1. According to the classical model, which of the following would double if the quantity of money doubled?
   a. prices but not nominal income
   b. nominal income but not prices
   c. both prices and nominal income
   d. neither prices nor nominal income

2. Microeconomic substitution is impossible for the economy as a whole because
   a. money is a veil.
   b. real GDP measures the total quantity of goods and services produced by all firms in all markets.
   c. the prices of some goods and services adjust sluggishly in response to changing economic conditions.
   d. a lower price level increases real wealth, which stimulates spending by consumers and vice-versa.

3. The aggregate-demand curve shows the
   a. quantity of labor and other inputs that firms want to buy at each price level.
   b. quantity of labor and other inputs that firms want to buy at each inflation rate.
   c. quantity of domestically produced goods and services that households want to buy at each price level.
   d. quantity of domestically produced goods and services that households, firms, the government, and customers abroad want to buy at each price level.

   **Answer:** d

4. The model of aggregate demand and aggregate supply
   a. is different from the model of supply and demand for a particular market, in that we cannot focus on the substitution of resources between markets to explain aggregate relationships.
   b. is different from the model of supply and demand for a particular market, in that we have to separate real and nominal variables in the aggregate model.
   c. is a straightforward extension of the model of supply and demand for a particular market, in which substitution of resources between markets is highlighted.
   d. is a straightforward extension of the model of supply and demand for a particular market, in which the interaction between real and nominal variables is highlighted.

5. Which of the following would help explain why the aggregate demand curve slopes downward?
   a. An unexpectedly low price level raises the real wage, which causes firms to hire fewer workers and produce a smaller quantity of goods and services.
   b. A lower price level causes domestic interest rates to rise and the real exchange rate to appreciate, which stimulates spending on net exports.
   c. A higher price level increases real wealth, which stimulates spending on consumption.
   d. A lower price level reduces the interest rate, which encourages greater spending on investment goods.
6. If the price level falls, the real value of domestic currency
   a. rises, so people will want to buy more. This response helps explain the slope of the aggregate demand curve.
   b. rises, so people will want to buy more. This response shifts aggregate demand to the right.
   c. falls, so people will want to buy less. This response helps explain the slope of the aggregate demand curve.
   d. falls, so people will want to buy less. This response shifts aggregate demand to the left.

7. The aggregate quantity of goods and services demanded changes as the price level falls because
   a. real wealth falls, interest rates rise, and the domestic currency appreciates.
   b. real wealth falls, interest rates rise, and the domestic currency depreciates.
   c. real wealth rises, interest rates fall, and the domestic currency appreciates.
   d. real wealth rises, interest rates fall, and the domestic currency depreciates.

8. As the price level falls
   a. people will want to buy more bonds, so the interest rate rises.
   b. people will want to buy fewer bonds, so the interest rate falls.
   c. people will want to buy more bonds, so the interest rate falls.
   d. people will want to buy fewer bonds, so the interest rate rises.

9. Other things the same, a decrease in the price level motivates people to hold
   a. less money, so they lend less, and the interest rate rises.
   b. less money, so they lend more, and the interest rate falls.
   c. more money, so they lend more, and the interest rate rises.
   d. more money, so they lend less, and the interest rate falls.

10. When the price level falls
    a. households want to lend more, so the interest rate rises making the quantity of goods and services demanded rise.
    b. households want to lend more, so the interest rate falls, making the quantity of goods and services demanded rise.
    c. households want to lend more, so the interest rate rises, making the quantity of goods and services demanded fall.
    d. None of the above are correct.

11. In the context of the aggregate-demand curve, the interest-rate effect refers to the idea that, when the price level increases,
    a. the real value of money decreases; in turn, the real value of the domestic currency increases in foreign exchange markets, which decreases net exports.
    b. the real value of money decreases; in turn, interest rates increase, which decreases net exports.
    c. households increase their holdings of money; in turn, interest rates decrease, which reduces spending on investment goods.
    d. households increase their holdings of money; in turn, interest rates increase, which reduces spending on investment goods.

12. Other things the same, if the U.S. price level rises, then
    a. the supply of dollars in the market for foreign-currency exchange increases, and net exports fall.
    b. the supply of dollars in the market for foreign-currency exchange increases, and net exports rise.
c. the supply of dollars in the market for foreign-currency exchange decreases, and net exports fall.
d. the supply of dollars in the market for foreign-currency exchange decreases, and net exports rise.

