

Production and Cost Unit Test

Comprehensive Micro Exam

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1. In the short-run, which of the following would most likely be considered a fixed cost?

- (A) wages paid to labor
- (B) cost of materials use in production
- (C) cost of the mortgage on a factory
- (D) cost of hiring a trucking company to deliver products to customers
- (E) cost of electricity use to power machines used in the production of output

2. If a firm's fixed cost increases, its marginal cost will

- (A) increase
- (B) decrease
- (C) not change
- (D) either increase or decrease
- (E) be eliminated

3. Which of the following does **NOT** accurately explain what the marginal cost is?

- (A) It is the additional cost of producing one more unit.
- (B) It is the average variable cost when one more unit is produced.
- (C) It is the change in total cost when one more unit is produced.
- (D) It is the change in total variable cost when one more unit is produced.
- (E) It is the change in total cost divided by the change in output.

4. Why would a firm produce at a level where its marginal cost is increasing?

- (A) It would lead to economies of scale
- (B) It would lead to more profit per unit
- (C) It would lead to less cost per unit
- (D) It would lead to more total profit
- (E) It would lead to less total cost

Brureff Bottling Co.
Production Costs

(units) <u>Output</u>	(dollars) <u>Total Costs</u>
0	1,000
500	1,250
1,000	1,500
1,500	1,750

5. Refer to the production costs for the Brureff Bottling Co.
Which of the following statements is true?

- (A) The production schedule indicates that the firm is in the long-run.
- (B) The production schedule indicates that the firm is operating at a profit.
- (C) The production schedule indicates that the firm is operating at a loss.
- (D) The production schedule indicates that the firm is in the short-run.
- (E) The production schedule indicates that the firm is indecisive about how many units to produce.

6. Refer to the production costs for the Brureff Bottling Co.
Which of the following statements is true?

- (A) The firm is experiencing increasing cost.
- (B) The firm is experiencing decreasing cost.
- (C) The firm is experiencing constant cost.
- (D) The firm is experiencing economies of scale.
- (E) The firm has an upward sloping supply curve.

7. Refer to the production costs for Brureff Bottling Co. What is the fixed cost for this company?

- (A) \$1750
- (B) \$1000
- (C) \$750
- (D) \$500
- (E) \$0

Brureff Bottling Co.
Production Costs

(units) <u>Output</u>	(dollars) <u>Total Costs</u>
0	1,000
500	1,250
1,000	1,500
1,500	1,750

8. Refer to the production costs for Brureff Bottling Co.
What is the average variable cost when the firm produces 1500 units?

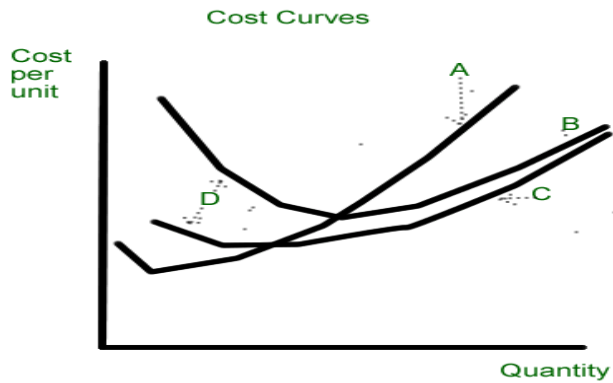
- (A) \$750
- (B) \$1
- (C) \$500
- (D) \$.50
- (E) \$1.75

9. Refer to the production costs for Brureff Bottling Co.
What is the total variable cost when the firm produces 1000 units ?

- (A) \$1500
- (B) \$1000
- (C) \$500
- (D) \$750
- (E) \$1250

10. Refer to the production costs for Brureff Bottling Co.
What is the marginal cost of the last unit?

- (A) \$.50
- (B) \$1.00
- (C) \$1.50
- (D) \$1.75
- (E) \$250



11. Refer to the graph for cost curves. Which curve represents the average variable cost curve?

- (A) A
- (B) B
- (C) C
- (D) D
- (E) none of the above

12. Refer to the graph for cost curves. Which curve represents the total cost curve?

- (A) A
- (B) B
- (C) C
- (D) D
- (E) none of the above

13. Refer to the graph of cost curves. Which curve represents the marginal cost curve?

- (A) A
- (B) B
- (C) C
- (D) D
- (E) none of the above

14. Refer to the graph of cost curves. Which curve represents the average total cost curve?

- (A) A
- (B) B
- (C) C
- (D) D
- (E) none of the above

15. Refer to the graph of cost curves. What does the space marked D represent?

- (A) the average marginal cost
- (B) the average total cost
- (C) the average variable cost
- (D) the average fixed cost
- (E) none of the above

