1. Productivity is the amount of goods and services
   a. an economy produces. It is not linked to a nation’s economic policies.
   b. an economy produces. It is linked to a nation’s economic policies.
   c. produced for each hour of a worker’s time. It is not linked to a nation’s economic policies.
   d. produced for each hour of a worker’s time. It is linked to a nation’s economic policies.

   ANSWER: d

2. Which of the following can be measured by the level of real GDP per person?
   a. productivity and the standard of living
   b. productivity but not the standard of living
   c. the standard of living but not productivity
   d. neither the standard of living nor productivity

   ANSWER: c

3. Last year real GDP per person in the imaginary nation of Olympus was 4,250. The year before it was 4,100. By about what percentage did Olympian real GDP per person grow during the period?
   a. 1.6 percent
   b. 2.5 percent
   c. 3.7 percent
   d. 6 percent

   ANSWER: c

4. Last year the imaginary nation of Freedonia had a population of 2,800 and real GDP of 16,800,000. This year it had a population of 2,700 and real GDP of 15,390,000. About what was the growth rate of real GDP per person between last year and this year?
   a. -5.3 percent
   b. -5 percent
   c. 5 percent
   d. 5.3 percent

   ANSWER: b

5. In 2011, the imaginary nation of Maconia had a population of 8,200 and real GDP of 210,500. Maconia had 5% growth in real GDP per person. In 2012 it had a population of 8,400. To the nearest dollar what was real GDP in Maconia in 2012?
   a. 216,815
   b. 221,025
   c. 226,416
   d. None of the above is correct.

   ANSWER: c
6. In 2010, the imaginary nation of Bovina had a population of 5,000 and real GDP of 500,000. In 2011 it had a population of 5,100 and real GDP of 520,200. During 2011 real GDP per person in Bovina grew by 
   a. 2 percent, which is high compared to average U.S. growth over the last one-hundred years. 
   b. 2 percent, which is about the same as average U.S. growth over the last one-hundred years. 
   c. 4 percent, which is high compared to average U.S. growth over the last one-hundred years. 
   d. 4 percent, which is about the same as average U.S. growth over the last one-hundred years.

ANSWER: c

7. In 2012, the imaginary nation of Platland had a population of 10,000 and real GDP of 42,000,000. During the year its real GDP per person grew by about 1.94%. Which of the following sets of growth rates is consistent with this growth in real GDP per person?
   a. 3% population growth and 4% real GDP growth
   b. 3% population growth and 5% real GDP growth
   c. 6% population growth and 4% real GDP growth
   d. 6% population growth and 5% real GDP growth

ANSWER: b

8. For a given year, productivity in a particular country is most closely matched with that country's 
   a. level of real GDP over that year.
   b. level of real GDP divided by hours worked over that year.
   c. growth rate of real GDP divided by hours worked over that year.
   d. growth rate of real GDP per person over that year.

ANSWER: b

9. Over the last ten years productivity grew more slowly in Iberia than in Aire while the population and total hours worked remained the same in both countries. It follows that
   a. real GDP per person must be lower in Iberia than in Aire.
   b. real GDP per person grew more slowly in Iberia than in Aire.
   c. the standard of living must be higher in Iberia than in Aire.
   d. All of the above are correct.

ANSWER: b

10. Which of the following can explain faster growth of real GDP in country A than in Country B?
    a. both greater population growth and greater productivity growth in Country A
    b. greater population growth in Country A, but not greater productivity growth in Country A
    c. greater productivity growth in Country A, but not greater population growth in Country A
    d. neither greater population growth nor greater productivity growth in Country A

ANSWER: a

11. Miller's Dairy produces 960 gallons of milk per day. Each milker at the dairy works 8 hours per day and produces the same number of gallons of milk per hour. If the Dairy's productivity is 12 gallons of milk per hour of labor, then how many milkers does the shop employ?
    a. 8
    b. 10
    c. 80
12. Alexis and Tara both mine salt. Alexis mines 300 pounds in 20 hours. Tara mines 400 pounds in 40 hours. Which of the following is correct?
   a. Alexis’s productivity is greater than Tara’s. This difference could be explained by Alexis having more physical capital than Tara.
   b. Alexis’s productivity is greater than Tara’s. This difference cannot be explained by a difference in the physical capital each has.
   c. Tara’s productivity is greater than Alexis’s. This difference could be explained by Tara having more physical capital than Alexis.
   d. Tara’s productivity is greater than Alexis’s. This difference cannot be explained by a difference in the physical capital each has.

