

1. If total output is calculated by adding up the market value of goods and services produced, then more expensive items:

- A. receive the same weighting as cheaper items.
- B. receive a higher weighting than cheaper items.
- C. receive a smaller weighting than cheaper items.
- D. are double counted.

2. National defense services provided by the military are:

- A. included in GDP at market prices.
- B. included in GDP at cost.
- C. excluded from GDP because they are not sold in markets.
- D. excluded from GDP because they are intermediate goods.

3. If Bountiful Orchard grows \$100,000 worth of peaches, sells \$50,000 worth of peaches to consumers and uses the rest to make jam that is sold to consumers for \$100,000, Bountiful Orchard's contribution to GDP is:

- A. \$50,000.
- B. \$100,000.
- C. \$150,000.
- D. \$200,000.

\$150,000

4. Capital goods are treated as _____ goods and, therefore, _____ GDP.

- A. final; included in
- B. final; excluded from
- C. intermediate; sometimes included in
- D. intermediate; excluded from

5. The largest expenditure component of U.S. GDP is:

- A. consumption
- B. investment
- C. government purchases
- D. exports

6. Which of the following would increase the net export component of U.S. GDP?

- A. A bottle of California wine is purchased in London.
- B. A car produced in Japan is purchased in California.
- C. A bottle of French wine is purchased in New York.
- D. A car produced in Michigan is purchased in Louisiana.

Exports - Imports

Suppose a jar of DeLux popcorn that is ultimately sold to a customer at Friendly Groceries is produced by the following production process. Answer the next three questions based on this information.

Name of Company	Revenues	Cost of Purchased Inputs
Fulton Family Farm	\$0.50	0
DeLux Popcorn Co.	\$2.50	\$.50
Friendly Groceries	\$4.00	\$2.50

7. What is the contribution of the above production process to GDP?

- A. \$1.50
- B. \$2.00
- C. \$4.00
- D. \$7.00

8. What is the value added of Fulton Family Farm?

- A. \$0.50
- B. \$1.50
- C. \$2.00
- D. \$2.50

9. If the corn and the jar of popcorn were produced in the year 2005, but the jar was sold at Friendly Groceries in the year 2006, what is the contribution of these transactions to GDP in the year 2005?

- A. \$0.00
 - B. \$0.50
 - C. \$1.50
 - D. \$2.50
- $0.50 + (2.50 - 0.50) = 2.50$

10. An economy produces 500,000 tables valued at \$100 each. Households purchase 100,000 tables of which 50,000 are imported. Businesses purchase 200,000 domestically produced tables. The government purchases 100,000 domestically produced tables and 50,000 domestically produced tables are sold abroad. The unsold tables at the end of the year are held in inventory by the table manufacturers. What is value of the investment component of GDP?

- A. \$10 billion
 - B. \$20 million
 - C. \$25 million
 - D. \$30 million
- $(200,000 + 100,000) \times 100 =$

11. Bob's Barber Shop cut 3,000 heads of hair in the year 2005 and 3,100 in the year 2006. The price of a hair cut was \$7 in 2005 and \$8 in 2006. If the year 2005 is the base year, what was Bob's contribution to real GDP in the year 2006?
 A. \$21,000
 B. \$21,700
 C. \$24,000
 D. \$24,800

Fix price
 2005: 3000(7)
 2006: 3100(7) =

12. The consumer price index for Planet Econ consists of only two items: books and hamburgers. In 2000, the base year, the typical consumer purchased 10 books for \$25 each and 25 hamburgers for \$2 each. In 2005, the typical consumer purchased 15 books for \$30 each and 30 hamburgers for \$3 each. The consumer price index for 2005 on Planet Econ equals:
 A. 1.00
 B. 1.08
 C. 1.15
 D. 1.25

Fix quantity

$$CPI \text{ in } 2005 = \frac{10(30) + 25(3)}{10(25) + 25(2)} = \frac{375}{300} = 1.25$$

13. The CPI in 1974 equaled 0.49. The CPI in 1975 equaled 0.54. The rate of inflation between 1974 and 1975 was _____ percent.
 A. 5.4
 B. 9.0
 C. 9.3
 D. 10.2

$$\frac{0.54 - 0.49}{0.49} (100) =$$

14. One family earned an income of \$28,000 in 1990. Over the next five years, their income increased by 15%, while the CPI increased by 15%. After five years, this family's nominal income _____ and their real income _____.
 A. decreased; decreased
 B. decreased; increased
 C. increased; did not change
 D. increased; increased

$r = i - \pi$
 $r = 15 - 15 = 0$

15. A report indicated that the average annual real income of agricultural workers declined by 2% between 1990 and 2000. If the CPI equaled 1.30 in 1990, 1.69 in 2000, and the nominal income of agricultural workers was \$35,000 in 2000, what was the average nominal income of agricultural workers in 1990?
 A. \$20,710
 B. \$21,124
 C. \$26,923
 D. \$27,462

1990: $CPI = 1.30$
 $R = 21,132$
 $N = 27,462$
 2000: $CPI = 1.69$
 $N = 35,000$
 $\frac{35000}{1.69} = 20,710 = R$
 $\frac{20710 - x}{x} = -0.02$
 $20710 = 0.98x$
 $x = 21,132$

16. A labor contract provides for a first-year wage of \$15 per hour, and specifies that the real wage will rise by 2 percent in the second year of the contract. The CPI is 1.00 in the first year and 1.09 in the second year. What dollar wage must be paid in the second year?

