
Chapter 11 Assignment

1. The _____ is the increase in output obtained by hiring an additional worker.
 - A) average product
 - B) total product
 - C) ~~marginal product~~
 - D) marginal cost

2. The idea of diminishing returns to an input in production suggests that if a local university adds more and more custodians, the marginal product of labour for the custodial staff will _____ over time.
 - A) increase at an increasing rate
 - B) increase at a decreasing rate
 - C) ~~decrease~~
 - D) not change

3. Suppose that the Molson Brewery and the Labatt Brewery are identical in all respects except that the Molson Brewery has more capital than the Labatt Brewery. This means that, the marginal product curve for the Molson Brewery:
 - A) must equal the marginal product curve for the Labatt Brewery.
 - B) ~~will lie above the marginal product curve for the Labatt Brewery.~~ *MB可以有更多的fixed input, 每位员工的产出就会增加*
 - C) will lie below the total marginal curve for the Labatt Brewery.
 - D) will show no diminishing marginal returns.

4. Oscar is required to pay \$5,000 per month in rent for his sporting goods store in the West Edmonton Mall. Oscar pays his staff \$10 per hour to sell sporting goods and his monthly electricity bill averages \$300. Depending on his total hours of operation each month, Oscar has fixed costs of production of _____.
 - A) ~~\$5,000 per month~~ *Produce more, electricity ↑ and staff cost ↑*
 - B) ~~\$3,200 per month~~ *but room rental not change*
 - C) \$10 per hour multiplied by total hours of work per month plus \$700
 - D) \$10 per hour multiplied by total hours of work per month plus \$3,200

5. For Heidi, the marginal cost of producing one additional photograph equals the _____ divided by _____.
 - A) ~~change in total cost; the change in the number of photographs~~
 - B) change in marginal cost; the change in the number of photographs
 - C) change in total cost; the change in the marginal product of photographs
 - D) change in average cost; the change in the number of photographs

6. If Marie Marionettes is operating under conditions of diminishing marginal product, the marginal costs will be:

- A) equal to ATC.
- B) decreasing.
- ☒ C) increasing.
- D) constant.

7. Krista operates a dry-cleaning business in Toronto on Bloor street. Krista incurs \$450 per month in fixed costs. Last month her total output equaled 1,500 pounds of clothes. This month her total output fell to 1,350 pounds of clothes. This means that her average fixed cost _____ by a little more than _____.

- A) fell; 3.33 cents
- ☒ B) increased; 3.33 cents
- C) fell; 3.00 cents
- ☒ D) increased; 3.00 cents

8. The _____ curve continually declines as more output is produced in the short-run:

- A) marginal cost
- B) average variable cost
- ☒ C) average fixed cost
- D) average total cost

9. The long-run average cost curve will be upward sloping when the firm is experiencing:

- A) economies of scale.
- ☒ B) diseconomies of scale.
- C) constant returns to scale.
- D) diminishing returns.

10. The long-run average cost curve will be downward sloping when the firm is experiencing:

- ☒ A) economies of scale.
- B) diseconomies of scale.
- C) constant returns to scale.
- D) diminishing returns.

11. If the ATC and the AVC curves are both U-shaped, then the minimum point of the ATC curve must lie vertically above the minimum point of the AVC curve.

- A) True
- ☒ B) False

12. If average total cost is declining, marginal cost cannot be increasing.

- A) True
- ☒ B) False

13. Any production function that is characterized by economies of scale will NOT be subject to the operation of diminishing returns.

- ☒ A) True

B) ~~False~~

14. The advantage of specialization in production is one of the primary reasons that a firm experiences decreasing returns to scale.

A) True

B) ~~False~~

15. If a firm builds a larger plant and does not experience a change in long-run average cost, the firm is experiencing constant returns to scale.

A) ~~True~~

B) ~~False~~

16. Eveline is considering expanding her flower shop.

The following table shows the possible numbers of workers and the total output per day.

Labour workers)	(# Quantity of Floral Arrangements	MPL	TC	MC	ATC
0	0		500		
		10		20	
1	10		700		70
		6		20 25	
2	18		900		50
		6		33	
3	24		1100		45.83
		4		50	
4	28		1300		46.43
		2		100	
5	30		1500		50

A) Calculate the *marginal product of labour* for Eveline's flower shop.

B) If Eveline's fixed costs are \$500 and each worker costs \$200, calculate her total costs, marginal costs, and average total costs.

c) What principle explains why the average total costs fall?

d) What principle explains why the average total costs rise?

e) What will happen to Eveline's MPL if she acquires more fixed inputs?

17. Consider the following table of long run total costs for three different firms. Calculate each firm's average long run total costs.

Quantity	Firm A		Firm B		Firm C	
	Total Costs	Average Total Costs	Total Costs	Average Total Costs	Total Costs	Average Total Costs
1	60		11		21	
2	70		24		34	
3	80		39		49	
4	90		56		66	
5	100		75		85	
6	110		96		106	
7	120		119		129	

Does each firm experience increasing, decreasing, or constant returns to scale?

Firm A _____

Firm B _____

Firm C _____

18. The following table contains the cost information for a business with three different levels of the fixed inputs, which are trucks: one truck, two trucks, or three trucks.

Q	TC 1	ATC 1	TC 2	ATC 2	TC 3	ATC 3
1	500		600		800	
2	900		1020		1400	
3	1260		1320		1830	
4	1800		1560		2120	
5	2500		2200		2300	
6	3420		3060		2400	
7	4620		4200		3220	
8	6080		5680		4240	

Calculate and graph the business' *average total costs*.