   ANSWER:        a

13. Daniel owns a coffee kiosk. All of his employees work 8 hours per day. In 2011, he employed 6 people who produced a total of 912 cups of coffee each day. In 2012, he hired a seventh employee and production increased to 1008 cups of coffee each day. In Daniel's kiosk, productivity
   a. increased by about 10.5 percent
   b. increased by 9.5 percent
   c. decreased by about 5.6 percent
   d. decreased by about 5.3 percent

   ANSWER:        d

14. In 2011, Modern Electronics, Inc. produced 60,000 calculators, employing 80 workers, each of whom worked 8 hours per day. In 2012, the same firm produced 76,500 calculators, employing 85 workers, each of whom worked 10 hours per day. Productivity at Modern Electronics
   a. decreased by 4%
   b. remained constant.
   c. increased by 8.33%
   d. increased by 27.50%

   ANSWER:        a

15. Country A has a population of 1,000, of whom 800 work 8 hours a day to make 128,000 final goods. Country B has a population of 2,000, of whom 1,800 work 6 hours a day to make 270,000 final goods.
   a. Country A has higher productivity and higher real GDP per person than country B.
   b. Country A has lower productivity and lower real GDP per person than country B.
   c. Country A has higher productivity, but lower real GDP per person than country B.
   d. Country B has lower productivity, but higher real GDP per person than country B.

   ANSWER:        b

16. Country A had a population of 2,000, of whom 1,300 worked an average of 8 hours a day and had a productivity of 5. Country B had a population of 2,500, of whom 1,700 worked 8 hours a day and had productivity of 4.
   a. A had the higher level of real GDP and real GDP per person.
   b. A had the higher level of real GDP and Country B had the higher level of real GDP per person.
c. B had the higher level of real GDP and Country A had the higher level of real GDP per person.

\[ \text{ANSWER: c} \]

17. Human capital is the
   a. knowledge and skills that workers acquire through education, training, and experience.
   b. stock of equipment and structures that is used to produce goods and services.
   c. total number of hours worked in an economy.
   d. same thing as technological knowledge.

\[ \text{ANSWER: a} \]

18. Janet is a farmer. Which of the following are included in her human capital?
   a. her tractor and what she’s learned from experience
   b. her tractor but not what she’s learned from experience
   c. what she’s learned from experience but not her tractor
   d. neither her tractor nor what she’s learned from experience

\[ \text{ANSWER: c} \]

19. Which of the following lists contains, in this order, natural resources, human capital, and physical capital?
   a. For a restaurant: the land the restaurant was built on, the money it borrowed to buy supplies, the freezers where the chops and steaks are kept.
   b. For a furniture company: wood, the skills and knowledge of its workers, saws.
   c. For a railroad: fuel, railroad engines, railroad tracks.
   d. None of the above is correct.

\[ \text{ANSWER: b} \]

20. Which of the following statements is correct?
   a. Productivity is a determinant of human capital per worker.
   b. Technological knowledge is a determinant of productivity.
   c. Human capital and technological knowledge are the same thing.
   d. All of the above are correct.

\[ \text{ANSWER: b} \]

21. Suppose a country reduces restrictions on how many hours people can work. If reducing these restrictions increase the total number of hours worked in the economy, but all other factors that determine output are held fixed, then
   a. productivity and output both rise.
   b. productivity rises and output falls.
   c. productivity falls and output rises.
   d. productivity and output fall.

\[ \text{ANSWER: c} \]

22. An economy’s production function has the constant-returns-to-scale property. If the economy’s labor force doubled and all other inputs stayed the same, then real GDP would
   a. stay the same.
   b. increase by exactly 50 percent.

