

**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.

- 1) Which one of the following is generally considered a characteristic of a perfectly competitive labor market? 1) \_\_\_\_\_
- A) a few workers of varying skills and capabilities
  - B) wage-setting behavior by firms
  - C) numerous firms hiring labor from the same pool of qualified workers
  - D) costly information
- 2) A perfectly competitive labor market may be characterized by all of the following *except* 2) \_\_\_\_\_
- A) neither firms nor workers have any control over the market wage.
  - B) a few firms that dominate hiring in the market.
  - C) numerous equally qualified workers.
  - D) perfect information.
- 3) Which of the following best explains why the *market* labor supply curve is upward sloping, even though *individual* supply curves are normally backward bending? 3) \_\_\_\_\_
- A) The statement is not true: market labor supply curves are also backward bending.
  - B) Market labor supply curves are "price-adjusted," whereas individual supply curves are not.
  - C) Lower wages in a given market increase the demand for labor, so more labor must be supplied to maintain labor market equilibrium.
  - D) Higher wages in a given market attract more workers away from other activities, more than compensating for any reduction in hours by individuals already in the market.
- 4) Market labor supply curves are generally 4) \_\_\_\_\_
- A) upward sloping, as higher wages attract workers away from their next best alternatives.
  - B) backward-bending, as the substitution effect of higher wages outweighs the income effect.
  - C) vertical at any particular point in time.
  - D) perfectly elastic at the market wage rate.
- 5) In a perfectly competitive environment, the height of the market labor supply curve at any given number of labor hours indicates 5) \_\_\_\_\_
- A) the total cost of employing that number of hours in the given occupation.
  - B) the marginal cost of employing the first hour of labor.
  - C) the value of the alternative activity in which the marginal hour might otherwise be used.
  - D) the maximum wage employers would be willing to pay to attract additional labor.

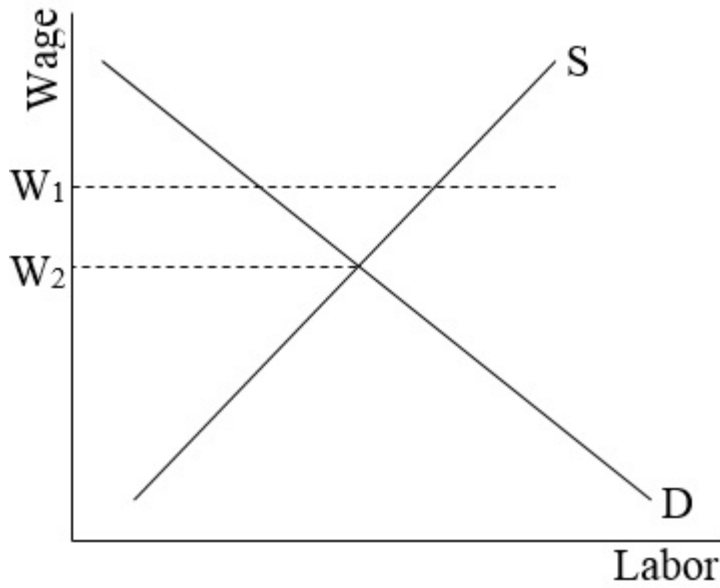
6) A firm will obtain its profit maximizing level of employment where

6) \_\_\_\_\_

- A) marginal revenue product equals value of marginal product.
- B) marginal revenue product equals marginal wage cost.
- C) value of marginal product equals marginal wage cost.
- D) marginal product equals marginal revenue product.

7) Refer to the following diagram of a perfectly competitive labor market.

