Chapter 06 Testbank

- 1. The economic theory of business behavior assumes that the goal of a firm is to
 - A. earn an accounting profit.
 - B. earn an economic profit.
 - C. earn maximum revenue.
 - D. maximize its profit.
- 2. Explicit costs
 - A. measure the opportunity costs of the business owners.
 - B. are always fixed in the short run.
 - C. measure the payments made to the firm's factors of production.
 - D. are always variable in the short run.
- 3. Which of the following is not an example of explicit costs?
 - A. Wages paid to workers
 - B. Personal savings of the owner invested in the firm
 - C. Salaries paid to management
 - D. Office space rent

4. Explicit costs

- A. are the only costs that matter to business owners.
- B. usually exceed implicit costs.
- C. are difficult to measure.
- D. appear on the firm's balance sheet.
- 5. Implicit costs
 - A. are always fixed.
 - B. measure the forgone opportunities of the owners of the business.
 - C. always exceed explicit costs.
 - D. are irrelevant to business decisions.
- 6. Accounting profits are
 - A. equal to total revenues minus implicit costs.
 - B. the difference between total revenues and explicit costs.
 - C. equal to total revenues minus explicit and implicit costs.
 - D. less than economic profits.
- 7. An example of an implicit cost is
 - A. interest paid on a bank loan.
 - B. wages paid to a family member.
 - C. the value of a spare bedroom turned into a home office.
 - D. operating costs of a company-owned car.

- 8. If you were to start your own business, your implicit costs would include
 - A. rent that you have paid in advance for use of a building.
 - B. the opportunity cost of your time.
 - C. profit over and above normal profit.
 - D. interest that you pay on your business loans.
- Suppose you quit your job to start a business. In the first month, your total revenue was \$6,000.
 You paid
 - \$1,000 in monthly rent for office space.
 - \$ 200 in monthly rent for equipment.
 - \$3,000 to your workers in wages for the month.
 - \$1,000 for the supplies you used that month.

You determine that your true profit that month was negative \$200. Why?

- A. You did the math incorrectly.
- B. You accounted for lost salary of \$200.
- C. You accounted for lost salary of \$1000.
- D. Your equipment rent is an implicit cost.
- 10. Kamal told Lutfiabout his new business venture: Kamal pays Anbar International \$1,000 per month for supplies and access to Anbar's network, works out of his own apartment on his own computer and earns monthly revenues of \$1500. Should Lutfiquit his job and do what Kamal is doing?
 - A. Yes, if Lutfihas at least \$1000 in savings to get started.
 - B. No, not if Lutfiis earning more than \$500 per month at his current job.
 - C. Yes, if Lutfican borrow the \$1000 monthly payment for less than 3% interest.
 - D. Yes, if Lutfialready owns a computer.

- 11. If a firm is earning zero economic profits
 - A. its revenues are sufficient to pay explicit costs, but not implicit costs.
 - B. the owner will not be able to pay himself or herself a salary.
 - C. it will shut down in the long run, but will continue to operate in the short run.
 - D. the owners are earning a return on their time and investment that is equal to the opportunity costs of that time and investment.
- 12. Which of the following would not be included in the calculation of accounting profits?
 - A. Wages of workers
 - B. The salary the owner could have earned working elsewhere
 - C. Rent
 - D. Medical insurance coverage for workers
- 13. Economic profits are
 - A. the same as accounting profits.
 - B. equal to total revenue minus the sum of explicit fixed and variable costs.
 - C. equal to total revenue minus both explicit and implicit costs.
 - D. greater than accounting profits.
- 14. Accounting profits minus implicit costs equals
 - A. total revenues.
 - B. economic profits.
 - C. explicit costs.
 - D. fixed and variable costs.