13. Other things the same, as the price level falls, a country's exchange rate
   a. and interest rates rise.
b. and interest rates fall.
c. falls and interest rates rise.
d. rises and interest rates fall.

14. When taxes decrease, consumption
   a. decreases as shown by a movement to the left along a given aggregate-demand curve.
b. decreases as shown by a shift of the aggregate demand curve to the left.
c. increases as shown by a movement to the right along a given aggregate-demand curve.
d. increases as shown by a shift of the aggregate demand curve to the right.

15. Suppose businesses in general believe that the economy is likely to head into recession and so they reduce capital purchases. Their reaction would initially shift
   a. aggregate demand right.
b. aggregate demand left.
c. aggregate supply right.
d. aggregate supply left.

16. The Central Bank of Wiknam increases the money supply at the same time the Parliament of Wiknam passes a new investment tax credit. Which of these policies shift aggregate demand to the right?
   a. both the money supply increase and the investment tax credit
b. the money supply increase but not the investment tax credit
c. the investment tax credit but not the money supply increase
d. neither the investment tax credit nor the money supply increase

17. Which of the following both shift aggregate demand right?
   a. net exports rise for some reason other than a price change and government purchases rise.
b. net exports rise for some reason other than a price change and taxes increase.
c. net exports fall for some reason other than a price change and government purchases fall.
d. net exports fall for some reason other than a price change and taxes fall.

18. If the dollar depreciates because of speculation or government policy, U.S.
   a. aggregate demand shifts left. U.S. aggregate demand also shifts left if other countries experience an increase in real GDP.
b. aggregate demand shifts left. U.S. aggregate demand shifts right if other countries experience an increase in real GDP.
c. aggregate demand shifts right. U.S. aggregate demand also shifts right if other countries experience a decrease in real GDP.
d. aggregate demand shifts right. U.S. aggregate demand shifts left if other countries experience a decrease in real GDP.

19. If speculators gained greater confidence in foreign economies so that they wanted to buy more assets
of foreign countries and fewer Turkish bonds,
  a. the TL would appreciate which would cause aggregate demand to shift right.
  b. the TL would appreciate which would cause aggregate demand to shift left.
  c. the TL would depreciate which would cause aggregate demand to shift right.
  d. the TL would depreciate which would cause aggregate demand to shift left.

20. Suppose that political instability in other countries makes people fear for the value of their assets in these countries so that they desire to purchase more Turkish assets. What would the change in the interest rate created by foreigners wanting to buy more Turkish assets do to investment spending in Turkey?
  a. make it rise which by itself would increase Turkey aggregate demand.
  b. make it rise which by itself would decrease Turkey aggregate demand.
  c. make it fall which by itself would increase Turkey aggregate demand.
  d. make it fall which by itself would decrease Turkey aggregate demand.

21. Other things the same, if the long-run aggregate supply curve shifts right, prices
  a. and output both increase.
  b. and output both decrease.
  c. increase and output decreases.
  d. decrease and output increases.

22. According to the aggregate demand and aggregate supply model, in the long run a decrease in the money supply leads to
  a. decreases in both the price level and real GDP.
  b. an increase in real GDP and an increase in the price level.
  c. a decrease in the price level but does not change real GDP.
  d. an increase in the price level but does not change real GDP.

23. The sticky-wage theory of the short-run aggregate supply curve says that when the price level is lower than expected,
  a. relative to prices wages are higher and employment rise.
  b. relative to prices wages are higher and employment falls.
  c. relative to prices wages are lower and employment rises.
  d. relative to prices wages are lower and employment falls.

24. Which of the following can explain the upward slope of the short-run aggregate supply curve?
  a. nominal wages are slow to adjust to changing economic conditions
  b. as the price level falls, the exchange rate falls
  c. an increase in the money supply lowers the interest rate
  d. an increase in the interest rate increases investment spending

25. Other things the same, if the money supply rises by 2% and people were expecting it to rise by 5%, then some firms have
  a. higher than desired prices, which increases their sales.
  b. higher than desired prices, which depresses their sales.
  c. lower than desired prices, which increases their sales.
  d. lower than desired prices, which depresses their sales.

26. The misperceptions theory of the short-run aggregate supply curve says that the quantity of output
supplied will increase if the price level
a. increases by less than expected so that firms believe the relative price of their output has increased.
b. increases by less than expected so that firms believe the relative price of their output has decreased.
c. increases by more than expected so that firms believe the relative price of their output has increased.
d. increases by more than expected so that firms believe the relative price of their output has decreased.