7) \_\_\_\_\_

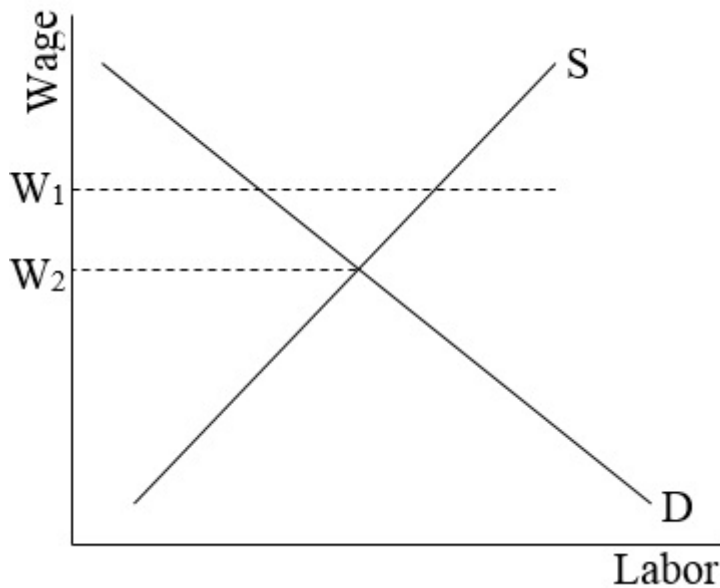


At wage rate  $W_1$ , there is an

- A) excess supply of labor and the wage rate will fall.
- B) excess supply of labor and the wage rate will rise.
- C) excess demand for labor and the wage rate will fall.
- D) excess demand for labor and the wage rate will rise.

8) Refer to the following diagram of a perfectly competitive labor market.

8) \_\_\_\_\_



For the supply and demand curves in the diagram, the level of employment will be highest

- A) wage rate  $W_1$ .  
B) wage rate  $W_2$ .  
C) a wage rate higher than  $W_1$ .  
D) a wage rate lower than  $W_2$ .

9) There will be a shortage of labor in a particular market if

9) \_\_\_\_\_

- A) labor supply increases and demand decreases.  
B) the current wage is above the wage that would clear the market.  
C) there is a decrease in the price of a substitute resource.  
D) the current wage is below the wage that would clear the market.

10) If capital and labor are gross complements, an increase in the cost of capital will

10) \_\_\_\_\_

- A) increase the supply of labor and drive the wage down.  
B) decrease the demand for labor and drive the wage down.  
C) increase the demand for labor and drive the wage up.  
D) either increase or decrease the demand for labor depending on whether the substitution effect or the output effect is stronger.

11) Suppose workers in labor market X are qualified to work in an alternative competitive labor market Y, and vice versa. An increase in the demand for labor in market Y will

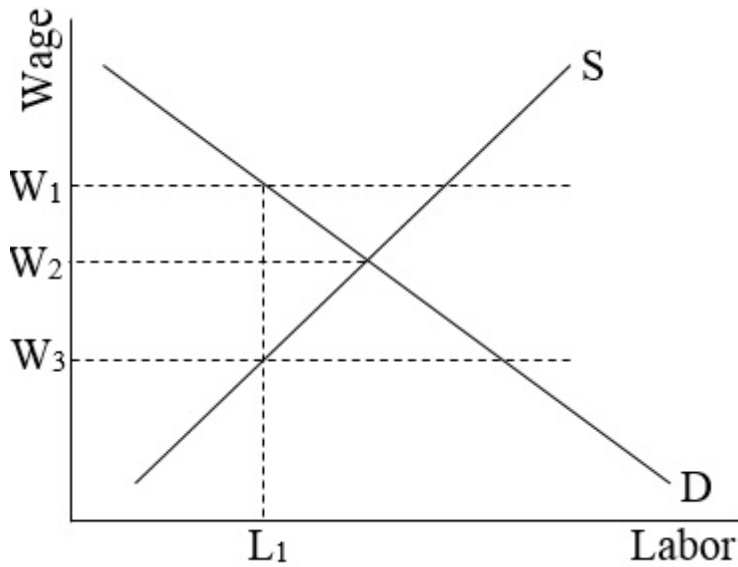
11) \_\_\_\_\_

- A) increase labor supply in X and drive its wage down.  
B) decrease labor supply in X and drive its wage up.  
C) reduce labor supply in Y and drive its wage down.  
D) have no impact at all in X.

