Chapter 29
AS–AD and the Business Cycle

29.1 Business–Cycle Definitions and Facts

1) The relationship between real GDP and potential GDP over the business cycle can be best summarized by which of the following statements?
A) Real GDP fluctuates around potential GDP.
B) Real GDP is always equal to potential GDP.
C) Real GDP cannot be greater than potential GDP.
D) Real GDP cannot be less than potential GDP.
E) Real GDP cannot be equal to potential GDP.
Answer: A
Topic: Business cycle
Skill: Level 2: Using definitions
Objective: Checkpoint 29.1
Author: WM

2) Over the business cycle,
A) potential GDP fluctuates around its trend.
B) real GDP fluctuates around its trend.
C) only potential GDP fluctuates around its trend and real GDP remains equal to its trend.
D) only real GDP fluctuates around its trend and potential GDP remains equal to its trend.
E) neither real GDP nor potential GDP fluctuate because they just grow smoothly along their trends.
Answer: B
Topic: Business cycle
Skill: Level 2: Using definitions
Objective: Checkpoint 29.1
Author: WM
3) A business cycle has two turning points, which are the
A) recession and trough.
B) peak and recession.
C) trough and peak.
D) expansion and recession.
E) peak and expansion.
Answer: C

Topic: Business cycle
Skill: Level 1: Definition
Objective: Checkpoint 29.1
Author: AA

4) The business cycle has two phases,
A) expansion and peak.
B) recession and trough.
C) peak and trough.
D) recession and expansion.
E) expansion and trough.
Answer: D

Topic: Business cycle
Skill: Level 1: Definition
Objective: Checkpoint 29.1
Author: CT

5) The business cycle has
A) four phases and one large turning point.
B) three phases and two turning points.
C) two phases and two turning points.
D) two phases and four turning points.
E) four phases and four turning points.
Answer: C

Topic: Business cycle
Skill: Level 1: Definition
Objective: Checkpoint 29.1
Author: WM
6) A standard definition of recession is
   A) a period of expansion in many sectors of the economy.
   B) an increase in GDP that lasts for at least 6 months.
   C) a decrease in GDP that lasts for at least 6 months.
   D) an increase in unemployment from one month to the next.
   E) a period of time when the unemployment rate exceeds 6.5 percent.

Answer: C

7) Resources are most underused during which phase of the business cycle?
   A) expansion
   B) recession
   C) peak
   D) under-phase
   E) trend-bottom phase

Answer: B

8) Identifying and dating business cycles is
   A) impossible because the economy changes so much.
   B) done by the government, at the Commerce Department.
   C) done by people on Wall Street.
   D) done by a private organization, the NBER.
   E) done by the government, at the Federal Reserve

Answer: D
9) Since 1854, the average length of an expansion phase in the United States is
   A) 35 months, about three years.
   B) 48 months, about four years.
   C) 72 months, about six years.
   D) 120 months, about ten years.
   E) 14 months, slightly more than a year.
   Answer: A
   Topic: Business cycle, history
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.1
   Author: CT

10) Since 1854, about how many complete business cycles has the United States experienced?
    A) 2
    B) 15
    C) 33
    D) 148
    E) 68
    Answer: C
    Topic: Business cycle, history
    Skill: Level 2: Using definitions
    Objective: Checkpoint 29.1
    Author: CT

11) In the United States, expansions have been the longest on the average between
    A) 1800 to 1854.
    B) 1854 to 1919.
    C) 1919 to 1945.
    D) 1945 to 2005.
    E) Both answers B and D are correct.
    Answer: D
    Topic: Business cycle, history
    Skill: Level 1: Definition
    Objective: Checkpoint 29.1
    Author: AA
12) Comparing average recession and expansion phases before and after World War II, the data show that the average recession ____ increased in length after World War II and the average expansion ____ increased in length after World War II.

A) has; has
B) has; has not
C) has not; has
D) has not; has not
E) might have; has

Answer: C

Topic: Business cycle, history
Skill: Level 1: Definition
Objective: Checkpoint 29.1
Author: CT

13) Looking at U.S. history since 1854, we find that the United States has

A) only had business cycles since World War II.
B) spent about an equal amount of time in recessions as in expansions.
C) spent more time in recessions than in expansions.
D) spent more time in expansions than in recessions.
E) not had a complete business cycle since the end of World War II.

Answer: D

Topic: Business cycle, history
Skill: Level 1: Definition
Objective: Checkpoint 29.1
Author: WM

14) If we look at U.S. history since 1854 we find that

A) recessions have been shorter since World War II.
B) business cycles only began following World War II.
C) business cycles were longer before World War II.
D) expansions were longer between 1919 to 1945 than after World War II.
E) expansions and recessions have been shorter since World War II.

Answer: A

Topic: Business cycle, history
Skill: Level 1: Definition
Objective: Checkpoint 29.1
Author: WM
15) The longest business cycle expansion in U.S. history occurred primarily during the
   A) 1960s.
   B) 1970s.
   C) 1980s.
   D) 1990s.
   E) 2000s.
   Answer: D

   Topic: U.S. recent business cycle
   Skill: Level 1: Definition
   Objective: Checkpoint 29.1
   Author: AA

16) When the United States economy reached its trough in November, 2001, the unemployment rate
   A) had begun to decline three months prior to the trough.
   B) began to decline immediately at the time the economy reached its trough.
   C) began to decline about two months after the economy reached its trough.
   D) began to decline about a year or so after the economy reached its trough.
   E) began to decline about a three years or so after the economy reached its trough.
   Answer: D

   Topic: U.S. recent business cycle
   Skill: Level 1: Definition
   Objective: Checkpoint 29.1
   Author: CT