- A. \$15.00
- B. \$15.30
- C. \$16.09
- D. \$16.68

Year 1 \$15
Year 2 : $R = 15(0.02) + 15 = \$15.30$ $N = 15.3(1.09)$

17. Suppose that the price of chicken rises sharply compared to the price of turkey. People buy more turkey and less chicken than they did in the CPI base year. In this situation the CPI will tend to _____ inflation as a result of _____ bias.

- A. overstate; substitution
- B. understate; substitution
- C. accurately measure; substitution
- D. overstate; quality adjustment

18. If all prices, including the price of beef, increase by 3%, then the relative price of beef _____ and there _____ inflation.

- A. increased; is
- B. increased; is no
- C. remained constant; is
- D. remained constant; is no

19. Suppose the value of the CPI is 1.10 in year 1, 1.21 in year 2, and 1.331 in year 3. Assume also that the price of computers increases by 3% between year 1 and year 2, and by another 3% between year 2 and year 3. The average price level is increasing, the inflation rate is _____, and the relative price of computers is _____.

- A. increasing; increasing
- B. constant; increasing
- C. constant; decreasing
- D. increasing; decreasing

$\frac{1.21 - 1.1}{1.1} = 10\%$ $\frac{1.331 - 1.21}{1.21} = 10\%$

20. If a borrower and lender agree to an interest rate on a loan when inflation is expected to be 7% and inflation turns out to be 10% over the life of the loan, then the borrower _____ and the lender _____.

- A. gains; gains
- B. gains; loses
- C. is not affected; gains
- D. loses; gains

With inflation, money is worth less

21. Samantha is lending Jack \$1,000 for one year. The CPI is 1.60 at the time the loan is made. They expect it to be 1.68 in one year. If Samantha and Jack agree that Samantha should earn a 3% real return for the year, the nominal interest rate on this loan should be _____ percent.

- A. 0
- B. 3
- C. 5
- D. 8

$$r = i - \pi$$
$$\pi = \frac{1.68 - 1.60}{1.60} = 5\%$$
$$3 = i - 5$$

$i = 8$

22. If both the lender and borrower agree on an 8% interest rate, both expect a 4% inflation rate, and inflation turns out to be 4%, then _____ by the inflation.

- A. the borrower is hurt and the lender gains
- B. the borrower gains and the lender is hurt
- C. neither the borrower nor the lender are hurt
- D. both the borrower and lender are hurt

23. If the annual real rate on a 10-year inflation-protected bond equals 1.9 percent and the annual nominal rate of return on a 10-year bond without inflation protection is 4.4 percent, what average rate of inflation over the ten years would make holders of inflation-protected bonds and holders of bonds without inflation protection equally well off?

- A. 0%
- B. 1.9%
- C. 2.5%
- D. 4.4%

$$r = i - \pi$$
$$1.9 = 4.4 - \pi$$
$$\pi = 2.5$$

24. The two most important factors contributing to increased productivity in industrialized countries in the twentieth century were:

- A. higher relative prices and a larger labor supply.
- B. higher relative prices and technological progress.
- C. technological progress and increases in the capital stock.
- D. technological prices and increases in the labor supply.

25. Factors increasing the labor supply and thereby contributing to the slowdown in real-wage growth that began in the 1970s include _____ and _____.

- A. skill-biased technological change; globalization
- B. increased labor force participation by women; the coming-of-age of the baby-boom generation
- C. technological progress; diminishing returns to labor
- D. increasing wage inequality; globalization

26. Slower real wage growth since the 1970s accompanied by rapid job growth can be explained by:

- A. skill-biased technological change.
- B. globalization.
- C. a productivity slowdown accompanied by an increase in the labor supply.
- D. a productivity slowdown accompanied by a decrease in the labor supply.

27. Globalization _____ the wages of workers in the exporting industries and _____ the wages of workers in the import-competing industries.

- A. raises; raises
- B. raises; lowers
- C. raises; does not change
- D. lowers; raises

28. From an economic perspective the best response to increased wage inequality is to:

- A. block future technological change.
- B. stop all international trade.
- C. provide transition aid to disadvantaged workers.
- D. make skill-biased technological change illegal.

