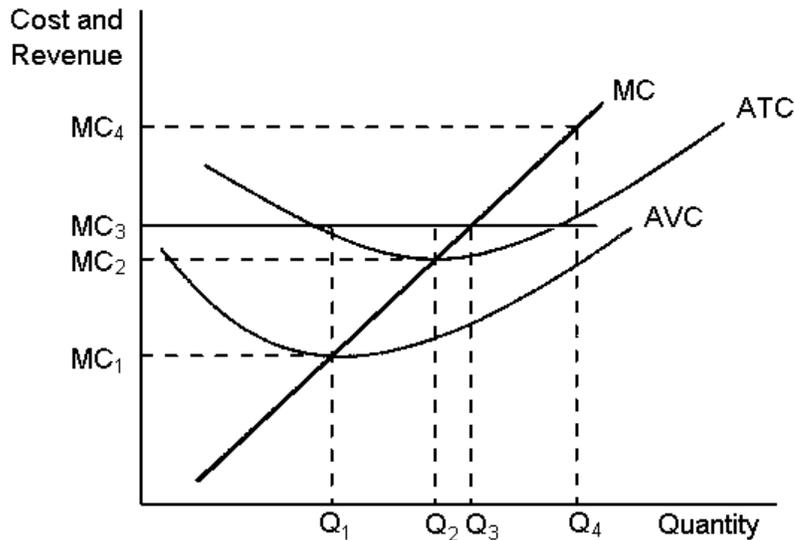


# Microeconomics

1. Economists assume that the goal of the firm is to maximize
  - A. total revenue
  - B. total profit
  - C. total costs
  - D. total satisfaction
  
2. If a perfectly competitive firm produces 100 units of a good and has marginal revenue of \$5.00, what is the firm's total revenue?
  - A. \$5
  - B. \$100
  - C. \$50
  - D. \$500
  
3. Economies of scale occur when, as output increases, the
  - A. long-run average cost increases
  - B. long-run average cost decreases
  - C. short-run average cost decreases
  - D. long-run average cost stays constant
  
4. Which of the following measures of cost is best described as "the increase in total cost that arises from an extra unit of production?"
  - A. variable cost
  - B. average variable cost
  - C. average total cost
  - D. marginal cost
  
5. Accounting profit
  - A. factors in implicit costs as well explicit costs
  - B. factors in just explicit costs
  - C. factors in just implicit costs
  - D. factors in neither implicit nor explicit costs

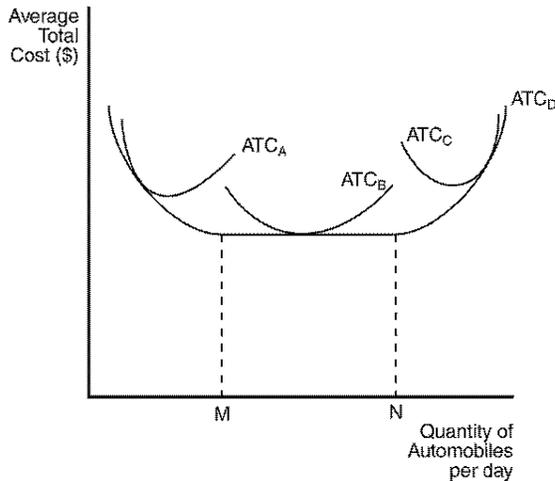
6. The textile industry is composed of a large number of small firms. In recent years, these firms have suffered economic losses and many sellers have left the industry. Therefore, these conditions will
- shift the demand curve outward so that price will rise to the level of production cost
  - cause the remaining firms to collude so that they can produce more efficiently
  - shift the market supply left and the price of textiles will rise
  - cause firms in the textile industry to suffer long run economic losses
7. An important implicit cost of almost every business is
- the cost of labor
  - the cost of utilities used in the manufacturing process
  - the opportunity cost of financial capital that has been invested in the business
  - the cost of raw materials used to manufacture a product
8. Spring Hill Bottling Company has average variable costs of \$6 and average total costs of \$10 when it produces 1,000 units of bottled water. The firm's total fixed costs equal
- \$2,000
  - \$3,000
  - \$4,000
  - \$5,000
9. When a perfectly competitive firm makes a decision to shut down, it is most likely that
- marginal cost is above average variable cost.
  - price is below the minimum of average variable cost.
  - fixed costs exceed variable costs.
  - average fixed costs are rising.