15. It is always true that

- A. accounting profits are positive.
- B. economic profits are zero.
- C. economic profits are greater than or equal to accounting profits.
- D. accounting profits greater than or equal to economic profits.
- 16. Normal profits occur when
 - A. accounting profits are positive.
 - B. economic profits are positive.
 - C. economic profits are zero.
 - D. total revenues are greater than explicit and implicit costs.
- 17. If economic profits are negative but accounting profits are positive, then
 - A. accounting profits are less than implicit costs.
 - B. total revenues are greater than the sum of explicit and implicit costs.
 - C. explicit costs exceed total revenues.
 - D. normal profits are zero.
- 18. What is Karim's explicit annual cost?
 - A. \$15,000
 - B. \$18,000
 - C. \$36,000
 - D. \$51,000

19. What is Karim's implicit cost?

- A. \$15,000
- B. \$18,000
- C. \$36,000
- D. \$40,000

20. Karim's opportunity cost of running his own business is _____ which is the _____.

- A. \$ 15,000; implicit cost
- B. \$ 51,000; explicit cost
- C. \$ 40,000; implicit cost
- D. \$ 51,000; economic cost
- 21. Karim's accounting profit is _____.
 - A. \$100,000
 - B. \$64,000
 - C. \$49,000
 - D. \$9,000
- 22. Karim's economic profit is _____.
 - A. \$100,000
 - B. \$9,000
 - C. \$64,000
 - D. \$49,000

23. In order for Karim to earn normal profit, his accounting profit would have to be _____.

- A. \$51,000
- B. \$40,000
- C. 0
- D. \$9,000

Rania used to work as an aerobics instructor at the local gym earning \$35,000 a year. Rania quit that job and started working as a personal trainer. Rania makes \$50,000 in total annual revenue. Rania's only out-of-pocket costs are \$12,000 per year for rent and utilities, \$1,000 per year for advertising and \$3,000 per year for equipment.

- 24. What is Rania's explicit cost?
 - A. \$12,000
 - B. \$15,000
 - C. \$16,000
 - D. \$35,000
- 25. What is Rania's implicit cost?
 - A. \$12,000
 - B. \$16,000
 - C. \$35,000
 - D. \$51,000

26. Rania's accounting profit (loss) is _____.

- A. \$50,000
- B. \$34,000
- C. \$15,000
- D. -\$1000
- 27. Rania's economic profit (loss) is _____.
 - A. \$50,000
 - B. \$34,000
 - C. \$15,000
 - D. -\$1,000
- 28. For Rania to earn normal profit (loss), accounting profit would have to be _____.
 - A. \$50,000
 - B. \$35,000
 - C. \$15,000
 - D. 0
- 29. If owners of a business are receiving total revenues just sufficient to cover all their explicit and implicit costs, they are
 - A. doing better than their next best alternative.
 - B. earning a normal profit.
 - C. earning economic losses.
 - D. doing worse than their next best alternative.

Quantity	Total Revenues	Explicit Costs	Implicit Costs
10	50	36	5
15	75	63	6
20	100	93	7
25	125	125	8
30	150	161	9

30. Refer to the figure above. An output level of 25 units results in

- A. economic profits of zero.
- B. positive economic profits.
- C. normal profits.
- D. accounting profits of zero.
- 31. Refer to the figure above. An output level of 25 units results in
 - A. an economic loss of \$8.
 - B. accounting profits of \$8.
 - C. normal profits.
 - D. positive accounting profits.
- 32. Refer to the figure above. An accountant would put the total cost of producing 15 units of output at
 - A. \$69.
 - B. \$63.
 - C. \$93.
 - D. \$125.

33. Refer to the figure above. An economist would put the total cost of producing 15 units of output

at

- A. \$6.
- B. \$63.
- C. \$69.
- D. \$75.
- 34. Refer to the figure above. At what output level or levels are the business owners doing better than their next best alternative?
 - A. 10 units
 - B. 10 and 15 units
 - C. 10, 15, and 20 units
 - D. 10, 15, 20, and 25 units
- 35. Refer to the figure above. Suppose all firms in this industry have identical costs to this firm and are producing 15 units of output. One can predict that
 - A. new firms will enter the industry.
 - B. old firms will exit the industry.
 - C. firms will attempt to lower their implicit costs.
 - D. price must rise.

