

**Econ 101 Tutorial 6****Multiple Choice**

Identify the choice that best completes the statement or answers the question.

**Table 13-15**

Consider the following table of long-run total cost for four different firms:

Quantity	1	2	3	4	5	6	7
Firm 1	\$210	\$340	\$490	\$660	\$850	\$1,060	\$1,290
Firm 2	\$180	\$350	\$510	\$660	\$800	\$930	\$1,050
Firm 3	\$120	\$250	\$390	\$540	\$700	\$870	\$1,050
Firm 4	\$150	\$300	\$450	\$600	\$750	\$900	\$1,050

- \_\_\_\_\_ 1. Refer to Table 13-15. Which firm has constant returns to scale over the entire range of output?
- Firm 1
  - Firm 2
  - Firm 3
  - Firm 4
- \_\_\_\_\_ 2. Refer to Table 13-15. Which firm has diseconomies of scale over the entire range of output?
- Firm 1 only
  - Firms 1 and 2 only
  - Firm 3 only
  - Firm 4 only
- \_\_\_\_\_ 3. Refer to Table 13-15. Which firm has economies of scale over the entire range of output?
- Firm 1 only
  - Firms 1 and 2 only
  - Firm 2 only
  - Firm 3 only
- \_\_\_\_\_ 4. Refer to Table 13-15. Which firm's long-run marginal cost decreases as output increases?
- Firm 1
  - Firm 2
  - Firm 3
  - Firm 4

**Table 13-13**

Output	Total Cost
0	\$40
10	\$60
20	\$90
30	\$130
40	\$180
50	\$240

- \_\_\_\_\_ 5. Refer to Table 13-13. What is average fixed cost when output is 40 units?
- \$1.00
  - \$3.32
  - \$5.00
  - \$8.00
- \_\_\_\_\_ 6. Refer to Table 13-13. What is average variable cost when output is 50 units?
- \$3.60
  - \$4.00
  - \$4.40
  - \$4.80
- \_\_\_\_\_ 7. Refer to Table 13-13. What is variable cost when output equals 30 units?
- \$4
  - \$40
  - \$90
  - \$130
- \_\_\_\_\_ 8. A firm has a fixed cost of \$200 in its first year of operation. When the firm produces 99 units of output, its total costs are \$4,000. The marginal cost of producing the 100th unit of output is \$700. What is the total cost of producing 100 units?
- \$900
  - \$4,200
  - \$4,700
  - \$4,900

**Scenario 13-10**

Walter builds birdhouses. He spends \$5 on the materials for each birdhouse. He can build one in 30 minutes. He is semi-retired but earns \$8 per hour at the local hardware store. He can sell a birdhouse for \$20 each.

- \_\_\_\_\_ 9. Refer to Scenario 13-10. An economist would calculate the total profit for one birdhouse to be
- \$7.
  - \$11.
  - \$12.
  - \$15.

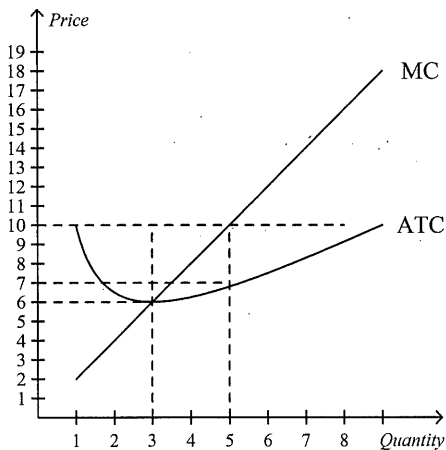
10. In the short run, a market consists of 100 identical firms. The market price is \$8, and the total cost to each firm of producing various levels of output is given in the table below. What will total quantity supplied be in the market?

Quantity	Total Costs
0	\$1
1	\$7
2	\$14
3	\$22
4	\$31
5	\$41

- a. 200 units  
 b. 300 units  
 c. 400 units  
 d. 500 units
11. A competitive market is in long-run equilibrium. If demand decreases, we can be certain that price will
- a. fall in the short run. All firms will shut down, and some of them will exit the industry. Price will then rise to reach the new long-run equilibrium.  
 b. fall in the short run. No firms will shut down, but some of them will exit the industry. Price will then rise to reach the new long-run equilibrium.  
 c. fall in the short run. All, some, or no firms will shut down, and some of them will exit the industry. Price will then rise to reach the new long-run equilibrium.  
 d. not fall in the short run because firms will exit to maintain the price.

**Figure 14-3**

Suppose a firm operating in a competitive market has the following cost curves:



12. Refer to Figure 14-3. If the market price is \$10, what is the firm's short-run economic profit?
- a. \$9  
 b. \$15  
 c. \$30  
 d. \$50

- \_\_\_\_\_ 13. Refer to Figure 14-3. If the market price is \$10, what is the firm's total cost?
- a. \$15
  - b. \$30
  - c. \$35
  - d. \$50
- \_\_\_\_\_ 14. Refer to Figure 14-3. If the market price is \$10, what is the firm's total revenue?
- a. \$15
  - b. \$30
  - c. \$35
  - d. \$50
- \_\_\_\_\_ 15. Refer to Figure 14-3. The firm will earn zero economic profit if the market price is
- a. \$0
  - b. \$6
  - c. \$7
  - d. \$10

**Short Answer**

16. If identical firms that remain in a competitive market over the long run make zero economic profit, why do these firms choose to remain in the market?