

Chapter 28

The Labor Market: Demand, Supply and Outsourcing

28.1 Labor Demand for a Perfectly Competitive Firm

- 1) For a perfectly competitive firm, the value of the marginal product of labor falls as more workers are hired because of the diminishing
- A) output price.
 - B) marginal physical product of labor.
 - C) price of labor.
 - D) marginal cost of production.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 2) The additional revenue earned from hiring one more worker is known as the
- A) marginal physical product of labor.
 - B) marginal revenue product of labor.
 - C) marginal factor cost of labor.
 - D) marginal utility of labor.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 3) The additional cost associated with the hiring of one more unit of labor is known as the
- A) marginal physical product of labor.
 - B) marginal revenue product of labor.
 - C) marginal factor cost of labor.
 - D) marginal utility of labor.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 4) Suppose at the current level of labor used, $MRP = \$100$ and $MFC = \$50$. To maximize profits, the firm should
- A) hire more labor.
 - B) reduce the level of labor.
 - C) maintain the current level of labor.
 - D) shut down.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 5) Suppose at the current level of labor used, $MRP = \$100$ and $MFC = \$150$. To maximize profits, the firm should
- A) hire more labor.
 - B) reduce the level of labor.
 - C) maintain the current level of labor.
 - D) expand production.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 6) Suppose at the current level of labor used, $MRP = \$100$ and $MFC = \$100$. To maximize profits, the firm should
- A) hire more labor.
 - B) reduce the level of labor.
 - C) maintain the current level of labor.
 - D) shut down.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 7) Derived demand means
- A) the labor demand curve will be upward sloping.
 - B) labor demand is derived from demand for the product it produces.
 - C) labor demand will shift about in a random fashion.
 - D) labor demand is determined by the supply of labor.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 8) The additional production resulting from hiring one more worker is
- A) marginal physical product.
 - B) marginal cost.
 - C) marginal production.
 - D) additional production.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 9) Holding other things constant, an increase in the use of capital in production would
- A) increase the marginal productivity of labor.
 - B) decrease, but not proportionately, the marginal productivity of labor.
 - C) not change the marginal productivity of labor.
 - D) decrease proportionately the marginal productivity of labor.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 10) If a firm employs an extra unit of labor, the additional product generated by employing the extra unit of labor is
- A) the marginal physical product of labor.
 - B) the diminished marginal product.
 - C) the outside edge.
 - D) total product.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 11) The change in total output due to the change in one variable input, while holding all other inputs constant, is the
- A) marginal revenue product.
 - B) derived demand for labor.
 - C) marginal physical product.
 - D) market demand curve for labor.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 12) The marginal physical product of labor is the
- A) total output divided by the number of labor employed.
 - B) wage that must be paid to labor.
 - C) value of sales divided by additional labor used.
 - D) change in output generated by a unit change in labor.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 13) We assume that when a firm hires additional workers, the marginal physical product of labor will
- A) increase because more workers can always get more work done.
 - B) decrease because the new workers are likely to be less able than the previously hired ones.
 - C) decrease because each worker now has less capital and other resources to work with.
 - D) increase because large firms are more efficient.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 14) As more workers are hired, the marginal physical product of labor eventually declines because
- A) less efficient workers are hired as the number of workers increases.
 - B) workers do not work well together when the number of workers increases.
 - C) the amount of capital each worker has to work with declines as the number of workers increases.
 - D) of diseconomies of scale.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

15) Marginal revenue product is

- A) marginal physical product multiplied by marginal revenue.
- B) marginal physical product multiplied by average variable cost of the product.
- C) the price of the product.
- D) the total revenue from the sale of the product sales.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

16) The contribution to total revenues coming from the next worker hired is

- A) marginal product.
- B) marginal revenue product.
- C) total product.
- D) total revenues.

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

17) A firm's marginal factor cost describes

- A) the increase in the firm's total revenue as one more unit of output is sold.
- B) the change in total fixed cost that results from hiring one more unit of input.
- C) the change in total variable cost that results from the production of an extra unit of output.
- D) the change in total cost that results from using one more unit of an input.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

18) If a firm is a perfectly competitive purchaser of factor inputs and the wage rate is \$5, the marginal factor cost for labor is

- A) greater than \$5.
- B) less than \$5.
- C) \$5.
- D) indeterminate.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

19) When market wages increase in a perfectly competitive market, then

- A) the marginal factor cost increases.
- B) the marginal product increases.
- C) the marginal factor cost decreases.
- D) the marginal product decreases.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

20) The marginal revenue product is

- A) the change in total output resulting from a one-unit change in variable output.
- B) the change in marginal output resulting from a one-unit change in variable input.
- C) the change in total revenue resulting from a one-unit change in variable input.
- D) the change in marginal revenue resulting from a one-unit change in variable input.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

21) The marginal revenue product of labor is

- A) the marginal physical product multiplied by marginal revenue.
- B) the marginal revenue of output multiplied by the price of the input.
- C) total sales divided by total labor employed.
- D) total labor employed divided by total sales.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

22) When 4 units of labor are employed, total product is 6 units; when 5 units of labor are employed, total product is 9 units of output. If the price of output is \$5 per unit, what is the marginal revenue product of the 5th unit of labor?

- A) \$3
- B) \$5
- C) \$15
- D) \$45

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

23) When 5 units of labor are employed, total product is 9 units; when 6 units of labor are employed, total product is 11 units of output. If the price of output is \$5 per unit, what is the marginal revenue product of the 6th unit of labor?

- A) \$10
- B) \$5
- C) \$15
- D) \$55

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

24) Marginal factor cost is

- A) the change in the value of output from using an additional unit of the factor.
- B) the cost of an additional unit of output.
- C) the total value of factor cost divided by the one cost that is being held constant.
- D) the cost of using an additional unit of an input.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 25) The marginal revenue product represents
- A) the marginal physical product of labor divided by the price of the good produced.
 - B) the worker's contribution to the firm's total revenues.
 - C) the worker's contribution to the firm's output.
 - D) the value of each additional unit of output.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 26) The firm's demand curve for labor is
- A) the marginal revenue product curve for labor.
 - B) the demand curve for the good produced divided by the price of the good.
 - C) the marginal physical product curve for labor divided by the price of the good.
 - D) the marginal physical product curve for labor multiplied by the price of labor.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 27) A firm will not hire additional workers once
- A) it earns accounting profits.
 - B) the additional cost of a worker equals the additional revenue from the worker.
 - C) total product is rising.
 - D) the company reaches its breakeven output level.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 28) When $MFC = MRP$, a firm in a competitive market will
- A) stop hiring.
 - B) hire more workers.
 - C) earn additional profits.
 - D) layoff workers.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 29) When $MFC < MRP$, a firm in a competitive market will
- A) stop hiring.
 - B) hire more workers.
 - C) earn fewer profits.
 - D) layoff workers.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 30) When $MFC > MRP$, a firm in a competitive market will
- A) stop hiring.
 - B) hire more workers.
 - C) earn additional profits.
 - D) layoff workers.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 31) A profit-maximizing firm in a competitive market will continue to hire more workers when
- A) the marginal factor cost exceeds the marginal revenue product of the additional workers.
 - B) the marginal factor cost equals the marginal revenue product of the additional workers.
 - C) the marginal factor cost is less than the marginal revenue product of the additional workers.
 - D) the marginal factor cost is less than zero.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 32) Which of the following statements about a perfectly competitive market are true?
- I. The perfectly competitive industry faces an upward sloping labor supply curve.
 - II. The individual firm in a perfectly competitive industry faces a perfectly elastic labor supply curve.
- A) I only
 - B) II only
 - C) Both I and II
 - D) Neither I nor II

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 33) The market demand curve for labor
- A) slopes downward.
 - B) slopes upward.
 - C) is vertical at the existing supply of labor.
 - D) is horizontal at the going wage rate.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 34) A firm's marginal revenue product of labor curve is also
- A) its labor demand curve.
 - B) its marginal cost curve.
 - C) its total revenue line.
 - D) its long-run input cost function.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

35) The demand for labor is

- A) derived from the satisfaction that hiring the inputs provides the owner or manager of the firm more money.
- B) derived from the demand for the final product being produced.
- C) derived from a utility maximizing process similar to that used to derive the demand curve for goods and services.
- D) totally unrelated to the demand curve for the final product.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

36) When the price of a product increases, the marginal revenue product curve in a perfectly competitive market

- A) does not change.
- B) becomes flatter.
- C) shifts to the right.
- D) shifts to the left.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

37) When the price of a product decreases, the marginal revenue product curve in a perfectly competitive market

- A) does not change.
- B) becomes flatter.
- C) shifts to the right.
- D) shifts to the left.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

38) When the marginal productivity of labor decreases, the demand curve for labor in a perfectly competitive market

- A) does not change.
- B) becomes flatter.
- C) shifts to the right.
- D) shifts to the left.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 39) When increased demand raises the price of the product, the
- A) marginal revenue product will also increase.
 - B) marginal revenue product will fall.
 - C) marginal revenue product will remain unchanged.
 - D) sales will fall.

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 40) The marginal revenue product curve shifts when
- A) wages fall.
 - B) there is a change in the product price workers are producing.
 - C) wages rise.
 - D) the wages paid exceed the price.

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 41) A perfectly competitive firm will hire workers up to the quantity at which the wage rate equals the
- A) marginal revenue product of labor.
 - B) marginal factor cost of labor.
 - C) price of the extra output produced.
 - D) average physical product of labor.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 42) A decrease in demand for a product, holding other things constant, will
- A) increase the marginal revenue product of labor.
 - B) decrease the marginal revenue product of labor.
 - C) not change the marginal revenue product of labor.
 - D) have an undetermined effect upon the marginal revenue product of labor.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 43) The demand for labor is considered a derived demand since it depends on
- A) the supply of labor.
 - B) the market for capital.
 - C) the consumer demand for the output produced.
 - D) competitive markets.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 44) An outward shift in the consumer demand for wheat will
- A) raise the price of wheat and shift inward the marginal revenue product of labor producing wheat.
 - B) lead to more capital and less labor used in producing wheat.
 - C) raise the price of wheat and shift out the marginal revenue product of labor producing wheat.
 - D) lead to downward pressure on the wages of those producing wheat.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 45) A firm is a price taker in the labor market if
- A) the skills of available workers do not match the requirements for the job.
 - B) there is a scarcity of labor in the market.
 - C) the hiring of more workers will drive the existing wage rate up.
 - D) the hiring of more workers will leave the existing wage rate unchanged.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 46) If the supply of labor to a firm is perfectly elastic at the going wage rate established by the forces of supply and demand then
- A) the firm is price taker.
 - B) the firm can only hire additional units of labor by driving the wage rate up.
 - C) the wage rate has been decreasing.
 - D) full employment exists in the labor market.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 47) For a firm in a perfectly competitive labor market, the supply curve of labor is
- A) elastic.
 - B) inelastic.
 - C) perfectly elastic.
 - D) perfectly inelastic.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 48) A firm in a competitive input market can
- A) hire workers at the going wage.
 - B) hire additional workers only by raising wages.
 - C) hire additional workers at lower wages because those who are still unemployed are anxious to work.
 - D) hire additional workers only after a long search process.

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 49) For a worker to be potentially available, he or she must
- A) know about the jobs available at a particular firm.
 - B) be in the relevant geographic market and be willing to work for minimum wage.
 - C) have most of the skills required by the firm only.
 - D) have the skills required by the firm and be in the relevant geographic market.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 50) The increase in output that results when one more unit of a variable input is hired is called
- A) total physical product.
 - B) marginal physical product.
 - C) average physical product.
 - D) marginal revenue.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 51) The marginal physical product of labor is
- A) the output of the firm divided by the number of workers.
 - B) the change in total revenues resulting from the addition of one more worker, while increasing one other factor of production.
 - C) the change in output resulting from the addition of one more worker, holding other factors of production constant.
 - D) the change in output resulting from the addition of one more worker, adjusting the level of the capital stock accordingly.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 52) As a firm hires more workers, holding the amounts of capital and other inputs constant,
- A) output increases at a decreasing rate.
 - B) output increases at a constant rate.
 - C) output increases for a while and then decreases.
 - D) output increases, but we can't be certain whether output increases at an increasing or a decreasing rate.

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 53) Other things held constant, after some point hiring additional units of labor will cause the marginal physical product of labor to decline because
- A) the firm is a price taker.
 - B) the wage rate increases when additional workers are hired.
 - C) of the law of diminishing marginal product.
 - D) the supply of labor is perfectly elastic.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 54) As a firm hires more workers, holding capital and other factors constant, the marginal physical product of labor declines because
- A) there are diseconomies of scale.
 - B) less efficient workers are hired as the number of workers increase.
 - C) workers don't perform well in teams.
 - D) the amount of other inputs each worker has to work with declines as the number of workers increases.

Answer: D

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 55) The marginal physical product of labor for the most recent worker hired by Ajax is 286. If Ajax were to hire an additional worker we would expect the marginal physical product of labor to
- A) remain at 286.
 - B) be below 286.
 - C) be above 286 by a small amount.
 - D) be above 286 by a large amount.

Answer: B

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

Labor Input (workers/day)	Total Physical Product (output/day)
10	500
11	600
12	690
13	760
14	800

- 56) Refer to the above table. What does the marginal physical product equal when the amount of labor goes from 10 to 11 units?

A) 600 B) 500 C) 100 D) 54.5

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 57) Refer to the above table. If the price of the good produced is \$7, the marginal revenue product of the 11th worker is

A) \$700 B) \$4200 C) \$630 D) \$3500

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 58) Refer to the above table. What does the marginal physical product equal when the amount of labor goes from 11 to 12 units?

A) 600 B) 90 C) 100 D) 690

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 59) Refer to the above table. If the price of the good produced is \$8, the marginal revenue product of the 12th worker is

A) \$720 B) \$800 C) \$5520 D) \$560

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 60) Refer to the above table. What does the marginal physical product equal when the amount of labor goes from 12 to 13 units?

A) 58.5 B) 70 C) 690 D) 760

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 61) Refer to the above table. If the price of the good produced is \$9, the marginal revenue product of the 13th worker is

A) \$810 B) \$360 C) \$6840 D) \$630

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 62) Refer to the above table. Suppose the price of the good sold is \$10 and the marginal factor cost of labor is \$700, how many units of labor will the firm hire?

A) 10 B) 11 C) 12 D) 13

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 63) Refer to the above table. For each level of employment of labor shown

A) marginal product declines.
B) marginal product holds constant.
C) marginal product rises.
D) marginal product falls for all employees beyond the 10th unit of labor.