29.2 Aggregate Supply

1) Over the business cycle, factors such as the quantity of capital, human capital and technology
   A) grow but do not fluctuate as much as the quantity of labor employed.
   B) change drastically, fluctuating more than the quantity of labor employed.
   C) fluctuate about the same amount as the quantity of labor employed.
   D) do not grow and are therefore not the source of economic growth.
   E) change randomly, sometimes growing, sometimes falling.
   Answer: A

   Topic: Aggregate supply
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.2
   Author: WM
2) Which of the following does NOT affect potential GDP?
   A) the quantity of the money supply
   B) the quantity of labor employed
   C) the quantity of capital and human capital
   D) the amount of entrepreneurial talent available
   E) the quantity of land and natural resources

Answer: A
Topic: Potential GDP
Skill: Level 2: Using definitions
Objective: Checkpoint 29.2
Author: AA

3) Moving along the potential GDP line, if the price level rises then
   A) the quantity of GDP supplied increases.
   B) the quantity of GDP supplied decreases.
   C) there is no change in potential GDP.
   D) the potential GDP line shifts out to the right.
   E) the quantity of potential GDP supplied increases.

Answer: C
Topic: Potential GDP
Skill: Level 2: Using definitions
Objective: Checkpoint 29.2
Author: WM

4) The real wage rate definitely falls if the money wage rate ____ and the price level ____.
   A) remains constant; rises
   B) remains constant; falls
   C) rises; falls
   D) rises; rises
   E) falls; falls

Answer: A
Topic: Real wage rate
Skill: Level 2: Using definitions
Objective: Checkpoint 29.2
Author: WM
5) A fall in the real wage rate ____ firms' profits and leads to ____ in the quantity supplied.
   A) raises; an increase
   B) raises; a decrease
   C) lowers; an increase
   D) lowers; a decrease
   E) does not change; no change

Answer: A

Topic: Real wage rate
Skill: Level 2: Using definitions
Objective: Checkpoint 29.2
Author: WM

6) Moving along the AS curve, when the price level increases the
   A) real wage rate falls and there is an increase in the quantity of real GDP supplied.
   B) real wage rate rises and there is an increase in the quantity of real GDP supplied.
   C) nominal wage rate falls and there is an increase in the quantity of real GDP supplied.
   D) nominal wage rate rises and there is a decrease in the quantity of real GDP supplied.
   E) real wage rate rises and there is a decrease in the quantity of real GDP supplied.

Answer: A

Topic: Aggregate supply, price level
Skill: Level 2: Using definitions
Objective: Checkpoint 29.2
Author: WM

7) The aggregate supply curve illustrates that the
   A) higher the price level, the greater the quantity of real GDP supplied.
   B) higher the price level, the smaller the quantity of real GDP supplied.
   C) aggregate demand curve is not needed to determine the aggregate price level.
   D) price level does not affect the quantity of real GDP supplied.
   E) amount of potential GDP increases when the price level rises.

Answer: A

Topic: Aggregate supply, price level
Skill: Level 3: Using models
Objective: Checkpoint 29.2
Author: WM
8) If the price level increases from 110.0 to 115.0, the quantity of
   A) real GDP supplied will increase.
   B) real GDP supplied will decrease.
   C) potential GDP will decrease.
   D) real GDP demanded will increase.
   E) potential GDP will increase.

Answer: A

Topic: Aggregate supply, price level
Skill: Level 2: Using definitions
Objective: Checkpoint 29.2
Author: CT

9) A change in the price level
   A) shifts the aggregate supply curve rightward.
   B) shifts the potential GDP line.
   C) shifts the aggregate supply curve leftward.
   D) changes the quantity of real GDP supplied.
   E) shifts the aggregate demand curve leftward.

Answer: D

Topic: Aggregate supply, price level
Skill: Level 2: Using definitions
Objective: Checkpoint 29.2
Author: AA

10) The quantity of real GDP supplied increases when the price level increases because
    A) investment increases.
    B) the quantity of money increases.
    C) the real wage rate falls.
    D) the real wage rate rises.
    E) aggregate demand increases.

Answer: C

Topic: Aggregate supply, price level
Skill: Level 2: Using definitions
Objective: Checkpoint 29.2
Author: AA
11) Moving along the aggregate supply curve when the price level rises, the

A) quantity supplied does not change because the aggregate supply curve is a vertical line.
B) the quantity supplied increases.
C) the quantity supplied decreases.
D) the aggregate demand curve shifts rightward.
E) the aggregate demand curve shifts leftward.

Answer: B

Topic: Aggregate supply, price level
Skill: Level 2: Using definitions
Objective: Checkpoint 29.2
Author: WM

12) During 2006, a country reports that its price level fell and the money wage rate did not change. These changes lead to

A) a higher real wage rate, lower profits, and a decrease in the quantity of real GDP supplied.
B) a higher real wage rate, higher profits, and an increase in the quantity of real GDP supplied.
C) a lower real wage rate, lower profits, and a decrease in the quantity of real GDP supplied.
D) a lower real wage rate, higher profits, and an increase in the quantity of real GDP supplied.
E) no change in the real wage rate and an increase in aggregate demand.