- 12) A net increase in people's preferences for work relative to leisure in a particular market will 12) \_\_\_\_\_
- A) increase labor supply, reducing the wage rate.
  - B) decrease labor supply, increasing the wage rate.
  - C) increase labor demand, increasing the wage rate.
  - D) decrease labor demand, reducing the wage rate.
- 13) All else equal, which of the following will increase the demand for labor in a particular market? 13) \_\_\_\_\_
- A) a decrease in the wage paid to another occupation for which these workers are qualified
  - B) a decrease in worker productivity
  - C) an improvement in the nonwage aspects of the job
  - D) an increase in the number of employers
- 14) At the profit-maximizing level of employment for a monopolist, 14) \_\_\_\_\_
- A) marginal revenue product equals the value of marginal product.
  - B) marginal revenue product exceeds the value of marginal product.
  - C) value of marginal product equals the marginal wage cost.
  - D) marginal revenue product is less than the value of marginal product.
- 15) All profit-maximizing firms hire labor up to the point where 15) \_\_\_\_\_
- A) price times marginal product equals the wage rate.
  - B) marginal revenue times marginal product equals the wage rate.
  - C) price times marginal product equals the marginal wage cost.
  - D) marginal revenue times marginal product equals the marginal wage cost.

16) Refer to the following diagram of a competitive labor market.

16) \_\_\_\_\_



Suppose the wage is currently  $W_1$  and  $L_1$  is the level of employment. If the firm sells its output competitively, the value of the last worker's additional output is \_\_\_\_\_ and the opportunity cost of the last worker's time is \_\_\_\_\_.

A)  $W_1$ ;  $W_1$

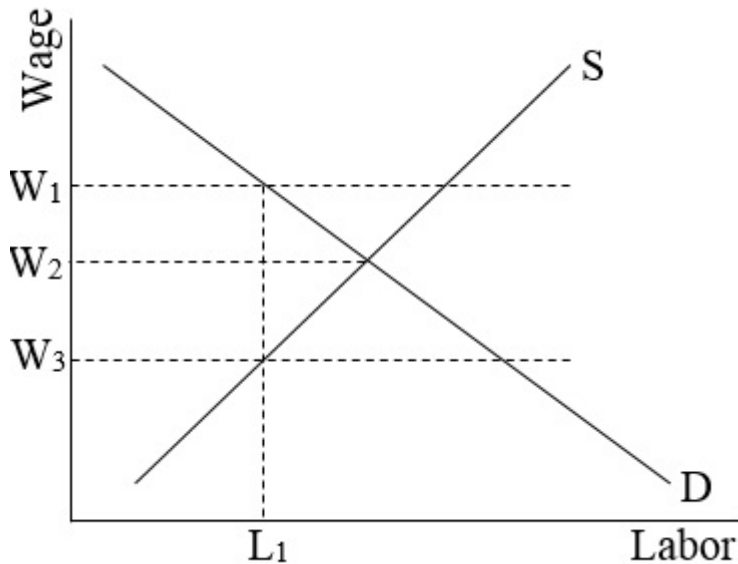
B)  $W_1$ ;  $W_2$

C)  $W_1$ ;  $W_3$

D)  $W_2$ ;  $W_2$

17) Refer to the following diagram of a competitive labor market.

17) \_\_\_\_\_



Suppose the wage is currently  $W_3$  and  $L_1$  is the level of employment. Then we should expect the wage to

- A) rise and employment to rise.
- B) rise and employment to fall.
- C) fall and employment to rise.
- D) fall and employment to fall.

18) Which one of the following conditions is required for allocative efficiency?

18) \_\_\_\_\_

- A) Marginal revenue product exceeds the value of marginal product by the greatest amount.
- B) Marginal revenue product equals the wage rate.
- C) Value of marginal product equals the marginal wage cost.
- D) Value of marginal product is the same in all alternative employments of a given type of labor.

19) Allocative efficiency is achieved when

19) \_\_\_\_\_

- A) the marginal product of labor equals its value of marginal product.
- B) all resources are fully employed.
- C) the price of each resource equals the value of its marginal product.
- D) the price of each resource equals the value of its marginal product and its marginal opportunity cost.

- 20) Allocative inefficiency in a labor market may be caused by
- A) monopoly power in the product market.
  - B) monopsony power in the labor market.
  - C) either monopoly power in the product market or monopsony power in the labor market.
  - D) neither monopoly power in the product market nor monopsony power in the labor market.

20) \_\_\_\_\_

- 21) Refer to the following table that shows the short-run production relationship and the product demand schedule for a firm.

21) \_\_\_\_\_

Labor	Output	Output Price
1	10	\$20.00
2	15	19.00
3	19	18.00
4	22	17.00
5	24	16.00
6	25	15.00

The table indicates that

- A) the firm sells output in a perfectly competitive market.
  - B) the firm is a monopolist.
  - C) the firm hires labor in a perfectly competitive market.
  - D) the firm is a monopsonist.
- 22) Refer to the following table that shows the short-run production relationship and the product demand schedule for a firm.