Answer: D

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

64) Refer to the above table. Which of the following statements is correct?

- A) The table follows economic principles because in an increasing cost industry, increases in a variable input will lead to increase in output.
- B) The table does not follow economic principles because in an increasing cost industry, increases in a variable input will lead to decrease in output.
- C) The table follows economic principles because the law of diminishing marginal product predicts that increase in a variable input will eventually lead to a decrease in the marginal physical product.
- D) The table does not follow economic principles because the law of diminishing marginal product predicts that increase in a variable input will eventually lead to an increase in the marginal physical product.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

Labor Input (workers/day)	Total Physical Product (output/day)
10	500
11	600
12	690
13	760
14	800

65) Refer to the above table. If the price of the product is \$1.50, what is the marginal revenue product of the 11th worker?

- A) \$1.50
- B) \$13.64
- C) \$150
- D) \$900

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

66) Refer to the above table. If the price of the product is \$1.50, what is the marginal revenue product of the 12th worker?

- A) \$1035
- B) \$135
- C) \$90
- D) \$1.50

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 67) Refer to the above table. If the price of the product is \$1.50, and the marginal factor cost of an additional unit of an input is \$135, how many units of labor should be hired?

A) 11 B) 12 C) 13 D) 14

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 68) Refer to the above table. If the price of the product is \$1.50, and the marginal factor cost of an additional unit of an input is \$105, how many units of labor should be hired?

A) 11 B) 12 C) 13 D) 14

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 69) If a firm hires 215 workers it will produce 3,016 units of output. If it hires 216 workers it will produce 3,128 units of output. The marginal physical product of labor equals

A) 1 B) 112 C) 216 D) 3,128

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 70) If a firm hires 312 workers it will produce 4,522 units of output. If it hires 313 workers it will produce 4,786 units of output. The marginal physical product of labor equals

A) 4,786 B) 313 C) 264 D) 1

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 71) If a firm hires 312 workers it produces 4,522 computers. If it hires 313 workers it produces 4,786 computers. If computers sell at a constant price of \$1 and labor is hired at a constant wage rate of \$65 per worker

A) the firm should hire and retain the additional worker.
 B) the marginal factor cost of labor is \$65.
 C) the marginal revenue product of the added worker is \$264.
 D) all of the above
 E) the additional employee brings into the firm a NET revenue of \$112.

Answer: D

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 72) The additional revenue obtained by a firm when it hires an additional worker, holding other inputs constant, is
- A) the marginal physical product of labor.
 - B) the marginal revenue product of labor.
 - C) the marginal cost of labor.
 - D) equal to total revenue divided by the number of workers.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 73) The marginal revenue product gives
- A) the change in total product for an additional unit of a variable input.
 - B) the amount that other inputs must increase by when labor increase by one unit.
 - C) the additions to total cost when an additional unit of a variable input is hired.
 - D) the additional revenue obtained when an additional unit of a variable input is hired.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 74) The marginal revenue product
- A) represents the incremental contribution to the firm's total revenues obtained from an increase in a variable input.
 - B) always increases when there is an increase in a variable input.
 - C) gives the increase in cost when there is an increase in a variable input.
 - D) gives the change in total product when an additional unit of a good is hired.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 75) The addition to revenue obtained from hiring an additional unit of labor is
- A) total product.
 - B) marginal revenue product.
 - C) marginal factor cost.
 - D) marginal physical product of labor.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 76) The marginal revenue product of labor declines as the number of workers increases because
- A) firms hire the most efficient workers first and the least efficient workers last.
 - B) firms must lower prices for the final product when they want to sell more units.
 - C) of the law of diminishing marginal product.
 - D) of diseconomies of scale.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 77) For a perfectly competitive firm, the value of the marginal product is
- A) the same thing as marginal factor cost.
 - B) the same thing as marginal physical product.
 - C) marginal physical product times the product price.
 - D) marginal physical product times the wage rate.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

Number of Workers	Total Output	Number of Workers	Total Output
0	0	6	945
1	200	7	1000
2	420	8	1025
3	620	9	1035
4	770	10	1040
5	870		

- 78) Refer to the above table. If the price of the good produced is \$5, the marginal revenue product of the 5th worker is
- A) \$3350.
 - B) \$670.
 - C) \$500.
 - D) \$100.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 79) Refer to the above table. If the price of the good produced is \$5, the marginal revenue product of the 7th worker is
- A) \$125.
 - B) \$385.
 - C) \$5000.
 - D) \$55.

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 80) Refer to the above table. Suppose the marginal revenue product of the 7th worker is \$1100. This implies that
- A) the price of the good is \$1.
 - B) the price of the good is \$8.
 - C) the price of the good is \$20.
 - D) we cannot tell what the price of the good is without more information.

Answer: C

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 81) Refer to the above table. Suppose the marginal revenue product of the 5th worker is \$800. This implies that
- A) the price of the good is \$5.33.
 - B) the price of the good is \$8.
 - C) the price of the good is \$70.
 - D) we cannot tell what the price of the good is without more information.

Answer: B

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 82) Refer to the above table. The marginal factor cost of labor is \$200. To get the firm to hire 8 workers, the
- A) firm must be able to reduce wages below the marginal factor cost.
 - B) price of the good must be \$8.
 - C) eighth worker must be at least as productive as the seventh worker was.
 - D) wage rate must be a fraction of the marginal factor cost of labor.

Answer: B

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 83) Refer to the above table. Suppose the firm hires 5 workers and the price of the good sold is \$3. The marginal factor cost of labor must be
- A) \$3.
 - B) \$100.
 - C) \$300.
 - D) \$900.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 84) Refer to the above table. Suppose the price of the good sold is \$3 and the marginal factor cost of labor is \$300, how many units of labor will the firm hire?
- A) 4.
 - B) 5.
 - C) 6.
 - D) 3.

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 85) Refer to the above table. Suppose the firm hires 4 workers and the price of the good sold is \$4. The marginal factor cost of labor must be
- A) \$4.
 - B) \$150.
 - C) \$3080.
 - D) \$600.

Answer: D

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 86) Refer to the above table. Suppose the price of the good sold is \$4 and the marginal factor cost of labor is \$600, how many units of labor will the firm hire?
- A) 4. B) 5. C) 6. D) 3.

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 87) The cost of using an additional unit of an input is called the
- A) marginal revenue product. B) marginal physical product cost.
C) marginal factor cost. D) marginal product of labor.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 88) The marginal factor cost is the
- A) additional revenue obtained from a one-unit change in labor input.
B) additional revenue obtained from a one-unit change in output.
C) change in output resulting from the addition of one more worker.
D) cost of using an additional unit of an input.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 89) When the supply of labor to a firm is perfectly elastic the marginal factor cost will equal the
- A) market price of the product. B) wage rate.
C) marginal physical product. D) wage rate times the number of workers.

Answer: B

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 90) A profit-maximizing firm will hire additional units of labor until
- A) the additional cost of hiring the last worker equals the additional revenue generated by that worker.
B) the additional cost of hiring the last worker equals the marginal factor cost of the worker.
C) the extra revenue from hiring the last worker equals the marginal physical product of labor.
D) the extra cost from hiring the last worker equals the cost of the product.

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 91) Ajax has just discovered that the marginal revenue product generated by the last worker hired was \$125 while the marginal factor cost was \$85. What should Ajax do?

- A) Leave the level of production unchanged.
- B) Increase the amount produced.
- C) Reduce the amount produced.
- D) Collect more information before making a decision.

Answer: B

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 92) Ajax has just discovered that the marginal revenue product generated by the last worker hired was \$75 while the marginal factor cost was \$95. What should Ajax do?

- A) Leave the level of production unchanged.
- B) Increase the amount produced.
- C) Reduce the amount produced.
- D) Collect more information before making a decision.

Answer: C

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 93) Ajax has just discovered that the marginal revenue product generated by the last worker hired was \$50 while the marginal factor cost was \$50. What should Ajax do?

- A) Leave the level of production unchanged.
- B) Increase the amount produced.
- C) Reduce the amount produced.
- D) Collect more information before making a decision.

Answer: A

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 94) If the marginal revenue product of the last worker hired exceeds the marginal factor cost of the worker, the firm would be better served if it

- A) hires additional workers.
- B) maintains its current level of workers already hired.
- C) lays off the last worker hired.
- D) None of the above is a good option for a profit-seeking firm.

Answer: A

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

95) If $MFC > MRP_L$, the firm should

- A) hire more workers.
B) lower wages.
C) get rid of some capital.
D) reduce the number of workers.

Answer: D

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

96) A firm should hire workers up to the point where

- A) $MP = P$. B) $MFC = P$. C) $MFC = MRP$. D) $MP = MRP$.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

97) If $MFC < MRP_L$, the firm should

- A) hire more workers.
B) lower wages.
C) get rid of some capital.
D) reduce the number of workers.

Answer: A

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

98) If the additional revenue from hiring an additional worker equals the additional costs from hiring the extra worker, then we know that

- A) $MFC = MPP_L$.
B) $MFC/MPP_L = \text{wage}$.
C) $MFC/MRP_L = 1$.
D) $MRP_L/P = MFC$.

Answer: C

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

99) The demand curve for labor is the

- A) marginal factor cost curve for labor.
B) marginal physical product curve for labor.
C) marginal physical product curve for labor times the wage rate.
D) marginal revenue product curve for labor.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

100) The demand curve for labor slopes down because

- A) firms value less efficient workers less than they value more efficient workers.
- B) firms must lower prices to sell the additional units of its product that the extra workers produce.
- C) of the law of diminishing marginal product.
- D) of profit maximizing behavior.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

101) An increase in the marginal factor cost of labor will

- A) lead to an increase in the quantity demanded of labor.
- B) induce a firm to hire fewer workers.
- C) lead to an increase in the value of an additional worker.
- D) cause the value of the marginal product of labor to increase.

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

102) A decrease in the marginal factor cost of labor will

- A) lead to an increase in the quantity demanded of labor.
- B) induce a firm to hire fewer workers.
- C) induce a firm to hire more workers.
- D) cause the value of the marginal product of labor to decrease.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

103) The wage rate for widget makers is currently \$25 per hour and Ajax hires 20 widget makers. If the wage rate were decreased to \$20, what would happen to the marginal revenue product for labor at Ajax?

- A) It would remain the same.
- B) It would increase since Ajax's demand for labor curve will shift.
- C) It would increase since the price of widgets would decrease.
- D) It would decrease since Ajax will hire more workers.

Answer: D

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 104) When the demand curve for an input is a derived demand this means that
- A) the demand curve is derived from the demand for the final product being produced.
 - B) the demand curve depends upon the MFC.
 - C) the law of diminishing marginal product does not hold.
 - D) the demand curve slopes upward.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 105) The demand for labor is
- A) derived from the demand for the final product of the firm.
 - B) derived from the satisfaction that hiring labor provides the owner of the firm.
 - C) derived from the satisfaction workers get for being employed.
 - D) derived from a utility-maximizing process similar to that used to derive the demand curve for all workers in a given industry.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 106) The demand curve for labor will shift whenever
- A) the wage rate changes.
 - B) the marginal factor cost changes.
 - C) demand for the final product changes.
 - D) the supply of labor changes.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 107) Which of the following will not cause the marginal revenue product of labor curve for a firm to shift?
- A) An increase in the productivity of workers.
 - B) An increase in demand for the product.
 - C) A decrease in the price of the product.
 - D) An increase in the wage rate.

Answer: D

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 108) An increase in product price implies that
- A) the firm's marginal factor cost will increase.
 - B) the wage rate the firm pays will increase.
 - C) the firm's demand for labor increases.
 - D) the firm's demand for labor decreases.

Answer: C

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 109) An increase in the productivity of labor induces
- A) an increase in the demand for labor.
 - B) an increase in the cost of labor.
 - C) a firm to hire fewer workers since fewer workers are needed with the increase in productivity.
 - D) a firm to offer a higher wage for workers since the workers are now more productive.

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 110) If the wage rate doesn't change but a profit-maximizing competitive firm hires fewer workers, we know that
- A) the price of the product increased.
 - B) technical change occurred that increased labor productivity, reducing the firm's demand for labor.
 - C) demand for the product fell or there has been a reduction in labor productivity.
 - D) marginal factor cost increased.

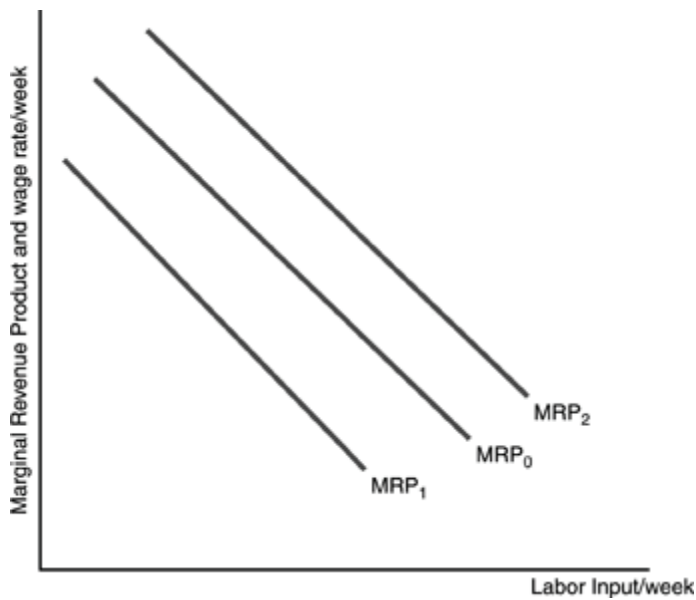
Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition



111) Refer to the above figure. MRP_0 represents

- A) the supply curve for the product.
- B) the supply curve for labor.
- C) the demand curve for the product.
- D) the demand curve for labor.

Answer: D

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

112) Refer to the above figure. The firm is operating using MRP_0 . An increase in demand for the product has occurred. The relevant curve for the firm after the increase in price

- A) is MRP_0 .
- B) is MRP_1 .
- C) is MRP_2 .
- D) could be MRP_1 or MRP_2 depending upon whether the firm was earning a positive profit.

Answer: C

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 113) Refer to the above figure. The firm is operating using MRP_0 . An increase in productivity has occurred. The relevant curve for the firm after the increase in productivity
- A) is MRP_0 .
 - B) is MRP_1 .
 - C) is MRP_2 .
 - D) could be MRP_1 or MRP_2 depending upon whether the firm was earning a positive profit.