Answer: A

Topic: Aggregate supply, price level
Skill: Level 2: Using definitions
Objective: Checkpoint 29.2
Author: CT
13) If the nominal wage rate does not change, then if the price level increases, the real wage rate ____ and profits ____.
   A) rises; increase
   B) rises; decrease
   C) falls; increase
   D) falls; decrease
   E) does not change; increase
   Answer: C
   Topic: Aggregate supply, price level
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.2
   Author: CT

14) The quantity of real GDP supplied decreases if the price level ____ because it ____ profits.
   A) rises; increases
   B) rises; decreases
   C) falls; increases
   D) falls; decreases
   E) None of the above answers are correct because the AS curve is vertical so that the quantity of real GDP supplied does not change when the price level changes.
   Answer: D
   Topic: Aggregate supply, price level
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.2
   Author: CT

15) If profits are high,
   A) it is likely the result of an increase in the real wage rate.
   B) new businesses open and the quantity of real GDP supplied increases.
   C) business failures rise and the quantity of real GDP supplied increases.
   D) potential GDP must be decreasing.
   E) the AS curve shifts leftward.
   Answer: B
   Topic: Aggregate supply, price level
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.2
   Author: WM
16) If the price level rises but the money wage rate does not, then firms will hire ____ labor and the quantity of real GDP supplied will ____.
   A) more; increase
   B) the same amount of; not change
   C) less; decrease
   D) more; not change
   E) less; increase

Answer: A
Topic: Aggregate supply, price level
Skill: Level 2: Using definitions
Objective: Checkpoint 29.2
Author: WM

17) Which of the following changes aggregate supply and shifts the aggregate supply curve?
   i. change in the price level
   ii. change in potential GDP
   iii. change in the money wage rate
   A) i only
   B) ii only.
   C) iii only.
   D) ii and iii.
   E) i, ii, and iii.

Answer: D
Topic: Aggregate supply, price level
Skill: Level 3: Using models
Objective: Checkpoint 29.2
Author: AA

18) If there is a rise in the price level, there is ____ in the quantity of real GDP supplied and a movement ____ along the AS curve.
   A) a decrease; downward
   B) an increase; upward
   C) an increase; downward
   D) a decrease; upward
   E) no change; upward

Answer: B
Topic: Aggregate supply, price level
Skill: Level 2: Using definitions
Objective: Checkpoint 29.2
Author: CT
19) Which of the following changes aggregate supply and shifts the AS curve?
   i. a change in the price of a major resource
   ii. increases in the amount of capital
   iii. a change in the money income of consumers
   A) i only.
   B) ii only.
   C) iii only.
   D) i and ii.
   E) i, ii, and iii.

   Answer: D

20) Which of the following statements is true?
   A) An increase in potential GDP increases aggregate supply and shifts the AS curve leftward.
   B) A decrease in potential GDP decreases aggregate supply and shifts the AS curve leftward.
   C) An increase in the money wage rate shifts the AS curve rightward.
   D) A fall in the price level shifts the AS curve leftward.
   E) An increase in the money wage rate increases potential GDP.

   Answer: B

21) The aggregate supply curve shifts rightward when
   A) potential GDP decreases.
   B) the money wage rate falls.
   C) income taxes increase.
   D) government purchases increase.
   E) the money wage rate rises.

   Answer: B
22) The aggregate supply curve will shift
   A) rightward if potential GDP decreases.
   B) rightward if the money wage rate falls.
   C) rightward if the money wage rate rises.
   D) leftward if potential GDP increases.
   E) leftward if the aggregate demand curve shifts leftward.

   Answer: B
   Topic: Changes in aggregate supply, money wage rate
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.2
   Author: AA

23) If the money wage rate increases, then the
   A) aggregate supply curve shifts rightward.
   B) potential GDP increases.
   C) potential GDP decreases.
   D) aggregate supply curve shifts leftward.
   E) aggregate demand curve shifts leftward.

   Answer: D
   Topic: Changes in aggregate supply, money wage rate
   Skill: Level 3: Using models
   Objective: Checkpoint 29.2
   Author: WM

24) An increase in technology ____ potential GDP and ____ aggregate supply.
   A) increases; increases
   B) increases; decreases
   C) decreases; increases
   D) decreases; decreases
   E) does not change; does not change

   Answer: A
   Topic: Changes in aggregate supply, potential GDP
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.2
   Author: CT
25) The change in potential real GDP and aggregate supply shown in the graph above can be a result of
   A) an increase in the real wage rate.
   B) an increase in the quantity of capital.
   C) a decrease in the money wage rate.
   D) a decrease in the money price of oil.
   E) a fall in the price level.

   Answer: B
   Topic: Changes in aggregate supply, potential GDP
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.2
   Author: CT

26) As the money wage rate increases,
   A) potential GDP increases.
   B) potential GDP decreases.
   C) aggregate supply increases.
   D) aggregate supply decreases.
   E) aggregate supply and potential GDP do not change.

   Answer: D
   Topic: Changes in aggregate supply, money wage rate
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.2
   Author: AA
27) The change reflected in the above figure might be a result of
   A) a decrease in the money wage rate.
   B) a decrease in the real wage rate.
   C) an increase in the money wage rate.
   D) an increase in the real wage rate.
   E) a rise in the price level.

Answer: A

Topic: Changes in aggregate supply, money wage rate
Skill: Level 3: Using models
Objective: Checkpoint 29.2
Author: CT
28) The change reflected in the above figure might be a result of
   A) a decrease in the quantity of capital.
   B) an increase in the quantity of labor.
   C) a rise in the money wage rate.
   D) a decrease in the money prices of resources other than labor.
   E) a fall in the price level.

Answer: C

*Topic: Changes in aggregate supply, money wage rate*

*Skill: Level 3: Using models*

*Objective: Checkpoint 29.2*

*Author: CT*
29.3 Aggregate Demand

1) A rise in the price level
   A) decreases aggregate demand.
   B) increases aggregate demand.
   C) decreases the quantity of real GDP demanded.
   D) increases the quantity of real GDP demanded.
   E) has no effect on aggregate demand or on the quantity of real GDP demanded.

   Answer: C
   Topic: Aggregate demand
   Skill: Level 1: Definition
   Objective: Checkpoint 29.3
   Author: TPS

2) Which of the following statements is correct?
   A) The price level does not effect the level of real GDP demanded.
   B) The lower the price level, the greater the quantity of real GDP demanded
   C) The lower the price level, the more the aggregate demand curve shifts rightward.
   D) The lower the price level, the more the aggregate demand curve shifts leftward.
   E) The higher the price level, the more the aggregate demand curve shifts rightward.