Tallulla Widget Company

<u>Output</u>	<u>Average Fixed Costs</u>	<u>Average Variable Costs</u>
0		
1	120	40
2	60	35
3	40	34
4	30	36
5	24	38

16. What is the total cost of producing 3 widgets for the Tallulla Widget Co. ?

- (A) \$72
- (B) \$34
- (C) \$120
- (D) \$102
- (E) \$222

17. Refer to the average costs data for Tallulla Widget Company.
What is the fixed cost if the firm produces 0 widgets?

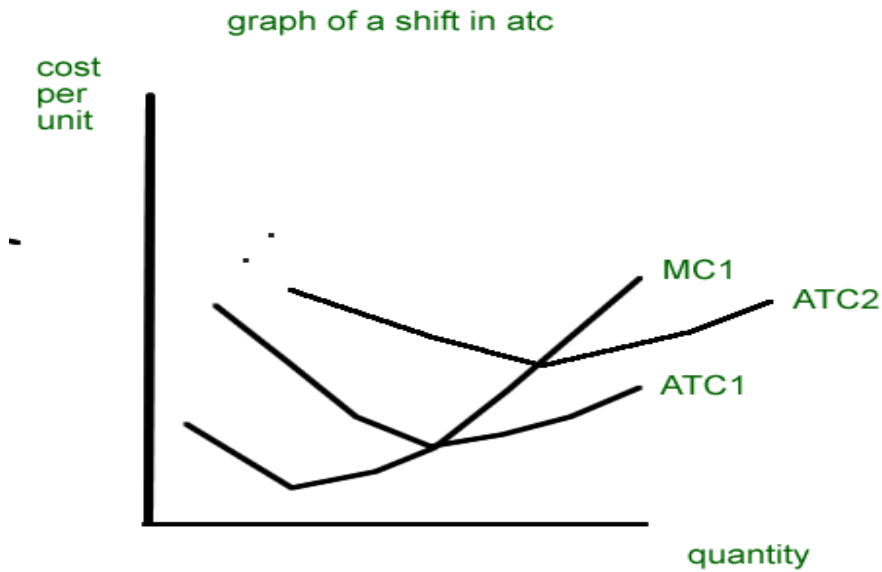
- (A) 0
- (B) 120
- (C) 60
- (D) 40
- (E) 30

18. What is Tallulla Widget Co.'s marginal cost of producing the 4th widget?

- (A) \$36
- (B) \$38
- (C) \$42
- (D) \$46
- (E) \$52

19. What is the total variable cost of producing 4 widgets for the Tallulla Widget Co.?

- (A) \$36
- (B) \$102
- (C) \$264
- (D) \$144
- (E) \$120



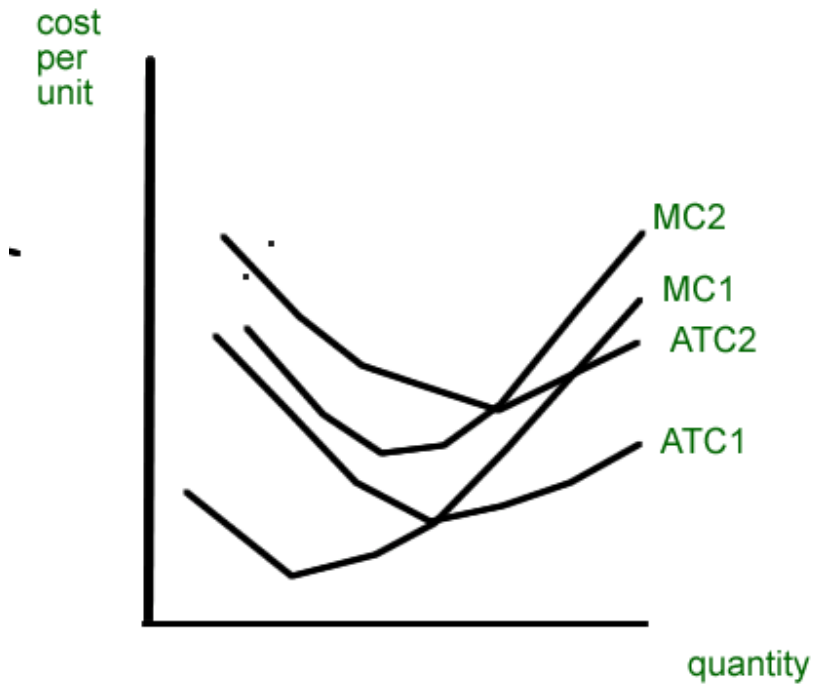
20. Refer to the above graph of a shift in atc.
Which of the following would cause a shift from ATC1 to ATC2?