Answer: C

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 114) Sam, who owns a carpentry shop, discovered that with 4 laborers he could produce 18 cabinets per day. With 5 laborers he produced 25 cabinets and with 6 laborers he produced 36 cabinets. What was the MPP of the 5th laborer?
- A) 8 cabinets
 - B) 7 cabinets
 - C) 6 cabinets
 - D) 4 cabinets

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 115) Sam, who owns a carpentry shop, discovered that with 4 laborers he could produce 18 cabinets per day. With 5 laborers he produced 25 cabinets and with 6 laborers he produced 36 cabinets. What was the MPP of the 6th laborer?
- A) 11 cabinets
 - B) 7 cabinets
 - C) 36 cabinets
 - D) 9 cabinets

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

- 116) The change in output resulting from the addition of one more worker is
- A) marginal physical product.
 - B) marginal revenue product.
 - C) average physical product.
 - D) average revenue product.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 117) The marginal physical product (MPP) is calculated by
- A) dividing total physical product by labor.
 - B) dividing the change in total physical product by the change in the input.
 - C) dividing the change in total cost by the change in labor.
 - D) the difference between the output of skilled and unskilled workers.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 118) The downward sloping marginal revenue product of labor is
- A) the firm's supply of labor.
 - B) the firm's short-run demand for labor.
 - C) the firm's marginal cost of labor.
 - D) another term for the marginal revenue product of labor.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 119) A firm's demand curve for labor is equal to the
- A) total revenue product.
 - B) marginal revenue product.
 - C) marginal factor cost.
 - D) marginal wage.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 120) Marginal revenue product is
- A) marginal physical product times marginal factor cost.
 - B) marginal physical product times marginal revenue.
 - C) average physical product times marginal revenue.
 - D) marginal physical product times the wage rate.

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 121) If the price of a product being sold in a perfectly competitive market increases,
- A) the MRP curve shifts to the right.
 - B) the MPP curve shifts to the right.
 - C) the MFC curve shifts to the right.
 - D) the MFC curve shifts to the left.

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 122) The additional revenue associated with hiring one additional unit of some factor input, such as labor, is called
- A) marginal cost.
 - B) marginal revenue product.
 - C) marginal factor cost.
 - D) marginal physical product.

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 123) Marginal factor cost is computed as
- A) total cost of the resource/total amount of the resource being used.
 - B) change in the total cost of the resource/total amount of the resource being used.
 - C) total cost of the resource/change in the amount of the resource being used.
 - D) change in the total cost of the resource/change in the amount of the resource being used.

Answer: D

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 124) The **cost** of hiring one more worker, *ceteris paribus*, is known as
- A) marginal revenue product.
 - B) marginal physical product.
 - C) marginal factor cost.
 - D) marginal wage.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 125) The additional cost associated with hiring one additional unit of some factor input, such as labor, is referred to as
- A) marginal physical product of labor.
 - B) marginal revenue cost.
 - C) marginal factor cost.
 - D) marginal revenue product.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 126) The firm's demand for labor curve is its
- A) average product of labor curve.
 - B) marginal product of labor curve.
 - C) marginal revenue product of labor curve.
 - D) average revenue product of labor curve.

Answer: C

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 127) The MRP of labor will shift to the right if
- A) labor productivity increases.
 - B) labor productivity decreases.
 - C) wages increase.
 - D) wages decrease.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

128) The MRP of labor will shift to the left if

- A) labor productivity increases.
- B) labor productivity decreases.
- C) wages increase.
- D) wages decrease.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

129) The additional revenue a firm obtains when it hires an additional worker (holding other inputs constant) is the

- A) marginal revenue product (MRP) of labor.
- B) total factor cost (TFC) per worker.
- C) general rule for hiring.
- D) marginal physical product (MPP) of labor.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

130) The additional output from one more worker is known as

- A) marginal revenue product.
- B) marginal physical product.
- C) marginal factor cost.
- D) marginal wage.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

131) All of the following statements regarding the marginal revenue product (MRP) curve and the demand for labor are true EXCEPT

- A) an individual firm's demand for labor is its MRP curve.
- B) under conditions of perfect competition, MRP equals marginal physical product multiplied by the product's price.
- C) an increase in the market demand for a given product decreases the product's price.
- D) the demand for labor is a derived demand.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

132) The MRP is

- A) the supply curve of labor for an individual firm.
- B) the demand curve for labor for an individual firm.
- C) the demand curve for labor for the entire market.
- D) the supply curve of labor for the entire market.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

133) Which of the following represents the general rule of hiring for a firm?

- A) $TPP = TFC$ B) $APP = W$ C) $MC = MR$ D) $MRP = MFC$

Answer: D

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

134) If the marginal factor cost of hiring an additional worker is \$10 while the marginal revenue product is \$15, then the firm should

- A) hire more workers.
B) stop hiring more workers.
C) fire some workers.
D) none of the above: insufficient information to answer the question

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: New

135) Derived demand is

- A) a derivative of the demand curve.
B) the demand for goods and services produced by companies using scarce resources.
C) the demand for advertising to increase the sales of the product.
D) the demand for the factors of production that are used to produce goods and services.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

136) Since the demand for labor depends upon the demand for the final product, we say that labor is

- A) a derived demand. B) an "inverse" demand.
C) a positive demand. D) a reverse demand.

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

137) The demands for labor and other input factors are called

- A) derived demands, because the demand for these inputs depends on the demand for goods and services they are employed to produce.
B) developed demands, because the demand for these inputs is developed from an analysis of the costs of advertising products.
C) indirect demands, because the demand for these inputs is indirectly related to the costs of advertising products.
D) reverse demands, because the demand for these inputs varies inversely with the demand for goods and services they are employed to produce.

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

Quantity of Workers	Total Product	Marginal Physical Product	Marginal Revenue Product
0	0	-	-
1	7		
2	18		
3	30		
4	40		
5	48		

138) In the above table, what is the marginal physical product of worker 4?

- A) 10 B) 40 C) 11 D) 12

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

139) In the above table, what is the marginal physical product of worker 2?

- A) 10 B) 40 C) 11 D) 12

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

140) In the above table, if this is a perfectly competitive firm and the market price of the product is \$10, what is the marginal revenue product of worker 4?

- A) \$210 B) \$100 C) \$411 D) \$120

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

141) In the above table, if this is a perfectly competitive firm and the market price of the product is \$8, what is the marginal revenue product of worker 3?

- A) \$96 B) \$88 C) \$80 D) \$240

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: New

142) In the above table, if this is a perfectly competitive firm and the market price of the product is \$5 and the marginal factor cost of labor is \$60, how many units of labor will the firm hire?

- A) 2 B) 3 C) 4 D) 6

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: New

Labor Input (workers per week)	Total Physical Output (computers per week)
10	100
11	190
12	270
13	340
14	400

- 143) The above table depicts the output of a firm that manufactures computers. The computers sell for \$1,000 each. What is the marginal physical product (MPP) of the eleventh worker per week?

A) 90 units B) 80 units C) \$7,000 D) \$6,000

Answer: A

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 144) The above table depicts output from a firm that manufactures computers. The computers sell for \$1,000 each. What is the marginal revenue product (MRP) for the fourteenth worker per week?

A) 90 units B) 80 units C) \$70,000 D) \$60,000

Answer: D

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 145) An increase in the price of a product

A) automatically increases wages.
B) raises the firm's demand for labor.
C) would probably decrease total revenues.
D) increases productivity.

Answer: B

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 146) If labor productivity increases,

A) labor costs rise by equal increments. B) the demand for labor increases.
C) some workers will be laid off. D) jobs will relocate.

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 147) An increase in labor productivity will shift

A) MRP curve to the left. B) MRP curve to the left.
C) MRP curve to the right. D) MFC curve to the left.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 148) At a perfectly competitive firm, all of the following is true of the MRP curve EXCEPT
- A) the MRP curve is the derived supply of labor.
 - B) the MRP curve shifts leftward when labor productivity falls.
 - C) the MRP curve shifts rightward when the product price rises.
 - D) the MRP curve shifts leftward when the demand for the final product falls.

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 149) If the demand for online banking increases, we would expect to see the
- A) supply of workers that produce online-banking services to increase.
 - B) supply of workers that produce online-banking services to decrease.
 - C) demand for workers that produce online-banking services to decrease.
 - D) demand for workers that produce online-banking services to increase.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 150) If workers in an industry become less productive, we would expect the
- A) supply of workers to increase.
 - B) supply of workers to decrease.
 - C) demand for workers to decrease.
 - D) demand for workers to increase.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

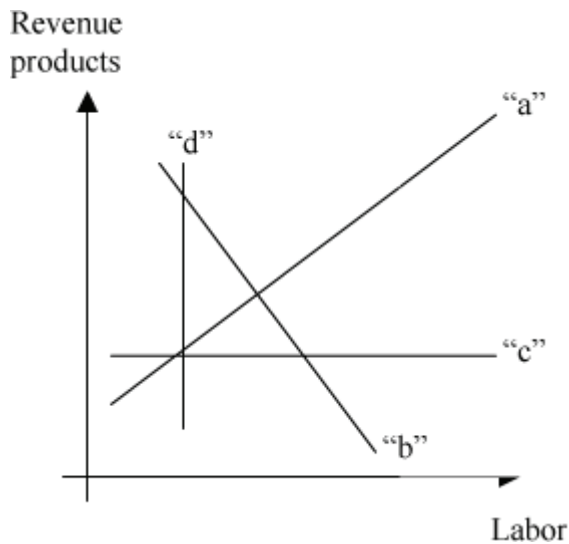
- 151) If laborers become more efficient over time, and if the Ajax Company would want to expand production, they would
- A) substitute capital for labor.
 - B) hire more laborers.
 - C) hire fewer laborers.
 - D) produce less product.

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition



152) In the above figure, the marginal revenue product is represented by line

- A) "a." B) "b." C) "c." D) "d."

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

153) The individual demand curve for an input such as labor to a firm would be the downward sloping portion of the firm's

- A) marginal physical product curve. B) marginal revenue product curve.
C) marginal revenue curve. D) total revenue curve.

Answer: B

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

154) Suppose that in a computer factory, if there is 1 worker, 80 computers are produced per week. If there are 2 workers, 150 computers are produced per week. If there are 3 workers, 210 computers are produced per week. Given this information, there

- A) is diminishing marginal product. B) are too many workers.
C) are not enough workers. D) is increasing marginal product.

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 155) Suppose that in a computer factory, if there is 1 worker, 80 computers are produced per week. If there are 2 workers, 150 computers are produced per week. If there are 3 workers, 210 computers are produced per week. Given this information, the marginal product of the third worker is

A) 210 computers per week. B) 70 computers per week.
C) 60 computers per week. D) 50 computers per week.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

- 156) Suppose that in a computer factory, if there is 1 worker, 80 computers are produced per week. If there are 2 workers, 150 computers are produced per week. If there are 3 workers, 210 computers are produced per week. Given this information and the fact that the firm receives \$200 per computer, the marginal revenue product of the third worker is

A) \$4,200. B) \$12,000. C) \$10,000. D) \$14,000.

Answer: B

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Previous Edition

Number of Workers	Total Output	Number of Workers	Total Output
0	0	6	540
1	100	7	600
2	220	8	650
3	320	9	690
4	400	10	700
5	475		

- 157) Refer to the above table. If the price of the good produced is \$10 and the wage rate is \$500, then the marginal revenue product of the 5th worker is _____.

A) \$10 B) \$50 C) \$750 D) \$4,750

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Revised

- 158) According to the above table, if the price of the good produced is \$5 and the wage rate is \$400, then the marginal revenue product of the 7th worker is

A) \$300. B) \$60. C) \$12. D) \$400.

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Revised

- 159) According to the above table, if the wage rate is \$400 a week and the price of the good produced is \$5, the perfectly competitive firm should hire
- A) 3 workers. B) 4 workers. C) 5 workers. D) 6 workers.

Answer: B

Diff: 3

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Revised

- 160) If the demand for hamburgers increases, it is likely that the demand for fast-food employees will
- A) increase. B) decrease.
C) stay the same. D) increase at first but then fall rapidly.

Answer: A

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Revised

- 161) Suppose the MRP of the 49th worker at a firm is \$25 and that the market wage rate is \$15. We know that if this firm operates in perfectly competitive product and labor markets,
- A) the firm is paying wages above the minimum wages.
B) the firm's profits would increase if it fired some workers.
C) the firm would be more profitable if it hired more workers.
D) the firm should use more capital.

Answer: C

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Revised

- 162) Which of the following is FALSE regarding the general rule for hiring?
- A) Virtually every optimizing rule in economics involves comparing marginal benefits with marginal cost.
B) The benefit from added workers is extra output and consequently more revenues.
C) The firm hires workers up to the point at which the additional cost associated with hiring the last worker is equal to the additional revenue generated by that worker.
D) If any firm hired fewer workers over time, profits would definitely increase at that firm.

Answer: D

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

Question Status: Revised

- 163) "A firm should continue to hire more workers as long as wages are low." Do you agree or disagree? Why?

Answer: Disagree. The firm should hire workers up to the point at which the additional cost associated with hiring the last worker is equal to the additional revenue generated by hiring that worker. What is ignored in the statement is the revenue associated with hiring an additional worker: Even if wages are low, the additional revenue associated with the additional worker may not be enough to cover the additional costs associated with the wages.

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 164) What is the marginal revenue product of labor (MRP)? What shape does the MRP curve have? Why?

Answer: Marginal revenue product of labor is the marginal physical product of labor times marginal revenue of selling the good produced. It gives the additional revenue from hiring one more unit of labor. The curve slopes down because of the law of diminishing marginal product.

Diff: 2

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

- 165) What is marginal factor cost? How is it related to the supply curve of an input?

Answer: Marginal factor cost is the cost of using an additional unit of an input. In the case of labor, this equals the wage. For a price taker in input markets, the marginal factor cost equals the price of the input and is the supply curve of the input too.

Diff: 1

Topic: 28.1 Labor Demand for a Perfectly Competitive Firm

AACSB: Analytic skills

Question Status: Previous Edition

28.2 The Market Demand for Labor

- 1) The market demand for labor will be
- A) insensitive to the wage rate in the short run.
 - B) downward sloping.
 - C) the inverse of the market demand for output.
 - D) perfectly inelastic.

Answer: B

Diff: 1

Topic: 28.2 The Market Demand for Labor

Question Status: Previous Edition

- 2) If labor is 80 percent of total costs in industry A and 20 percent in industry B, then other things equal, we would expect the elasticity of demand for labor to be
- A) greater in industry A than in industry B.
 - B) greater in industry B than in industry A.
 - C) the same in both industries.
 - D) uncertain since no general relationship exists between cost shares and elasticities.