   Answer: B
   Topic: Aggregate demand
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.3
   Author: WM

3) The AD curve is a graph depicting the
   A) relationship between the price level and the quantity of real GDP supplied.
   B) business cycle during expansions and recessions.
   C) relationship between the price level and the quantity of real GDP demanded.
   D) relationship between the price level and potential GDP.
   E) relationship between the aggregate quantity of real GDP demanded and the aggregate quantity of real GDP supplied.

   Answer: C
   Topic: Aggregate demand curve
   Skill: Level 1: Definition
   Objective: Checkpoint 29.3
   Author: WM
4) An increase in the price level leads to a
   A) rightward shift of the aggregate demand curve.
   B) leftward shift of the aggregate demand curve.
   C) movement upward along the aggregate demand curve.
   D) movement downward along the aggregate demand curve.
   E) neither a shift in the aggregate demand curve nor a movement along it.
   Answer: C

5) If the price level increases, there is ____ the AD curve and the quantity of real GDP demanded ____.
   A) a movement upward along; increases
   B) a movement downward along; increases
   C) a movement upward along; decreases
   D) a leftward shift in; decreases
   E) no change in; does not change
   Answer: C

6) A rise in the price level ____ the buying power of money and ____ the quantity of real GDP demanded.
   A) does not affect; increases
   B) lowers; increases
   C) raises; decreases
   D) lowers; decreases
   E) does not affect; does not change
   Answer: D
7) Last year the price level increased from 118 to 122. The increase in the price level leads to a decrease in
   A) the buying power of money.
   B) the real interest rate.
   C) the money wage rate.
   D) the price of domestic goods and services relative to foreign goods and services.
   E) potential GDP.
Answer: A

8) At a price level of 100, John has savings equal to $20,000. If the price level increases to 130, the buying power of John's savings is approximately
   A) $12,780.
   B) $15,400.
   C) $20,000.
   D) $26,000.
   E) $30,000.
Answer: B

9) If the price level doubles, it will
   A) increase the buying power of money.
   B) have no effect on the buying power of money.
   C) decrease the buying power of money.
   D) increase potential GDP.
   E) decrease potential GDP.
Answer: C
10) When the price level rises and increases the demand for money, the nominal interest rate ____ and the real interest rate ____.

A) rises; rises  
B) rises; falls  
C) falls; rises  
D) falls; falls  
E) does not change; does not change

Answer: D  
*Topic: Buying power of money*  
*Skill: Level 2: Using definitions*  
*Objective: Checkpoint 29.3*  
*Author: TPS*

11) A reason why an increase in the price level decreases the quantity of real GDP demanded is that

A) the buying power of money increases.  
B) the real interest rate falls.  
C) the price of domestic goods and services increases relative to foreign goods and services.  
D) the inflation rate decreases.  
E) potential GDP decreases.

Answer: C  
*Topic: Relative price of domestic and foreign goods*  
*Skill: Level 1: Definition*  
*Objective: Checkpoint 29.3*  
*Author: CT*

12) When the U.S. price level rises relative to other nations’ price levels, then

A) U.S. firms’ profits increase and the aggregate demand curve shifts rightward.  
B) U.S. exports increase and the aggregate demand curve shifts rightward.  
C) U.S. exports decrease, U.S. imports increase, and the aggregate demand curve shifts leftward.  
D) U.S. exports decrease, U.S. imports increase, and there is a movement upward along the aggregate demand curve.  
E) U.S. exports decrease, U.S. imports increase, and the aggregate demand curve shifts rightward.

Answer: D  
*Topic: Relative price of domestic and foreign goods*  
*Skill: Level 1: Definition*  
*Objective: Checkpoint 29.3*  
*Author: WM*
13) Sherri lives in Canada and is considering buying a new sofa. If the price level in Canada falls and the price level in the United States does not change, Canadian manufactured sofas are relatively

A) more expensive, so Sherri will likely purchase a U.S. manufactured sofa.
B) more expensive, so Sherri will likely purchase a Canadian manufactured sofa.
C) less expensive, so Sherri will likely purchase a U.S. manufactured sofa.
D) less expensive, so Sherri will likely purchase a Canadian manufactured sofa.
E) Both answers B and D could be correct depending on whether U.S. manufactured sofas were initially more expensive or less expensive than Canadian sofas.

Answer: D

Topic: Relative price of domestic and foreign goods
Skill: Level 2: Using definitions
Objective: Checkpoint 29.3
Author: CT

14) When the domestic price level increases, exports decrease and imports increase. Other things the same, this change is illustrated by a

A) movement upward along the aggregate demand curve.
B) movement downward along the aggregate demand curve.
C) rightward shift of the aggregate demand curve.
D) leftward shift of the aggregate demand curve.
E) rightward shift of the aggregate supply curve.

Answer: A

Topic: Relative price of domestic and foreign goods
Skill: Level 2: Using definitions
Objective: Checkpoint 29.3
Author: CT

15) Aggregate demand

A) decreases if expected future income rises.
B) increases if the exchange rate rises.
C) increases if government expenditures decrease.
D) increases if the expected inflation rate increases.
E) increases if aggregate supply increases.

Answer: D

Topic: Changes in aggregate demand, expectations
Skill: Level 2: Using definitions
Objective: Checkpoint 29.3
Author: AA
16) If people's expectations about future income improve so they think their future income will be higher than previously believed, then the $AD$ curve
   A) will not change until income actually rises.
   B) will shift leftward because people will spend less now.
   C) will shift rightward because people will increase spending now.
   D) and the $AS$ curve will both shift leftward because people will increase their saving.
   E) will not shift but potential GDP will increase.