27. The mathematical equation: quantity of output supplied = natural rate of output + a(actual price level - expected price level), expresses
a. how the long run equilibrium adjusts to changes in money supply.
b. how output deviates in the short run from its long run natural rate.
c. how the short run aggregate supply curve shifts.
d. how adverse shifts in aggregate supply can cause stagflation.

28. Which of the following shifts the short-run aggregate supply curve right?
a. both an increase in the price level that is greater than expected and an increase in the expected price level.
b. an increase in the price level that is greater than expected, but not an increase in the expected price level.
c. an increase in the expected price level, but not an increase in the price level that is greater than expected.
d. neither an increase in the price level that is greater than expected nor an increase in the expected price level.

29. If aggregate demand shifts right then in the short run
a. firms will increase production. In the long run increased price expectations shift the short-run aggregate supply curve to the left.
b. firms will increase production. In the long run increased price expectations shift the short-run aggregate supply curve to the left.
c. firms will decrease production. In the long run increased price expectations shift the short-run aggregate supply curve to the right.
d. firms will decrease production. In the long run increased price expectations shift the short-run aggregate supply curve to the left.

Figure 7-1

![Diagram showing aggregate supply and demand curves with shifts SRAS1 and SRAS2 to the right, indicating increased output and price levels.](image)
30. Refer to Figure 7-1. The appearance of the long-run aggregate-supply (LRAS) curve
   a. is consistent with the concept of monetary neutrality.
   b. is consistent with the idea that point A represents a long-run equilibrium and a short-run
equilibrium when the relevant short-run aggregate-supply curve is SRAS1.
   c. indicates that Y1 is the natural rate of output.
   d. All of the above are correct.

31. Refer to Figure 7-1. The shift of the short-run aggregate-supply curve from SRAS1 to SRAS2
   a. could be caused by an outbreak of war in the Middle East.
   b. could be caused by a decrease in the expected price level.
   c. causes the economy to experience an increase in the unemployment rate.
   d. causes the economy to experience stagflation.

32. Refer to Figure 7-1. In Figure 33-5,
   a. Point B represents a short-run equilibrium and a long-run equilibrium.
   b. Point B represents a short-run equilibrium, and Point A represents a long-run equilibrium.
   c. Point B represents a long-run equilibrium, and Point A represents a short-run equilibrium.
   d. Point B represents a long-run equilibrium, and Point C represents a short-run equilibrium.

33. Refer to Figure 7-1. Starting from point B and assuming that aggregate demand is held constant,
in the long run the economy is likely to experience
   a. a falling price level and a falling level of output, as the economy moves to point C.
   b. a falling price level and a rising level of output, as the economy moves to point A.
   c. a rising price level and a falling level of output, as the economy moves to point A.
   d. a rising price level and a rising level of output, as the economy moves to point C.

34. Suppose the economy is in long-run equilibrium. Then because of corporate scandal, international
tensions, and loss of confidence in policymakers, people become pessimistic regarding the future
and retain that level of pessimism for some time. Which curve shifts and in which direction?
   a. aggregate demand shifts right
   b. aggregate demand shifts left
   c. aggregate supply shifts right.
   d. aggregate supply shifts left.

35. Suppose the economy is in long-run equilibrium. If the government increases its expenditures,
eventually the increase in aggregate demand causes price expectations to
   a. rise. This rise in price expectations shifts the short-run aggregate supply curve to the right.
   b. rise. This rise in price expectations shifts the short-run aggregate supply curve to the left.
   c. fall. This fall in price expectations shifts the short-run aggregate supply curve to the right.
   d. fall. This fall in price expectations shifts the short-run aggregate supply curve to the left.

36. Suppose the economy is in long-run equilibrium. If there is an increase in the supply of labor as well
as an increase in the money supply, then we would expect that in the short-run,
   a. real GDP will rise and the price level might rise, fall, or stay the same.
   b. real GDP will fall and the price level might rise, fall, or stay the same.
   c. the price level will rise, and real GDP might rise, fall, or stay the same.
   d. the price level will fall, and real GDP might rise, fall, or stay the same.
37. Suppose the economy is in long-run equilibrium. In a short span of time, there is a sharp increase in the supply of labor, a major new discovery of oil, and new environmental regulations that raise the cost of electricity production.