Answer: A

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 3) In the long run, input demand becomes more
- A) elastic.
 - B) inelastic.
 - C) unit-elastic.
 - D) cost efficient.

Answer: A

Diff: 2

Topic: 28.2 The Market Demand for Labor

Question Status: Previous Edition

- 4) Whenever an input makes up a large percentage of a good's final cost, an increase in that input's price will
- A) affect total cost relatively more.
 - B) not affect total revenues.
 - C) affect only accounting profits.
 - D) cause the firm to shutdown.

Answer: A

Diff: 3

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 5) As new substitutes for office productivity software are developed, the demand for workers in office productivity software production should
- A) become more elastic.
 - B) become less elastic.
 - C) be unchanged.
 - D) change in an undetermined way.

Answer: A

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 6) Suppose a new technology allows firms to substitute mechanical tomato pickers for farm laborers. As a result, the demand curve for farm laborers will
- A) become less elastic.
 - B) become more elastic.
 - C) shift to the right.
 - D) not be affected.

Answer: B

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 7) The more inelastic the consumer demand for the final product, the
- A) greater will be the economic profit in a competitive market.
 - B) greater the impact on employment from a change in the wage rate.
 - C) more inelastic the demand for labor producing the product.
 - D) more responsive the output demand to a change in the price of labor.

Answer: C

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 8) If the price elasticity of demand is greater than 1, then consumer demand is
- A) unrelated to the elasticity of demand.
 - B) inelastic.
 - C) elastic.
 - D) unitary elastic.

Answer: C

Diff: 1

Topic: 28.2 The Market Demand for Labor

Question Status: New

- 9) If the price elasticity of demand is less than 1, then then consumer demand is
- A) unrelated to the elasticity of demand.
 - B) inelastic.
 - C) elastic.
 - D) unitary elastic.

Answer: B

Diff: 1

Topic: 28.2 The Market Demand for Labor

Question Status: New

- 10) When an input represents a small proportion of a firm's total costs, then
- A) demand for the input will tend to be less elastic.
 - B) the input demand will vary significantly with a change in input price.
 - C) the usage of the input cannot be varied in the production function.
 - D) output demand will be highly elastic.

Answer: A

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 11) When an input represents a larger proportion of a firm's total costs, then
- A) demand for the input will tends to be less elastic.
 - B) the input demand will not vary significantly with a change in input price.
 - C) the usage of the input cannot be varied in the production function.
 - D) demand for the input will tends to be more elastic.

Answer: D

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: New

- 12) The price elasticity of demand for a variable input will be greater
- A) the fewer substitutes there are for the final product.
 - B) the easier it is for a particular input to be substituted for by other inputs.
 - C) the lower the price elasticity of supply of all other inputs.
 - D) the smaller the proportion of total costs accounted for by a particular variable input.

Answer: B

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 13) Aluminum cannot be produced without bauxite. Hence, the price elasticity of demand for bauxite by aluminum manufacturers will be
- A) perfectly elastic.
 - B) elastic.
 - C) inelastic.
 - D) unitary elastic.

Answer: C

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Reflective thinking skills

Question Status: Previous Edition

- 14) Suppose there are four industries. Labor costs are 80 percent of total costs in industry A, 60 percent in B, 45 percent in C, and 10 percent in D. In which of these industries will a 10 percent increase in the price of labor reduce quantity demanded of labor by the largest proportion?
- A) A
 - B) B
 - C) C
 - D) D

Answer: A

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 15) We would expect that a fall in labor supply will have a proportionately larger effect on the market wage rate when
- A) capital goods exist that can replace many of the workers.
 - B) the product produced in the industry has several close substitutes.
 - C) the product produced in the industry makes up a large portion of most families' budgets.
 - D) labor represents a relatively small portion of total costs.

Answer: D

Diff: 3

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 16) We would expect that a rise in labor supply will have a proportionately larger effect on the market wage rate when
- A) the demand for labor is unitary elastic.
 - B) the demand for labor is inelastic.
 - C) the supply for labor is elastic
 - D) the demand for labor is elastic.

Answer: B

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: New

- 17) We would expect that a fall in labor supply will have a proportionately smaller effect on the market wage rate when
- A) workers can easily be replaced by capital goods.
 - B) the product produced in the industry has very few substitutes.
 - C) the product is produced in a perfectly competitive industry.
 - D) labor represents a relatively small portion of total costs.

Answer: A

Diff: 3

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: New

- 18) What has been the impact of the widespread adoption of automated teller machines (ATMs) on the demand for bank tellers?
- A) The demand for tellers has increased.
 - B) The demand for bank tellers has become more inelastic.
 - C) The demand for bank tellers has become more elastic.
 - D) There has been no change because the ATMs and the employees provide completely different services.

Answer: C

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Reflective thinking skills

Question Status: Previous Edition

- 19) Which of the following statements is true?
- A) A firm cannot increase quantity demand for labor when the wage rate falls without causing the product price to decline.
 - B) A movement along the market demand curve for labor does not require a change in the product price.
 - C) A firm can increase quantity demanded for labor when the wage rate falls without affecting the product price but the industry cannot hire more workers without causing the product price to fall.
 - D) Both a firm and the industry can move down their demand curves for labor without causing product price to change.

Answer: C

Diff: 3

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 20) Which of the following will cause a shift in the demand curve of labor?
- A) An increase or decrease in the productivity of labor.
 - B) An increase or decrease in the demand for the product labor produces.
 - C) A decline in the price of a complementary input .
 - D) all of the above

Answer: D

Diff: 3

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 21) Which of the following statements is true about the market demand curve for labor?
- A) The market demand curve is the sum of the individual firm's demand curve.
 - B) The market demand curve will be perfectly inelastic since firms need labor.
 - C) The market demand curve shows the quantities of labor demanded by all firms in the industry at various marginal products.
 - D) The market demand curve depends upon labor productivity, the wage rate and the price of the final product.

Answer: D

Diff: 3

Topic: 28.2 The Market Demand for Labor

Question Status: Previous Edition

- 22) Suppose there are 1000 firms in a market and all are identical. Firm A will hire 20 workers when the wage rate is \$10, 25 workers when the wage rate is \$9, and 30 workers when the wage rate is \$8. The equilibrium wage rate for a number of years has been \$9. If the wage rate falls to \$8, we know that
- A) the quantity demanded for the market will increase to 30,000 workers.
 - B) the quantity demanded for the market will increase to more than 30,000 workers.
 - C) the quantity demanded for the market will increase to less than 30,000 workers.
 - D) the quantity demanded for the market will increase, but we can't tell which of the above answers is correct.

Answer: C

Diff: 3

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 23) The price elasticity of demand for labor will depend upon all but the
- A) price elasticity of demand for the final product.
 - B) price elasticity of supply for the final product.
 - C) time period being considered.
 - D) availability of substitutes for inputs.

Answer: B

Diff: 1

Topic: 28.2 The Market Demand for Labor

Question Status: Revised

24) All of the following make the demand for labor more elastic EXCEPT

- A) greater elasticity of demand for the final product.
- B) the longer the time period under consideration.
- C) the smaller the proportion of total costs accounted for by labor.
- D) the easier it is to substitute another input for labor.

Answer: C

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

25) The price elasticity of demand for labor equals

- A) the percentage change in the price of labor divided by the percentage change in the supply of labor.
- B) the change in the quantity demanded of labor divided by the change in the price of labor.
- C) the slope of the demand curve for labor.
- D) the percentage change in the quantity demanded of labor divided by the percentage change in the price of labor.

Answer: D

Diff: 1

Topic: 28.2 The Market Demand for Labor

Question Status: Previous Edition

26) The elasticity of demand for labor will be *less* the

- A) longer the time period.
- B) easier it is to substitute one input for another.
- C) less the demand elasticity for the final product.
- D) larger the share of total costs accounted for by labor.

Answer: C

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

27) Coal is required to make steel. Hence, the price elasticity of demand for coal by steel manufacturers will be

- A) unit elastic.
- B) inelastic.
- C) elastic.
- D) perfectly elastic.

Answer: B

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Reflective thinking skills

Question Status: Previous Edition

- 28) Suppose there are four industries. Labor costs are 20 percent of total costs in A, 40 percent in B, 60 percent in C, and 80 percent in D. A ten percent increase in the price of labor will cause industry _____ to reduce quantity demanded of labor by the largest proportion.

A) A B) B C) C D) D

Answer: D

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 29) We would expect unions to have a more difficult time negotiating higher wages for their members when

A) labor represents a small portion of total costs.
 B) the product produced makes up a small portion of families' budgets.
 C) the product produced has several close substitutes.
 D) there are not good substitutes for labor in the production process.

Answer: C

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 30) A 20 percent increase in the wage rate induces firms in an industry to reduce quantity demanded for labor by 5 percent in the first year. Five years later we would expect, other things constant,

A) the reduction in the quantity demanded of labor to be much greater than 5 percent.
 B) the reduction in the quantity demanded of labor to be less than 5 percent.
 C) the reduction in the quantity demanded of labor to be about 5 percent.
 D) the quantity demanded of labor to be back to its original level.

Answer: A

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 31) The price elasticity of demand for labor will be greater, the

A) greater is the price elasticity of demand for the final product.
 B) more difficult it is to employ substitute inputs in production.
 C) smaller is the proportion of wage costs in the total cost of production.
 D) shorter is the time period under examination.

Answer: A

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 32) The price elasticity of demand for labor will be greater, the
- A) smaller is the price elasticity of demand for the final product.
 - B) easier it is to employ substitute inputs in production.
 - C) smaller is the proportion of wage costs in the total cost of production.
 - D) shorter is the time period under examination.

Answer: B

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: New

- 33) The price elasticity of demand for labor will be smaller, the
- A) smaller is the price elasticity of demand for the final product.
 - B) easier it is to employ substitute inputs in production.
 - C) larger is the proportion of wage costs in the total cost of production.
 - D) longer is the time period under examination.

Answer: A

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

- 34) The price elasticity of demand for labor will be smaller, the
- A) greater is the price elasticity of demand for the final product.
 - B) easier it is to employ substitute inputs in production.
 - C) smaller is the proportion of wage costs in the total cost of production.
 - D) longer is the time period under examination.

Answer: C

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: New

- 35) The greater the elasticity of demand for a final product, we find _____ the demand for the factor inputs.

- A) the greater will be
- B) the lower will be
- C) that it will not impact
- D) The answer cannot be determined.

Answer: A

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

36) The price elasticity of demand for a variable input will be more elastic in all the following cases EXCEPT

- A) the greater the price elasticity of demand for the final product.
- B) the easier it is for a particular variable input to be substituted for by other inputs.
- C) the larger the proportion of total costs accounted for by a particular variable input.
- D) the shorter the time period being considered.

Answer: D

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

37) The demand for an input will be more inelastic when

- A) the demand for the product being produced is elastic.
- B) the cost of the input is a relatively large percentage of total production costs.
- C) the time period being considered is relatively long.
- D) it is difficult to substitute other inputs for this input.

Answer: D

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

38) All of the following affect the demand elasticity for labor EXCEPT

- A) final product income elasticity.
- B) ease of substitution of labor for other inputs.
- C) final product price elasticity.
- D) labor costs as a portion of total cost.

Answer: A

Diff: 2

Topic: 28.2 The Market Demand for Labor

Question Status: Previous Edition

39) Which of the following would cause the price elasticity of demand for a variable input to be greater?

- A) The smaller the price elasticity of demand for the final product
- B) The longer the time period being considered
- C) The smaller the proportion of total costs accounted for by the variable input
- D) The harder it is for a variable input to be substituted for by other inputs

Answer: B

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Revised

40) Which will NOT affect the elasticity of demand for labor?

- A) the labor intensity of the production process
- B) the elasticity of supply for labor
- C) the elasticity of demand for the good
- D) the substitutability of capital for labor

Answer: B

Diff: 2

Topic: 28.2 The Market Demand for Labor

Question Status: Revised

41) "The market demand curve for labor is the horizontal summation of the labor demand curves of all firms." Do you agree or disagree? Why?

Answer: Disagree. A reduction in the wage rate causes each firm to move down their demand curves for labor and hire more workers. Industry output increases, which means product price falls. The fall in the product price causes the individual firm's demand curve for labor to shift to the left. The market demand curve for labor reflects not only the shape of the individual demand curves, but also this shift in the MRP curve.

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

42) What would make the demand for labor more elastic?

Answer: The demand for labor will be more elastic the greater the demand for the final product, the easier it is for labor to be substituted for by other inputs, the larger the proportion of total costs accounted for by labor, and the longer the time period.

Diff: 1

Topic: 28.2 The Market Demand for Labor

AACSB: Analytic skills

Question Status: Previous Edition

43) Suppose the price elasticity of demand for iPods is inelastic. What would you expect about the demand elasticity for workers producing iPods? Explain.

Answer: Because the demand for workers producing iPods is derived from the demand for iPods, the demand elasticity for the workers is positively related to the price elasticity of demand for the final products. This means that the demand elasticity for workers producing iPods is also inelastic.

Diff: 2

Topic: 28.2 The Market Demand for Labor

AACSB: Reflective thinking skills

Question Status: Previous Edition

28.3 Wage Determination in a Perfectly Competitive Labor Market

1) In a perfectly competitive labor market, the labor supply curve facing the firm will be

- A) upward sloping.
- B) downward sloping.
- C) horizontal.
- D) vertical.

Answer: C

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

2) Which of the following would cause the labor demand curve to shift to the right?

- A) A decrease in demand for the product the labor is used to produce
- B) An increase in labor productivity
- C) A decrease in the price of a complimentary resource
- D) All of the above

Answer: B

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

3) In a perfectly competitive labor market, the industry demand curve is _____ and the industry supply curve is _____.

- A) perfectly elastic; upward sloping
- B) downward sloping; upward sloping
- C) upward sloping; downward sloping
- D) vertical; perfectly elastic

Answer: B

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

4) An industry's equilibrium wage rate is established

- A) by the industry supply curve for labor alone.
- B) by the slope of the industry demand curve for labor alone.
- C) by the Labor Department and based on the cost of living in the area.
- D) by the intersection of the industry supply and demand curves for labor.

Answer: D

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

5) When there is an increase in the wages the banking industry offers accountants, what happens to the supply of accountants available to other industries?