- (A) An increase in labor cost
- (B) A decrease in labor cost
- (C) An increase in real estate property taxes
- (D) A decrease in real estate property taxes
- (E) An increase in material costs

21. When an economist refers to "the total cost" of producing a good, she includes:
A. all of the material cost
B. all of the labor cost
C. all of the fixed cost

- (A) A
- (B) B
- (C) C
- (D) A and B
- (E) A, B, and C

graph of mc and atc cost curves



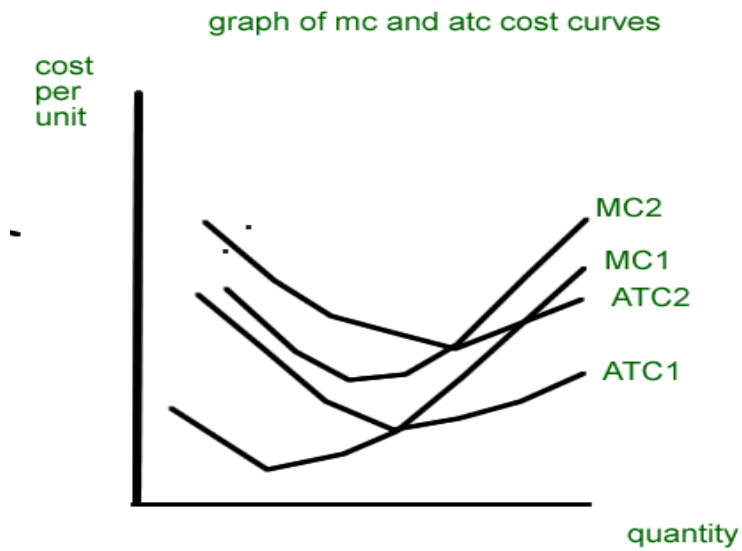
22. Refer to the above graph of mc and atc curves.

Which of the following would move the cost curves from mc2 and atc2 toward mc1 and atc1?

- (A) a decrease in fixed cost
- (B) an increase in fixed cost
- (C) an increase in labor costs
- (D) a decrease in labor costs
- (E) a decrease in productivity

23. Assume that a firm is selling as much output as it can and it faces a downward sloping demand curve, if the price of selling the last unit of a good produced is \$10 and the cost of producing that good is \$12, the firm should:

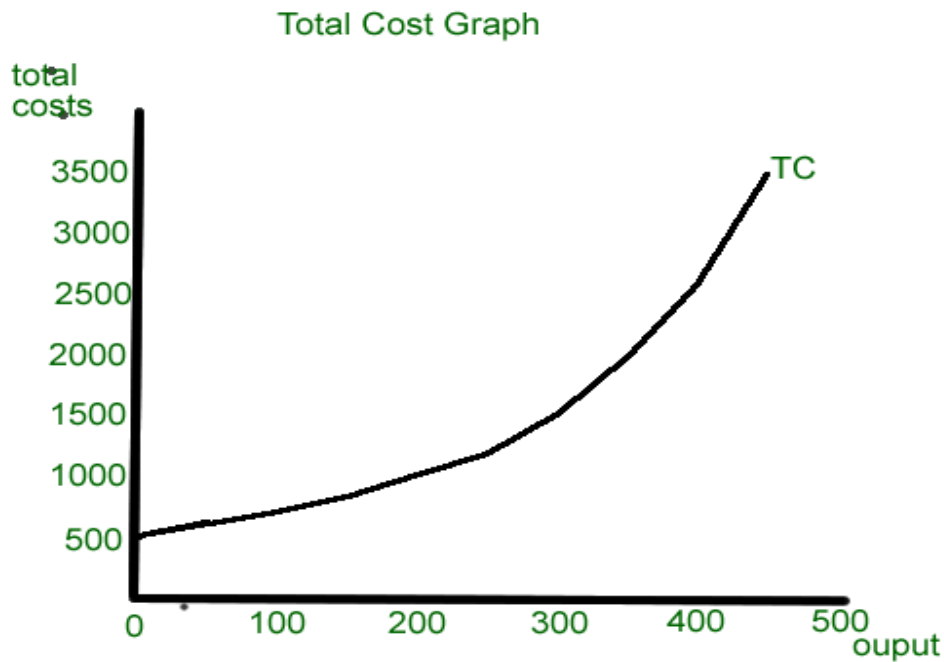
- (A) decrease the cost of producing the last good
- (B) decrease the output it is producing
- (C) increase its inventory
- (D) increase its output
- (E) decrease its price



24. Refer the above graph of mc and atc curves.

Which of the following would cause an increase in costs from mc1 and atc 1 to mc2 and atc2?