\[ \text{ANSWER: b} \]
23. A certain production process requires only two types of inputs — capital and labor. In 2006, 100 units of labor and 50 units of capital were employed, and 100 units of output were produced. In 2013, 112 units of labor and 56 units of capital were employed. If the production process displays constant returns to scale, then how many units of output were produced in 2013?
   a. 100
   b. 112
   c. 124
   d. 144
   
   **ANSWER:** d

24. An economy's production form takes the form $Y = AF(L, K, H, N)$. If the production function has the constant-returns-to-scale property, then it is possible that the specific form of the production function is
   a. $Y = 4L + 2K + 3H + N$
   b. $Y = (L + K + H + N)/4$
   c. $Y = (L \cdot K \cdot H \cdot N)^{1/4}$
   d. $Y = \sqrt[4]{L \cdot K \cdot H \cdot N}$
   
   **ANSWER:** c

25. "When workers have a relatively small quantity of capital to use in producing goods and services, giving them an additional unit of capital increases their productivity by a relatively large amount." This statement
   a. is an assertion that production functions have the property of constant returns to scale.
   b. is consistent with the view that capital is subject to diminishing returns.
   c. is inconsistent with the view that it is easier for a country to grow fast if it starts out relatively poor.
   d. All of the above are correct.
   
   **ANSWER:** b

26. All else equal, if there are diminishing returns, then which of the following is true if a country increases its capital by one unit?
   a. Output will rise by more than it did when the previous unit was added.
   b. Output will rise but by less than it did when the previous unit was added.
   c. Output will fall by more than it did when the previous unit was added.
   d. Output will fall but by less than it did when the previous unit was added.
   
   **ANSWER:** b

27. Country A and country B both increase their capital stock by one unit. Output in country A increases by 12 while output in country B increases by 15. Other things the same, diminishing returns implies that country A is
   a. richer than Country B. If Country A adds another unit of capital, output will increase by more than 12 units.
   b. richer than Country B. If Country A adds another unit of capital, output will increase by less than 12 units.
   c. poorer than Country B. If Country A adds another unit of capital, output will increase by more
3.2. poorer than Country B. If Country A adds another unit of capital, output will increase by less than 12 units.

**ANSWER:** b

28. On a production function, as capital per worker increases, output per worker
   a. increases. This increase is larger at larger values of capital per worker.
   b. increases. This increase is smaller at larger values of capital per worker.
   c. decreases. This decrease is larger at larger value of capital per worker.
   d. decreases. This decrease is smaller at larger value of capital per worker.

**ANSWER:** b

29. Other things equal, relatively poor countries tend to grow
   a. slower than relatively rich countries; this is called the poverty trap.
   b. slower than relatively rich countries; this is called the fall-behind effect.
   c. faster than relatively rich countries; this is called the catch-up effect.
   d. faster than relatively rich countries; this is called the constant-returns-to-scale effect.

**ANSWER:** c

30. The logic behind the catch-up effect is that
   a. workers in countries with low incomes will work more hours than workers in countries with high incomes.
   b. the capital stock in rich countries deteriorates at a higher rate because it already has a lot of capital.
   c. new capital adds more to production in a country that doesn't have much capital than in a country that already has much capital.
   d. None of the above is correct.

**ANSWER:** c

31. Which of the following is consistent with the catch-up effect?
   a. The United States had a higher growth rate before 1900 than after.
   b. After World War II the United States had lower growth rates than war-ravaged European countries.
   c. Although the United States has a relatively high level of output per person, its growth rate is rather modest compared to some countries.
   d. All of the above are correct.

**ANSWER:** d

32. Suppose a U.S. automaker builds and operates a new factory in Italy. Future production from such an investment will
   a. increase Italian GDP more than it increases Italian GNP.
   b. increase Italian GNP more than it increases Italian GDP.
   c. have no affect on Italian GNP, but will increase Italian GDP.
   d. have no affect on either Italian GDP or GNP.

