Chapter 8 Q and A

1. Zero economic profits is the same thing as
   A. a negative accounting profit.
   B. zero accounting profit.
   C. a positive accounting profit.

2. Which of these is an implicit cost?
   A. the electric bill
   B. the capital invested in the business.
   C. advertising expenses
   D. employee wages

3. Output is a function of
   A. profit and loss
   B. explicit and implicit costs
   C. fixed and variable costs
   D. labor and capital.

4. If a firm is producing where MC is sloping downwards and MC is below the AVC, then
   A) MR is decreasing.
   B) AVC is rising.
   C) ATC is decreasing.
   D) We do not have sufficient information to conclude any of the above.

5. Which of the following is FALSE?

   A) The AFC curve can never rise with output.
   B) The marginal cost curve begins to increase before the average variable cost curve.
   C) The ATC always lies above the AVC.
   D) None of the above. All are true.

6. At Disneyland a one-day pass is $100, a two-day pass is $130, and a three-day pass is $150. What is the marginal cost of purchasing a three-day pass compared to the two-day pass?
   A. $ 20
   B. $150
   C. $ 15
   D. $ 50

7. In the table, diminishing marginal returns begin

Input	Total Product
0	0
1	10
2	35
3	70
4	120
5	165
6	175
7	170
8	155

A) after the 1st unit of input
B) after the 2nd unit of input
C) after the 7th unit of input
D) after the 4th unit of input

8. The MC curve goes through the minimum point of which of the following curves?

A) AVC, AFC
B) ATC, AVC
C) AFC, ATC
D) ATC, AVC, AFC

9. The MC curve eventually rises as output increases in the short run because of

A) the law of diminishing returns
B) diseconomies of scale
C) constant returns to scale
D) economies of scale

10. When Super Stuff Corporation produces 5,000 units, total costs equal $150,000 and total variable costs equal $75,000. At this level of output, what is Super Stuff's average fixed cost?

A) $75,000
B) $30
C) $225,000
D) $15

11. In the following table find the value of A:

Output	Total fixed cost	Total variable cost	Total cost	Average fixed cost	Average variable cost	Average total cost	Marginal cost
1	____	$200	____	____	____	$300	____
2	$100	$400	____	____	____	____	A=$100
3	____	____	$600	____	____	____	____
4	____	$350	____	____	____	____	____
5	____	____	____	____	$40	____	

12. When a firm exhibits _____, production should be lowered.
A) economies of scale
B) constant returns to scale
C) diseconomies of scale

13. In the following table find the value of A:

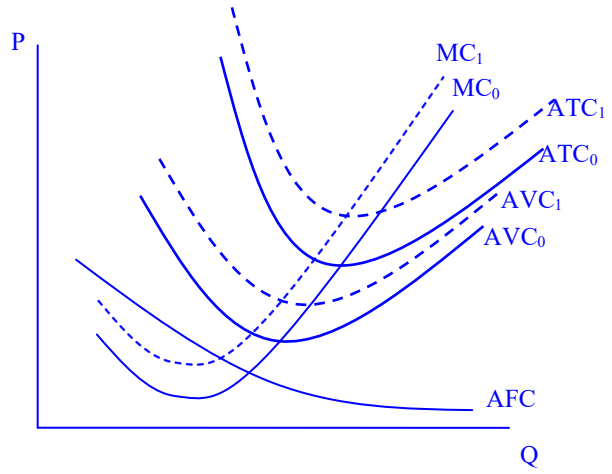
Output	**Total fixed cost**	**Total variable cost**	**Total cost**	**Average fixed cost**	**Average variable cost**	**Average total cost**	**Marginal cost**
1	____	____	$100	$50	____	____	$25
2	____	$75	____	A=$25	____	____	____
3	____	____	$150	____	____	____	

14. Many small boats are made of fiberglass, which is made from crude oil.

a. Assuming that the amount of fiberglass that a firm uses can be varied in the short run and that other factors of production are fixed, draw a standard set of cost curves for a firm in the boat industry. Clearly label the average total cost curve, the average variable cost curve, the average fixed cost curve and the marginal cost curve.

b. Now suppose that the price of crude oil rises, on your diagram show what happens to the cost curves of an individual boat-making firm in the short run.

Answer: See below. The continuous lines at the answer for a. The dashed lines represent the answer for b.



15. Nathan runs an antiques store. Last year, he earned $35,000 in revenue and had explicit costs of $8,000. Nathan could have made $30,000 testing information security equipment and received an additional $7,500 if he had used the company's inputs in a different way. Calculate Nathan's economic profit.

Answer: How does economic profit differ from accounting profit? What do we include in the calculation?

Use the following equation to determine economic profit:

Economic profit = total revenues - (explicit costs + implicit costs)

We know Nathan's explicit costs are $8,000. Implicit costs are the opportunity costs of doing business. Nathan's implicit costs include the salary he could have made testing information security equipment ($30,000) and the money he could have received from using the other inputs differently ($7,500). Therefore, Nathan's total implicit costs equal $37,500.

When we insert these values into the equation for economic profit, we get the

following solution:

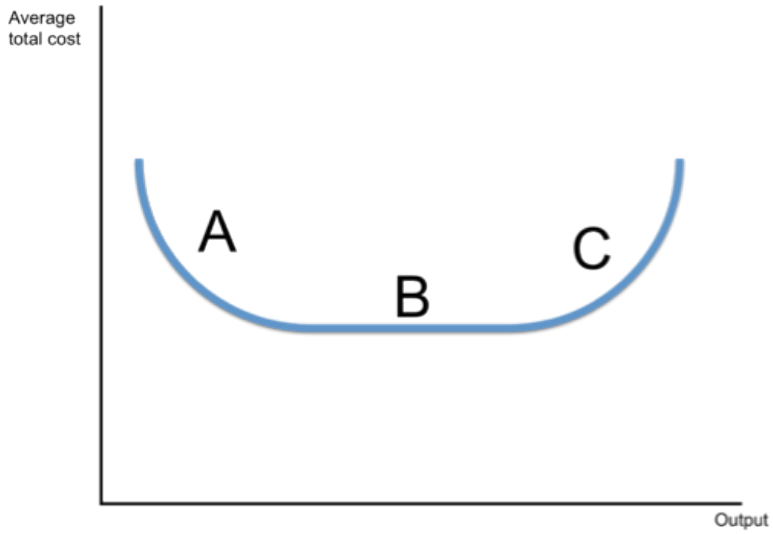
Economic profit = $35,000 - ($8,000 + 30,000 + 7,500) = -10,500

16. An airline has a marginal cost per passenger of $30 on a route from Detroit to Phoenix. At the same time, the typical fare charged is $300. The planes that fly the route are usually full, yet the airline claims it loses money on the route. This loss may occur because

A) economic profits are less than accounting profits.
B) fixed costs are so high that they are not being covered.
C) variable costs increase greatly with each additional passenger.
D) total costs are higher than the sum of fixed costs and variable costs.

Explanation: The airline may be losing money on this route if it has a very high fixed cost. It makes sense to fly the plane in the short run because the revenue from the passengers is greater than the variable cost of flying that route. The variable costs might include things such as fuel and flight attendants. However, when the airline calculates its profits, it has to include the fixed costs it incurred that year, such as the cost of buying or leasing the plane that flies that route. This is a huge fixed cost that the revenue from the airfare may not cover.

17. The long-run average total cost curve for a local creamery is shown below.



a. Point A exhibits _____.
Answer: economies of scale

b. Point B exhibits _____.
Answer: constant returns to scale

c. Point C exhibits _____.
Answer: diseconomies of scale