

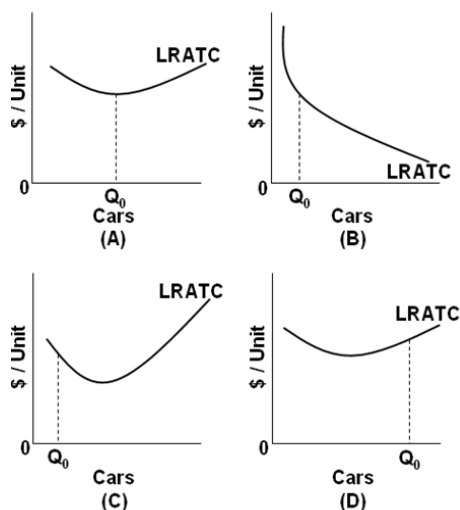
## REVIEW QUESTIONS

1. Which is true for a purely competitive firm in short-run equilibrium?
  - A. The firm is making only normal profits
  - B. The firm's marginal cost is greater than its marginal revenue
  - C. The firm's marginal revenue is equal to its marginal cost **C**
  - D. A decrease in output would lead to a rise in profits
  
2. The law of diminishing returns implies:
  - A. The more hours you spend studying the less you will know **C**
  - B. Your understanding will be increased by decreasing your marginal study time
  - C. Eventually, the more hours you spend studying per day, the less you will learn with each added hour
  - D. The more hours you spend studying per day, the more you will learn with each added hour
  
3. Mutual interdependence would tend to limit control over price in which market model?
  - A. Monopolistic competition
  - B. Pure competition **D**
  - C. Pure monopoly
  - D. Oligopoly
  
4. A firm doubles the quantity of all resources it employs and, as a result, output doubles. Which of the following is correct?
  - A. There are increasing returns to scale
  - B. The long-run average total cost curve is flat **B**
  - C. The law of diminishing returns is proven wrong
  - D. The example is for the short run rather than the long run
  
5. Ellen is preparing for a comprehensive course exam by reading a textbook with chapters of equal length and difficulty. The number of chapters she can comprehend and master when studying is: (1) hour one: 2 chapters; (2) hour two: 2.5 chapters; (3) hour three: 3 chapters; (4) hour four: 2 chapter; (5) hour five: 1 chapters. Diminishing marginal returns to studying sets in for Chris after hour:
  - A. One
  - B. Two **D**
  - C. Three
  - D. Four
  
6. The phrase "don't cry over spilt milk" could be rephrased in economic terms by saying:
  - A. "real resources have opportunity costs."
  - B. "there are economies and diseconomies of scale." **D**
  - C. "the law of diminishing returns applies to everything."
  - D. "sunk costs are irrelevant to a decision."

7. Which characteristic would best be associated with pure competition?

- A. Few sellers
- B. Price takers
- C. Barriers to entry
- D. Product differentiation

B



8. Refer to the above graphs. They show the long-run average total cost (LRATC) for cars. For which graph are there economies of scale throughout the entire range of output of cars?

- A. Graph A
- B. Graph B
- C. Graph C
- D. Graph D

B

9. Refer to the above graphs. They show the long-run average total cost (LRATC) for cars. For which graph is the output level  $Q_0$  at minimum efficient scale?

- A. Graph A
- B. Graph B
- C. Graph C
- D. Graph D

A

10. Refer to the above graphs. They show the long-run average total cost (LRATC) for cars. Just after World War II the Ford Motor Company opened a large automobile manufacturing facility near Detroit with capacity  $Q_0$  autos per year. Shortly thereafter, the plant was closed and two smaller ones were opened in the same vicinity, each more profitably producing about one-half as many cars as the old facility. Which graph best shows the situation described above, when only one plant was operating?

- A. Graph A
- B. Graph B
- C. Graph C
- D. Graph D

D

11. If a purely competitive firm is producing at an output where marginal revenue exceeds marginal cost, the firm will increase its profit by:

- A. Reducing production to the point where variable costs are minimized D
- B. Reducing production to the point where unit costs are minimized
- C. Reducing its output and simultaneously increasing its price
- D. Increasing its output

12. Assume the price of a product sold by a purely competitive firm is \$5. Given the data in the accompanying table, at what output level is total profit highest in the short run?