In the short run
a. the price level will rise and real GDP will fall.
b. the price level will fall and real GDP will rise.
c. the price level and real GDP will both stay the same.
d. All of the above are possible.

38. According to the theory of liquidity preference,
   a. if the interest rate is below the equilibrium level, then the quantity of money people want to hold is less than the quantity of money the Fed has created.
   b. if the interest rate is above the equilibrium level, then the quantity of money people want to hold is greater than the quantity of money the Fed has created.
   c. the demand for money is represented by a downward-sloping line on a supply-and-demand graph.
   d. All of the above are correct.

39. Liquidity preference theory is most relevant to the
   a. short run and supposes that the price level adjusts to bring money supply and money demand into balance.
   b. short run and supposes that the interest rate adjusts to bring money supply and money demand into balance.
   c. long run and supposes that the price level adjusts to bring money supply and money demand into balance.
   d. long run and supposes that the interest rate adjusts to bring money supply and money demand into balance.

40. When the Fed buys government bonds, the reserves of the banking system
   a. increase, so the money supply increases.
   b. increase, so the money supply decreases.
   c. decrease, so the money supply increases.
   d. decrease, so the money supply decreases.

41. If people decide to hold less money, then
   a. money demand decreases, there is an excess supply of money, and interest rates rise.
   b. money demand decreases, there is an excess supply of money, and interest rates fall.
   c. money demand increases, there is an excess demand for money, and interest rates fall.
   d. money demand increases, there is an excess demand for money, and interest rates rise.
42. Refer to Figure 7-2. What is measured along the horizontal axis of the left-hand graph?
   a. nominal output
   b. real output
   c. the opportunity cost of holding money
   d. the quantity of money

43. Refer to Figure 7-2. What does $Y$ represent on the horizontal axis of the right-hand graph?
   a. the quantity of money
   b. the rate of inflation
   c. real output
   d. nominal output

44. Refer to Figure 7-2. Which of the following quantities is held constant as we move from one point to another on either graph?
   a. the nominal interest rate
   b. the quantity of money demanded
   c. investment
   d. the expected rate of inflation

45. Refer to Figure 7-2. If the graphs apply to an economy such as the U.S. economy, then the slope of the AD curve is primarily attributable to the
   a. wealth effect.
   b. interest-rate effect.
   c. exchange-rate effect.
   d. Fisher effect.

46. Refer to Figure 7-2. A decrease in $Y$ from $Y_1$ to $Y_2$ is explained as follows:
   a. The Federal Reserve increases the money supply, causing the money-demand curve to shift from $MD_1$ to $MD_2$; this shift of MD causes $r$ to increase from $r_1$ to $r_2$; and this increase in $r$ causes $Y$ to decrease from $Y_1$ to $Y_2$.
   b. An increase in $P$ from $P_1$ to $P_2$ causes the money-demand curve to shift from $MD_1$ to $MD_2$; this shift of MD causes $r$ to increase from $r_1$ to $r_2$; and this increase in $r$ causes $Y$ to
decrease from \( Y_1 \) to \( Y_2 \).

c. A decrease in \( P \) from \( P_2 \) to \( P_1 \) causes the money-demand curve to shift from \( MD_1 \) to \( MD_2 \); this shift of MD causes \( r \) to increase from \( r_1 \) to \( r_2 \); and this increase in \( r \) causes \( Y \) to decrease from \( Y_1 \) to \( Y_2 \).

d. An increase in the price level causes the money-demand curve to shift from \( MD_2 \) to \( MD_1 \); this shift of MD causes \( r \) to decrease from \( r_2 \) to \( r_1 \); and this decrease in \( r \) causes \( Y \) to decrease from \( Y_1 \) to \( Y_2 \).

47. Refer to Figure 7-2. As we move from one point to another along the money-demand curve \( MD_1 \),
   a. the price level is held fixed at \( P_1 \).
   b. the interest rate is held fixed at \( r_1 \).
   c. the money supply is changing so as to keep the money market in equilibrium.
   d. the expected inflation rate is changing so as to keep the real interest rate constant.

48. Refer to Figure 7-2. If the money-supply curve MS on the left-hand graph were to shift to the left, this would
   a. represent an action taken by the Federal Reserve.
   b. shift the AD curve to the left.
   c. create, until the interest rate adjusted, an excess demand for money at the interest rate that equilibrated the money market before the shift.
   d. All of the above are correct.