**ANSWER:** a
33. The opening of a new American-owned factory in Algeria would tend to increase Algeria's GDP more than it increases Algeria's GNP because
   a. some of the income from the factory accrues to people who do not live in Algeria.
   b. gross domestic product is income earned within a country by both residents and nonresidents, whereas gross national product is the income earned by residents of a country while producing both at home and abroad.
   c. all of the income from the factory is included in Algeria's GDP.
   d. All of the above are correct.

   ANSWER: d

34. Buskin's Corporation has issued 2 million shares of stock. Its earnings were $10 million, of which it retained 40 percent. What was the dividend per share?
   a. $2.
   b. $3.
   c. $5.
   d. $8.

   ANSWER: b

35. A mutual fund
   a. is a financial market where small firms mutually agree to sell stocks and bonds to raise funds.
   b. is funds set aside by local governments to lend to small firms who want to invest in projects that are mutually beneficial to the firm and community.
   c. sells stocks and bonds on behalf of small and less known firms who would otherwise have to pay high interest to obtain credit.
   d. is an institution that sells shares to the public and uses the proceeds to buy a selection of various types of stocks, bonds, or both stocks and bonds.

   ANSWER: d

36. A bond buyer is a
   a. saver. Long term bonds have less risk than short term bonds.
   b. saver. Long term bonds have more risk than short term bonds.
   c. borrower. Long term bonds have less risk than short term bonds.
   d. borrower. Long term bonds have more risk than short term bonds.

   ANSWER: b

37. In national income accounting, we use which of the following pairs of terms interchangeably?
   a. “investment” and “private saving”
   b. “investment” and “purchases of stocks and bonds”
   c. “saving” and “national saving”
   d. “public saving” and “government tax revenue minus government spending”

   ANSWER: d

38. Suppose private saving in a closed economy is $12b and investment is $10b.
   a. National saving must equal $12b.
   b. Public saving must equal $2b.
   c. The government budget surplus must equal $2b.
   d. The government budget deficit must equal $2b.
39. For a closed economy, GDP is $12 trillion, consumption is $7 trillion, taxes net of transfers are $3 trillion and the government runs a deficit of $1 trillion. What are private saving and national saving?
   a. $5 trillion and $3 trillion, respectively
   b. $5 trillion and $1 trillion, respectively
   c. $2 trillion and $3 trillion, respectively
   d. $2 trillion and $1 trillion, respectively

   **ANSWER:** d

40. For a closed economy, GDP is $11 trillion, consumption is $7 trillion, taxes are $2.5 trillion and the government runs a surplus of $1 trillion. What are private saving and national saving?
   a. $1.5 trillion and $2.5 trillion, respectively
   b. $2.5 trillion and $1.5 trillion, respectively
   c. $2.5 trillion and $2.5 trillion, respectively
   d. $1.5 trillion and $1.5 trillion, respectively

   **ANSWER:** a

41. For an imaginary closed economy, \( T = 5,000 \), \( S = 11,000 \), \( C = 48,000 \), and the government is running a budget surplus of $1,000. Then
   a. private saving = $10,000 and GDP = $55,000.
   b. private saving = $10,000 and GDP = $63,000.
   c. private saving = $12,000 and GDP = $67,000.
   d. private saving = $12,000 and GDP = $69,000.

   **ANSWER:** b

42. Consider three different closed economies with the following national income statistics. Country A has taxes of $40 billion, transfers of $20 billion, and government expenditures on goods and services of $30 billion. Country B has private savings of $60 billion, and investment expenditures of $40 billion. Country C has GDP of $300 billion, investment of $90, consumption of $180 billion, taxes of $60 billion and transfers of $20 billion. From this information, we know that
   a. country A has the largest government budget deficit.
   b. country B has the largest government budget deficit.
   c. country C has the largest government budget deficit.
   d. The government budget deficit is equal in all three countries.