   Answer: C
   Topic: Changes in aggregate demand, expectations
   Skill: Level 3: Using models
   Objective: Checkpoint 29.3
   Author: WM

17) If firms' expectations about the future become pessimistic so that they think future profits will be lower, then
   A) aggregate demand decreases and the $AD$ curve shifts leftward.
   B) aggregate demand increases and the $AD$ curve shifts rightward.
   C) the quantity of real GDP demanded decreases and there is a movement up along the $AD$ curve.
   D) the quantity of real GDP demanded increases and there is a movement down along the $AD$ curve.
   E) the aggregate demand curve does not shift but potential GDP decreases.

   Answer: A
   Topic: Changes in aggregate demand, expectations
   Skill: Level 3: Using models
   Objective: Checkpoint 29.3
   Author: TPS

18) Which of the following decreases aggregate demand and shifts the $AD$ curve leftward?
   A) a tax cut
   B) a decrease in price level
   C) a decrease in government expenditures
   D) a decrease in the price of exported goods and services
   E) a decrease in potential GDP

   Answer: C
   Topic: Changes in aggregate demand, fiscal policy
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.3
   Author: AA
19) An increase in government expenditures on goods and services leads to the
   A) aggregate supply curve shifting rightward.
   B) aggregate supply curve shifting leftward.
   C) aggregate demand curve shifting rightward.
   D) aggregate demand curve shifting leftward.
   E) potential GDP increasing.

   Answer: C
   Topic: Changes in aggregate demand, fiscal policy
   Skill: Level 3: Using models
   Objective: Checkpoint 29.3
   Author: CT

20) A tax increase
   A) decreases aggregate demand and the AD curve shifts leftward.
   B) increases aggregate demand and the AD curve shifts rightward.
   C) decreases the quantity of real GDP demanded and there is a movement up along the
       AD curve.
   D) increases the quantity of real GDP demanded and there is a movement down along the
       AD curve.
   E) does not shift or lead to a movement along the aggregate demand curve.

   Answer: A
   Topic: Changes in aggregate demand, fiscal policy
   Skill: Level 3: Using models
   Objective: Checkpoint 29.3
   Author: TPS

21) Which of the following decreases aggregate demand and shifts the AD curve leftward?
   A) a tax cut
   B) an interest rate hike
   C) an increase in quantity of money
   D) an increase in government expenditures on goods and services
   E) a decrease in potential GDP.

   Answer: B
   Topic: Changes in aggregate demand, monetary policy
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.3
   Author: AA
22) If the Fed increases the quantity of money, then
   A) aggregate demand decreases and the $AD$ curve shifts leftward.
   B) aggregate demand increases and the $AD$ curve shifts rightward.
   C) the quantity of real GDP demanded decreases and there is a movement up along the $AD$ curve.
   D) the quantity of real GDP demanded increases and there is a movement down along the $AD$ curve.
   E) both the aggregate demand curve and the aggregate supply curve shift leftward.

   Answer: B

Topic: Changes in aggregate demand, monetary policy
Skill: Level 3: Using models
Objective: Checkpoint 29.3
Author: TPS

23) Which of the following statements is correct?
   A) An increase in the price level shifts the aggregate demand curve rightward.
   B) An increase in the price level shifts the aggregate demand curve leftward.
   C) An increase in the quantity of money shifts the aggregate demand curve rightward.
   D) An increase in the real interest rate shifts the aggregate demand curve rightward.
   E) An increase in the money wage rate shifts the aggregate demand curve leftward.

   Answer: C

Topic: Aggregate demand curve
Skill: Level 2: Using definitions
Objective: Checkpoint 29.3
Author: AA

24) One of the influences that the world economy has on U.S. aggregate demand comes from changes in
   A) world opinion.
   B) foreign income.
   C) foreign governments.
   D) world pollution.
   E) foreign aid.

   Answer: B

Topic: Changes in aggregate demand, foreign income
Skill: Level 2: Using definitions
Objective: Checkpoint 29.3
Author: AA
25) If European economies enter a recession,
   A) U.S. aggregate demand decreases and the U.S. AD curve shifts leftward.
   B) U.S. aggregate demand increases and the U.S. AD curve shifts rightward.
   C) the quantity of real GDP demanded in the United States decreases and there is a movement down along the U.S. AD curve.
   D) the quantity of real GDP demanded in the United States increases and there is a movement up along the U.S. AD curve.
   E) U.S. aggregate demand decreases and the U.S. AD curve shifts rightward.

Answer: A

Topic: Changes in aggregate demand, foreign income
Skill: Level 3: Using models
Objective: Checkpoint 29.3
Author: TPS
26) In the figure above, as the price level increases the aggregate demand curve will
   A) shift from $AD_1$ to $AD_3$.
   B) shift from $AD_1$ to $AD_2$.
   C) not shift but the aggregate demand curve will change its slope will change so that it is
      positively sloped.
   D) not shift.
   E) shift from $AD_1$ to $AD_3$ and then back to $AD_1$.

   Answer: D

   Topic: Aggregate demand curve
   Skill: Level 3: Using models
   Objective: Checkpoint 29.3
   Author: AA
27) In the figure above, the shift in the aggregate demand curve from $AD_1$ to $AD_2$ could be the result of
   A) a fall in the price level.
   B) a decrease in the quantity of money.
   C) an increase in government expenditures on goods and services.
   D) an increase in taxes.
   E) a rise in the price level.
   Answer: C
   Topic: Changes in aggregate demand, fiscal policy
   Skill: Level 3: Using models
   Objective: Checkpoint 29.3
   Author: AA

28) In the figure above, the shift in the aggregate demand curve from $AD_1$ to $AD_3$ could be the result of
   A) a decrease in the real interest rate.
   B) a decrease in the buying power of money.
   C) an increased expectation of a recession that lowers the expected rate of profit from investment.
   D) a decrease in the foreign exchange rate.
   E) an increase in the price level.
   Answer: C
   Topic: Changes in aggregate demand, fiscal policy
   Skill: Level 3: Using models
   Objective: Checkpoint 29.3
   Author: CT