Output	Total Cost
20	\$70
25	75
30	85
35	100
40	125
45	155
50	190

- A. 20
- B. 30 C
- C. 40
- D. 50

13. In the standard model of pure competition, a profit-maximizing entrepreneur will shut down in the short run if:

- A. Average variable cost is less than average revenue
- B. Marginal cost is greater than average revenue
- C. Average fixed cost is greater than average revenue D
- D. Total revenue is less than total variable costs

14. In which market model would there be a unique product for which there are no close substitutes?

- A. Pure monopoly
- B. Pure competition A
- C. Monopolistic competition
- D. Oligopoly

15. Many people have turned to the Internet to get the news. This has caused the circulation numbers of newspapers to fall drastically, which in turn caused their:

- A. Average fixed costs to increase
- B. Average total costs to decrease A
- C. Average fixed costs to decrease
- D. Marginal costs to increase

16. Assume that the market for soybeans is purely competitive. Currently, firms growing soybeans are experiencing economic profits. In the long run, we can expect:

- A. New firms to enter, and the industry's supply to increase
- B. New firms to enter, and the industry's supply to decrease
- C. Some firms to exit, and the industry's supply to increase A
- D. Some firms to exit, and the industry's supply to decrease

17. The following schedule gives the cost data for a firm:

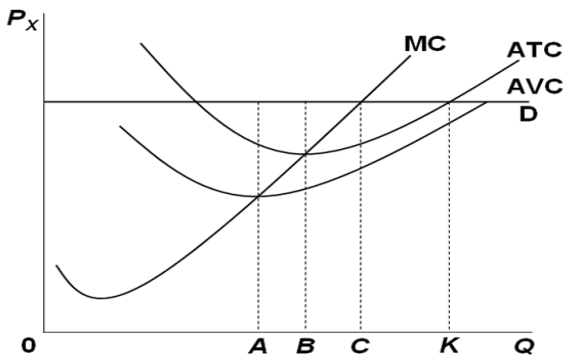
Total Product (thousand units)	Total Cost (Hundred \$)
100	200
200	300
300	450
400	600
500	1000

Diseconomies of scale start between:

- A. 0 and 100 (thousand) units of output
- B. 400 (thousand) and 500 (thousand) units of output b
- C. 200 (thousand) and 300 (thousand) units of output
- D. 300 (thousand) and 400 (thousand) units of output

18. Which idea is *inconsistent* with pure competition?

- A. Short-run losses
- B. A large number of buyers and sellers
- C. Product differentiation C
- D. Freedom of entry or exit for firms



19. Refer to the above graph. To maximize profits, the firm should produce the quantity:

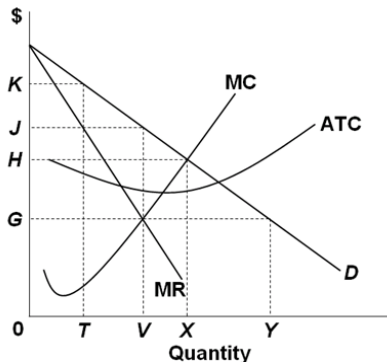
- A. 0A
- B. 0B
- C. 0C C
- D. 0K

20. Refer to the above graph. The firm should shut down if the quantity of output that it could sell falls below:

- A. 0A a
- B. 0B
- C. 0C
- D. 0K

avc graph

21. Diseconomies of scale occur mainly because:
- A. Of the law of diminishing returns
  - B. Firms in an industry must be relatively large in order to use the most efficient production techniques
  - C. Of the inherent difficulties involved in managing and coordinating a large business enterprise
  - D. The short-run average total cost curve rises when marginal product is greater than average total cost