22) \_\_\_\_\_

Labor	Output	Output Price
1	10	\$20.00
2	15	19.00
3	19	18.00
4	22	17.00
5	24	16.00
6	25	15.00

What is the marginal revenue product of the fourth worker?

- A) \$17
- B) \$32
- C) \$51
- D) \$374

- 23) Refer to the following table that shows the short-run production relationship and the product demand schedule for a firm.

23) \_\_\_\_\_

Labor	Output	Output Price
1	10	\$20.00
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What is the value of the fourth worker's marginal product?

- A) \$17                      B) \$32                      C) \$51                      D) \$374

- 24) Refer to the following table that shows the short-run production relationship and the product demand schedule for a firm.

24) \_\_\_\_\_

Labor	Output	Output Price
1	10	\$20.00
2	15	19.00
3	19	18.00
4	22	17.00
5	24	16.00
6	25	15.00

How many workers will this firm hire if the wage is \$15?

- A) 3                      B) 4                      C) 5                      D) 6

- 25) For a firm hiring labor and selling its output in perfectly competitive markets,

25) \_\_\_\_\_

- A)  $P_L = MWC$  and  $VMP = MRP$ .                      B)  $P_L = MWC$  and  $VMP > MRP$ .  
C)  $P_L > MWC$  and  $VMP = MRP$ .                      D)  $P_L > MWC$  and  $VMP > MRP$ .

- 26) Which of the following is a *true* statement?

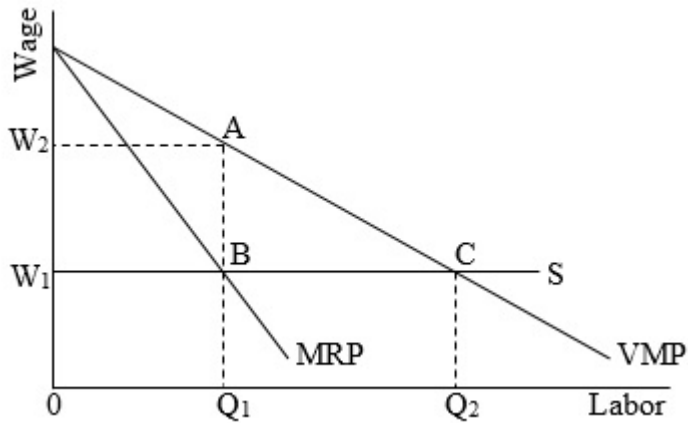
26) \_\_\_\_\_

- A) Monopolists employ too many labor resources, because the value of the marginal product exceeds the marginal opportunity cost of labor.  
B) For a monopolist, the marginal revenue product of labor exceeds marginal wage at the profit-maximizing level of employment.  
C) Monopolists pay a lower wage than competitors for the same type of labor.  
D) The monopolist's demand for labor curve is less elastic than if it were a competitor in the sale of its output.



- 27) Compared to a firm that sells its output competitively, an otherwise identical monopolist operating in the same labor market will \_\_\_\_\_
- A) pay a lower wage.
  - B) pay the same wage.
  - C) pay a higher wage.
  - D) may pay either a higher or lower wage.

- 28) Refer to the following diagram that shows the labor demand for a monopolistic firm hiring labor from a competitive labor market. \_\_\_\_\_

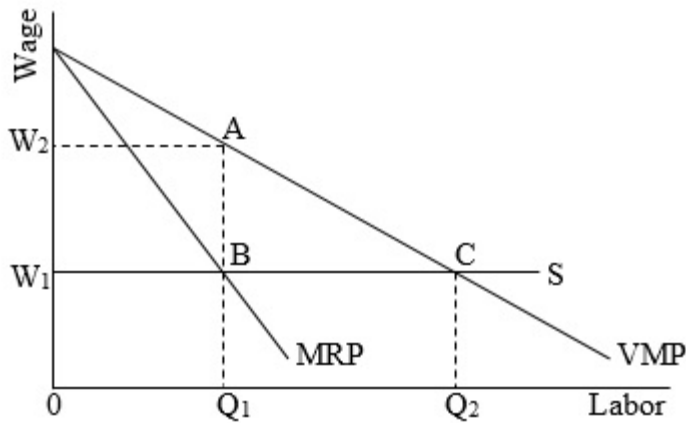


At the profit-maximizing level of employment, the wage rate is \_\_\_\_\_ and the level of employment is \_\_\_\_\_.