49. Refer to Figure 7-2. Assume the money market is always in equilibrium. Under the assumptions of the model,
   a. the real interest rate is lower at \( Y_2 \) than it is at \( Y_1 \).
   b. the quantity of money is the same at \( Y_1 \) as it is at \( Y_2 \).
   c. the price level is lower at \( r_2 \) than it is at \( r_1 \).
   d. All of the above are correct.

50. Refer to Figure 7-2. Assume the money market is always in equilibrium. Under the assumptions of the model,
   a. the quantity of goods and services demanded is higher at \( P_2 \) than it is at \( P_1 \).
   b. the quantity of money is higher at \( Y_1 \) than it is at \( Y_2 \).
   c. an increase in \( r \) from \( r_1 \) to \( r_2 \) is associated with a decrease in \( Y \) from \( Y_1 \) to \( Y_2 \).
   d. All of the above are correct.

51. Refer to Figure 7-2. Assume the money market is always in equilibrium, and suppose \( r_1 = 0.08 \); \( r_2 = 0.12 \); \( Y_1 = 13,000 \); \( Y_2 = 10,000 \); \( P_1 = 1.0 \); and \( P_2 = 1.2 \). Which of the following statements is correct?
   a. When \( r = r_2 \), nominal output is higher than it is when \( r = r_1 \).
   b. When \( r = r_2 \), real output is higher than it is when \( r = r_1 \).
   c. When \( r = r_2 \), the expected rate of inflation is higher than it is when \( r = r_1 \).
   d. If the velocity of money is 4 when \( r = r_2 \), then the quantity of money is $3,000.

52. Refer to Figure 7-2. Assume the money market is always in equilibrium, and suppose \( r_1 = 0.08 \);
\[ r_2 = 0.12; \ Y_1 = 13,000; \ Y_2 = 10,000; \ P_1 = 1.0; \text{ and } P_2 = 1.2. \] Which of the following statements is correct? When \( P = P_2 \),

a. investment is lower than it is when \( P = P_1 \).
b. nominal output is higher than it is when \( P = P_1 \).
c. the expected rate of inflation is higher than it is when \( P = P_1 \).
d. the velocity of money is higher than it is when \( P = P_1 \).

53. When there is an excess supply of money,

a. people will try to get rid of money causing interest rates to rise. Investment increases.
b. people will try to get rid of money causing interest rates to fall. Investment decreases.
c. people will try to get rid of money causing interest rates to fall. Investment increases.
d. people will try to get rid of money causing interest rates to rise. Investment decreases.

54. Which of the following statements is correct?

a. Both liquidity preference theory and classical theory assume the interest rate adjusts to bring the money market into equilibrium.
b. Both liquidity preference theory and classical theory assume the price level adjusts to bring the money market into equilibrium.
c. Liquidity preference theory assumes the interest rate adjusts to bring the money market into equilibrium; classical theory assumes the price level adjusts to bring the money market into equilibrium.
d. Liquidity preference theory assumes the price level adjusts to bring the money market into equilibrium; classical theory assumes the interest rate adjusts to bring the money market into equilibrium.

55. Other things the same, which of the following happens if the price level rises?

b. Initially there is an excess demand for money in the money market.
c. The interest rate rises.
d. All of the above are correct.

56. Which of the following properly describes the interest-rate effect?

a. A higher price level leads to higher money demand; higher money demand leads to higher interest rates; a higher interest rate increases the quantity of goods and services demanded.
b. A higher price level leads to higher money demand; higher money demand leads to lower interest rates; a higher interest rate reduces the quantity of goods and services demanded.
c. A lower price level leads to lower money demand; lower money demand leads to lower interest rates; a lower interest rate reduces the quantity of goods and services demanded.
d. A lower price level leads to lower money demand; lower money demand leads to lower interest rates; a lower interest rate increases the quantity of goods and services demanded.

57. In which of the following cases does the aggregate-demand curve shift to the right?

a. The price level rises, causing the interest rate to fall.
b. The price level falls, causing the interest rate to fall.
c. The money supply increases, causing the interest rate to fall.
d. The money supply decreases, causing the interest rate to fall.

58. Changes in the interest rate

a. shift aggregate demand whether they are caused by changes in the price level or by changes
in fiscal or monetary policy.
b. shift aggregate demand if they are caused by changes in the price level, but not if they are caused by changes in fiscal or monetary policy.
c. shift aggregate demand if they are caused by fiscal or monetary policy, but not if they are caused by changes in the price level.
d. do not shift aggregate demand.