   **ANSWER:** b

43. In examining the national income accounts of the closed economy of Nepotocracy you see that this year it had taxes of $100 billion, transfers of $20 billion, and government purchases of goods and services of $70 billion. You also notice that last year it had private saving of $70 billion and investment of $50 billion. In which year did Nepotocracy have a budget deficit of $20 billion?
   a. this year and last year
   b. this year but not last year

   **ANSWER:** b
c. last year but not this year  
d. neither this year nor last year

ANSWER:  
c  

44. The country of Yokovia does not trade with any other country. Its GDP is $20 billion. Its government collects $2 billion in taxes. Consumption equals $15 billion and investment equals $2 billion. What is public saving in Yokovia, and what is the value of the goods and services purchased by the government of Yokovia?  
   a. -$2 billion and $1 billion.  
   b. $1 billion and $1 billion.  
   c. -$1 billion and $3 billion.  
   d. -$2 billion and $3 billion.

ANSWER:  
c  

45. An increase in the government’s budget surplus means  
   a. public saving is greater than $0 and increasing.  
   b. public saving is greater than $0 and decreasing.  
   c. public saving is less than $0 and increasing.  
   d. public saving is less than $0 and decreasing.

ANSWER:  
a  

46. In a closed economy, if Y remained the same, but G rose, T rose by the same amount as G, and C fell but by less than the increase in T, what would happen to private and national saving?  
   a. national saving would fall and private saving would rise  
   b. national saving would rise and private saving would fall  
   c. both national saving and private saving would fall  
   d. None of the above is correct.

ANSWER:  
c  

47. The Eye of Horus incense company has $10 million in cash which it has accumulated from retained earnings. It was planning to use the money to build a new factory. Recently, the rate of interest has increased. The increase in the rate of interest should  
   a. not influence the decision to build the factory because The Eye of Horus doesn't have to borrow any money.  
   b. not influence the decision to build the factory because its stockholders are expecting a new factory.  
   c. make it more likely that The Eye of Horus will build the factory because a higher interest rate will make the factory more valuable.  
   d. make it less likely that The Eye of Horus will build the factory because the opportunity cost of the $10 million is now higher.

ANSWER:  
d  

48. Other things the same, when the interest rate rises,  
   a. people would want to lend more, making the supply of loanable funds increase.  
   b. people would want to lend less, making the supply of loanable funds decrease.  
   c. people would want to lend more, making the quantity of loanable funds supplied increase.  
   d. people would want to lend less, making the quantity of loanable funds supplied decrease.

ANSWER:  
c
49. If there is a shortage of loanable funds, then
   a. the quantity of loanable funds demanded is greater than the quantity of loanable funds supplied and the interest rate is above equilibrium.
   b. the quantity of loanable funds demanded is greater than the quantity of loanable funds supplied and the interest rate is below equilibrium.
   c. the quantity of loanable funds supplied is greater than the quantity of loanable funds demanded and the interest rate is above equilibrium.
   d. the quantity of loanable funds supplied is greater than the quantity of loanable funds demanded and the interest rate is below equilibrium.

   **ANSWER:** b

50. Which of the following would necessarily increase the equilibrium interest rate?
   a. The demand for and the supply of loanable funds shift right.
   b. The demand for and the supply of loanable funds shift left.
   c. The demand for loanable funds shifts right and the supply of loanable funds shifts left.
   d. The demand for loanable funds shifts left and the supply of loanable funds shifts right.

   **ANSWER:** c

51. What would happen in the market for loanable funds if the government were to decrease the tax rate on interest income?
   a. There would be an increase in the amount of loanable funds borrowed.
   b. There would be a reduction in the amount of loanable funds borrowed.
   c. There would be no change in the amount of loanable funds borrowed.
   d. The change in loanable funds is uncertain.

   **ANSWER:** a

52. Suppose the government were to replace the income tax with a consumption tax so that interest on savings was not taxed. The result would be that the interest rate
   a. and investment both would increase.
   b. and investment both would decrease.
   c. would increase and investment would decrease.
   d. would decrease and investment would increase.

   **ANSWER:** d

53. In the loanable funds model, an increase in an investment tax credit would create a
   a. shortage at the former equilibrium interest rate. This shortage would lead to a rise in the interest rate.
   b. shortage at the former equilibrium interest rate. This shortage would lead to a fall in the interest rate.
   c. surplus at the former equilibrium interest rate. This surplus would lead to a rise in the interest rate.
   d. surplus at the former equilibrium interest rate. This surplus would lead to a fall in the interest rate.