22. Refer to the above graph for a profit-maximizing monopolist. The firm will set its price at:
- A. 0J
  - B. 0G
  - C. 0K
  - D. 0H
23. Refer to the above graph for a profit-maximizing monopolist. The firm will produce the quantity:
- A. 0V
  - B. 0Y
  - C. 0T
  - D. 0X
24. Refer to the above graph for a profit-maximizing monopolist. At equilibrium, the firm will be earning:
- A. Positive profits
  - B. Negative profits
  - C. Profits that cannot be determined from the given graph
  - D. Zero profits
25. A monopoly is most likely to emerge and be sustained when:
- A. Output demand is relatively elastic
  - B. Firms have U-shaped, average-total-cost curves
  - C. Fixed capital costs are small relative to total costs
  - D. Economies of scale are large relative to market demand
26. A profit-maximizing firm in the short run will expand output:
- A. Until marginal cost begins to rise
  - B. Until total revenue equals total cost
  - C. Until marginal cost equals average variable cost
  - D. As long as marginal revenue is greater than marginal cost

27. Let us suppose **Pink Grapes**, a local supplier of ice cream, has the following revenue and cost structure:

<b>Total Revenue</b>	<b>\$3,000 Per Week</b>
<b>Total Variable Cost</b>	<b>\$2,000 Per Week</b>
<b>Total Fixed Costs</b>	<b>\$2,000 Per Week</b>

b (long run will no have total variable cost and total fixed costs)

- A. Pink Grapes should stay open in the long run
- B. Pink Grapes should stay open in the short run
- C. Pink Grapes should shut down in the short run
- D. Pink Grapes should shut down in the short run but reopen in the long run

28. A fast-food company spends millions of dollars to develop and promote a new hamburger on their menu only to find that consumers won't buy it because they don't like the taste. From an economic perspective, the company should:

- A. Keep the hamburger on the menu because they've spent so much money and time developing and promoting the product
- B. Spend more money to develop a more efficient way to cook the hamburger so it cooks in a shorter time
- C. Pull the hamburger off the menu and treat the development and promotion expenditures as a sunk cost
- D. Keep trying to sell the hamburger so that people who developed and promote it have a job with the company

29. An exclusive right granted by government for twenty years to an inventor of a product is a:

- A. Copyright
- B. Franchise A
- C. Patent
- D. License

The fixed cost of the firm is \$500. The firm's total variable cost is indicated in the table.

<b>Output</b>	<b>Total Variable Cost</b>
<b>1</b>	40
<b>2</b>	72
<b>3</b>	100
<b>4</b>	140
<b>5</b>	200
<b>6</b>	360

30. Refer to the above table and information. The average variable cost of the firm when 5 units of output are produced is:

- A. \$10
- C. \$30

- B. \$20
- D. \$40

Output = 5  
variable cost = 200  
D     $200 / 5 = 40$

31. Refer to the above table and information. The marginal cost of the sixth unit of output is:

- A. \$40
- C. \$120

- B. \$60
- D. \$160

D    difference between 200 and  
360 = 160

32. Refer to the above table and information. The average total cost of the firm when 3 units of output are being produced is:

- A. \$35
- C. \$50

- B. \$40
- D. \$70

33. All of the following statements apply to a purely competitive market in the long run, *except*:

- A. In the long run, all inputs are variable in quantity
- B. Firms can expand their plant capacities in the long run
- C. Total fixed costs remain constant even when output expands in the long run
- D. Firms may enter or leave the industry in the long run

34. The economic incentive for price discrimination is based upon:

- A. Prejudices of business managers
- B. Differences among sellers' costs
- C. A desire to evade antitrust legislation
- D. Differences among buyers' demand elasticities