- 36. It takes a bus and a driver to produce bus service for the students in college town. Therefore, the bus and the driver are the ______ for bus service.
 - A. short run output
 - B. variable cost
 - C. factors of production
 - D. only inputs in the long run
- 37. The short run is defined as
 - A. one year or less.
 - B. a period in which all factors of production are variable.
 - C. the period of time between quarterly accounting reports.
 - D. a period in which at least one factor of production is fixed.
- 38. A fixed factor of production
 - A. is fixed in the long run but variable in the short run.
 - B. is fixed only in the short run.
 - C. is fixed in both the short run and the long run.
 - D. is common in large firms but rare in small firms.
- 39. A variable factor of production
 - A. is fixed in the long run but variable in the short run.
 - B. plays no role in the law of diminishing marginal returns.
 - C. is variable in both the short run and the long run.
 - D. is variable only in the short run.

40. The long run is defined as

- A. one year or more.
- B. a period in which all factors of production are variable.
- C. the period of time between annual accounting reports.
- D. a period in which at least one factor of production is fixed.
- 41. When some factors of production are fixed, in order to increase production by equal amounts a firm would need to add
 - A. smaller increases in the variable factor.
 - B. equal sized increases in the variable factor.
 - C. larger increases in the variable factor.
 - D. larger increases in the fixed factors.
- 42. Which of the following factors of production is likely to be fixed in the short run?
 - A. The location of the firm.
 - B. The number of employee-hours.
 - C. The amount of electricity consumed.
 - D. The amount of paper used.
- 43. Which of the following is most likely to be a fixed factor of production at a university?
 - A. The number of personal computers.
 - B. The number of lecture halls.
 - C. The number of professors and lecturers.
 - D. The amount of chalk.

44. Which of the following is most likely to be a variable factor of production at a university?

- A. The number of teaching assistants and work-study students.
- B. The size of the basketball arena or football stadium.
- C. The school mascot.
- D. The location of the university.
- 45. One reason that variable factors of production tend to show diminishing returns in the short run is that
 - A. too much capital equipment is idle.
 - B. there are too many workers using a fixed amount of productive resources.
 - C. the firm has become too large to effectively manage workers.
 - D. the cost of hiring additional workers increases as firms seek to hire more.
- 46. To produce 150 units of output, the firm must use 3 employee-hours. To produce 300 units of output the firm must use 8 employee-hours. Apparently, the firm is

A. in the long run.

- B. experiencing diminishing marginal returns.
- C. not using any fixed factors of production.
- D. failing to profit maximize.

47. The location of a firm will be a ______ factor of production in ______ run.

- A. variable; the short
- B. fixed; both the short and long
- C. variable; the long
- D. fixed; the long

48. Congestion of the work space and fixed factors of production at the firm

- A. explain high employee turnover.
- B. cause increased workspace violence.
- C. demonstrate the law of diminishing marginal returns.
- D. result in increased self-employment.
- 49. Suppose 30 employee-hours can produce 50 units of output. Assuming the law of diminishing marginal returns is present, to produce 100 units of output will require
 - A. an additional 30 employee-hours.
 - B. more than 30 additional employee-hours.
 - C. a total of 60 or less employee-hours.
 - D. less than 30 additional employee-hours.

Output per day	Employee-hours	
0	0	
33	1	
66	2	
99	4	
132	7	
165	11	

50. Refer to the figure above. The marginal product of the second employee-hour is equal to

- A. 33 units.
- B. 66 units.
- C. 99 units.
- D. 132 units.
- 51. Refer to the figure above. To increase output from 33 to 66 units requires _____ extra employeehours; to increase output from 66 to 99 units requires _____ extra employee-hours.
 - A. 1; 1
 - B. 1; 2
 - C. 2; 1
 - D. 2; 4
- 52. Refer to the figure above. To increase output from 99 to 132 units requires _____ extra employee-hours; to increase output from 132 to 165 units requires _____ extra employee-hours.
 - A. 11; 18
 - B. 7; 11
 - C. 4; 3
 - D. 3; 4

- 53. Refer to the figure above. The law of diminishing marginal returns becomes evident at ______ units of output.
 - A. 33
 - B. 66
 - C. 99
 - D. 132

This phone center uses only equipment and workers to provide service.

