

Test for Chapter 4

Directions:

Choose the best answer

1)

Total product is the amount of output that a firm can produce

- using a given amount of inputs.
- using a given amount of outputs.
- by ignoring production costs.
- by not considering a firm's technology.

2)

The average product–marginal product relationship indicates that

- if the marginal product is less than the average product, the average product is falling.
- if the marginal product is greater than the average product, the average product is falling.
- if the marginal product is increasing, the average product is above it.
- if the marginal product is decreasing, the average product is below it.

3)

When each additional worker produces more output than the previously hired worker, the marginal cost of production is

- increasing.
- decreasing.
- the same as before.
- the same as the average.

4)

Assume that a company has a wage cost of \$1000 per worker per week. If three workers can make 15 units of the product in week, the firm's average variable cost is

- \$3000.
- \$1000.
- \$200.
- \$100.

5)

If marginal cost is greater than average variable cost,

- average variable cost is decreasing.
- average variable cost is increasing.
- marginal cost is less than average variable cost.
- average variable cost is negative.

6)

Average total cost equals

- $MC + FC$.
- AFC / MC .
- $AFC + AVC$.
- AVC / VC .

7)

At 100 units of output, total cost is \$12,000, total variable cost is \$7000, and total fixed cost is \$5000. Average total cost is

- \$50.
- \$70.
- \$100.
- \$120.

8)

The long run is a period of time during which

- all inputs are variable.
- there are no fixed costs.
- the firm can change the scale of its operation.
- all the above.

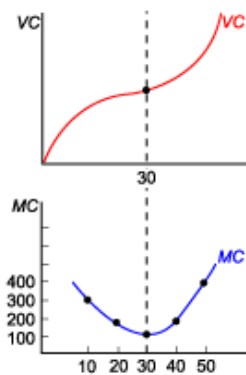
9)

Marginal cost equals

- the variable cost of the additional unit of production minus the variable cost of the previous unit produced.
- the change in variable costs divided by the change in output.
- the change in total cost divided by the change in output.
- all of the above.

10)

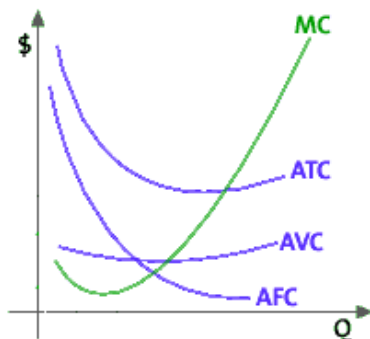
Examine the graph below. The marginal cost at 30 units of output is



- \$500.
- \$100.
- \$200.
- equal to variable cost.

11)

Marginal cost is equal to both average variable cost and average total cost when

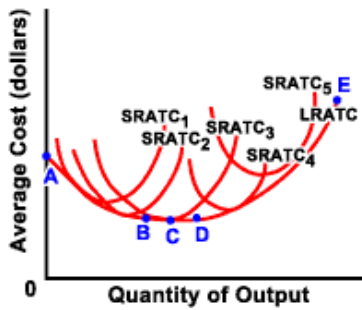


- average total cost and average variable cost are decreasing.
- average variable cost and average total cost are at their minimums.
- the marginal product of labor is increasing.
- total fixed costs are large relative to variable costs.

12)

Examine the graph below. The firm is experiencing increasing returns to scale between points

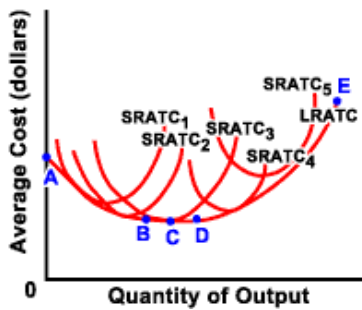
- A and C.
- B and C.
- C and D.
- D and E.



13)

Examine the graph below. The firm is experiencing decreasing returns to scale between points

- A and B.
- B and D.
- C and E.
- B and C.



14)

What is marginal product (MP)?