29. Data for an economy shows that the unemployment rate is 6%, the participation rate 60 percent, 200 million people 16 years or older are not in the labor force. How many people are in the working-age population in this economy?

- A. 200 million
- B. 300 million
- C. 400 million
- D. 500 million

$$\frac{U}{E+U} = 0.06 \quad | \quad 18 = 0.06E + 1.08 \quad \frac{E+U}{E+U+200} = 0.6 \quad | \quad E+U+N$$

$$U = 0.06(300) \quad | \quad E = 282 \quad \frac{E+U}{E+U+200} = 0.6$$

$$U = 18 \quad | \quad E+U = 0.6E + 0.6U + 120$$

$$4U = -0.4E + 120$$

$$U = -E + 300$$

30. In a small town of 100 people there are 10 children under 16, 10 retired people, 60 people with full-time jobs, 3 people with part-time jobs, 3 full-time students over 16, and 4 full-time homemakers. The remaining people did not have jobs, but wanted them. All but one of these had actively looked for a job in the previous four weeks. What is the participation rate in this town?

- A. 63.0%
- B. 71.1%
- C. 72.0%
- D. 80.0%

$$E = 60 + 3$$

$$N = 10 + 3 + 4 + 1$$

$$U = 9$$

$$\frac{72}{90} = 80\% \quad \frac{E+U}{E+U+N}$$

31. Two groups of workers not counted as unemployed in the official unemployment (U3) statistics are _____ workers.

- A. chronically unemployed and short-term unemployed
- B. chronically-unemployed and discouraged
- C. chronically unemployed and involuntary part-time
- D. discouraged and involuntary part-time

32. Martha did not like her job as a receptionist, so she quit the job and is looking for one that better suits her artistic talents. Jacques would like to work, but employers are not willing to hire him because he does not speak English. Martha is _____ unemployed and Jacques is _____ unemployed.

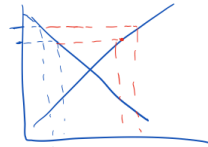
- A. frictionally; structurally
- B. structurally; frictionally
- C. cyclically; structurally
- D. structurally; cyclically

33. Arthur is an unskilled worker, who is currently unemployed. He has been offered a minimum wage job paying \$40 a day, but he is currently receiving unemployment insurance benefits of \$50 a day, so he chooses not to accept the minimum wage job and to continue looking for a better job. Arthur is _____ unemployed.

- A. frictionally
- B. structurally
- C. cyclically
- D. not

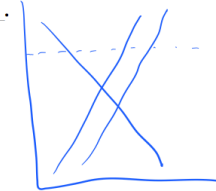
34. Assume that the union wage already exceeds the market-clearing wage. If the union wage is increased, holding other factors constant, then the number unemployed _____ and the number employed _____.

- A. increases; increases
- B. increases; decreases
- C. increases; does not change
- D. decreases; increases



35. Assume the union contract wage exceeds the market-clearing wage. If there is an increase in the labor supply, then the current number of unemployed will _____ and the number of employed will _____.

- A. increase; increase
- B. increase; decrease
- C. increase; not change
- D. decrease; increase



36. Unemployment insurance contributes to structural unemployment by:

- A. keeping wages above the market-clearing level.
- B. keeping wages below the market-clearing level.
- C. allowing unemployed workers to search longer or less intensively for jobs.
- D. forcing unemployed workers to take the first job offered to them.

37. Decreased demand for low-skilled workers has resulted in _____ in the United States and _____ in Western Europe.

- A. high rates of unemployment; increasing wage inequality
- B. high rates of unemployment; decreasing wage inequality
- C. increasing wage inequality; high rates of unemployment
- D. decreasing wage inequality; high rates of unemployment

38. Real GDP per person in the Canada was \$7,377 in 1950. Over the next 48 years it grew at a compound annual rate of 2.0%. If instead real GDP per person had grown at an average compound annual rate 2.5%, then real GDP per capita in the Canada in 1998 would have been approximately _____ larger.

- A. \$3,000
- B. \$5,050
- C. \$7,400
- D. \$19,100

$$N = 7377 (1 + 0.02)^{48} = 19084$$

$$N = 7377 (1.025)^{48} = 24133$$

39. Assume that average labor productivity is the same in each country. Based on the information below, which country has the highest real GDP per capita?

Country	Population (millions)	Share of Population Employed (%)
A	100	60
B	150	55
C	75	50
D	250	45
E	95	40

$$\frac{Y}{Pop} = \frac{Y}{N} + \frac{N}{Pop}$$

- A. Country A
- B. Country B
- C. Country C
- D. Country D

40. Gamma has \$30,000 of capital per worker, while Omega has \$37,500 of capital per worker. According to the principle of diminishing returns to capital, an additional unit of capital will increase output _____ in Gamma compared to Omega, holding other factors constant.

- A. more
- B. less
- C. not at all
- D. by the same amount