   **ANSWER:** a

54. Suppose government expenditures on goods and services increase, transfers are unchanged, and taxes rise by less than the increase in expenditures. These changes in the government's budget cause
   a. both the equilibrium interest rate and the equilibrium quantity of loanable funds to fall.
   b. both the equilibrium interest rate and the equilibrium quantity of loanable funds to rise.
   c. the equilibrium interest rate to rise and the equilibrium quantity of loanable funds to fall.

   **ANSWER:** c
d. the equilibrium interest rate to fall and the equilibrium quantity of loanable funds to rise.

ANSWER: c

55. Who in the adult population is counted as “employed” in U.S. labor statistics?
   a. people who are temporarily absent from their job and people who work without pay in a family member’s business
   b. people who are temporarily absent from their job but not people who work without pay in a family member’s business
   c. people who work without pay in a family member’s business but not people who are temporarily absent from their job
   d. neither people who are temporarily absent from their job nor people who work without pay in a family member’s business

ANSWER: a

56. Amy is working part-time. Tavaris is on temporary layoff. Who is included in the Bureau of Labor Statistics’ “employed” category?
   a. only Amy
   b. only Tavaris
   c. both Amy and Tavaris
   d. neither Amy nor Tavaris

ANSWER: a

57. Which of the following includes everyone in the adult population that the Bureau of Labor Statistics counts as “unemployed”?
   a. anyone who is not employed
   b. anyone who is not employed, is available for work, and has looked for work in the past four weeks
   c. anyone who is not employed, is available for work, has looked for work in the past four weeks, and anyone who is waiting to be recalled from a job from which they have been laid off
   d. anyone who is not employed, is available for work, has looked for work in the past four weeks, anyone who is waiting to be recalled from a job from which they have been laid off, and anyone who is employed part time and has searched for full time employment in the past 4 weeks

ANSWER: c

58. Who among the following would be counted as “unemployed”?
   a. Shasta, who is waiting to be recalled to a job from which she has been laid off.
   b. Karen, who neither has a job nor is looking for one.
   c. Mary, who worked only 35 hours last week.
   d. None of the above is correct.

ANSWER: a

59. Tatiana is waiting to be recalled to a job from which she was laid off. Ivan was fired but has not looked for work during the last two months. Who does the Bureau of Labor Statistics count as “unemployed”?
   a. Tatiana but not Ivan
   b. Ivan but not Tatiana
   c. both Ivan and Tatiana
   d. neither Ivan nor Tatiana

ANSWER: c
60. Karena was laid off, but she is expecting to be recalled. She has not looked for work since being laid off. Nathan is not employed, nor was he laid off. Who is counted as “unemployed” in the U.S. labor force statistics?
   a. Karena and Nathan, even if Nathan has not looked for work during the previous four weeks
   b. Karena and Nathan, if Nathan has looked for work during the previous four weeks
   c. not Karena but Nathan, even if Nathan has not looked for work during the previous four weeks
   d. not Karena but Nathan, if Nathan has looked for work during the previous four weeks

   ANSWER:  b

61. Christopher is an unpaid, stay-at-home father who works as a volunteer at the local Habitat for Humanity chapter. Currently, Christopher is not looking for a paid job. The Bureau of Labor Statistics counts Christopher as
   a. unemployed and in the labor force.
   b. unemployed but not in the labor force.
   c. in the labor force but not unemployed.
   d. neither in the labor force nor unemployed.

   ANSWER:  d

62. Suppose that the adult population in the country of Atlantis is 115 million. If 80 million people are employed and 5 million are unemployed, then
   a. 30 million are not in the labor force.
   b. 35 million are in the labor force.
   c. 75 million are in the labor force.
   d. 35 million are not in the labor force.

