

Name _____

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

- 1) A firm's marginal cost can always be thought of as the change in total cost if _____
A) the firm buys one more unit of capital.
B) the firm's average cost increases by \$1.
C) the firm produces one more unit of output.
D) the firm moves to the next highest isoquant.
- 2) Fixed costs are _____
A) equal to total cost divided by the units of output produced.
B) a production expense that does not vary with output.
C) the amount by which a firm's cost changes if the firm produces one more unit of output.
D) a production expense that changes with the quantity of output produced.
- 3) Variable costs are _____
A) a production expense that changes with the quantity of output produced.
B) the amount by which a firm's cost changes if the firm produces one more unit of output.
C) equal to total cost divided by the units of output produced.
D) a production expense that does not vary with output.
- 4) Suppose the total cost of producing T-shirts can be represented as $TC = 50 + 2q$. The marginal cost of the 5th T-shirt is _____
A) 10. B) 12. C) 2. D) 60.
- 5) Suppose the total cost of producing T-shirts can be represented as $TC = 50 + 2q$. The average cost of the 5th T-shirt is _____
A) 60. B) 2. C) 12. D) 52.
- 6) Suppose the short-run production function is $q = 10 * L$. If the wage rate is \$10 per unit of labor, then AVC equals _____
A) $10/q$. B) 1. C) $q/10$. D) q .
- 7) Which statement is TRUE? Fixed costs _____
A) do NOT exist in the long run.
B) depend on the firm's level of output.
C) are the difference between total costs and average variable costs.
D) are zero if the firm is producing nothing.
- 8) Suppose the short-run production function is $q = 10 * L$. If the wage rate is \$10 per unit of labor, then MC equals _____
A) 1. B) $q/10$. C) $10/q$. D) q .

- 9) The Lawn Ranger, a landscaping company, has total costs of \$4,000 and total variable costs of \$1,000. The Lawn Ranger's total fixed costs are _____
- A) \$0.
 - B) \$3,000.
 - C) \$5,000.
 - D) indeterminate because the firm's output level is not known.

Refer to the information provided in Figure 8.2 below to answer the questions that follow.

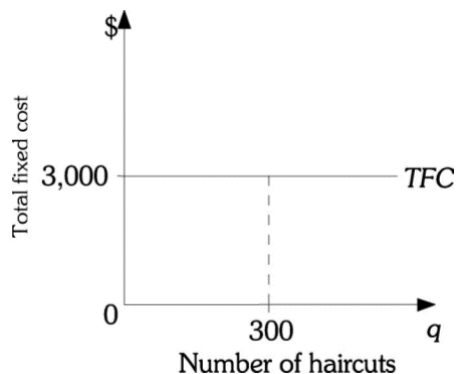


Figure 8.2

- 10) Refer to Figure 8.2 above. The total fixed costs for The Barber Shop are \$3,000. If The Barber Shop produces 300 hair cuts, the average fixed costs are _____
- A) \$.20.
 - B) \$5.
 - C) \$10.
 - D) \$100.

Refer to the information provided in Table 8.1 below to answer the questions that follow.

Produce	Using Techniques	Units of Variable K	Inputs L
1 unit of output	A	8	8
	B	4	12
2 units of output	A	14	12
	B	8	20
3 units of output	A	16	12
	B	12	22

- 11) Refer to Table 8.1. Assuming the price of labor (L) is \$5 per unit and the price of capital (K) is \$10 per unit, what production technique should this firm use to produce 2 units of output? _____
- A) It is impossible to determine if the firm should select production technique A or B because total fixed costs are not given.
 - B) Production technique B
 - C) Production technique A
 - D) The firm is indifferent between production technique A and production technique B.

- 12) Refer to Table 8.1. Assuming the price of labor (L) is \$5 per unit and the price of capital (K) is \$10 per unit, the total variable cost of producing one unit of output is _____
 A) \$16. B) \$100. C) \$120. D) \$220.
- 13) Marginal cost _____
 A) always equals average cost.
 B) is the increase in total cost resulting from producing one more unit.
 C) equals the increase in AVC resulting from producing one more unit.
 D) is the average cost of production divided by output.
- 14) A firm will begin to experience diminishing returns at the point where _____
 A) marginal cost decreases. B) marginal cost increases.
 C) marginal product increases. D) Both B and C
- 15) Diminishing marginal returns implies _____
 A) decreasing marginal costs. B) increasing marginal costs.
 C) decreasing average fixed costs. D) decreasing average variable costs.
- 16) In the short run when the marginal product of labor _____, the marginal cost of an additional unit of output _____.
 A) rises; falls B) falls; doesn't change
 C) rises; rises D) falls; falls

Refer to the information provided in Figure 8.3 below to answer the questions that follow.