35. Which of the following statements is true of price discrimination?

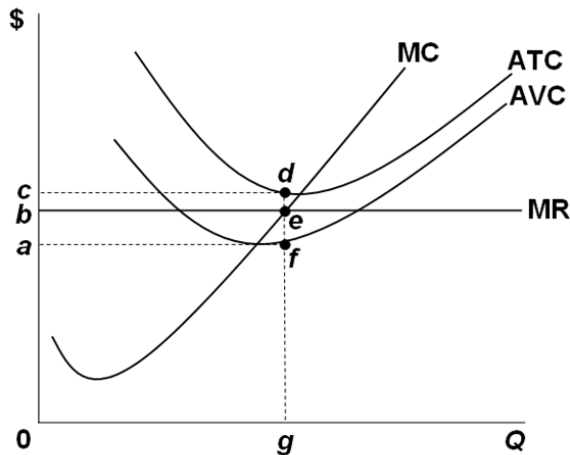
- A. Successful price discrimination will provide the firm with lower total profits than if it did not discriminate
- B. Successful price discrimination will provide the firm with more profit than if it did not discriminate
- C. Successful price discrimination will generally result in a lower level of output than would be the case under a single-price monopoly
- D. Successful price discrimination occurs when there are differences in the costs of producing for different groups of buyers

36. If the short-run average variable cost of production for a firm is decreasing, then it follows that:

- A. Average variable cost must be above average fixed cost
- B. Marginal cost must be below average variable cost
- C. Average fixed cost must be constant
- D. Marginal cost must be decreasing

37. Which is a reason why there is no advertising by individual firms under pure competition?
- A. Firms produce a homogeneous product
  - B. The quantity of the product demanded is very large **A**
  - C. The market demand curve cannot be increased
  - D. Firms do not make long-run profits
38. A monopolist sells 6 units of a product per day at a unit price of \$15. If it lowers price to \$14, its total revenue increases by \$22. This implies that its sales quantity increases by:
- A. 4 units per day
  - B. 3 units per day
  - C. 2 units per day **C**
  - D. 1 unit per day
39. A purely competitive firm's output is currently such that its marginal cost is \$4 and marginal revenue is \$5. Assuming profit maximization, the firm should:
- A. Cut its price and raise its output
  - B. Raise its price and cut output
  - C. Leave price unchanged and raise output **C**
  - D. Leave price unchanged and cut output
40. Which would definitely *not* be an example of price discrimination?
- A. A theater charges children less than adults for a movie
  - B. Universities charge higher tuition for out-of-state residents
  - C. A doctor charges for services according to the income of patients
  - D. An electric power company charges less for electricity used during off-peak hours when production costs are lower **D**
41. In pure competition, the demand for the product of a single firm is perfectly:
- A. Elastic because the firm produces a unique product
  - B. Inelastic because the firm produces a unique product
  - C. Elastic because many other firms produce the same product **C**
  - D. Inelastic because many other firms produce the same product
42. Which statement is *not* correct?
- A. The real cost of producing A is the amounts of products B, C, etc., which might have been produced with the resources devoted to A
  - B. Diseconomies of scale arise primarily from the difficulties in managing and coordinating a large-scale business enterprise
  - C. The law of diminishing returns accounts for the fact that the long-run average total cost curve is U-shaped
  - D. Average fixed costs diminish so long as output increases **C**





43. Refer to the above graph for a purely competitive firm operating at a loss in the short run. Which area in the graph represents the portion of total costs that the firm can recoup by continuing to produce rather than shutting down?

- A.  $0beg$
- B.  $0cdg$
- C.  $acdf$
- D.  $abef$

D

44. Refer to the above graph for a purely competitive firm operating at a loss in the short run. Which area in the graph represents the amount of economic loss for the firm?

- A.  $0beg$
- B.  $bcde$
- C.  $acdf$
- D.  $abef$

B

45. The Campus Crustacean Company receives \$2 per box for its crawfish and is selling 1,600 boxes to maximize its profits. What is the profit per box of crawfish at this equilibrium level of output if the average variable cost is \$1 per box and fixed costs are \$1,200?