- A)  $W_1$ ;  $Q_1$
- B)  $W_1$ ;  $Q_2$
- C)  $W_2$ ;  $Q_1$
- D)  $W_2$ ;  $Q_2$

29) Refer to the following diagram that shows the labor demand for a monopolistic firm hiring labor from a competitive labor market.

29) \_\_\_\_\_

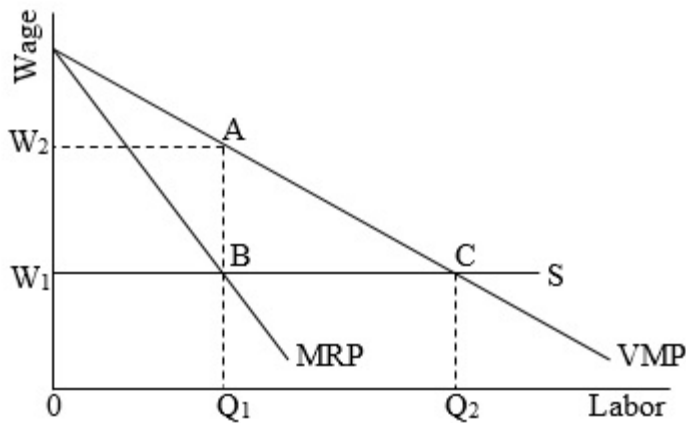


The efficiency loss associated with the profit-maximizing wage and employment level is , by area

- A)  $Q_1ACQ_2$ .                      B)  $BAC$ .                      C)  $0W_2AQ_1$ .                      D)  $W_1W_2AC$ .

30) Refer to the following diagram that shows the labor demand for a monopolistic firm hiring labor from a competitive labor market.

30) \_\_\_\_\_



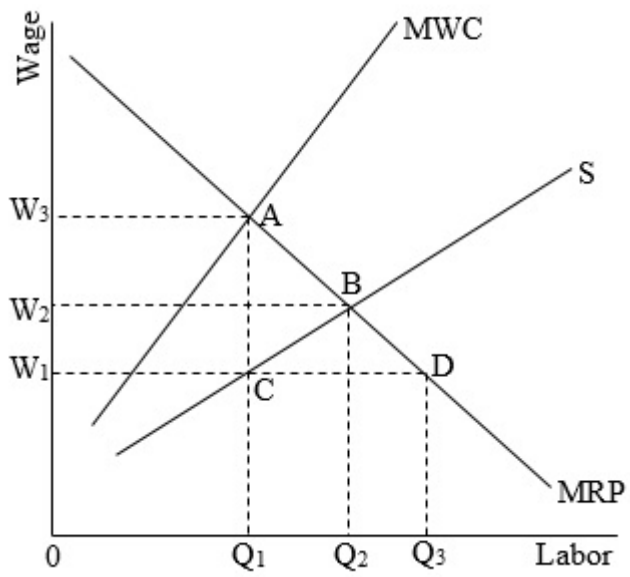
The allocatively efficient level of employment for this firm is given by

- A)  $Q_1$ .                                              B)  $Q_2$ .  
C) some amount between  $Q_1$  and  $Q_2$ .                      D) some amount greater than  $Q_2$ .

- 31) A monopsonist's marginal wage cost curve is positively sloped because 31) \_\_\_\_\_
- A) it "discriminates" by paying each worker a different wage according to his or her opportunity cost.
  - B) it must charge a lower price for each additional unit of output, and it must charge this lower price for all units sold.
  - C) it pays its workers lower wages, so that the supply of labor to the market is restricted.
  - D) it must pay a higher wage to attract additional workers, and it must pay this higher wage to all workers.
- 32) A firm can hire 20 workers for \$10 per hour, but finds it must raise the wage to \$11 to attract another worker. If it must pay all its workers the same wage, the marginal wage cost of the 21st worker is 32) \_\_\_\_\_
- A) \$10.
  - B) \$11.
  - C) \$21.
  - D) \$31.
- 33) At the profit-maximizing level of employment for a monopsonist, 33) \_\_\_\_\_
- A) the wage exceeds the marginal wage cost.
  - B) marginal revenue product equals the wage.
  - C) the wage is less than marginal wage cost.
  - D) marginal product equals marginal revenue product.
- 34) Compared to a monopsonist that sells its output in a competitive product market, an otherwise identical monopsonist with monopoly power in the product market will pay 34) \_\_\_\_\_
- A) a lower wage.
  - B) a higher wage.
  - C) the same wage.
  - D) More information is needed.