29) In the figure above, the shift in the aggregate demand curve from $AD_1$ to $AD_3$ could be the result of an increase in
   A) expected future income.
   B) the foreign exchange rate.
   C) foreign incomes.
   D) the price level.
   E) aggregate supply.
   Answer: B
   Topic: Changes in aggregate demand, foreign exchange rate
   Skill: Level 3: Using models
   Objective: Checkpoint 29.3
   Author: AA
30) The aggregate demand multiplier effect says that an initial increase in expenditure plans leads to an induced
   A) increase in consumption expenditure.
   B) increase in production expenditure.
   C) increase in government expenditures on goods and services.
   D) decrease in the price level.
   E) increase in exports.
   Answer: A
   Topic: Aggregate demand multiplier
   Skill: Level 3: Using models
   Objective: Checkpoint 29.3
   Author: CT

29.4 Understanding the Business Cycle

1) When the quantity of real GDP demanded exceeds the quantity of real GDP supplied, firms
   A) increase production and prices.
   B) decrease production and prices.
   C) increase production and lower prices.
   D) decrease production and increase prices.
   E) do not change production because aggregate demand and potential GDP will adjust.
   Answer: A
   Topic: Macroeconomic equilibrium
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: CT
2) According to the AS–AD model
   A) the aggregate quantity supplied is typically greater than the aggregate quantity demanded, thereby leading to unemployment.
   B) the equilibrium is where the AS curve crosses the AD curve but the amount of real GDP at this point is not always equal to potential GDP.
   C) the aggregate quantity demanded is typically greater than the aggregate quantity supplied, thereby leading to inflation.
   D) the AS curve is always equal to potential GDP.
   E) changes in the amount of potential GDP is the only factor that shifts both the aggregate supply curve and the aggregate demand curve.

Answer: B

Topic: Macroeconomic equilibrium
Skill: Level 3: Using models
Objective: Checkpoint 29.4
Author: WM

<table>
<thead>
<tr>
<th>Price level (GDP deflator)</th>
<th>Real GDP demanded (trillions of 2000 dollars)</th>
<th>Real GDP supplied (trillions of 2000 dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>90</td>
<td>9</td>
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<tr>
<td>100</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>110</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>120</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>130</td>
<td>4</td>
<td>9</td>
</tr>
</tbody>
</table>

3) The above table gives aggregate demand and aggregate supply schedules. Equilibrium real GDP is
   A) $10 trillion.
   B) $9 trillion.
   C) $8 trillion.
   D) $7 trillion.
   E) $6 trillion.

Answer: D

Topic: Equilibrium AD and AS
Skill: Level 3: Using models
Objective: Checkpoint 29.4
Author: AA
4) The above table gives aggregate demand and aggregate supply schedules. The equilibrium price level is
   A) 130.
   B) 120.
   C) 110.
   D) 100.
   E) 90.
   Answer: C
   Topic: Equilibrium AD and AS
   Skill: Level 3: Using models
   Objective: Checkpoint 29.4
   Author: AA

5) The above table gives aggregate demand and aggregate supply schedules. If the price level is 120 then the aggregate quantity demanded is ____ than the aggregate quantity supplied and the price level ____.
   A) greater; rises
   B) greater; falls
   C) less; rises
   D) less; falls
   E) less; might fall, rise or not change depending on whether real GDP is more than, less than, or equal to potential GDP.
   Answer: D
   Topic: Equilibrium AD and AS
   Skill: Level 3: Using models
   Objective: Checkpoint 29.4
   Author: AA

6) A decrease in investment leads to ____ in aggregate demand and ____ in real GDP.
   A) an increase; an increase
   B) an increase; a decrease
   C) a decrease; an increase
   D) a decrease; a decrease
   E) no change; a decrease
   Answer: D
   Topic: Aggregate demand fluctuations
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: CT
7) A deep recession hits the world economy and real GDP in the rest of the world decreases. In the United States,
   A) aggregate supply and aggregate demand both increase and the price level rises.
   B) aggregate supply decreases while aggregate demand does not change and the price level rises.
   C) aggregate demand decreases while aggregate supply does not change and the price level falls.
   D) aggregate supply increases and aggregate demand decreases, so the effect on the price level is uncertain.
   E) aggregate supply and aggregate demand both decrease and the price level rises.

Answer: C

Topic: Aggregate demand fluctuations
Skill: Level 3: Using models
Objective: Checkpoint 29.4
Author: AA

8) If the $AD$ curve shifts rightward, then
   A) both the price level and real GDP will increase.
   B) the price level will increase but no change will occur in real GDP.
   C) the price level will not change but real GDP will increase.
   D) both the price level and real GDP will decrease.
   E) potential GDP increases.

Answer: A

Topic: Aggregate demand fluctuations
Skill: Level 3: Using models
Objective: Checkpoint 29.4
Author: WM

9) An economy is at a full-employment equilibrium, and then the aggregate demand curve shifts leftward. As a result, the price level ____ and real GDP ____.
   A) rises; increases
   B) rises; decreases
   C) falls; increases
   D) falls; decreases
   E) falls; does not change

Answer: D

Topic: Aggregate demand fluctuations
Skill: Level 3: Using models
Objective: Checkpoint 29.4
Author: CT
10) If the AD curve shifts rightward while the AS curve and potential GDP don’t change, then
   A) the economy will move from a peak into recession.
   B) the expansion phase of the business cycle occurs.
   C) there will be no change in real GDP, so the economy is at the peak of the cycle.
   D) there will be no change in real GDP, so the economy is at the trough of the cycle.
   E) real GDP does not change.
   Answer: B
   Topic: Aggregate demand fluctuations
   Skill: Level 3: Using models
   Objective: Checkpoint 29.4
   Author: WM

