correct statements.

1. Most people know the price of gum, so it could serve as money because it is a unit of account.
2. Because most people buy gum, it can be used as money because it is a useful tool in barter.
3. Gum does not serve as money because it is not a good store of value.
4. Gum does not serve as money because it is not generally accepted in exchange for goods and services.

- A. Statements 1 and 2 are correct.
  - B. Statements 3 and 4 are correct.
  - C. Statements 2 and 4 are correct.
  - D. Statements 1 and 3 are correct.
- 

16. A problem with using a commodity as money is \_\_\_\_\_.

- A. a commodity's value changes over time
  - B. it is not possible to use a commodity as a unit of account
  - C. a commodity can never serve as a means of payment
  - D. an obligation remains between two parties of a transaction when a commodity is used to settle a debt
-

17. The main components of money in the United States today are \_\_\_\_\_.

- A. notes and coins
- B. currency and traveler's checks
- C. checks and credit cards
- D. currency and deposits at banks and other depository institutions

18. The two main official measures of money in the United States today are \_\_\_\_\_.

The two main official measures of money in the United States \_\_\_\_\_ really money.

- A. M2 and M3; are not
- B. currency and M2; are
- C. M1 and M2; are
- D. M1 and currency; are not

The table shows the amounts held as the various components of M1 and M2.

The value of M1 is \$ \_\_\_\_\_ billion.

The value of M2 is \$ \_\_\_\_\_ billion.

Item	\$billions
Savings deposits	400
Checking deposits	225
Time deposits	240
Money market mutual funds and other deposits	220
Currency and traveler's checks	80

19. Choose the correct statement.

- A. Deposits are not money because you cannot settle a debt with a deposit.
- B. A credit card increases the quantity of money by the amount of the purchase.
- C. A credit card is not a means of payment.
- D. While a check is in circulation, the quantity of money increases by the amount of the check.

20. Indicate whether the following items are money or not money in the United States today.

- Coins inside a vending machine (1) \_\_\_\_\_
- Your Visa card (2) \_\_\_\_\_
- Cash in Citibank's cash machines (3) \_\_\_\_\_
- U.S. dollar bills in your wallet (4) \_\_\_\_\_

- (1)  not money    (2)  not money    (3)  money    (4)  money
- money                money                not money            not money

21. In June 2013, currency held by individuals and businesses was \$1124 billion; traveler's checks were \$4 billion; checkable deposits owned by individuals and businesses were \$1,402 billion; savings deposits were \$6,884 billion; time deposits were \$583 billion; and money market funds and other deposits were \$647 billion.

Calculate M1 and M2 in June 2013.

M1 in June 2013 is \$ \_\_\_\_\_ billion.

M2 in June 2013 is \$ \_\_\_\_\_ billion.

---

22. The functions of depository institutions include all of the following *except* \_\_\_\_\_.

- A. pooling risk
  - B. lowering the cost of borrowing
  - C. providing debt counseling
  - D. lowering the cost of monitoring borrowers
- 

23. Depository institutions balance risk and return by \_\_\_\_\_.

- A. providing credit counseling and debt counseling
  - B. placing some funds into safe low interest-earning assets and other funds into high-interest risky assets
  - C. converting loans into reserves
  - D. refusing to make risky loans
- 

24. Read the news clip, then answer the following question.

A bank's attempts to pursue profit can sometimes lead to bank failure because \_\_\_\_\_.

- A. the bank will minimize its reserves because reserves pay low or zero interest
- B. depositors can become concerned that the bank will not be able to repay the funds deposited in the bank
- C. a large number of depositors may request the return of their funds
- D. a combination of all of the above

**U.S. Bank Earnings up 21% as Loan Losses Decline, FDIC Says**

For the 12th straight quarter, U.S. bank profits increased. At \$34.5 billion, they were 21 percent higher than a year earlier, and according to the Federal Deposit Insurance Corporation (FDIC), balance sheets were less risky. FDIC Acting Chairman Martin Gruenberg said "Levels of troubled assets and troubled institutions remain high, but they are continuing to improve." The number of institutions on FDIC's list of banks deemed to be at greater risk of collapse fell for a fifth straight quarter. By August, 40 banks had failed in 2012. The FDIC's deposit insurance fund, which protects customer accounts up to \$250,000 against bank failure, increased.