59. Which of the following sequences best explains the negative slope of the aggregate-demand curve?
   a. price level ↑ ⇒ demand for money ↓ ⇒ equilibrium interest rate ↑ ⇒ quantity of goods and services demanded ↓
   b. price level ↑ ⇒ demand for money ↑ ⇒ equilibrium interest rate ↓ ⇒ quantity of goods and services demanded ↓
   c. price level ↓ ⇒ demand for money ↓ ⇒ equilibrium interest rate ↓ ⇒ quantity of goods and services demanded ↑
   d. price level ↓ ⇒ equilibrium interest rate ↓ ⇒ demand for money ↑ ⇒ quantity of goods and services demanded ↑

60. In the long run, fiscal policy influences
   a. saving, investment, and growth; in the short run, fiscal policy primarily influences technology and the production function.
   b. saving, investment, and growth; in the short run, fiscal policy primarily influences the aggregate demand for goods and services.
   c. technology and the production function; in the short run, fiscal policy primarily influences saving, investment, and growth.
   d. the aggregate demand for goods and services; in the short run, fiscal policy primarily influences technology and the production function.

61. If the \( MPC = \frac{4}{5} \), then the government purchases multiplier is
   a. \( \frac{5}{4} \).
   b. \( \frac{4}{5} \).
   c. 5.
   d. 20.

62. If the multiplier is \( 5.25 \), then the \( MPC \) is
   a. 0.19.
   b. 0.68.
   c. 0.81.
   d. 0.84.

63. In a certain economy, when income is $100, consumer spending is $60. The value of the multiplier for this economy is 4. It follows that, when income is $101, consumer spending is
   a. $60.25.
   b. $60.75.
   c. $61.33.
   d. $64.00.

64. In a certain economy, when income is $1000, consumer spending is $800. The value of the multiplier for this economy is 2.5. It follows that, when income is $1020, consumer spending is
a. $816. For this economy, an initial increase of $100 in consumer spending translates into a $250 increase in aggregate demand.

b. $816. For this economy, an initial increase of $100 in consumer spending translates into a $400 increase in aggregate demand.

c. $812. For this economy, an initial increase of $100 in consumer spending translates into a $250 increase in aggregate demand.

d. $812. For this economy, an initial increase of $100 in consumer spending translates into an $800 increase in aggregate demand.

Figure 7-3. On the left-hand graph, MS represents the supply of money and MD represents the demand for money; on the right-hand graph, AD represents aggregate demand. The usual quantities are measured along the axes of both graphs.

65. Refer to Figure 7-3. Suppose the multiplier is 5 and the government increases its purchases by $15 billion. Also, suppose the AD curve would shift from AD\(_1\) to AD\(_2\) if there were no crowding out; the AD curve actually shifts from AD\(_1\) to AD\(_3\) with crowding out. Also, suppose the horizontal distance between the curves AD\(_1\) and AD\(_3\) is $55 billion. The extent of crowding out, for any particular level of the price level, is

a. $75 billion.

b. $40 billion.

c. $30 billion.

d. $20 billion.

66. Refer to Figure 7-3. Suppose the multiplier is 3 and the government increases its purchases by $25 billion. Also, suppose the AD curve would shift from AD\(_1\) to AD\(_2\) if there were no crowding out; the AD curve actually shifts from AD\(_1\) to AD\(_3\) with crowding out. Finally, assume the horizontal distance between the curves AD\(_1\) and AD\(_3\) is $40 billion. The extent of crowding out, for any particular level of the price level, is

a. $15 billion.

b. $40 billion.

c. $35 billion.

d. $95 billion.

67. Refer to Figure 7-3. Suppose the graphs are drawn to show the effects of an increase in government purchases. If it were not for the increase in \(r\) from \(r_1\) to \(r_2\), then

a. there would be no crowding out.

b. the full multiplier effect of the increase in government purchases would be realized.
c. the AD curves that actually apply, before and after the change in government purchases, would be separated horizontally by the distance equal to the multiplier times the change in government purchases.

d. All of the above are correct.

68. The term crowding-out effect refers to
   a. the reduction in aggregate supply that results when a monetary expansion causes the interest rate to decrease.
   b. the reduction in aggregate demand that results when a monetary expansion causes the interest rate to decrease.
   c. the reduction in aggregate demand that results when a fiscal expansion causes the interest rate to increase.
   d. the reduction in aggregate demand that results when a decrease in government spending or an increase in taxes causes the interest rate to increase.