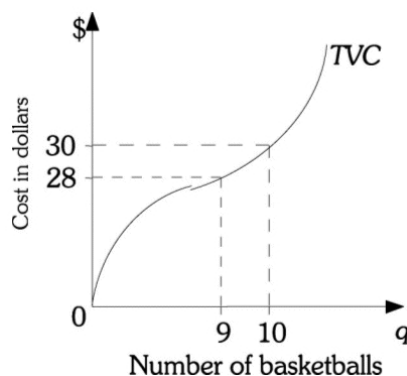


Figure 8.3

- 17) Refer to Figure 8.3. The marginal cost of the 10th basketball is _____
 A) \$2. B) \$3. C) \$3.05. D) \$5.80.
- 18) Refer to Figure 8.3. The marginal cost of the ninth basketball is _____
 A) less than \$2. B) \$2.
 C) \$3. D) greater than \$3.

Refer to the information provided in Table 8.2 below to answer the questions that follow.

Number of Earrings	TVC	MC	AVC	TFC	TC	AFC	ATC
0					100		
1		50					
2							95
3			46.67				
4					300		
5	270						

- 19) Refer to Table 8.2. If Sherry produces zero earrings, her total fixed costs are _____
 A) \$0. B) \$50.
 C) \$100. D) indeterminate from this information.
- 20) Refer to Table 8.2. If Sherry produces one pair of earrings, her total variable costs are _____
 A) \$50. B) \$100.
 C) \$150. D) indeterminate from this information.
- 21) Refer to Table 8.2. If Sherry produces two pairs of earrings, her marginal cost is _____
 A) \$40. B) \$45. C) \$72.50. D) \$122.50.
- 22) Refer to Table 8.2. If Sherry produces three pairs of earrings, her total variable costs are _____
 A) \$26.67. B) \$140. C) \$175. D) \$225.
- 23) Refer to Table 8.2. If Sherry produces five pairs of earrings, her total costs are _____
 A) \$320. B) \$360. C) \$370. D) \$400.
- 24) Refer to Table 8.2. If Sherry produces four pairs of earrings, her average fixed costs are _____
 A) \$4. B) \$20. C) \$25. D) \$100.
- 25) Refer to Table 8.2. Assume that Sherry's Earrings is producing in a perfectly competitive market and the market price for earrings is \$60. To maximize profits Sherry should produce _____ pairs of earrings.
 A) two B) three C) four D) five
- 26) If marginal cost is above average variable cost, then _____
 A) marginal cost must be decreasing. B) average variable cost is constant.
 C) average variable cost is decreasing. D) average variable cost is increasing.
- 27) The marginal cost curve intersects the average variable cost curve at the _____ value of the average variable cost curve.
 A) zero B) average C) minimum D) maximum

- 28) Twenty-five students in a class take a test for which the average grade is 75. Then a twenty-sixth student enters the class, takes the test, and scores 80. The test average calculated with 26 students will _____.
- A) rise above 75
 - B) still equal 75
 - C) fall below 75
 - D) change from 75 but the direction is unclear

28) _____

Refer to the information provided in Figure 8.4 below to answer the questions that follow.