- A. \$.25
- B. \$.50
- C. \$1.00
- D. \$1.25

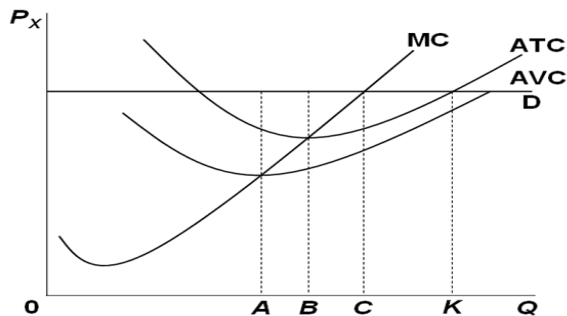
A / average profit = profit / quantity

46. A purely competitive firm can be identified by the fact that:

- A. There are other firms in the industry producing close substitutes
- B. It is making only normal profits in the short run
- C. Its average revenue equals marginal revenue
- D. It experiences diminishing marginal returns

47. The total revenue of a purely competitive firm from 8 units of output is \$48. Based on this information, total revenue for 9 units of output must be:

- A. \$52
- B. \$54**
- C. \$58
- D. \$60



48. Refer to the above graph. To maximize profits, the firm should produce the quantity:

- A. 0A
- B. 0B
- C. 0C**
- D. 0K

49. Refer to the above graph. The firm should shut down if the quantity of output that it could sell falls below:

- A. 0A**
- B. 0B
- C. 0C
- D. 0K

50. If the total cost of 20 units is \$20, and the total cost of 21 units is \$21, then over the range 20 to 21 units:

- A. Marginal cost is decreasing
- B. Marginal cost equals average total cost**
- C. Marginal cost equals average variable cost
- D. Average total cost equals average variable cost

51. Suppose that  $TC = \$550$ ,  $TVC = \$500$ , and  $MC = \$100$ . If the firm produces 10 units of output, then:

- A.  $AVC > MC$
- B.  $AFC = AVC$
- C.  $MC > AVC$**
- D.  $AVC = MC$

52. If all resources used in the production of a product are increased by 20 percent and output increases by 20 percent, then there must be:

- A. Economies of scale
- B. Diseconomies of scale
- C. Constant returns to scale**
- D. Increasing average total costs

53. The law of diminishing returns implies:

- A. The more hours you spend studying the less you will know
- B. Your understanding will be increased by decreasing your marginal study time
- C. Eventually, the more hours you spend studying per day, the less you will learn with each added hour**
- D. The more hours you spend studying per day, the more you will learn with each added hour

54. Many people have turned to the Internet to get the news. This has caused the circulation numbers of newspapers to fall drastically, which in turn caused their:

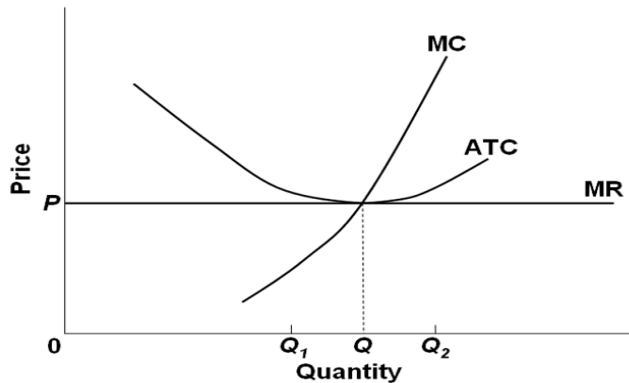
- A. Average fixed costs to increase**
- B. Average total costs to decrease
- C. Average fixed costs to decrease
- D. Marginal costs to increase

55. The production of agricultural products such as wheat or corn would best be described by which market model?

- A. Monopolistic competition
- B. Pure competition**
- C. Pure monopoly
- D. Oligopoly