35) Refer to the following diagram of a monopsonistic labor market.

35) \_\_\_\_\_



At the profit maximizing level of employment, the wage rate is \_\_\_\_\_ and the level of employment is \_\_\_\_\_.

A)  $W_1$ ;  $Q_1$

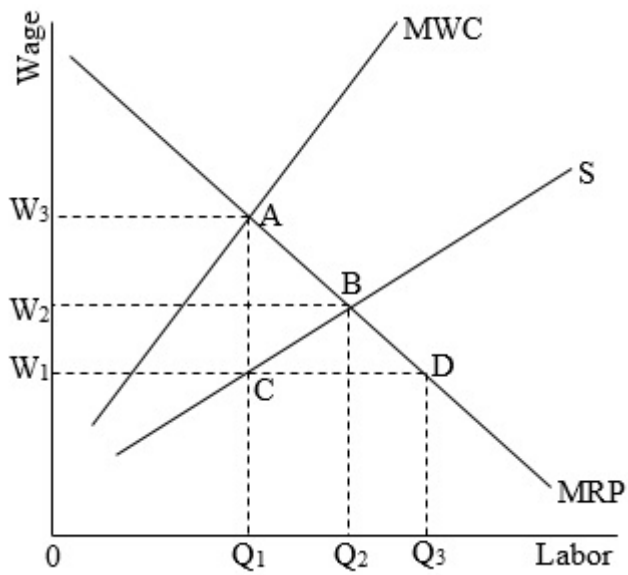
B)  $W_3$ ;  $Q_1$

C)  $W_2$ ;  $Q_2$

D)  $W_3$ ;  $Q_3$

36) Refer to the following diagram of a monopsonistic labor market.

36) \_\_\_\_\_

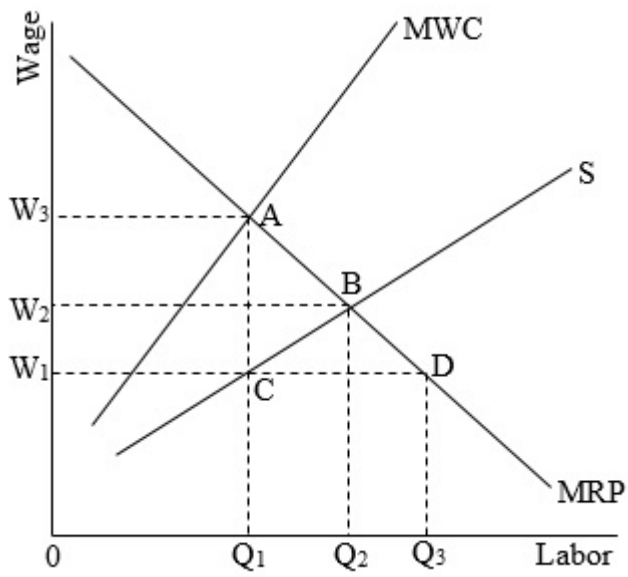


Relative to their monopsony levels, both the wage and the level of employment would increase in this market if a wage-setting union negotiates a wage

- A) anywhere between  $W_1$  and  $W_3$ .
- B) anywhere between  $W_2$  and  $W_3$ .
- C) anywhere between  $W_1$  and  $W_2$ .
- D) equal to  $W_2$  only.

37) Refer to the following diagram of a monopsonistic labor market.