- Marginal product (MP) is a product of marginal (barely acceptable) quality.
- Marginal product (MP) is the change in total product made possible by the addition of one (1) more unit of a variable input.
- Marginal product (MP) is the same as average product.
- Marginal product (MP) increases when total product decreases.

15)

If marginal product (MP) is negative, which of the following is true?

- Profit is maximized.
- Marginal cost is decreasing.
- Average product is increasing.
- The slope of the total product curve is negative.

16)

What is the average product of labor?

- The average product of labor is total wages divided by the number of workers.
- The average product of labor is the number of workers times their average hourly wage.
- The average product of labor is the total product divided by the number of workers.
- The average product of labor is the marginal product divided by the number of workers.

17)

When total product increases at an increasing rate, the firm employs

- team work.
- specialization.
- both A and B.
- neither A nor B.

18)

If the worker has an average product of one-third of a video camera, ($1/3$), how many workers would it take to produce one whole video camera?

- 1.
- 2.
- 3.
- 4.

19)

The schedule shown here shows the total product

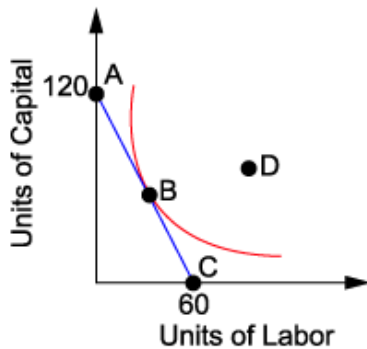
Labor (input)	VCR's (total product)
0	0
1	5
2	15
3	22
4	27
5	30
6	29

- when the factory size is fixed.
- when the quantity of labor employed is fixed.
- when all inputs are variable.
- when all inputs are fixed.

20)

Assume that the isoquant represents an output level of 50 units. If the firm chooses to produce 50 units of output, its least-cost combination of labor and capital is at point

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



21)

The long run is characterized by

- no variable costs.
- no fixed costs.
- no marginal costs.
- no capital costs.

22)

A firm's isocost line has the equation $100 = 10L + 5K$. Which of the following is correct?

- The horizontal intercept is 20.
- The vertical intercept is 10.
- The slope equals $-1/2$.
- This firm has to give up two units of capital to gain an additional worker.

23)

The short run is usually characterized by

- labor being fixed.
- a period no longer than one year.
- total output being fixed.
- capital being fixed.

24)

Which of the following is **not** true of the total product curve?

- It shows how output changes at different levels of capital.
- It describes output as a function of labor.
- Its slope equals the marginal product of labor.
- It represents the firm's production possibilities in the short run.

25)

Marginal product increases as long as

- total product is positive.
- the total product curve is concave (decreasing slope).
- total product is increasing.
- the total product curve is convex (increasing slope).

26)

Marginal cost is defined as the

- change in variable costs divided by the change in number of workers.
- change in variable costs divided by total product.
- change in variable costs divided by the change in total product.
- change in variable costs divided by number of workers.

27)

This firm has a wage of \$100 per worker. According to the following output schedule, the marginal cost when the firm is producing 15 units of output is

Labor	Output
1	5
2	15
3	20
4	24

- \$6.67.
- \$100.
- \$10.
- \$20.

28)

Marginal cost is the slope of the

- variable cost curve.
- total product curve.
- marginal product curve.
- average cost curve.

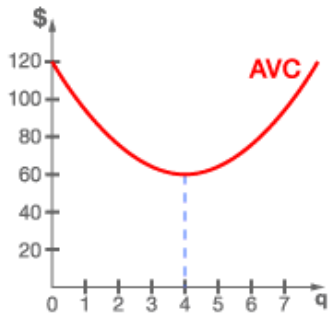
29)

The marginal cost curve passes through the average variable cost curve at the point of

- maximum marginal cost.
- minimum average variable cost.
- minimum marginal cost.
- maximum average variable cost.

30)

According to the following average variable cost curve, average product is



- decreasing between the first and second unit.
- increasing between the third and fourth unit.
- increasing between the fifth and sixth unit.
- at a minimum at the fourth unit.