69. A decrease in government spending
   a. increases the interest rate and so investment spending increases.
   b. increases the interest rate and so decreases investment spending decreases.
   c. decreases the interest rate and so investment spending increases.
   d. decreases the interest rate and so investment spending decreases.

70. If the MPC is 0.8 and there is no crowding-out effect, then an initial increase in aggregate demand of $120 billion will eventually shift the aggregate demand curve to the right by
   a. $216 billion.
   b. $150 billion.
   c. $600 billion.
   d. $480 billion.

71. Assume the multiplier is 5 and that the crowding-out effect is $30 billion. An increase in government purchases of $20 billion will shift the aggregate-demand curve to the
   a. right by $130 billion.
   b. right by $70 billion.
   c. right by $50 billion.
   d. right by $10 billion.

72. A tax increase has
   a. a multiplier effect but not a crowding out effect
   b. a crowding out effect but not a multiplier effect
   c. both a crowding out and multiplier effect
   d. neither a multiplier or crowding out effect

73. Suppose the MPC is 0.60. Assume there is no crowding out effect. If the government increases expenditures by $200 billion, then by how much does aggregate demand shift to the right? If the government decreases taxes by $200 billion, then by how much does aggregate demand shift to the right?
   a. $300 billion and $180 billion
   b. $300 billion and $300 billion
   c. $500 billion and $300 billion
   d. $500 billion and $500 billion
74. Suppose there was a large increase in net exports. If the Central Bank wanted to stabilize output, it could
   a. increase the money supply, which will reduce interest rates.
   b. decrease the money supply, which will reduce interest rates.
   c. increase the money supply, which will increase interest rates.
   d. decrease the money supply, which will increase interest rates.

75. The price of imported oil rises. If the government wanted to stabilize output, which of the following could it do?
   a. increase government expenditures or increase the money supply
   b. increase government expenditures or decrease the money supply
   c. decrease government expenditures or increase the money supply
   d. decrease government expenditures or decrease the money supply

76. Which of the following policies would Keynes's followers support when an increase in business optimism shifts the aggregate demand curve away from long-run equilibrium?
   a. increase taxes
   b. increase government expenditures
   c. increase the money supply
   d. All of the above are correct.

77. Critics of stabilization policy argue that
   a. policy affects aggregate demand quickly, but the effects on aggregate demand are long-lived.
   b. policy affects aggregate demand with a lag, and the effects on aggregate demand are long-lived.
   c. policy affects aggregate demand with a lag, but the effects are short-lived.
   d. policy does not affect aggregate demand.

78. Automatic stabilizers
   a. increase the problems that lags cause in using fiscal policy as a stabilization tool.
   b. are changes in taxes or government spending that increase aggregate demand without requiring policy makers to act when the economy goes into recession.
   c. are changes in taxes or government spending that policy makers quickly agree to when the economy goes into recession.
   d. All of the above are correct.

79. In the long run, inflation
   a. and unemployment are primarily determined by labor market factors.
   b. and unemployment are primarily determined by the rate of money supply growth.
   c. is primarily determined by the rate of money supply growth while unemployment is primarily determined by labor market factors.
   d. is primarily determined by labor market factors while unemployment is primarily determined by the rate of money supply growth.

80. A basis for the slope of the short-run Phillips curve is that when unemployment is high there are
   a. downward pressures on prices and wages.
   b. downward pressures on prices and upward pressures on wages.
   c. upward pressures on prices and downward pressures on wages.
d. upward pressures on prices and wages.

81. When aggregate demand shifts right along the short-run aggregate supply curve, unemployment
   a. falls, so there are upward pressures on wages and prices.
   b. falls, so there are downward pressures on wages and prices.
   c. rises, so there are upward pressures on wages and prices.
   d. rises, so there are downward pressures on wages and prices.

82. The short-run Phillips curve shows the combinations of
   a. unemployment and inflation that arise in the short run as aggregate demand shifts the economy
      along the short-run aggregate supply curve.
   b. unemployment and inflation that arise in the short run as short-run aggregate supply shifts the
      economy along the aggregate demand curve.
   c. real GDP and the price level that arise in the short run as short-run aggregate supply shifts the
      economy along the aggregate demand curve.
   d. None of the above is correct.