37) \_\_\_\_\_

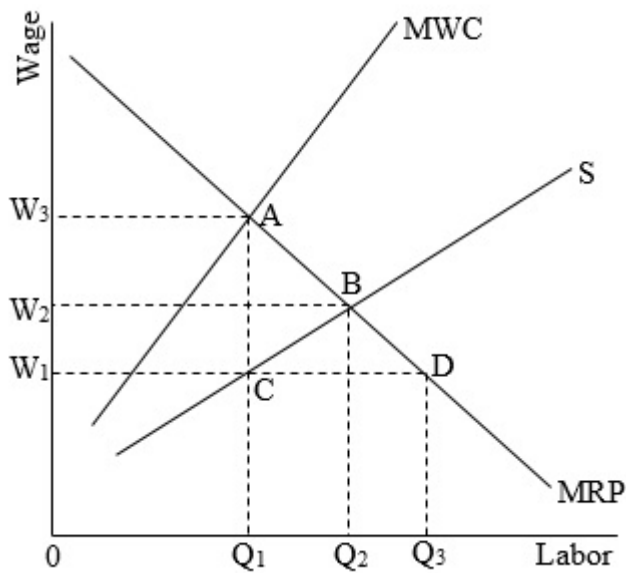


If legislation set the minimum wage at  $W_2$ , then employment

- A) would fall from its original monopsony level.
- B) would remain unchanged.
- C) would rise from its original monopsony level.
- D) may or may not change from its original monopsony level.

38) Refer to the following diagram of a monopsonistic labor market.

38) \_\_\_\_\_



If this firm sells its output in a competitive market (so that  $MRP = VMP$ ), the allocative efficiency loss in the labor market is given by area

- A)  $W_3ACW_1$ .      B)  $Q_1ABQ_2$ .      C)  $CAD$ .      D)  $CAB$ .

39) Compared to the allocatively efficient amount, a monopsonist tends to hire

39) \_\_\_\_\_

- A) too few workers because the value of marginal product exceeds marginal revenue product.  
 B) too few workers because marginal wage cost exceeds the wage rate.  
 C) too many workers because the value of marginal product exceeds marginal revenue product.  
 D) too many workers because marginal wage cost exceeds the wage rate.

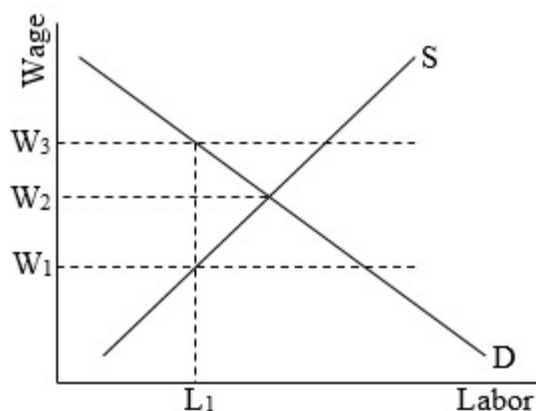
40) One criticism of the cobweb model is that

40) \_\_\_\_\_

- A) students form rational expectations of the effect of changes in labor demand and adjust their supply responses accordingly.  
 B) the prediction of chronic boom-bust cycles is not borne out in the real world.  
 C) students adjust career decisions based on starting salaries rather lifetime earnings.  
 D) demand is likely to shift as the market approaches equilibrium, so that equilibrium is never achieved.

41) Refer to the following diagram.

41) \_\_\_\_\_



Suppose the wage is currently  $W_1$  and  $L_1$  is the level of employment. If this market is characterized by delayed supply responses, in the immediate period the wage will

- A) rise and employment will rise.
- B) rise and employment will remain unchanged.
- C) remain unchanged and employment will rise.
- D) remain unchanged and employment will remain unchanged.

42) With respect to Major League Baseball, studies by Scully and others found that

42) \_\_\_\_\_

- A) players were paid substantially less than their marginal revenue products prior to free agency.
- B) players were paid their marginal revenue products even before free agency, which is consistent with the competitive nature of the baseball business.
- C) players were paid their marginal revenue products prior to free agency. Since that time, salaries have fallen below marginal revenue products.
- D) salaries far exceed marginal revenue products since the advent of free agency.

43) Since passage of NAFTA, trade between the U.S., Canada, and Mexico has

43) \_\_\_\_\_

- A) increased, but the effects on employment have been modest.
- B) increased, causing substantial loss of U.S. manufacturing jobs.
- C) increased, causing substantial loss of U.S. service-sector jobs.
- D) not changed, but there has been a substantial loss in U.S. manufacturing jobs.