- A) The supply to other industries increases.
- B) The supply to other industries falls.
- C) The supply curve for other industries shifts to the right.
- D) no change

Answer: B

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Reflective thinking skills

Question Status: Previous Edition

6) In a perfectly competitive industry, an individual firm faces

- A) a perfectly inelastic labor supply curve.
- B) a perfectly vertical labor supply curve.
- C) a perfectly elastic labor supply curve.
- D) none of the above.

Answer: C

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 7) The supply of labor to the individual firm in a perfectly competitive market is
- A) perfectly inelastic at the current equilibrium employment level.
 - B) perfectly elastic at the current market clearing wage rate.
 - C) downward sloping.
 - D) equal to the marginal revenue of output.

Answer: B

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 8) The individual firm operating in a perfectly competitive labor market
- A) can hire more labor only by offering a higher wage.
 - B) faces an inelastic demand for labor.
 - C) will pay less to the additional labor employed.
 - D) can buy all the labor it wants at the going market wage rate.

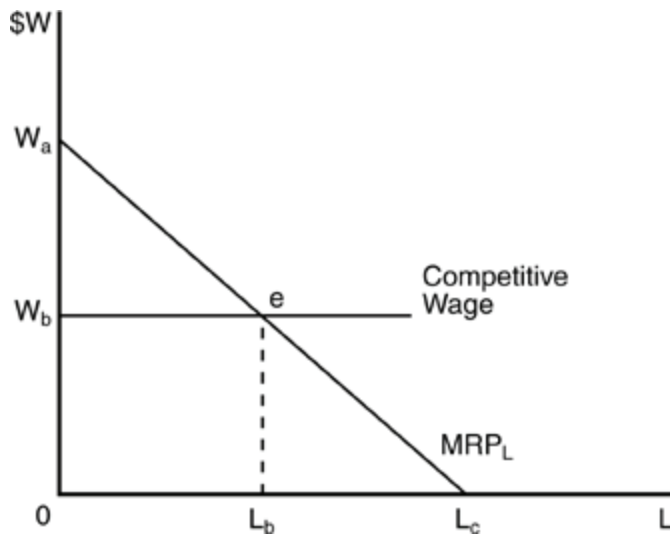
Answer: D

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition



- 9) In the above figure, the competitive firm will employ the quantity of labor
- A) equal to L_c .
 - B) equal to L_b .
 - C) less than L_b .
 - D) greater than L_c .

Answer: B

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 10) In the above figure, the line labeled " MRP_L " also represents the firm's
- A) supply curve.
 - B) marginal physical product curve.
 - C) total physical product curve.
 - D) demand curve.

Answer: D

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Revised

- 11) In the above figure, if the wage rate fell below W_b , in the short run the firm would
- A) hire more workers.
 - B) fire several workers.
 - C) reduce its level of output.
 - D) keep all its input levels the same as they were before.

Answer: A

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 12) The labor supply curve faced by an individual firm in a perfectly competitive market is
- A) upward sloping.
 - B) horizontal.
 - C) vertical.
 - D) downward sloping.

Answer: B

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

- 13) When hiring additional workers, a firm operating in a perfectly competitive labor market will
- A) have to offer higher wages to hire additional workers, but the old workers do not get the higher wage.
 - B) have to offer higher wages to hire additional workers, and the old workers will also receive the new, higher wage.
 - C) be able to hire additional workers without offering higher wages.
 - D) be able to hire additional workers at lower wages because the new workers have been unemployed.

Answer: C

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 14) The equilibrium wage rate in an industry is determined by
- A) finding where the market supply curve indicates that the substitution effect and income effect of a wage increase are offsetting.
 - B) the intersection of the market demand curve for labor and the market supply curve for labor.
 - C) the strength of the substitution effect relative to the elasticity of demand for labor.
 - D) whether workers or management are better at negotiating.

Answer: B

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

- 15) As the wage rate rises, other things constant, perfectly competitive firms will employ
- A) more workers.
 - B) less capital.
 - C) the same number of workers.
 - D) fewer workers.

Answer: D

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 16) If the price of labor increases, the typical perfectly competitive firm in the short run will
- A) produce more output.
 - B) hire less labor.
 - C) hire the same labor and produce the same output.
 - D) hire more labor.

Answer: B

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 17) A short-run increase in the price of a firm's output will typically
- A) lead to a movement along the firm's demand for labor curve.
 - B) lead to more employment in the competitive firm.
 - C) not impact the hiring of labor.
 - D) make the demand for labor more inelastic.

Answer: B

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

18) Which of the following will lead to an outward shift in the firm's short-run demand for labor?

- A) An increase in the price of output
- B) Less capital per unit of labor
- C) A decline in labor productivity
- D) A reduction in average consumer income

Answer: A

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

19) Which of the following will lead to a decrease in the firm's short-run demand for labor?

- A) An increase in the price of the final product
- B) An increase in price of the final product's substitute good
- C) A decline in labor productivity
- D) An increase in the number of buyers for the final product

Answer: C

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: New

20) Goods X and Y are substitutes. If the price of good Y falls, the marginal revenue product of good X

- A) will not change.
- B) will shift out.
- C) will become more inelastic.
- D) will shift in.

Answer: D

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

21) The demand curve for labor will shift whenever

- A) the demand for the final product changes.
- B) the wage rate changes.
- C) the supply curve of labor shifts.
- D) the marginal factor cost changes.

Answer: A

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

- 22) A fall in the price of the final product produced by a firm will cause
- A) a decline in the price of an input used to produce the good.
 - B) a movement down the demand curve for an input used to produce the final product.
 - C) a reduction in demand for an input used to produce the final product.
 - D) a reduction in the supply of an input used to produce the final product.

Answer: C

Diff: 3

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 23) Assume that the labor market is perfectly competitive. An increase in the productivity of labor
- A) causes the marginal factor cost of labor to decrease.
 - B) generates a lower wage rate.
 - C) causes an increase in the demand for labor.
 - D) causes a reduction in the demand for labor since each worker is now more productive.

Answer: C

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 24) An industry utilizes capital and two types of labor. Unskilled labor is a substitute for capital while the skilled labor is complementary to capital. An increase in the price of capital will
- A) cause the demand for labor to increase, raising wages of both skilled and unskilled labor.
 - B) cause the wage of unskilled labor to rise relative to the price of skilled labor.
 - C) induce the firms in the industry to cut back on all levels—capital, unskilled and skilled labor.
 - D) cause the demand for skilled labor to rise and the demand for unskilled labor to fall.

Answer: B

Diff: 3

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 25) If the marginal productivity of labor decreases, then
- A) the quantity of labor demanded at every possible wage rate will be less.
 - B) the quantity of labor demanded at every possible wage rate will be higher.
 - C) the quantity of labor demanded will not be affected.
 - D) the demand curve for labor will shift upward and to the right.

Answer: A

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 26) In labor markets, the substitution effect occurs when
- A) a substitute good also functions as a complement.
 - B) the cost of production falls enough that the firm will produce a larger amount of output.
 - C) a change in the price of a substitute input causes the demand for labor to change in the same direction.
 - D) a change in the price of a substitute input reduces the cost of capital.

Answer: C

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

- 27) Which of the following would NOT shift an industry's supply of labor curve?
- A) The wage rate in the particular industry falls.
 - B) Wage rates in industries using similar labor rise.
 - C) Working conditions within the industry become less desirable.
 - D) Wage rates in other industries fall.

Answer: A

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

- 28) An increase in the supply of labor generates
- A) increased unemployment.
 - B) lower wages.
 - C) an offsetting increase in the demand for labor.
 - D) a decrease in the quantity demanded of labor.

Answer: B

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 29) The supply of labor to an industry will decrease when
- A) the price of leisure falls.
 - B) the income effect dominates the substitution effect.
 - C) the demand for labor falls in the industry.
 - D) workers receive better employment opportunities in other industries.

Answer: D

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 30) The demand for computers increases. As a result,
- A) the quantity demanded of workers increases, the wage rate rises, and the supply of labor increases.
 - B) the demand for workers increases, hiring increases, but wages stay the same since each firm faces a horizontal supply curve of labor.
 - C) the wage rate increases in the industry and the quantity demanded of workers falls.
 - D) the wage rate increases in the industry and the quantity supplied of workers increases.

Answer: D

Diff: 3

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Use of information technology

Question Status: Previous Edition

- 31) The equilibrium wage rate in an *industry* is found by
- A) the intersection of the market demand curve for labor and the marginal revenue product curve of labor.
 - B) the intersection of the firm's demand curve for labor and the firm's supply curve of labor.
 - C) the intersection of the market demand curve for labor and the market supply curve of labor.
 - D) negotiations between the union leadership and the managers of the firms.

Answer: C

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

- 32) The wage rate found by the intersection of the market demand and supply curves for labor then determines the
- A) firm's demand curve for labor.
 - B) firm's supply curve for labor.
 - C) labor's supply curve of labor.
 - D) labor's demand curve for jobs.

Answer: B

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 33) Which of the following statements is true about the market and individual firm's supply curve for labor?
- A) The market supply curve is perfectly elastic and the individual firm's supply curve is perfectly inelastic.
 - B) The market supply curve is perfectly inelastic and the individual firm's supply curve is perfectly elastic.
 - C) The market supply curve is more elastic than the firm's supply curve.
 - D) The market supply curve is more inelastic than the firm's supply curve.

Answer: D

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 34) A firm purchases more capital equipment. We would expect to observe
- A) a decrease in the supply curve of labor to this firm.
 - B) an increase in the supply of labor for this firm.
 - C) an increase in the demand for labor by this firm.
 - D) an increase in the wage rate paid for labor by this firm.

Answer: C

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 35) Which of the following will **not** lead to a change in the demand for labor?
- A) A change in demand for the final good.
 - B) A change in the supply of labor.
 - C) A change in the price of a substitute input.
 - D) A change in labor productivity.

Answer: B

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

- 36) An increase in demand for DVD machines occurs. Which of the following statements is true for individual firms that produce DVD machines?
- A) The price of DVD machines will decrease leading to an increase in the demand for labor by the firm.
 - B) The price of DVD machines will increase leading to an increase in the demand for labor by the firm.
 - C) The price of DVD machines will increase leading to a decrease in demand by customers leading to a decrease in the demand for labor by the firm.
 - D) A change in demand at the industry level does not influence an individual firm's demand curve for labor.

Answer: B

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 37) Suppose the market for autoworkers is initially in equilibrium, but then the automakers purchase capital goods that are a substitute for workers. What happens in the market for autoworkers?
- A) The equilibrium wage rate will increase and the equilibrium quantity of labor will decrease.
 - B) The equilibrium wage rate and the equilibrium quantity of labor will both increase.
 - C) The equilibrium wage rate and the equilibrium quantity of labor will both decrease.
 - D) The equilibrium wage rate will decrease and the equilibrium quantity of labor will increase.

Answer: C

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: New

- 38) Suppose the market for autoworkers is initially in equilibrium, but then suppose the automakers improve working conditions at the plants. What happens in the market for autoworkers?
- A) The equilibrium wage rate will increase and the equilibrium quantity of labor will decrease.
 - B) The equilibrium wage rate and the equilibrium quantity of labor will both increase.
 - C) The equilibrium wage rate and the equilibrium quantity of labor will both decrease.
 - D) The equilibrium wage rate will decrease and the equilibrium quantity of labor will increase.

Answer: D

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: New

- 39) Suppose the market for autoworkers is initially in equilibrium, but then the demand for automobiles increases **and** simultaneously the automakers allow autoworkers workers less flexibility working at the plants. What happens in the market for autoworkers?
- A) The equilibrium wage rate will increase and the equilibrium quantity of labor will increase, decrease or stay the same.
 - B) The equilibrium wage rate will increase, decrease or stay the same and the equilibrium quantity of labor will increase.
 - C) The equilibrium wage rate and the equilibrium quantity of labor will both decrease.
 - D) The equilibrium wage rate will decrease and the equilibrium quantity of labor will increase.

Answer: A

Diff: 3

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: New

- 40) Suppose the market for pizza makers is initially in equilibrium, but then the equilibrium wage rate and the equilibrium quantity of labor both increased. What happened in the market for pizza makers?
- A) The demand for pizza makers increased.
 - B) The demand for pizza makers decreased.
 - C) The supply for pizza makers increased.
 - D) The supply for pizza makers decreased.

Answer: A

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: New

41) Suppose the market for pizza makers is initially in equilibrium, but then the equilibrium wage rate increased and the equilibrium quantity of labor will decreased. What happened in the market for pizza makers?

- A) The demand for pizza makers increased.
- B) The demand for pizza makers decreased.
- C) The supply for pizza makers decreased.
- D) The supply for pizza makers increased.

Answer: C

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: New

42) The demand for DVD's increases. As a result,

- A) the wage rate in the DVD industry increases and the quantity demanded of workers increases.
- B) the wage rate in the DVD industry increases and the quantity supplied of workers increases.
- C) the demand for labor increases and the supply of labor also increases, leaving wages unchanged.
- D) the demand for labor increases, but since the supply curve of labor is perfectly elastic, the wage rate does not change.

Answer: B

Diff: 3

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Revised

43) When manufacturing a car, parts must be soldered together. This work can be done by labor or by a robot (capital). More robots will be hired when the price of labor increases. This is known as

- A) the effect of changing labor productivity.
- B) marginal revenue product.
- C) the complementary effect.
- D) the substitution effect.

Answer: D

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Reflective thinking skills

Question Status: Previous Edition

- 44) Coal and iron ore are complements in the manufacture of steel. An increase in the price of coal would lead to
- A) an increase in the demand for iron ore as producers substitute more iron ore for coal in the production process.
 - B) a decrease in the demand for iron ore as steel manufacturers reduce production of steel.
 - C) an increase in the supply of iron ore as iron ore producers see an opportunity to expand their markets.
 - D) no change in the demand for iron ore since the steel makers must use both iron ore and coal if they are to make steel.

Answer: B

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Reflective thinking skills

Question Status: Previous Edition

- 45) Suppose firms in an industry hire unskilled labor and skilled labor. Unskilled labor is a substitute for capital and skilled labor is a complement with capital. A decrease in the real price of capital would
- A) cause the demand for labor to increase, raising wages of both skilled and unskilled labor.
 - B) cause the demand for unskilled labor to increase and the demand for skilled labor to decrease. The wage of unskilled labor would rise relative to the wage of skilled labor.
 - C) cause the demand for unskilled labor to decrease and the demand for skilled labor to increase. The wage of unskilled labor would decrease relative to the wage of skilled labor.
 - D) cause the demand for both kinds of labor to decrease. Wages rates of both kinds of labor would decrease too.