- (A) a lump-sum tax on the product paid by the producer
- (B) a per-unit tax on the product paid by the producer
- (C) an increase in fixed cost
- (D) a decrease in variable cost
- (E) a decrease in fixed cost



25. Refer to the above Total Cost Graph. The average variable cost at an output of 200 is

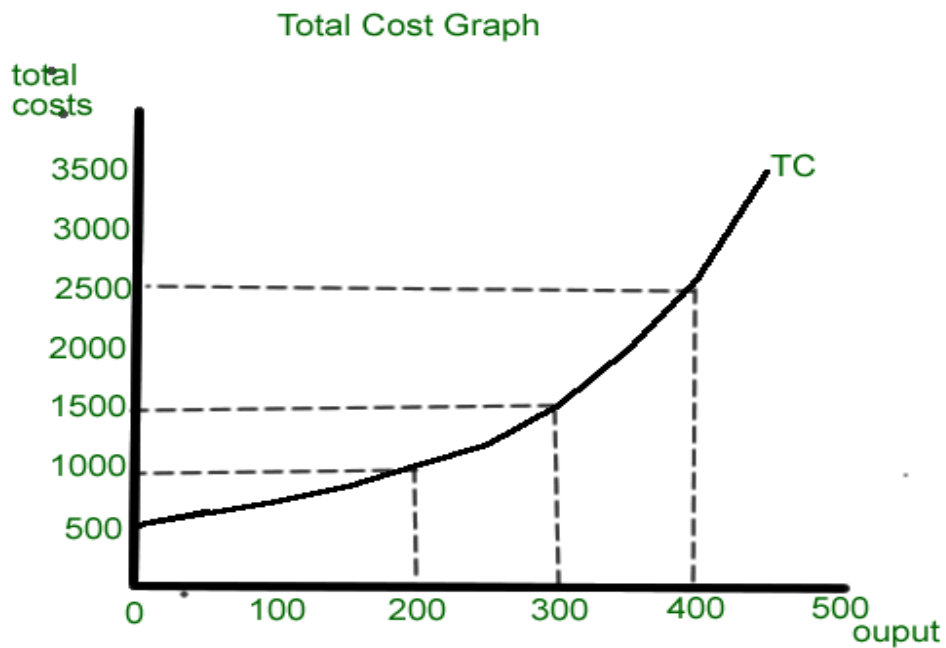
- ___ (A) \$1.50
- ___ (B) \$2.00
- ___ (C) \$2.50
- ___ (D) \$3.00
- ___ (E) \$5.00