11) Real GDP definitely increases if
   A) both the AD curve and the AS curve shift rightward.
   B) both the AD curve and AS curve shift leftward.
   C) the AD curve shifts leftward and the AS curve shifts rightward.
   D) the AS curve shifts leftward and the AD curve does not shift.
   E) potential GDP decreases so that real GDP exceeds potential GDP.
   Answer: A
   Topic: Aggregate demand and supply fluctuations
   Skill: Level 3: Using models
   Objective: Checkpoint 29.4
   Author: WM

12) Stagflation is defined as a period when real GDP ____ and the price level ____.
   A) increases; increases
   B) increases; decreases
   C) decreases; increases
   D) decreases; decreases
   E) is constant; rises rapidly
   Answer: C
   Topic: Stagflation
   Skill: Level 1: Definition
   Objective: Checkpoint 29.4
   Author: WM
13) A combination of declining real GDP and rising price level is referred to as
   A) an expansion.
   B) a trough.
   C) stagflation.
   D) deflation.
   E) a depression.
   Answer: C
   Topic: Stagflation
   Skill: Level 1: Definition
   Objective: Checkpoint 29.4
   Author: CT

14) In the United States, stagflation
   A) occurs regularly, such as throughout the 1990s.
   B) occurs infrequently and occurred last in the late 1970s and early 1980s.
   C) has never occurred, but did occur in South America in the late 1970s and early 1980s.
   D) is caused by large increases in aggregate demand that are the result of large decreases in interest rates.
   E) is caused by decreases in aggregate demand that are the result of large decreases in interest rates.
   Answer: B
   Topic: Stagflation
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: WM

15) The combination of recession and inflation
   A) cannot occur according to our model.
   B) occurred during the 1990s.
   C) happens at least once during each business cycle in the United States.
   D) last occurred as a result of large increases in the price of oil.
   E) is the result of increases in aggregate demand.
   Answer: D
   Topic: Stagflation
   Skill: Level 3: Using models
   Objective: Checkpoint 29.4
   Author: WM
16) If real GDP exceeds potential GDP, then the money wage rate ____; aggregate supply ____; and the price level ____.
   A) rises; decreases; rises
   B) falls; decreases; rises
   C) rises; increases; falls
   D) falls; increases; rises
   E) does not change; increases; rises

   Answer: A

   Topic: Inflationary gap
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: AA

17) If real GDP is greater than potential GDP, then ____ and the price level ____.
   A) the aggregate demand curve shifts leftward; rises
   B) the aggregate demand curve shifts rightward; falls
   C) the aggregate supply curve shifts leftward; rises
   D) the aggregate supply curve shifts rightward; falls
   E) potential GDP increases; falls

   Answer: C

   Topic: Inflationary gap
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: AA

18) If the aggregate demand curve and the aggregate supply curve intersect at a level of real GDP more than potential GDP, there is
   A) a recessionary gap.
   B) an inflationary gap.
   C) a falling price level.
   D) a rising real GDP.
   E) a below-full employment equilibrium.

   Answer: B

   Topic: Inflationary gap
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: TPS
19) If real GDP is less than potential GDP, then the money wage rate ____ aggregate supply ____, and the price level ____.
   A) rises; decreases; rises
   B) falls; increases; falls
   C) rises; increases; falls
   D) falls; decreases; rises
   E) does not change; increases; falls

   Answer: B
   Topic: Recessionary gap
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: AA

20) If real GDP is less than potential GDP, then the ____ and the price level ____.
    A) aggregate demand curve shifts leftward; rises
    B) aggregate demand curve shifts rightward; falls
    C) aggregate supply curve shifts leftward; rises
    D) aggregate supply curve shifts rightward; falls
    E) amount of potential GDP increases; falls

   Answer: D
   Topic: Recessionary gap
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: AA

21) A recessionary gap occurs when ____ so that real GDP is ____ potential GDP.
    A) aggregate supply increases; less than
    B) aggregate supply decreases; less than
    C) aggregate demand increases; greater than
    D) aggregate demand decreases; less than
    E) potential GDP decreases; greater than

   Answer: D
   Topic: Recessionary gap
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: CT
22) If the aggregate demand curve and the aggregate supply curve intersect at a level of real GDP less than potential GDP, there is
   A) a recessionary gap.
   B) an inflationary gap.
   C) a rising price level.
   D) a falling real GDP.
   E) an above full-employment equilibrium.

   Answer: A
   Topic: Recessionary gap
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: TPS

23) An economy experiences a recessionary gap. As a result, the money wage rate
   A) falls, shifting the aggregate supply curve rightward.
   B) rises, shifting the aggregate supply curve leftward.
   C) rises, shifting the aggregate demand curve rightward.
   D) falls, shifting the aggregate demand curve leftward.
   E) falls, increasing potential GDP.

   Answer: A
   Topic: Recessionary gap
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: CT

24) If the economy is above full employment, there is ____ gap and as the economy adjusts toward full employment the price level ____.
   A) an inflationary; rises
   B) an inflationary; falls
   C) a recessionary; rises
   D) a recessionary; falls
   E) an inflationary; does not change

   Answer: A
   Topic: Adjustment to full employment
   Skill: Level 3: Using models
   Objective: Checkpoint 29.4
   Author: WM
25) If the economy begins at full employment and then aggregate demand decreases,
   A) potential GDP decreases to fill the resultant deflationary gap.
   B) a recessionary gap is created and the AS curve shifts rightward as the money wage rate
      falls.
   C) a recessionary gap is created shifting the AD curve rightward.
   D) an inflationary gap is created shifting the AS curve leftward as the money wage rate
      rises.
   E) an inflationary gap is created shifting the AD curve rightward.