Answer: C

Diff: 3

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 46) Which of the following will not lead to an increase in the demand for labor for a firm producing automobiles?
- A) A decrease in labor productivity.
 - B) A decrease in the price of robots that are used to solder parts of the car together.
 - C) An increase in the demand for automobiles.
 - D) A decrease in the price of automobiles.

Answer: A

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 47) A decrease in the supply of labor could be caused by
- A) wage rates falling in another industry.
 - B) better working conditions.
 - C) more job flexibility.
 - D) increased wage rates in another industry.

Answer: D

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 48) Which of the following will not cause the supply of labor curve to shift in the economics professor industry?
- A) A decrease in the wage rate for Ph.D. economists in the banking industry.
 - B) A decrease in the number of courses a professor must teach.
 - C) Universities have discovered a way to make professors more productive.
 - D) University professors are going to be required to spend more time in their offices.

Answer: C

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Reflective thinking skills

Question Status: Previous Edition

- 49) An increase in the supply of labor to an industry could be caused by
- A) higher wages.
 - B) increased productivity of labor.
 - C) an increase in job flexibility in the industry.
 - D) an increase of wages in another industry.

Answer: C

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 50) Ajax Corporation has just decided to let managers work from home one day a week. This decision will make working conditions better and will
- A) cause the demand curve for labor for managers to increase.
 - B) increase the elasticity of demand for labor for managers.
 - C) lead to an increase in the supply curve of labor for managers.
 - D) leave the supply curve of labor unchanged.

Answer: C

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 51) In the perfectly competitive market, the labor supply curve faced by the individual firm is _____, while that of the market is _____.

A) perfectly elastic; perfectly inelastic
B) perfectly inelastic; perfectly elastic
C) perfectly elastic; upward sloping
D) perfectly inelastic; upward sloping

Answer: C

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 52) A single firm in a competitive labor market has a labor supply curve that is

A) upward sloping.
B) perfectly inelastic.
C) perfectly elastic.
D) downward sloping.

Answer: C

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 53) In a perfectly competitive labor market, the wage rate paid by the individual firm is

A) the equilibrium market wage rate.
B) dependent on the demand for the product.
C) below the equilibrium market wage rate.
D) a function of the tax system.

Answer: A

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

- 54) Absent government interference, the wage rate for labor in a competitive market is established

A) solely by the firm's demand for labor.
B) solely by the market supply of labor.
C) by both the demand for and supply of labor at each individual firm.
D) by the the market supply and market demand for labor.

Answer: D

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

- 55) A change in a price of a substitute input for labor will cause

A) a change in the demand for labor in the opposite direction of the price change.
B) no change in the demand for labor.
C) a change in the supply of labor in the opposite direction of the price change.
D) a change in the demand for labor in the same direction of the price change.

Answer: D

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 56) If an increase in the price of one input causes an increase in demand for labor, the two inputs are
- A) complementary.
 - B) substitutes.
 - C) interchangeable.
 - D) flexible.

Answer: B

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 57) Which of the following would NOT a reason for a shift in the labor demand curve?
- A) A change in demand for the final product
 - B) A change in labor productivity
 - C) A change in the market wage rate
 - D) A change in the price of a related input

Answer: C

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

- 58) There are a number of reasons why labor supply curves will shift in a particular industry. Which one of the following is NOT one of them?
- A) Changes in working conditions in an industry affect the labor supply curve.
 - B) Job flexibility that determines the position of the labor supply curve.
 - C) There is a change in the market wage rate.
 - D) Taxes on labor affect the labor supply curve.

Answer: C

Diff: 1

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

- 59) If the price of golf balls increases, what will likely happen to the demand for golf club manufacturing employees?
- A) It will increase.
 - B) It will decrease.
 - C) It will stay the same.
 - D) Nothing, the two are not related.

Answer: A

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Reflective thinking skills

Question Status: Previous Edition

- 60) When the price of labor increases, the substitution effect will _____ the quantity of labor demanded and the output effect will _____ it.
- A) increase; increase
 - B) increase; decrease
 - C) decrease; increase
 - D) decrease; decrease

Answer: D

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

61) Which of the following will NOT shift the MRP curve for labor?

- A) a change in the productivity of labor
- B) a change in the price of the product being sold
- C) a change in the wage rate in the market
- D) a change in the demand for the product being produced

Answer: C

Diff: 3

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

62) All of the following shift the labor demand curve EXCEPT changes in

- A) fringe benefits offered to employees.
- B) the demand for the final product.
- C) labor productivity.
- D) prices of related factors.

Answer: A

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

63) All of the following shift an industry's labor supply curve EXCEPT changes in

- A) market wages offered in other industries.
- B) the demand for the final product.
- C) job flexibility.
- D) working conditions.

Answer: B

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

Question Status: Previous Edition

64) Suppose the market price of zinc doubles. Which of the following scenarios is most likely?

- A) The demand for zinc miners will increase, raising the market wage rate.
- B) The demand for zinc miners will decrease, reducing the market wage rate.
- C) The demand for zinc will increase, raising the market price further.
- D) The demand for zinc miners will decrease, reducing the market price back to its original price.

Answer: A

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

65) What does it mean for a firm to be a price taker in the labor market?

Answer: A price taker in the labor market can hire as many workers as it wants without having to offer a higher wage. The supply curve of labor faced by the individual firm is horizontal at the market wage.

Diff: 1

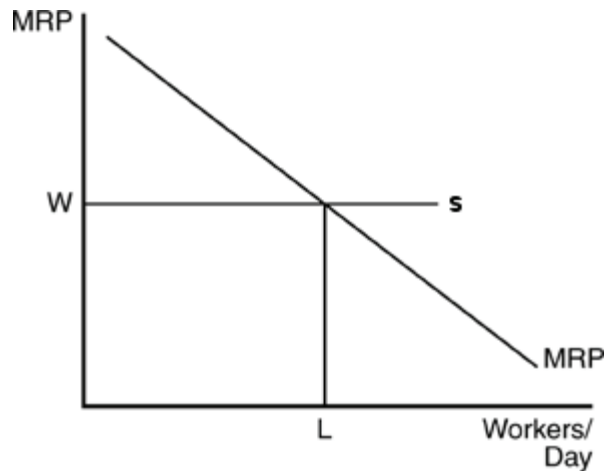
Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 66) What is the general rule for hiring for a perfectly competitive firm? Show it on a graph. What is the demand curve for labor on the graph? Explain.

Answer:



The firm hires workers up to the point at which the additional of hiring the last worker is equal to the additional revenue generated by that worker. In the above figure, the supply curve of labor is horizontal at the market wage W , so the additional cost of hiring a worker is W . The additional revenue is the MRP , so the firm hires L workers. The MRP curve is the firm's demand curve since it indicates the maximum wage that the firm is willing to pay for each worker it wishes to hire.

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 67) Suppose the market for autoworkers is initially in equilibrium, but then the automakers purchase capital goods that are a substitute for workers. What happens in the market for autoworkers? Explain. Now, suppose the automakers improve working conditions at the plants. What are the effects? Explain.

Answer: The purchase of capital that is a substitute for labor causes the demand for autoworkers to fall. Fewer workers are hired and the wage rate falls. When the firms make the workplace better, the supply of autoworkers increases, causing an increase in quantity demanded and a further lowering of the wage rate. Whether more or less workers are hired than before both changes occur depends on which effect was greater.

Diff: 3

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

- 68) Explain the efficiency wage theory.

Answer: The efficiency wage theory says that firms may offer above market wages with the goal of increasing labor productivity. Labor productivity would increase if the higher wage reduced turnover, attracted more productive workers, and encouraged current workers to work harder so they won't lose their jobs.

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

69) What can cause the demand curve for labor to shift? Explain.

Answer: The demand curve for labor is the marginal revenue product curve, which is marginal physical product multiplied by marginal revenue. For a perfectly competitive firm, marginal revenue equals price. Whenever the product price changes, the demand curve for labor shifts. Whenever marginal physical product changes due to changes in productivity, the demand curve for labor shifts. The changes in the prices of related factors (substitutes and complements) will also shift demand. The demand for labor is a derived demand, so an increase in the demand for the product produced causes the demand for labor and other variable inputs to change.

Diff: 2

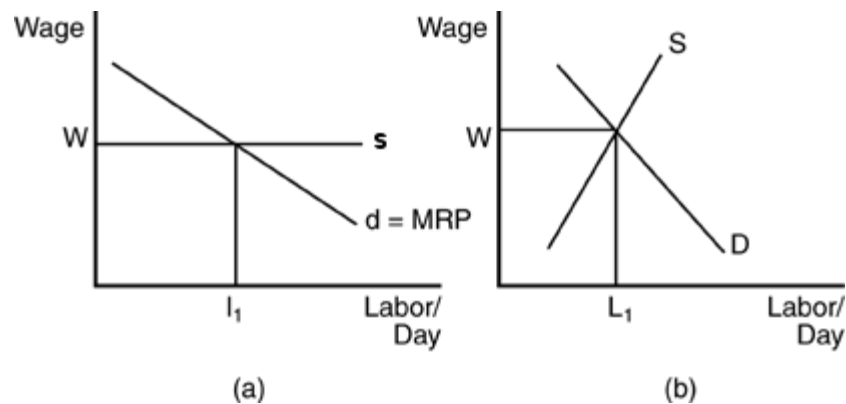
Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

70) Explain how the equilibrium wage rate is determined for a perfectly competitive industry and how a firm in that industry determines its profit maximizing employment level.

Answer:



In the above figure, the right-hand figure shows industry's labor market. The market wage is at the intersection of market labor supply and labor demand. The market wage is W , and equilibrium employment by all firms is L_1 workers. The wage determines the supply curve that the perfectly competitive firm faces. The firm's demand curve for labor is the marginal revenue product curve, and the firm hires l_1 workers.

Diff: 2

Topic: 28.3 Wage Determination in a Perfectly Competitive Labor Market

AACSB: Analytic skills

Question Status: Previous Edition

28.4 Labor Outsourcing, Wages, and Employment

- 1) When U.S. computer companies hire workers in India to staff their customer service call centers, they are engaging in
- A) predatory pricing.
 - B) unfair trade practices.
 - C) outsourcing.
 - D) labor engagement.

Answer: C

Diff: 1

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 2) A firm's employment of labor outside the country in which the firm is located is called
- A) featherbedding.
 - B) a lockout.
 - C) outsourcing.
 - D) dumping.

Answer: C

Diff: 1

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 3) The practice of outsourcing has been given a boost by
- A) advances in telecommunications and computer networking.
 - B) support from organized labor.
 - C) firms that are becoming more risk-averse.
 - D) sharp increases in the cost of overseas labor.

Answer: A

Diff: 1

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 4) Outsourcing is being practiced by
- A) U.S. firms that want to keep jobs at home in the United States.
 - B) overseas firms hiring in the U.S. labor market and by U.S. firms hiring in foreign labor markets with lower wages.
 - C) U.S. firms only.
 - D) governments but private firms are not allowed to outsource work.

Answer: B

Diff: 1

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 5) Which of the following is an example of outsourcing?
- A) A U.S. firm moves a manufacturing plant from the U.S. to Thailand where the firm can hire cheaper labor.
 - B) A German firm hires an accountant in the U.S. to manage its payrolls.
 - C) All the above are examples of outsourcing.
 - D) None of the above is an example of outsourcing.

Answer: C

Diff: 2

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 6) Suppose that U.S. firms outsource plane manufacturing jobs to China, it is expected that
- A) the wage rate for workers manufacturing planes will decrease in the U.S. but increase in China.
 - B) the wage rate for workers manufacturing planes will increase in the U.S. but decrease in China.
 - C) the wage rate for workers manufacturing planes will increase in both the U.S. and China.
 - D) the wage rate for workers manufacturing planes will decrease in both the U.S. and China.

Answer: A

Diff: 2

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 7) When Canadian firms outsource accounting services to the United States, in markets for the labor of accountants,
- A) equilibrium employment and the market clearing wage rate will both increase in Canada, but equilibrium employment and the market clearing wage rate will both decrease in the United States.
 - B) equilibrium employment and the market clearing wage rate will both decrease in Canada, but equilibrium employment and the market clearing wage rate will both increase in the United States.
 - C) equilibrium employment and the market clearing wage rate will both increase in Canada and in the United States.
 - D) equilibrium employment and the market clearing wage rate will both increase in Canada and in the United States.

Answer: B

Diff: 2

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Revised

- 8) A firm's employment of labor outside the country in which the firm is located
- A) is outsourcing.
 - B) shifts the supply of labor in the original country.
 - C) is the marginal revenue product.
 - D) shifts the supply of labor in the other country.

Answer: A

Diff: 1

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 9) Outsourcing is
- A) one of the factors that shifts the supply of labor curve.
 - B) when a firm employs labor outside the country in which the firm is located.
 - C) when the change in the price of a complementary input causes the demand for labor curve to shift in the opposite direction.
 - D) the cost of using an additional unit of an input.

Answer: B

Diff: 1

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 10) Outsourcing is
- A) only beneficial to a few select countries.
 - B) another way for residents of different nations to conduct trade with one another.
 - C) not beneficial to any country.
 - D) not beneficial to the consumers who purchase outsourced goods.

Answer: B

Diff: 1

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: New

- 11) Some companies are having their technical support calls answered by people located in India. This is an example of
- A) a factor that shifts the supply of labor curve in the U.S.
 - B) insourcing.
 - C) outsourcing.
 - D) a change in the demand for the final product that labor produces.

Answer: C

Diff: 1

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 12) What are the short-run economic effects when U.S. firms substitute labor outside of the U.S. for labor inside the U.S.?
- A) The wage rate in the U.S. will remain the same, and the wage rate in the foreign country will decrease.
 - B) The wage rate in the U.S. will increase, and the wage rate in the foreign country will decrease.
 - C) The wage rate in the U.S. will decrease, and the wage rate in the foreign country will decrease.
 - D) The wage rate in the U.S. will decrease, and the wage rate in the foreign country will increase.

Answer: D

Diff: 2

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 13) What are the short-run economic effects when U.S. firms substitute labor outside of the U.S. for labor inside the U.S.?
- A) The demand curve for labor in the U.S. decreases, and the demand curve in the foreign country will increase.
 - B) The demand curve for labor in the U.S. increases, and the demand curve in the foreign country will decrease.
 - C) The demand curve for labor in the U.S. decreases, and the demand curve in the foreign country will decrease.
 - D) The demand curve for labor in the U.S. increases, and the demand curve in the foreign country will increase.