26. Refer to the above Total Cost Graph. The fixed cost at an output of 200 units is:

- ___ (A) 0
- ___ (B) 500
- ___ (C) 1000
- ___ (D) 1500
- ___ (E) 2000

27. Refer to the above Total Cost Graph. The total variable cost at an output of 400 units is

- ___ (A) \$2000
- ___ (B) \$2500
- ___ (C) \$3000
- ___ (D) \$3500
- ___ (E) \$4000

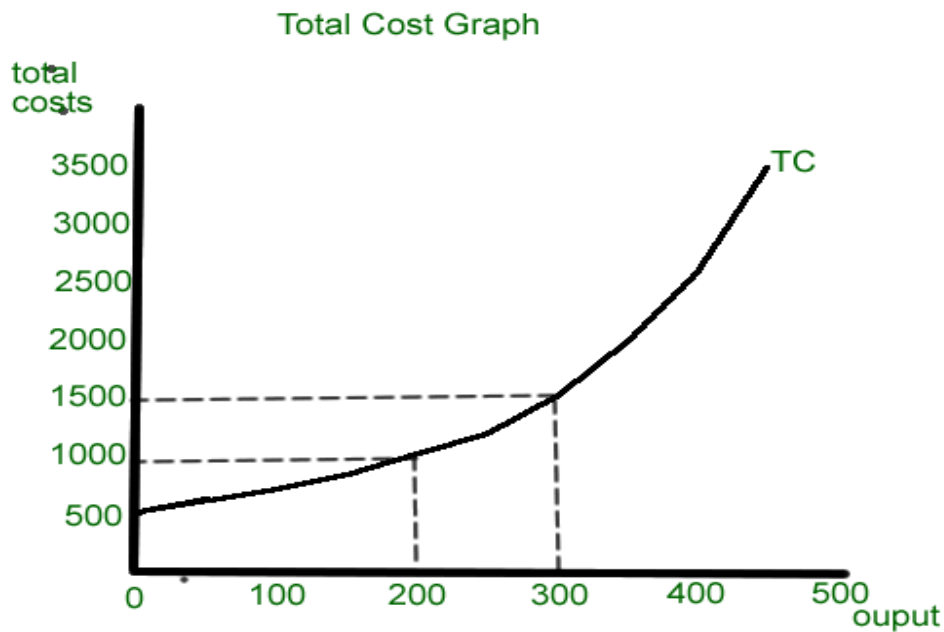


28. Refer to above Total Cost Graph
At an output of 400 units, average total cost is

- (A) \$5.00
- (B) \$5.50
- (C) \$6.00
- (D) \$6.25
- (E) \$6.50

29. Refer to the above Total Cost Graph.
As production increases from 300 units to 400 units,

- (A) the marginal cost decreases
- (B) the marginal cost increases
- (C) to average total cost decreases
- (D) the average total cost remains constant
- (E) average fixed cost increases



30. Refer to the above Total Cost Graph.
The marginal cost at an output level of 300 is:

- (A) \$1500
- (B) \$500
- (C) \$100
- (D) \$50
- (E) \$5

31. A firm's unit profit can be determined by:

- (A) subtracting its average total cost from its total revenue
- (B) subtracting its average total cost from its average price
- (C) subtracting its average total cost from its average revenue
- (D) subtracting its average variable cost from its average revenue
- (E) subtracting its marginal cost from its average revenue

32. If a firm's marginal cost is rising,

- (A) its average cost is rising.
- (B) its average cost is falling.
- (C) its average cost could be rising or falling.
- (D) its average variable cost is rising.
- (E) its average variable cost is falling.

33. In the short-run, which of the following best explains an increasing marginal cost?

- (A) the existence of economies of scale
- (B) the existence of diseconomies of scale
- (C) the fact that the last worker hired is less capable than the workers hired earlier
- (D) the fact that one of the inputs used in production is fixed
- (E) the fact that the firm's price will increase as more units are produced.

34. A firm can take advantage of economies of scale if

- (A) The firm's employees are educated.
- (B) The firm's technology is state of the art.
- (C) The resources used by the firm are all variable.
- (D) The firm is a perfect competitor.
- (E) The firm is vertically integrated.

35. Economies of scale can only happen if a firm

- (A) has a fixed resource.
- (B) can increase its labor resources.
- (C) can increase its material resources.
- (D) can increase all of its resources.
- (E) can limit the use of one of its resources.

36. Given the following costs:

- I. Cost of office building
- II. Cost of wage labor
- III. Cost of materials

Which cost or costs is (are) most likely to be a fixed cost?

- (A) I
- (B) II
- (C) III
- (D) I and II
- (E) I and III

37. The marginal cost of producing the 100th widget is:

- (A) the variable cost of producing the 100th widget
- (B) the average total cost of producing the 100th widget
- (C) the average variable cost of producing the 100th widget
- (D) the difference between the total cost of producing 100 widgets and the marginal cost of producing 99 widgets.
- (E) the average fixed cost of producing the 100th widget plus the average variable cost of producing the 100th widget

38. Given the following costs:

- I. cost of office building
- II. cost of labor
- III. cost of materials

Which cost or costs are most likely variable costs?

- (A) I.
- (B) II.
- (C) III.
- (D) I and II
- (E) II and III

39. When an economist refers to "the total cost" of production. She is referring to:

- (A) The explicit costs
- (B) The implicit costs
- (C) The explicit and implicit costs
- (D) The short-run costs
- (E) The long-run costs

Brureff Bottling Co.
Production Costs

(units) <u>Output</u>	(dollars) <u>Total Costs</u>
0	1,000
500	1,250
1,000	1,500
1,500	1,750

40. Refer to the production costs for Brureff Bottling Co.
What is the average fixed cost if the firm produces 1000 units?

- (A) \$1
- (B) \$.50
- (C) \$1000
- (D) \$1500
- (E) \$1.50