www.bloomberg.com  
August 29, 2012

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25. During times of uncertainty, it might be necessary for a bank to hold large cash reserves and to have a large percentage of its assets purchased by its own capital because \_\_\_\_\_.
- A. the quantity of U.S. government Treasury bills available for purchase decreases
  - B. it might be forced to make many high-risk loans
  - C. people are more likely to withdraw cash from ATMs rather than to write checks
  - D. its depositors may decide to make large withdrawals
- 

26. A depository institution takes deposits from \_\_\_\_\_ and earns most of its income by \_\_\_\_\_.
- A. households and firms; making loans and buying securities that earn a higher interest rate than that paid to depositors
  - B. households and firms; providing Internet banking services and charging service fees
  - C. households; providing Internet banking services
  - D. firms; charging service fees

The deposits of the following three types of depository institutions make up the nation's money: \_\_\_\_\_.

- A. savings and loan associations, savings banks, and credit unions
  - B. commercial banks, thrift institutions, and insurance companies
  - C. commercial banks, thrift institutions, and money market mutual funds
  - D. commercial banks, savings and loan associations, and savings banks
- 

27. Depository institutions provide four benefits, which are \_\_\_\_\_.
- A. minimizing interest rates on purchases of large ticket items, centralizing all household monetary needs in one location, introducing new technology into banking, and paying interest on investment funds
  - B. creating liquidity, lowering the cost of borrowing, lowering the cost of monitoring borrowers, and pooling risk
  - C. pooling risk, keeping inflation low and steady, lowering the cost of borrowing, and lowering the cost of monitoring borrowers
  - D. creating liquidity, lowering the cost of borrowing, paying interest on investment funds, and introducing new technology into banking
- 

28. A \_\_\_\_\_ is a depository institution that accepts savings deposits and makes mostly home-purchase loans.
- A \_\_\_\_\_ is a depository institution owned by a social or economic group such as a firm's employees that accepts savings deposits and makes mostly personal loans.
- A. credit union; savings and loan association
  - B. savings and loan association; credit union
  - C. savings bank; credit union
  - D. credit union; savings bank

1. C. potential GDP; aggregate demand

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2. B. increases; rises

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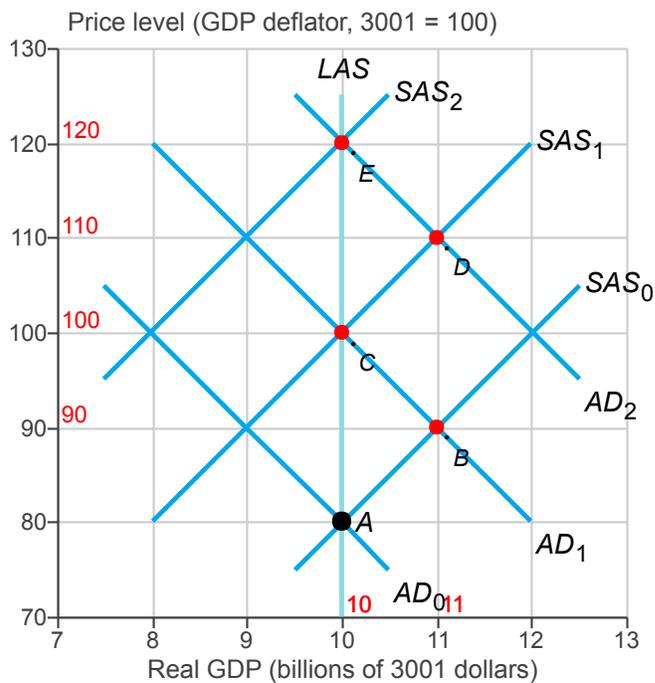
3. A.

the money wage rate is sticky and consequently if aggregate demand grows faster than potential GDP, an inflationary gap emerges