10. If marginal revenue is equal to  $MC_4$ , the profit-maximizing firm will produce what level of output?
- $Q_1$
  - $Q_2$
  - $Q_3$
  - $Q_4$
11. If marginal cost is positive, a firm's total cost is \_\_\_\_\_ as output increases.
- increasing
  - decreasing
  - constant
  - negative

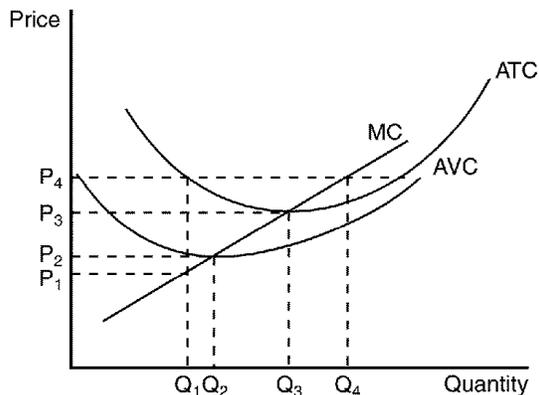
12. When a factory is operating in the short run,
- A. total costs and variable costs are the same
  - B. average fixed costs rise as output increases
  - C. it cannot adjust the quantity of fixed inputs
  - D. it cannot alter its variable costs
13. Which of the following is NOT a characteristic of a perfectly competitive market?
- A. Firms are price takers.
  - B. Firms have difficulty entering the market.
  - C. There are many sellers in the market.
  - D. Goods offered for sale are largely the same.
14. Which of the following is true in long-run equilibrium under perfect competition?
- A. Economic profit is zero.
  - B. There is no incentive for entry or exit of firms.
  - C. Long-run average cost is minimized.
  - D. All of the above are true
15. Suppose that a perfectly competitive market is in a short-run equilibrium with firms earning positive economic profit. What change is most likely to occur in this market in the long run?
- A. consumers will decrease their purchases reducing demand and reducing price
  - B. costs will increase, increasing the price of the product
  - C. new firms will enter the market increasing output
  - D. existing firms will increase price due to the potential for greater profits
16. Suppose a perfectly competitive firm is producing 50 units, and at this output, its average variable cost is minimized at \$3. If the market price is \$2, the firm should
- A. continue to operate at an output of 50
  - B. increase output beyond 50
  - C. continue to produce, but decrease output to below 50
  - D. shut down
17. As output increases in the short run, average fixed costs:
- A. rise
  - B. fall
  - C. remain constant
  - D. rise then fall as output increases
18. Economic profit is equal to
- A. total revenues minus explicit costs
  - B. total revenues minus implicit costs
  - C. total revenues minus marginal costs
  - D. total revenues minus explicit and implicit costs

The figure below depicts average total cost functions for a firm that produces automobiles.



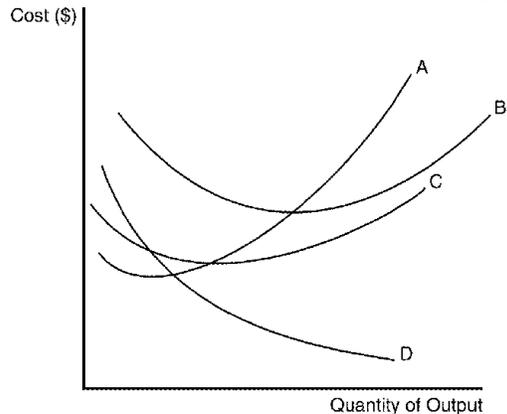
19. **Refer to the figure above.** At levels of output below M the firm experiences
- economies of scale.
  - diseconomies of scale.
  - economic profit.
  - accounting profit.
20. Zumiez Inc produces skateboards. When Zumiez Inc produces 10 skateboards a week, the marginal cost of the 10<sup>th</sup> skateboard is \$84, average variable cost is \$62 and the marginal revenue of that skateboard is \$70. Given that this company operates in a competitive market, what would you advise Zumiez Inc. to do?
- shut down
  - produce more skateboards
  - decrease the price of skateboards
  - produce fewer skateboards
21. If a restaurant stays open for lunch service even though few customers patronize the restaurant for lunch, which of the following principles is (are) best demonstrated?
- At least the firm is covering its fixed costs, since variable costs are not relevant to this decision.
  - In the short run, only fixed costs are important to the decision to stay open for lunch.
  - If revenue exceeds variable cost, the restaurant owner is making a profitable strategic decision to remain open for lunch.
  - The customers must be spending a lot for their lunches.
22. When profit-maximizing firms in competitive markets are earning profits,
- market demand must exceed market supply at the market equilibrium price.
  - market supply must exceed market demand at the market equilibrium price.
  - new firms will enter the market.
  - the most inefficient firms will be encouraged to leave the market.
23. Whenever marginal cost is greater than average total cost,
- marginal cost is rising.
  - marginal cost is falling.
  - average total cost is rising.
  - average total cost is falling.