   ANSWER:  a

63. All else equal, which of the following would increase the unemployment rate?
   (i) an increase in the number of women who return to work after being stay-at-home mothers
   (ii) a preference among older men to retire early
   (iii) an increase in the maximum number of weeks for which someone can receive government unemployment benefits
   (iv) an increase in the number of previously unemployed women who stop looking for work and become discouraged workers
   a. (i) and (ii) only
   b. (iii) only
   c. (i) and (iii) only
   d. (ii), (iii), and (iv) only

   ANSWER:  c

64. In 2009, based on concepts similar to those used to estimate U.S. employment figures, the Japanese adult non-institutionalized population was 110,272 million, the labor force was 65,362 million, and the number of people employed was 62,242 million. According to these numbers, the Japanese labor-force participation rate and unemployment rate were about
   a. 56.4% and 2.8%.
b. 56.4% and 4.8%.
c. 59.3% and 2.8%.
d. 59.3% and 4.8%.

**ANSWER:** d

65. The Bureau of Labor Statistics reported in 2005 that there were 50.40 million people over age 25 whose highest level of education was some college or an associate degree, 33.86 million of whom were employed and 12.77 million of whom were unemployed. What were the labor-force participation rate and the unemployment rate for this group?
   a. 69.7% and 2.5%
   b. 69.7% and 3.6%
   c. 67.2% and 2.5%
   d. 67.2% and 3.6%

**ANSWER:** b

66. Suppose that the adult population is 4 million, the number of unemployed is 0.25 million, and the labor-force participation rate is 75%. What is the unemployment rate?
   a. 6.25%
   b. 8.3%
   c. 9.1%
   d. 18.75%

**ANSWER:** b

67. Suppose that some country had an adult population of about 50 million, a labor-force participation rate of 60 percent, and an unemployment rate of 5 percent. How many people were employed?
   a. 1.5 million
   b. 28.5 million
   c. 30 million
   d. 47.5 million

**ANSWER:** b

68. Suppose that some country had an adult population of about 46 million, a labor-force participation rate of 75 percent, and an unemployment rate of 8 percent. How many people were unemployed?
   a. 2.54 million
   b. 2.76 million
   c. 3.68 million
   d. 8 million

**ANSWER:** b

69. Some persons are counted as out of the labor force because they have made no serious or recent effort to look for work. However, some of these individuals may want to work even though they are too discouraged to make a serious effort to look for work. If these individuals were counted as unemployed instead of out of the labor force, then
   a. both the unemployment rate and labor-force participation rate would be higher.
   b. the unemployment rate would be higher and the labor-force participation rate would be lower.
73. The unemployment rate would be lower, and the labor-force participation rate would be higher.
d. both the unemployment rate and labor-force participation rate would be lower.

ANSWER: a

70. Discouraged workers are included in
a. the number of unemployed.
b. frictional unemployment.
c. the labor force.
d. None of the above is correct.

ANSWER: d

71. Frictional unemployment is thought to explain relatively
a. short spells of unemployment, as is structural unemployment.
b. long spells of unemployment, as is structural unemployment.
c. short spells of unemployment, while structural unemployment is thought to explain relatively long spells of unemployment.
d. long spells of unemployment, while structural unemployment is thought to explain relatively short spells of unemployment.

ANSWER: c

72. Bob is looking for work after school, but everywhere he fills out an application, the managers say they always have a lot more applications than open positions. Tom has a law degree. Several firms have made him offers, but he thinks he might be able to find a firm where his talents could be put to better use.
a. Bob and Tom are both frictionally unemployed.
b. Bob and Tom are both structurally unemployed.
c. Bob is frictionally unemployed, and Tom is structurally unemployed.
d. Bob is structurally unemployed, and Tom is frictionally unemployed.

ANSWER: d

73. Sandy has graduated from college and is devoting her time to searching for a job. She has seen plenty of openings but has not yet been offered one that best suits her tastes and skills. Sandy is
a. structurally unemployed. Structural unemployment exists even in the long run.
b. structurally unemployed. There is no structural unemployment in the long run.
c. frictionally unemployed. Frictional unemployment exists even in the long run.
d. frictionally unemployed. There is no frictional unemployment in the long run.

ANSWER: c

74. The natural unemployment rate includes
a. both frictional and structural unemployment.
b. neither frictional nor structural unemployment.
c. structural but not frictional unemployment.
d. frictional but not structural unemployment.

ANSWER: a