83. Suppose that the money supply increases. In the short run this decreases unemployment according to
   a. both the short-run Phillips curve and the aggregate demand and aggregate supply model.
   b. neither the short-run Phillips curve nor the aggregate demand and aggregate supply model.
   c. the short-run Phillips curve, but not according to the aggregate demand and supply model.
   d. the aggregate demand and aggregate supply model, but not according to the short-run Phillips
      curve.

**Figure 7-4.** In the left panel there is price in the vertical axis and output on the horizontal axis. In
the right panel there is inflation on the vertical axis and unemployment on the horizontal axis.

84. Refer to Figure 7-4. If the economy starts at C and 1, then in the short run, an increase in the
    money supply growth rate moves the economy to
    a. A and 1
    b. B and 2
    c. C and 3
    d. None of the above is correct.

85. Refer to Figure 7-4. If the economy starts at C and 1, then in the short run, an increase in
    government expenditures moves the economy to
    a. B and 2.
b. B and 3.
c. B and 3.
d. None of the above is correct.

86. Refer to Figure 7-4. If the economy starts at C and 1, then in the short run, a decrease in taxes moves the economy to
a. D and 2.
b. D and 3.
c. back to C and 1.
d. None of the above is correct.

87. Refer to Figure 7-4. If the economy starts at C and 1, then in the short run, a decrease in aggregate demand moves the economy to
a. A and 2.
b. D and 3.
c. E and 3.
d. None of the above is correct.

88. Refer to Figure 7-4. If the economy starts at C and 1, then in the short run, a decrease in the money supply moves the economy to
a. E and 1.
b. D and 2.
c. D and 3.
d. None of the above is correct.

89. Refer to Figure 7-4. If the economy starts at C and 1, then in the short run, a decrease in government expenditures moves the economy to
a. D and 2
b. D and 3.
c. E and 3.
d. None of the above is correct.

90. Refer to Figure 7-4. If the economy starts at C and 1, then in the short run, an increase in taxes moves the economy to
a. B and 2.
b. D and 3.
c. E and 2.
d. None of the above is correct.

91. Which of the following increases inflation and reduces unemployment in the short run?
   a. either an increase in government expenditures by itself or an increase in the money supply growth rate by itself
   b. an increase in government expenditures, but not an increase in the money supply growth rate
   c. an increase in the money supply growth rate, but not an increase in government expenditures
   d. neither an increase in government expenditures nor an increase in the money supply

92. Suppose that the central bank unexpectedly increases the growth rate of the money supply. In the short run, the effects of this are shown by
a. moving to the left along the short-run Phillips curve.
b. moving to the right along the short-run Phillips curve.
c. shifting the short-run Phillips curve to the right.
d. shifting the short-run Phillips curve to the left.

93. If the long-run Phillips curve shifts to the right, then for any given rate of money growth and inflation the economy has
a. higher unemployment and lower output.
b. higher unemployment and higher output.
c. lower unemployment and lower output.
d. lower unemployment and higher output.

94. A change in expected inflation shifts
a. the short-run Phillips curve, but not the long run Phillips curve.
b. the long-run Phillips curve, but not the long run Phillips curve.
c. neither the short-run nor the long-run Phillips curve.
d. both the short-run and long-run Phillips curve right.

95. If inflation expectations rise, the short-run Phillips curve shifts
a. right, so that at any inflation rate unemployment is higher in the short run than before.
b. left, so that at any inflation rate unemployment is higher in the short run than before.
c. right, so that at any inflation rate unemployment is lower in the short run than before.
d. left, so that at any inflation rate unemployment is lower in the short run than before.

96. Suppose expected inflation and actual inflation are both relatively high, and unemployment is at its natural rate. If the Fed then pursues a contractionary monetary policy, which of the following results would be expected in the short run?
a. Expected inflation would exceed actual inflation, and unemployment would exceed its natural rate.
b. Expected inflation would exceed actual inflation, and unemployment would be below its natural rate.
c. Actual inflation would exceed expected inflation, and unemployment would exceed its natural rate.
d. Actual inflation would exceed expected inflation, and unemployment would be below its natural rate.

97. If the unemployment rate is below the natural rate, then
a. inflation is less than expected. As inflation expectations are revised the short-run Phillips curve will shift right.
b. inflation is less than expected. As inflation expectations are revised the short-run Phillips curve will shift left.
c. inflation is greater than expected. As inflation expectations are revised the short-run Phillips curve will shift left.
d. inflation is greater than expected. As inflation expectations are revised the short-run Phillips curve will shift right.