The graph below depicts the cost structure for a firm in a competitive market.



- \_\_\_ 24. Refer to the figure above. When price falls from  $P_3$  to  $P_2$ , the firm finds that
- fixed cost is higher at a production level of  $Q_1$  than it is at  $Q_3$ .
  - it should produce  $Q_2$  units of output.
  - it should produce  $Q_3$  units of output.
  - it should shut down immediately.
- \_\_\_ 25. Which of the following expressions is correct?
- accounting profit = total revenue - explicit costs
  - economic profit = total revenue - implicit costs
  - economic profit = total revenue - explicit costs
  - Both a and b are correct.

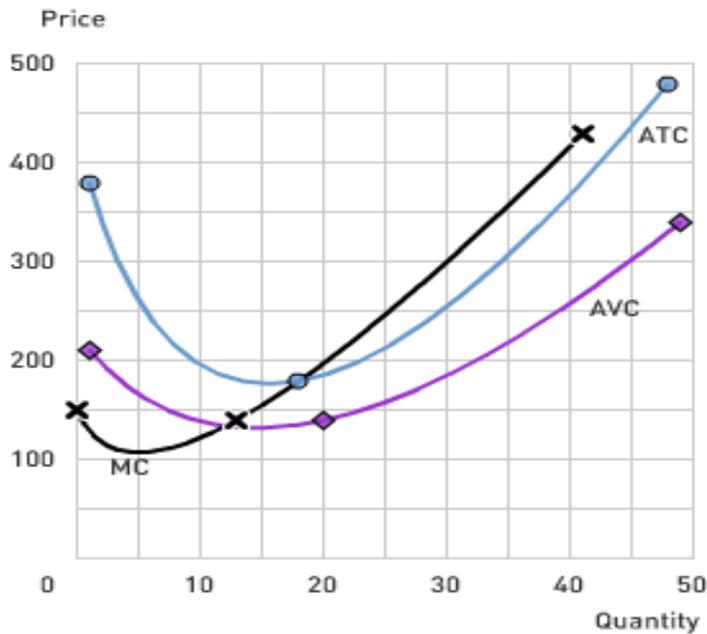
The curves below reflect information about the cost structure of a firm.



- \_\_\_ 26. Refer to the figure above. Which of the curves is most likely to represent average total cost?
- A
  - B
  - C
  - D
- \_\_\_ 27. Mrs. Smith is operating a firm in a competitive market. The market price is \$6.50. At her profit-maximizing level of output, her average total cost of production is \$7.00 and her average variable cost of production is \$6.00.
- Mrs. Smith is earning a loss and should shutdown in the short run.
  - Mrs. Smith is earning a loss but should continue to operate in the short run.
  - Mrs. Smith is earning a profit since the price is above the average variable cost.
  - Without knowing Mrs. Smith's marginal cost we cannot determine whether she should stay in business or shut down.

28. Consider what happens at the market level for video game consoles. The demand function for these consoles is  $Q_d = 1500 - 3P$  and the supply is  $Q_s = -600 + 4P$ . Find the market equilibrium price and quantity; draw the demand and supply curves, making sure you indicate the equilibrium price and quantity.

Now, using the market price that you found above, do the following for *one* firm in this market **Nintendo**, assuming that it is perfectly competitive and its cost curves are as depicted below. Draw in the price on the diagram and find the optimal output level. Then given this information calculate the firm's profits (or losses). Finally use this information to draw conclusions about what will happen in this market.



29. The following table represents the cost information for Ruehl, an up and coming retailer of casual athletic shirts.

Output	Fixed Costs	Variable Cost	Total Cost	AFC	AVC	ATC	MC
0	\$12.00	\$0.00					
1		\$4.00					
2		\$16.00					
3		\$30.00					
4		\$48.00					
5		\$73.00					
6		\$102.00					

- A. Using this information, fill in the remaining boxes, completing the table. (Remember that AFC is average fixed costs, AVC is average variable costs, ATC is average total costs, and MC is marginal costs.)
- B. If Ruehl is a perfectly competitive firm and maximizes profit at the point where marginal revenue is equal to \$25, how many shirts should Ruehl produce and why?
- C. What is the profit for the level of output determined in question (B)?

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1	B
2	D
3	B
4	D
5	B
6	C
7	C
8	C
9	B
10	D
11	A
12	C
13	B
14	D
15	C
16	D
17	B
18	D
19	A
20	D
21	C
22	C
23	C
24	B
25	A
26	B
27	B