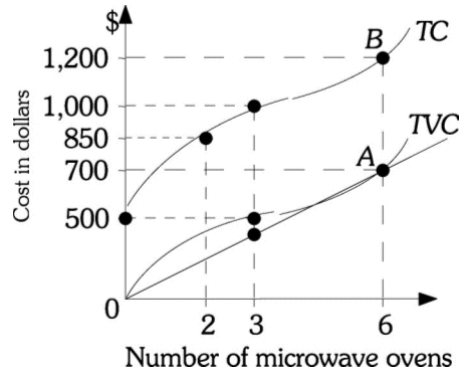


Figure 8.4

- 29) Refer to Figure 8.4. Micro Oven's total fixed costs are _____.
- A) \$0.
 - B) \$200.
 - C) \$500.
 - D) indeterminate from this information.
- 30) Refer to Figure 8.4. If two microwave ovens are produced, Micro Oven's total variable costs are _____.
- A) \$350.
 - B) \$425.
 - C) \$500.
 - D) indeterminate from this information.
- 31) Refer to Figure 8.4. If three microwave ovens are produced, average variable costs are _____.
- A) \$166.67.
 - B) \$333.33.
 - C) \$500.
 - D) \$1,500.
- 32) Refer to Figure 8.4. The marginal cost of the third microwave oven is _____.
- A) \$133.33.
 - B) \$150.
 - C) \$350.
 - D) indeterminate from this information.
- 33) Refer to Figure 8.4. Up to Point A _____.
- A) marginal costs are increasing.
 - B) marginal costs are decreasing.
 - C) average variable costs are increasing.
 - D) average variable costs are decreasing.
- 34) Refer to Figure 8.4. After Point A _____.
- A) average variable costs are increasing.
 - B) marginal costs are decreasing.
 - C) average total costs are increasing.
 - D) average variable costs are decreasing.

29) _____

30) _____

31) _____

32) _____

33) _____

34) _____

- 35) Refer to Figure 8.4. Marginal costs will equal average variable costs at 35) _____
 A) six microwave ovens.
 B) three microwave ovens.
 C) two microwave ovens.
 D) an indeterminate level of output from this information.
- 36) Refer to Figure 8.4. If six microwave ovens are produced, Micro Oven's average total costs are 36) _____
 A) \$33.33. B) \$83.33. C) \$116.67. D) \$200.00.
- 37) Refer to Figure 8.4. The marginal cost of the sixth microwave oven is 37) _____
 A) \$83.33. B) \$116.67. C) \$200. D) \$1200.
- 38) Refer to Figure 8.4. Average variable costs are minimized at an output level 38) _____
 A) of 2.
 B) of 3.
 C) of 6.
 D) that is indeterminate from this information.
- 39) Refer to Figure 8.4. If six microwave ovens are produced, Micro Oven's average fixed costs are 39) _____
 A) \$33.33. B) \$83.33.
 C) \$116.67. D) indeterminate from this information.
- 40) Refer to Figure 8.4. The vertical distance AB represents 40) _____
 A) average fixed costs. B) marginal costs.
 C) average total costs. D) total fixed costs.

Refer to the information provided in Figure 8.6 below to answer the questions that follow.

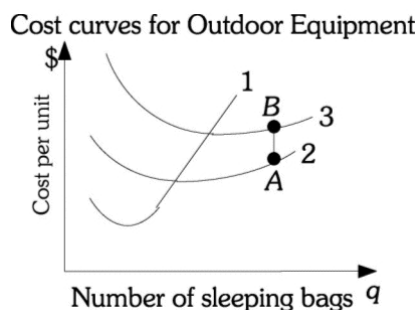


Figure 8.6

- 41) Refer to Figure 8.6. Curve 1 is Outdoor Equipment's 41) _____
 A) marginal cost curve. B) average variable cost curve.
 C) average fixed cost curve. D) average total cost curve.
- 42) Refer to Figure 8.6. Curve 2 is Outdoor Equipment's 42) _____
 A) marginal cost curve. B) average fixed cost curve.
 C) average variable cost curve. D) average total cost curve.

- 43) Refer to Figure 8.6. Curve 3 is Outdoor Equipment's 43) _____
A) marginal cost curve. B) average fixed cost curve.
C) average variable cost curve. D) average total cost curve.
- 44) Refer to Figure 8.6. The vertical distance AB is Outdoor Equipment's 44) _____
A) marginal cost. B) total cost.
C) total fixed cost. D) average fixed cost.
- 45) If marginal cost is below average total cost, average total cost will 45) _____
A) be increasing. B) be maximized.
C) be decreasing. D) remain constant.
- 46) If marginal cost equals average total cost, average total cost will 46) _____
A) increase. B) be minimized. C) be maximized. D) decrease.
- 47) The short-run average total cost curve eventually begins to increase at an increasing rate because of 47) _____
A) the constraint that the firm cannot change production technologies.
B) diminishing returns phenomena.
C) economies of scale.
D) increasing returns to scale.