---

4. B. an increase in aggregate demand

---



5. A. an above full-employment equilibrium; a full-employment equilibrium

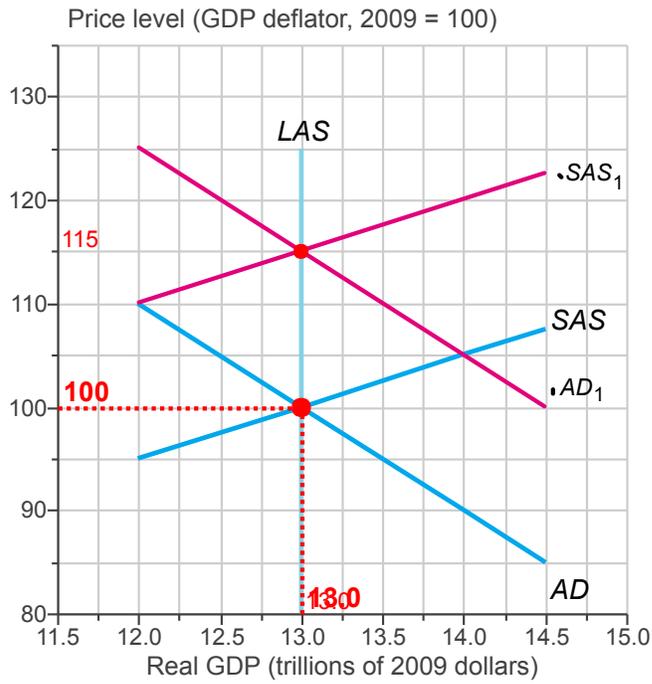
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6. D. a decrease in short-run aggregate supply

---

7. C. C when the money prices of raw materials rise; D when aggregate demand increases

---



8.

B. real wage rate is constant

---

9.

A. 3 percent a year

---

10.

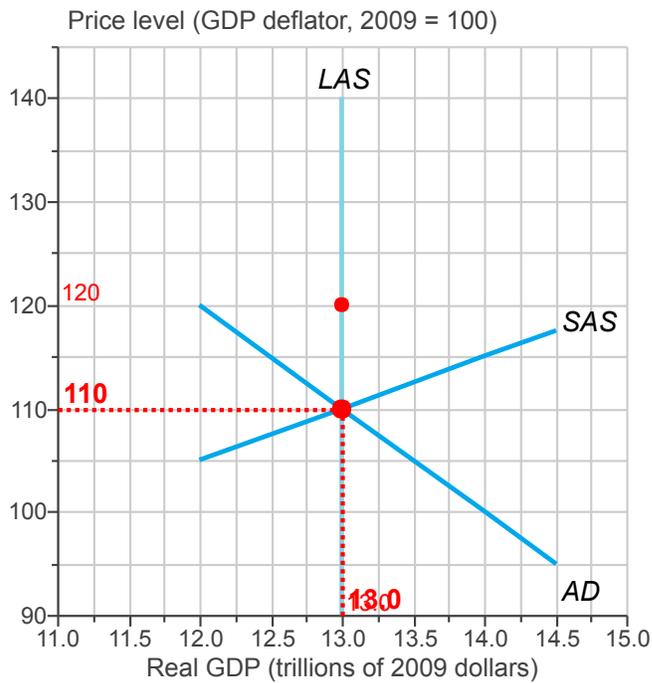
C. cost-push

---

11.

D. falls below; rise

---



12.

B. neither a cost-push inflation nor a demand-pull inflation occur

---

13. D. a rational expectation
- 
14. A.  
will often turn out to be wrong, but no other forecast that could have been made with the information available could do better
- 
15. A. means of payment  
B. Statements 3 and 4 are correct.
- 
16. A. a commodity's value changes over time
- 
17. D. currency and deposits at banks and other depository institutions
- 
18. C. M1 and M2; are  
305  
1,165
- 
19. C. A credit card is not a means of payment.
- 
20. (1) not money  
(2) not money  
(3) not money  
(4) money
- 
21. 2,530  
10,644
- 
22. C. providing debt counseling
- 
23. B. placing some funds into safe low interest-earning assets and other funds into high-interest risky assets
- 
24. D. a combination of all of the above
- 
25. D. its depositors may decide to make large withdrawals
- 
26. A.  
households and firms; making loans and buying securities that earn a higher interest rate than that paid to depositors  
C. commercial banks, thrift institutions, and money market mutual funds
-

27. B.  
creating liquidity, lowering the cost of borrowing, lowering the cost of monitoring borrowers, and pooling risk

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28. C. savings bank; credit union

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