56. Which is *not* a basic market model?

- A. Pure competition
- B. Free enterprise**
- C. Oligopoly
- D. Monopoly



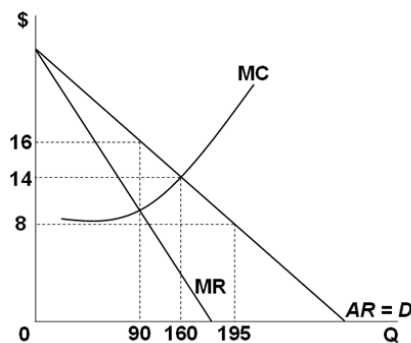
57. The above diagram portrays:
- a competitive firm that should shut down in the short run.
  - the equilibrium position of a competitive firm in the long run.
  - a competitive firm that is realizing an economic profit.
  - the loss-minimizing position of a competitive firm in the short run.
58. Refer to the above diagram. If this competitive firm produces output  $Q$ , it will:
- suffer an economic loss.
  - earn a normal profit.
  - earn an economic profit.
  - achieve productive efficiency, but not allocative efficiency.
59. Refer to the above diagram. By producing output level  $Q$ :
- neither productive nor allocative efficiency are achieved.
  - both productive and allocative efficiency are achieved.
  - allocative efficiency is achieved, but productive efficiency is not.
  - productive efficiency is achieved, but allocative efficiency is not.
60. Refer to the above diagram. At output level  $Q_1$ :
- neither productive nor allocative efficiency are achieved.
  - both productive and allocative efficiency are achieved.
  - allocative efficiency is achieved, but productive efficiency is not.
  - productive efficiency is achieved, but allocative efficiency is not.
61. Economic profit in the long run is:
- possible for both a pure monopoly and a pure competitor.
  - possible for a pure monopoly, but not for a pure competitor.
  - impossible for both a pure monopolist and a pure competitor.
  - only possible when barriers to entry are nonexistent.
62. An unregulated pure monopolist will maximize profits by producing that output at which:
- $P = MC$ .
  - $P = ATC$ .
  - $MR = MC$ .
  - $MC = AC$ .

63. Assume a purely competitive firm is maximizing profit at some output at which long-run average total cost is at a minimum. Then:

- A. the firm is earning an economic profit.
- B. there is no tendency for the firm's industry to expand or contract.**
- C. allocative but not productive efficiency is being achieved.
- D. other firms will enter this industry.

64. The  $MR = MC$  rule applies:

- A. in the short run, but not in the long run.
- B. in the long run, but not in the short run.
- C. in both the short run and the long run.**
- D. only to a purely competitive firm.



65. Refer to the graph above for an industry. If the industry were purely competitive, the output quantity would be:

- A. 90
- B. 160**
- C. 195
- D. A level that is not labeled in the graph

66. Refer to the graph above for an industry. If the industry had a pure monopoly, the output quantity would be:
- A. 90
  - B. 160
  - C. 195
  - D. A level that is not labeled in the graph
67. Refer to the graph above for an industry. If the industry were purely competitive, the market price would be:
- A. lower than 8
  - B. 8
  - C. 14
  - D. 16
68. At the profit-maximizing level of output, a monopolist will always operate where:
- A. Price is greater than marginal cost
  - B. Price is greater than average revenue
  - C. Average total cost equals marginal cost
  - D. Total revenue is greater than total cost
69. Which of the following distinguishes the short run from the long run in pure competition?
- A. Firms can enter and exit the market in the long run, but not in the short run.
  - B. Firms attempt to maximize profits in the long run, but not in the short run.
  - C. Firms use the  $MR=MC$  rule to maximize profits in the short run, but not in the long run.
  - D. The quantity of labor hired can vary in the long run, but not in the short run.
70. Marginal costs may fall lower due to a product's ability to satisfy a large number of consumers at the same time. This characteristic of a product is called:
- A. Economies of scale
  - B. Rent-seeking
  - C. Simultaneous consumption
  - D. Consumer sovereignty
71. Which market model assumes the least number of firms in an industry?
- A. Monopolistic competition
  - B. Pure competition
  - C. Pure monopoly
  - D. Oligopoly
72. All of the following are long-run changes, *except*:
- A. A purely competitive industry expands as more firms enter it
  - B. A purely competitive firm moves into larger production facilities to expand production
  - C. A purely competitive firm decides to leave the industry
  - D. A purely competitive firm produces more output by acquiring more raw materials for its existing factory