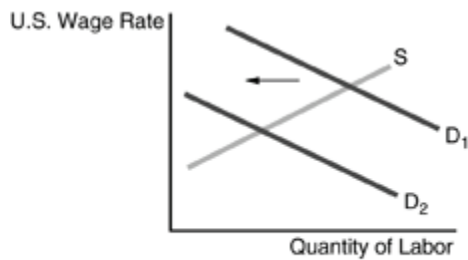
Answer: A

Diff: 2

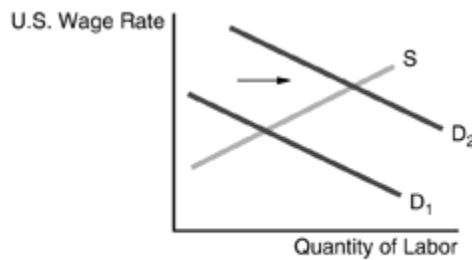
Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

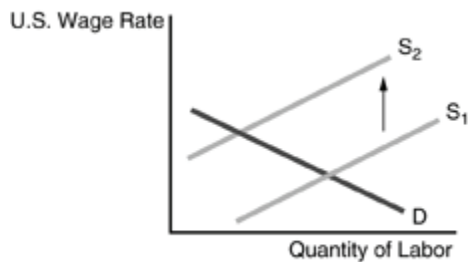
Question Status: Previous Edition



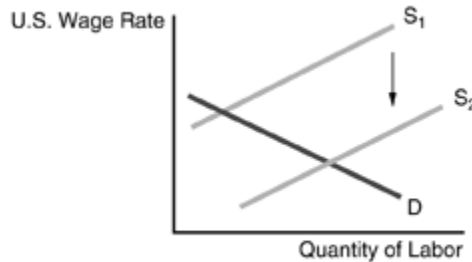
Panel A



Panel B



Panel C



Panel D

- 14) Refer to the above figure. Which panel represents what happens in the U.S. job market in the short-run when U.S. firms substitute labor outside of the U.S. for labor inside the U.S.?

A) Panel A B) Panel B C) Panel C D) Panel D

Answer: A

Diff: 2

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 15) Refer to the above figure. Which panel represents what happens in the foreign job market in the short-run when U.S. firms substitute labor outside of the U.S. for labor inside the U.S.?

A) Panel A B) Panel B C) Panel C D) Panel D

Answer: B

Diff: 2

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 16) Which of the following statements describes the long-run effects of global outsourcing?

A) Wages for U.S. workers will decrease but wages in other countries will increase.
 B) Wages in all countries will remain the same as before the outsourcing.
 C) Wages and employment will increase globally.
 D) Wages will increase globally and employment will stay the same.

Answer: C

Diff: 1

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 17) Which of the following statements is FALSE about the long-run effects of outsourcing?
- A) Outsourcing allows countries to specialize in producing what they can produce most efficiently.
 - B) More goods and services can be produced than in the absence of outsourcing.
 - C) Globally wages will increase because of outsourcing.
 - D) Employment levels will decrease globally as the result of outsourcing.

Answer: D

Diff: 2

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 18) Employment of labor in a country other than the firm's home country is called
- A) employing guest workers.
 - B) outsourcing.
 - C) employing non-naturalized workers.
 - D) employing illegal aliens.

Answer: B

Diff: 1

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 19) Economic analysis indicates the net long-run effect of outsourcing for the United States is likely to be
- A) an increased demand for labor due to economic growth.
 - B) a decreased in the demand for labor in the United States in the short run.
 - C) an increase in the supply of labor.
 - D) a decrease in the supply of labor.

Answer: A

Diff: 1

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

- 20) When firms in a U.S. industry outsource some of their production,
- A) both U.S. labor demand and U.S. wages in the industry fall
 - B) U.S. labor demand falls, but U.S. wages are not affected.
 - C) U.S. labor demand remains unchanged, but U.S. wages fall.
 - D) U.S. labor demand falls, but U.S. wages increase.

Answer: A

Diff: 1

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

21) Suppose a U.S. computer company outsources its technical–support services to India. This will cause

- A) the demand for labor in the United States to fall, lowering U.S. wage rates, and the demand for labor in India to increase, increasing Indian wage rates.
- B) the demand for labor in the United States to increase, lowering U.S. wage rates, and the demand for labor in India to fall, increasing Indian wage rates.
- C) the demand for labor in the United States to fall, lowering U.S. wage rates, and the demand for labor in India to fall, decreasing Indian wage rates.
- D) the demand for labor in the United States to increase, increasing U.S. wage rates, and the demand for labor in India to fall, decreasing Indian wage rates.

Answer: A

Diff: 2

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Use of information technology

Question Status: Previous Edition

22) Explain the implications of outsourcing for employment and wages in the domestic and foreign labor markets.

Answer: If domestic firms out source their jobs abroad, then there will be a decrease in the demand for domestic workers and an increase in the demand for foreign workers that are substitutable for the domestic workers. As a result, the domestic labor demand curve shifts leftward, so equilibrium domestic employment and the market clearing domestic wage will decrease. The foreign labor demand curve shifts rightward, so equilibrium foreign employment and the market clearing foreign wage will increase.

Diff: 2

Topic: 28.4 Labor Outsourcing, Wages, and Employment

AACSB: Dynamics of the global economy

Question Status: Previous Edition

28.5 Monopoly in the Product Market

1) Other things being equal, the behavior of a monopolist differs from that of a competitive industry in that

- A) the monopolist does not attempt to maximize economic profit.
- B) the monopolist hires more labor.
- C) the monopolist restricts output and hires less labor.
- D) the monopolist must consider fixed costs in deciding the optimal level of output to produce in the short run.

Answer: C

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 2) Which of the following would be the most likely outcome if all perfectly competitive firms in a product market join together to form a monopoly?
- A) Both the rate of output and the quantity of labor input employed will decrease.
 - B) Both the rate of output and the quantity of labor input employed will increase.
 - C) The rate of output in the market will increase but the quantity of labor input will decrease.
 - D) The rate of output in the market will decrease but the quantity of labor input will increase.

Answer: A

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 3) The monopolist's input demand curve is equal to its
- A) variable cost curve.
 - B) marginal cost curve.
 - C) average cost curve.
 - D) marginal revenue product curve.

Answer: D

Diff: 1

Topic: 28.5 Monopoly in the Product Market

Question Status: Previous Edition

- 4) Other things being equal, the monopolist will
- A) hire more workers than if the industry were perfectly competitive.
 - B) hire the same number of workers as a perfectly competitive industry would.
 - C) hire fewer workers than if the industry were perfectly competitive.
 - D) have lower profits than if the industry were perfectly competitive.

Answer: C

Diff: 2

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 5) A monopolist hires fewer workers than a perfectly competitive industry, other things being equal, because
- A) a monopolist has to pay higher wages in order to attract additional workers.
 - B) the monopolist substitutes more capital for labor when compared to a competitive industry.
 - C) the monopolist producer has to deal with unions and face higher wages than do competitive industries.
 - D) the monopolist produces less output than a competitive industry.

Answer: D

Diff: 2

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 6) A monopolist will hire fewer workers than a competitive firm, other things being equal, because
- A) the monopolist exploits labor and other types of producers do not.
 - B) the monopolist must take account of the declining product price that must be charged in order to sell more units of the product.
 - C) the monopolist is more efficient.
 - D) diminishing marginal productivity of labor is more severe for a monopolist.

Answer: B

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 7) If a firm sells its product in a monopolistic market, even though the firm operates in a perfectly competitive labor market, the firm will employ workers up to the point where
- A) $TR = TC$.
 - B) the $MRP =$ the wage rate.
 - C) the $MRP =$ the marginal physical product of labor.
 - D) the $MRP =$ the output price.

Answer: B

Diff: 1

Topic: 28.5 Monopoly in the Product Market

Question Status: Previous Edition

- 8) A firm wanting to maximize profits should operate in such a way that
- A) the MRP of each input is equal to or greater than its MFC .
 - B) MRP equal MFC in the input market but MC must exceed MR in the output market.
 - C) marginal revenue must be equal to the marginal revenue product.
 - D) none of the above

Answer: A

Diff: 1

Topic: 28.5 Monopoly in the Product Market

Question Status: Previous Edition

- 9) If a monopolist has an output price of \$10, marginal revenue equal to \$4, and faces a fixed wage of \$6, he or she should hire labor until the marginal revenue product is equal to
- A) \$10.
 - B) \$4.
 - C) \$6.
 - D) \$2.

Answer: C

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 10) The demand curve for labor of a monopolist
- A) is horizontal even though the demand curve for labor for a competitive firm is downward sloping.
 - B) slopes down for the same reason as the demand curve for labor of a perfectly competitive firm.
 - C) slopes down because of the law of diminishing marginal product and because the monopolist must lower prices to sell additional units of the good.
 - D) slopes upward because monopolists use more capital than do perfectly competitive firms.

Answer: C

Diff: 2

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 11) The monopolist's input demand curve is the
- A) marginal revenue curve.
 - B) marginal revenue product curve.
 - C) marginal physical product curve.
 - D) marginal factor cost.

Answer: B

Diff: 1

Topic: 28.5 Monopoly in the Product Market

Question Status: Previous Edition

- 12) Compared to the perfectly competitive firm, the monopolist's input demand curve is
- A) more elastic.
 - B) more inelastic.
 - C) due to a constant per-unit price of the product.
 - D) marginal factor cost.

Answer: B

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: New

- 13) A monopolist will hire an additional unit of labor as long as
- A) the additional cost of the worker is outweighed by the additional revenues made from selling the output of these workers.
 - B) the marginal revenue curve is above the demand curve.
 - C) the marginal revenue product is larger than the marginal factor cost.
 - D) the marginal revenue product is less than the marginal factor cost.

Answer: A

Diff: 1

Topic: 28.5 Monopoly in the Product Market

Question Status: Previous Edition

- 14) A profit maximizing monopolist will hire labor up to the point where
- A) marginal revenue product equals the price of the product.
 - B) marginal revenue product is greater than the wage rate.
 - C) marginal revenue product equals the wage rate.
 - D) marginal revenue product is less than the wage rate.

Answer: C

Diff: 1

Topic: 28.5 Monopoly in the Product Market

Question Status: Previous Edition

- 15) A rule of thumb in the employment of resources is to set
- A) marginal revenue product (MRP) equal to marginal factor cost (MFC).
 - B) marginal revenue (MR) equal to marginal cost (MC).
 - C) marginal physical product equal to marginal resource cost.
 - D) none of the above

Answer: A

Diff: 1

Topic: 28.5 Monopoly in the Product Market

Question Status: Previous Edition

- 16) Other things equal, a monopolist will hire
- A) more workers than a perfectly competitive industry.
 - B) fewer workers than a perfectly competitive industry.
 - C) more workers than a perfectly competitive firm.
 - D) the same number of workers as a perfectly competitive industry would.

Answer: B

Diff: 2

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 17) A monopolist will hire fewer workers than a perfectly competitive firm because
- A) the marginal product curve decreases as additional units of labor are hired for a monopoly but not for a competitive firm.
 - B) there is a variety of employers in a competitive market and only one in a monopoly.
 - C) marginal revenue is greater than price for a monopoly while marginal revenue is equal to price for a competitive firm.
 - D) to sell an additional unit of the good the competitive firm will keep the price the same while the monopolist must lower it on all units sold.

Answer: D

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

Labor Input (workers per week)	Marginal Physical Product (output per week)	Marginal Revenue MR
25	150	9.00
26	140	8.50
27	130	8.00
28	120	7.50
29	110	7.00

- 18) Refer to the above table. What does the marginal revenue product equal when 26 workers are hired a week?

A) \$8.50 B) \$26 C) \$221 D) \$1190

Answer: D

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 19) Refer to the above table. What does the marginal revenue product equal when 27 workers are hired a week?

A) \$1040 B) \$216 C) \$16.25 D) \$8

Answer: A

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 20) Refer to the above table. What does the marginal revenue product equal when 28 workers are hired a week?

A) \$1040 B) \$900 C) \$210 D) \$7.50

Answer: B

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: New

- 21) Refer to the above table. How many worker will this firm hire if the weekly wage rate is \$1350?

A) 28 B) 25 C) 26 D) 27

Answer: B

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Revised

22) Refer to the above table. How many workers will this firm hire if the weekly wage rate is \$770?

- A) 26 B) 27 C) 28 D) 29

Answer: D

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Revised

23) Refer to the above table. How many workers will this firm hire if the weekly wage rate is \$900?

- A) 26 B) 27 C) 28 D) 29

Answer: C

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: New

24) Refer to the above table. How do we know that this is not a competitive firm?

- A) The marginal physical product decreases as the amount of labor hired increases.
 B) The marginal revenue changes as output changes.
 C) The marginal revenue product decreases as the amount of labor increases.
 D) Marginal physical product cannot be computed for competitive firms.

Answer: B

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

25) If we assume competitive labor markets, the supply curve of labor when the firm is a monopoly is

- A) upward sloping. B) vertical.
 C) horizontal. D) downward sloping.

Answer: C

Diff: 1

Topic: 28.5 Monopoly in the Product Market

Question Status: Previous Edition

26) In an imperfectly competitive labor market, the firm is faced with a(n) _____ MPP curve and a(n) _____ MR curve.

- A) downward sloping; upward sloping B) downward sloping; downward sloping
 C) upward sloping; downward sloping D) downward sloping; horizontal

Answer: B

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

Quantity of Workers	Total Product	Marginal Physical Product	Price of Final Product	Marginal Revenue Product
1	7		\$10	
2	18		9	
3	30		8	
4	40		7	
5	48		6	
6	52		5	

27) In the above table, what is the marginal revenue product of the 4th worker?

- A) \$92 B) \$70 C) \$40 D) \$8

Answer: B

Diff: 3

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

28) In the above table, what is the marginal revenue product of the 1st worker?

- A) \$92 B) \$70 C) \$40 D) \$8

Answer: B

Diff: 3

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

29) In the above table, what is the marginal revenue product of the 2nd worker?

- A) \$99 B) \$70 C) \$110 D) \$9

Answer: A

Diff: 3

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: New

30) In the above table, if the marginal factor cost is \$20, how many workers would be hired?

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

Answer: D

Diff: 3

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

31) In the above table, if the marginal factor cost is \$48, how many workers would be hired?

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

Answer: C

Diff: 3

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

32) In the above table, if the marginal factor cost is \$96, how many workers would be hired?

- A) 3 B) 4 C) 5 D) 2

Answer: A

Diff: 3

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: New

33) In constructing the monopolist's input demand curve, which of the statements is FALSE?