   Answer: B

   Topic: Adjustment to full employment
   Skill: Level 3: Using models
   Objective: Checkpoint 29.4
   Author: WM

26) Assume the economy is hit by a shock that decreases aggregate demand. When the
    economy has finally adjusted to full employment,
    A) only the level of real GDP will be affected.
    B) there will be no changes to either the price level or real GDP.
    C) only the price level will be affected.
    D) both real GDP and the price level will be affected.
    E) aggregate supply will not have changed.

    Answer: C

   Topic: Adjustment to full employment
   Skill: Level 3: Using models
   Objective: Checkpoint 29.4
   Author: WM
27) In the figure above, the economy is at an equilibrium with real GDP of $10 trillion and a price level of 110. At this point there is
   A) an inflationary gap.
   B) a recessionary gap.
   C) price stability.
   D) a full-employment equilibrium.
   E) a below full-employment equilibrium.

Answer: A

Topic: Inflationary gap
Skill: Level 1: Definition
Objective: Checkpoint 29.4
Author: AA
28) In the figure above, the economy is at an equilibrium with real GDP of $10 trillion and a price level of 110. As the economy moves toward its ultimate equilibrium, the ____ curve will shift ____.

   A) aggregate supply; leftward
   B) aggregate supply; rightward
   C) aggregate demand; rightward
   D) aggregate demand; leftward
   E) potential GDP; rightward

Answer: A

*Topic: Adjustment to full employment*
*Skill: Level 3: Using models*
*Objective: Checkpoint 29.4*
*Author: AA*
29) In the figure above, the economy is at an equilibrium with real GDP of $10 trillion and a price level of 110. At this point there is
   A) an inflationary gap.
   B) a recessionary gap.
   C) price stability.
   D) a full-employment equilibrium.
   E) an above full-employment equilibrium.

Answer: B

Topic: Recessionary gap
Skill: Level 1: Definition
Objective: Checkpoint 29.4
Author: AA
30) In the figure above, the economy is at an equilibrium with real GDP of $10 trillion and a price level of 110. As the economy moves toward its ultimate equilibrium, the ____ curve shifts ____.
   A) aggregate supply; leftward
   B) aggregate supply; rightward
   C) aggregate demand; rightward
   D) aggregate demand; leftward
   E) potential GDP; leftward
   Answer: B
   Topic: Adjustment to full employment
   Skill: Level 3: Using models
   Objective: Checkpoint 29.4
   Author: AA

31) As a result of OPEC ____ oil prices in 1973 and 1980, real GDP in United States ____.
   A) increasing; increased
   B) increasing; decreased
   C) decreasing; increased
   D) decreasing; decreased
   E) increasing; did not change
   Answer: B
   Topic: Eye on the past, oil price cycles in U.S. & global economies
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: AA

32) When OPEC nearly tripled the price of oil in late 1973
   A) U.S. real GDP increased as profits by oil producers increased.
   B) U.S. real GDP did not change although the price level rose.
   C) the U.S. price level fell because production became too expensive.
   D) the U.S. price level rose and real GDP decreased.
   E) both U.S. real GDP and the price level increased.
   Answer: D
   Topic: Eye on the past, oil price cycles in U.S. & global economies
   Skill: Level 2: Using definitions
   Objective: Checkpoint 29.4
   Author: WM
33) At the beginning of 2007, a country is at full-employment. During 2007, oil-producing countries decrease oil production leading to higher oil prices. The higher oil prices
A) increase aggregate demand and lead to an expansion.
B) increase aggregate supply and lead to an expansion.
C) decrease aggregate demand and lead to a stagflation.
D) decrease aggregate supply and lead to a stagflation.
E) decrease aggregate demand and lead to a higher price level.

Answer: D

Topic: Eye on the past, oil price cycles in U.S. & global economies
Skill: Level 3: Using models
Objective: Checkpoint 29.4
Author: CT

29.5 Integrative Questions

1) An increase in the price level ____ the aggregate quantity supplied and ____ the aggregate quantity demanded.
   A) increases; increases
   B) increases; decreases
   C) decreases; increases
   D) decreases; decreases
   E) does not change; decreases

Answer: B

Topic: Integrative
Skill: Level 3: Using models
Objective: Integrative
Author: AA

2) During the late 1960s, U.S. defense spending increased as the United States fought in Vietnam. This increase in government expenditures on goods and services created
   A) a recessionary gap.
   B) an inflationary gap.
   C) a decrease in aggregate supply.
   D) a decrease in aggregate demand because consumers’ expenditures decreased.
   E) an increase in potential GDP.

Answer: B

Topic: Integrative
Skill: Level 4: Applying models
Objective: Integrative
Author: TPS
3) A recession in the rest of the world means U.S.
   A) aggregate supply decreases.
   B) aggregate demand decreases.
   C) potential GDP decreases.
   D) exports increase.
   E) potential GDP increases.

Answer: B

Topic: Integrative
Skill: Level 4: Applying models
Objective: Integrative
Author: TPS

4) ____ increases potential GDP.
   A) A decrease in the money wage rate
   B) A recessionary gap
   C) A recession
   D) An increase in the amount of human capital
   E) An increase in aggregate demand

Answer: D

Topic: Integrative
Skill: Level 4: Applying models
Objective: Integrative
Author: TPS

5) Unemployment increases when
   A) an inflationary gap is created.
   B) potential GDP increases.
   C) the government decreases its expenditures on goods and services.
   D) aggregate demand increases.
   E) aggregate supply increases.

Answer: C

Topic: Integrative
Skill: Level 4: Applying models
Objective: Integrative
Author: TPS
6) In the late 1920s, the U.S. economy experienced a decrease in investment, which perhaps triggered the Great Depression. The decrease in investment
   A) increased aggregate supply.
   B) decreased aggregate supply.
   C) increased aggregate demand.
   D) decreased aggregate demand.
   E) increased potential GDP.

Answer: D

Topic: Integrative
Skill: Level 4: Applying models
Objective: Integrative
Author: TPS