- A) The demand curve has a negative slope due to the law of diminishing marginal product.
 B) Marginal revenue is always positive.
 C) A monopoly restricts output and hires fewer units of labor than a perfectly competitive firm.
 D) The supply curve a monopoly faces is horizontal because the monopoly is a price taker.

Answer: B

Diff: 2

Topic: 28.5 Monopoly in the Product Market

Question Status: Previous Edition

34) The MRP curve for a monopolist in the product market is

- A) the same as the MRP curve for a perfectly competitive firm in the product market.
 B) to the left and below the MRP curve for a perfectly competitive firm in the product market.
 C) to the right and above the MRP curve for a perfectly competitive firm in the product market.
 D) upward sloping and below the MFC curve for a perfectly competitive firm in the product market.

Answer: B

Diff: 2

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

35) When a firm has monopoly power, it

- A) hires fewer workers because its marginal revenue lies below the demand curve.
 B) hires more workers because its marginal revenue lies below the demand curve.
 C) hires fewer workers because its marginal revenue lies above the demand curve.
 D) hires more workers because its marginal revenue lies above the demand curve.

Answer: A

Diff: 1

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 36) If the demand for a monopolist's product increases, its
- A) marginal revenue increases, making it more profitable to hire more workers.
 - B) marginal revenue increases, making it more profitable to hire fewer workers.
 - C) marginal revenue decreases, making it more profitable to hire more workers.
 - D) marginal revenue decreases, making it more profitable to hire fewer workers.

Answer: A

Diff: 2

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 37) "Other things being equal, the monopolist hires fewer workers than would be hired than a perfectly competitive industry." Do you agree or disagree? Why?

Answer: Agree. For competitive firms, marginal revenue product equals marginal physical product multiplied by product price. For a monopoly, marginal revenue product equals marginal physical product multiplied by marginal revenue. Since marginal revenue falls faster than price, MRP of a monopolist falls faster than the price in a competitive industry. Marginal factor cost is the same for both, so the equilibrium quantity of labor is less for monopoly than for perfect competition.

Diff: 3

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

- 38) What does a monopolist's demand curve for labor look like? How does it compare to the market demand curve for a competitive industry? What does the supply curve of labor to a monopolist look like? Explain.

Answer: The demand curve for labor for a monopoly is downward sloping because of the law of diminishing marginal product. The marginal revenue product curve falls faster in the case of monopoly than in perfect competition because marginal revenue falls faster than price falls as more units are sold. So, the monopoly will tend to hire fewer workers than if the industry was competitive. This is consistent with the fact that monopolies restrict output. The supply curve facing a monopoly is horizontal because the monopoly is still a price taker in input markets.

Diff: 3

Topic: 28.5 Monopoly in the Product Market

AACSB: Analytic skills

Question Status: Previous Edition

28.6 The Utilization of Other Factors of Production

- 1) In a perfectly competitive labor market, the least-cost combination rule for resource use
- A) requires that resources be used in combinations such that marginal products are equal.
 - B) requires that the marginal physical product per dollar spent for each resource is equalized.
 - C) assures the firm an economic profit.
 - D) assures the firm a normal profit.

Answer: B

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Revised

- 2) In the employment of any resource, a firm should
- A) equate marginal revenue product with the cost of the additional resource.
 - B) hire each input unit that adds more to revenue than it adds to costs.
 - C) hire each input unit provided its marginal physical product is greater than zero.
 - D) A and B are both correct.

Answer: D

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Revised

- 3) Assume that a perfectly competitive firm faces a fixed wage rate of \$4 and a constant per-unit cost of capital of \$2. If the marginal product of labor and capital are 16 and 6, respectively, then to maximize profits the firm should
- A) use relatively more capital.
 - B) use relatively less capital.
 - C) increase all inputs proportionately.
 - D) decrease all inputs proportionately.

Answer: B

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: Previous Edition

- 4) Assume that a perfectly competitive firm faces a fixed wage rate of \$4 and a constant per-unit cost of capital of \$2. If the marginal product of labor and capital are 16 and 6, respectively, then to maximize profits the firm should
- A) use relatively more labor.
 - B) use relatively less labor.
 - C) increase all inputs proportionately.
 - D) decrease all inputs proportionately.

Answer: A

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: New

- 5) If a firm faces perfectly competitive product and factor markets and the marginal product of labor and capital are 4 and 9, respectively, while the wage rate is \$2 and the rental rate on capital is \$4, the firm should
- A) use relatively more capital.
 - B) use relatively less capital.
 - C) increase all inputs proportionately.
 - D) decrease all inputs proportionately.

Answer: A

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: Previous Edition

- Question Status: New

- Question Status: Previous Edition

- Question Status: Previous Edition

- Question Status: Previous Edition

- Question Status: Previous Edition

11) Profit maximization requires that

- A) the marginal factor cost of every input equals that input's marginal physical product.
- B) the marginal factor cost of every input equals that input's marginal revenue product.
- C) the amount of one input hired divided by the amount of another input hired equals the total costs of the first input hired divided by the total costs of the second input.
- D) equal amounts of each input are employed.

Answer: B

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

12) The profit maximizing combination of resources

- A) usually involves more of each input hired than the cost minimizing combination of resources.
- B) usually involves less of each input hired than the cost minimizing combination of resources.
- C) usually involves hiring more of some resources and less of other resources than the cost minimizing combination of resources.
- D) is also the cost minimizing combination of resources.

Answer: D

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

13) Profit maximization occurs where

- A) each factor is used up to the point where its marginal revenue product is equal to its marginal factor cost.
- B) each factor is used up to the point where its marginal physical product is equal to its marginal factor cost.
- C) average variable cost equals marginal cost.
- D) average variable cost equals average total cost.

Answer: A

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

14) If a perfectly competitive firm is currently employing workers to the point where the value of the last worker's marginal product is equal to the wage rate, and the government imposes a minimum wage higher than the value of the worker's marginal product, we can predict that

- A) the firm will pay the higher wage rate and not change the number of workers hired.
- B) the firm will no longer employ the marginal worker.
- C) the firm will increase its price.
- D) the firm will employ more workers.

Answer: B

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: Previous Edition

- 15) To minimize total costs for a particular rate of output, a firm will equate
- A) the average cost of each factor.
 - B) the marginal revenue of each factor.
 - C) the marginal physical product per dollar spent on each factor.
 - D) the marginal revenue product and variable marginal revenue for each factor.

Answer: C

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

- 16) Cost minimization suggests that two inputs should be employed to the point where
- A) the marginal cost of each input is identical.
 - B) the marginal revenue product of each input is identical.
 - C) the marginal physical product per dollar spent on each input is identical.
 - D) the extra contribution to physical output of the inputs is identical.

Answer: C

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

- 17) If the marginal physical product (MPP) of the last dollar spent on labor is only half as large as the MPP from the last dollar spent on capital, this firm should
- A) increase its use of labor and sell employ less capital.
 - B) employ more capital.
 - C) increase its use of both labor and capital.
 - D) maintain its current factor utilization pattern.

Answer: B

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: Previous Edition

- 18) If a firm uses only capital and labor as inputs, then what should the firm do at a given rate of production if the marginal physical product of labor per last dollar spent is higher than the marginal physical product of capital per last dollar spent?
- A) The firm should increase both the quantity of capital and the quantity of labor.
 - B) The firm should decrease both the quantity of capital and the quantity of labor.
 - C) The firm should increase the quantity of capital and reduce the quantity of labor.
 - D) The firm should decrease the quantity of capital and increase the quantity of labor.

Answer: D

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: Previous Edition

- 19) If a firm uses only capital and labor as inputs, then what should the firm do at a given rate of production if the marginal physical product of labor per last dollar spent is lower than the marginal physical product of capital per last dollar spent?

- A) The firm should increase both the quantity of capital and the quantity of labor.
- B) The firm should decrease both the quantity of capital and the quantity of labor.
- C) The firm should increase the quantity of capital and reduce the quantity of labor.
- D) The firm should decrease the quantity of capital and increase the quantity of labor.

Answer: C

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: New

- 20) A perfectly competitive firm discovers that its MRP_L divided by the wage equals 1.25. The firm should

- A) check the MRP of the other inputs and divide them by their prices. If they are all equal to 1.25 it is maximizing profits.
- B) hire more labor.
- C) purchase more capital.
- D) try to pay a lower wage rate.

Answer: B

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: Previous Edition

- 21) A firm that wants to maximize profits should hire each input to the point where

- A) its marginal revenue product divided by the price of the input equals one.
- B) its marginal revenue product divided by its marginal physical product equals the wage.
- C) its marginal revenue product divided by the product price equals one.
- D) its marginal physical product divided by the price of the input equals the product price.

Answer: A

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

- 22) If a firm wants to maximize profits it should

- A) hire lots of capital and very little labor since labor needs to be trained.
- B) hire unskilled labor rather than skilled labor since unskilled labor is cheaper.
- C) equate the marginal physical product for each input to the price of the input.
- D) equate the marginal revenue product for each input to the price of the input.

Answer: D

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

23) A firm that maximizes profits also

- A) is inefficient.
- B) cuts corners in production processes so that its products are made too cheaply.
- C) uses the least-cost combination of resources.
- D) pays input prices lower than other firms do.

Answer: C

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

24) If a firm wants to maximize profits it should

- A) hire each factor of production up to the point at which the marginal physical product per last dollar spent is equalized.
- B) hire each factor of production up to the point at which the marginal revenue product per last dollar spent is equalized.
- C) hire each factor of production up to the point at which the marginal factor cost per last dollar spent is equalized.
- D) hire the same number of units of all inputs.

Answer: A

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

25) The cost-minimizing rule is that a firm should utilize inputs such that the marginal physical product of an input divided by the price of the input is the same for all inputs. This is also the profit-maximizing rule because

- A) we obtain the profit-maximizing rule by multiplying each ratio by the marginal revenue produced.
- B) we obtain the profit-maximizing rule by multiplying each ratio by the product price, which is the same for each input.
- C) the profit-maximizing rule is just the inverse of the cost-minimizing rule.
- D) they are exactly the same.

Answer: B

Diff: 3

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: Previous Edition

26) A profit-maximizing firm will hire workers up to the point at which

- A) $MRP < MFC$.
- B) $MRP = MFC$.
- C) $MRP > MFC$.
- D) $MRP = MPP$.

Answer: B

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

- 27) For a firm in a perfectly competitive labor market,
 A) $W > MFC$. B) $W < MFC$. C) $W > MRP$. D) $W = MFC$.

Answer: D

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

- 28) If a firm wants to maximize profits, it should hire workers up to the point at which
 A) total factor cost = total revenue.
 B) marginal factor cost = marginal revenue product.
 C) marginal utility = marginal cost.
 D) total social benefit = total social costs.

Answer: B

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

- 29) Profit-maximizing employment is the quantity of labor at which
 A) marginal revenue product is equal to marginal factor cost.
 B) marginal revenue product is equal to product price.
 C) marginal factor cost is equal to marginal revenue.
 D) marginal factor product is equal to product price.

Answer: A

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

- 30) In a perfectly competitive situation, the profit-maximizing hiring situation for all inputs being used is where
 A) the MRP of each input is equal to the price of each input.
 B) the MRP of each input is greater than the price of each input.
 C) the MRP of each input is less than the price of each input.
 D) There is no relationship between MRP and the prices of the inputs.

Answer: A

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

- 31) The profit-maximizing combination of resources in a perfectly competitive situation occurs at the point at which
 A) MRP of labor = price of labor (wage rate).
 B) MRP of land = price of land (rental rate per unit).
 C) MRP of capital = price of capital (cost per unit of service).
 D) All of the above are correct.

Answer: D

Diff: 1

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

- 32) The following table depicts both the product and labor markets for imported coffee. What is the total revenue when 15 workers per day are hired?

Labor Input (workers per day)	Total Physical Product	Product Price (\$)
10	100	50
11	110	49
12	120	48
13	130	47
14	140	46
15	150	45

- A) \$5,000 B) \$6,750 C) \$7,350 D) \$7,500

Answer: B

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: Previous Edition

- 33) A perfectly competitive firm is hiring variable resources M and N. It will minimize total costs

- A) $MRP_M/MFC_M = MRP_N/MFC_N$. B) $MRP_M * MFC_M = MRP_N * MFC_N$.
C) $P_M/MPP_M = P_N/MPP_N$. D) $MPP_M/P_M = MPP_N/P_N$.

Answer: D

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

- 34) When a firm has maximized profits,

- A) it has also minimized total costs.
B) the marginal product of each input is also maximized.
C) the marginal physical product is greater than the input price for all inputs.
D) its marginal cost is zero.

Answer: A

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

Question Status: Previous Edition

- 35) For a firm that uses land, labor and capital as inputs, how should the inputs be utilized in order to minimize total costs?

Answer: Given a particular rate of production, the firm can minimize total costs by hiring each of the three inputs up to the point at which the marginal physical product per last dollar spent on each input is equalized across the three inputs.

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: Previous Edition

- 36) Show how the profit-maximizing rule for hiring resources is equivalent to the cost-minimizing rule.

Answer: The cost-minimizing rule for hiring resources is to hire resources to the point at which the marginal physical product per last dollar spent on each input is equalized. That is: $(\text{MPP of labor}/\text{price of labor}) = (\text{MPP of capital}/\text{price of capital}) = (\text{MPP of land}/\text{price of land})$, and so on. The profit-maximizing rule substitutes MRP for MPP in the equations. However, since MRP is the MPP multiplied by the price of the product, which is the same for all the inputs, the two conditions are exactly the same.

Diff: 3

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: Previous Edition

- 37) Explain what the profit-maximizing combination of resources is for the perfectly competitive firm.

Answer: The firm hires each input such that the marginal revenue product of the input equals the price of the input. This can also be expressed as: $(\text{MRP of labor}/\text{Price of labor}) = (\text{MRP of capital}/\text{Price of capital}) = (\text{MRP of land}/\text{Price of land})$, and so on.

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: Previous Edition

- 38) Suppose a firm employs only capital and labor as inputs. Explain how the firm should allocate its inputs in order to maximize profits in a perfectly competitive market.

Answer: To maximize profits, the firm should allocate the two inputs so that the marginal revenue product (MRP) of each of the two inputs equals its input price, i.e., the MRP of capital equals the price of capital (cost per unit of service), and the MRP of labor equals the price of labor (wage rates).

Diff: 2

Topic: 28.6 The Utilization of Other Factors of Production

AACSB: Analytic skills

Question Status: Previous Edition