Output (units)	Equipment	Workers	Total Cost	Marginal Cost	Average Variable Cost
0.5	1	2			
1	1	4			
3	1	6			
8	1	8			
11	1	10			
12	1	12			

- 54. Suppose that one unit of equipment costs \$10 and each worker earns \$5. What is the total cost of producing 3 units of output?
 - A. \$25
 - B. \$30
 - C. \$35
 - D. \$40

- 55. Assuming equipment costs \$10 per unit and each worker earns \$5, Average Variable Costs are minimized when output is approximately
 - A. 3 units.
 - B. 8 units.
 - C. 11 units.
 - D. 12 units.
- 56. Relative to costs when equipment cost \$10, if the price of equipment increased to \$20 and nothing else changed,
 - A. Total Cost would increase by \$10 per unit of output.
 - B. Marginal Cost would increase by \$20 divided by units of output.
 - C. Marginal Cost would not change.
 - D. Average Total cost would increase by \$10 at each level of output.
- 57. For this firm, Marginal Cost
 - A. equals Average Variable Cost at Average Variable Cost's minimum point.
 - B. equals Average Total Cost at Average Total Cost's maximum point.
 - C. is always greater than Average Variable Cost.
 - D. is always less than Average Variable Cost.

- 58. If the firm spends \$400 to produce 20 units of output and spends \$880 to produce 40 units, then the marginal cost of increasing production from 20 to 40 units is
 - A. \$20.
 - B. \$24.
 - C. \$22.
 - D. \$480.
- 59. Marginal cost is calculated as
 - A. total revenue minus total costs.
 - B. the change in output divided by the change in total costs.
 - C. the percentage change in total costs divided by the percentage change in output.
 - D. the change in total costs divided by the change in output.
- 60. If a firm is experiencing diminishing marginal returns to a variable input, you might guess that
 - A. marginal costs are also declining.
 - B. marginal costs are increasing.
 - C. average variable costs are constant.
 - D. average fixed costs are increasing.

- 61. Assume that a firm uses 13 employee-hours and an office to produce 100 units of output. The price of output is \$5, the wage rate is \$10, and rent is \$200. The firm will earn a _____ of _____.
 - A. profit; \$370
 - B. loss; \$200
 - C. profit; \$170
 - D. loss; \$170
- 62. In general, if the price of a variable factor of production increases,
 - A. total costs fall.
 - B. the profit maximizing level of output rises.
 - C. price rises.
 - D. marginal costs rise.
- 63. In general, if the price of a fixed factor of production increases,
 - A. price rises.
 - B. marginal costs are unchanged.
 - C. marginal costs increase.
 - D. the profit maximizing level of output falls.

- 64. Suppose a firm is collecting \$1345 in total revenues and the total cost of its fixed factors of production rise from \$200 to \$300. One can speculate that the firm will
 - A. expand output.
 - B. raise price.
 - C. earn greater profits or smaller losses.
 - D. learn smaller profits or greater losses.
- 65. Suppose a firm is collecting \$1999 in total revenues and the total cost of its fixed factors of production fall from \$500 to \$400. One can speculate that the firm will
 - A. expand output.
 - B. lower price.
 - C. earn greater profits or smaller losses.
 - D. contract output.

Employee hours per day	Output per day	Output price	Hourly wage rate	Rent
0	0	\$2	\$14	\$50
1	40	\$2	\$14	\$50
4	80	\$2	\$14	\$50
9	120	\$2	\$14	\$50
15	160	\$2	\$14	\$50
23	200	\$2	\$14	\$50

- 66. Refer to the figure above. Fixed cost for this firm is
 - A. \$66
 - B. \$64
 - C. \$50
 - D. \$14

- 67. Refer to the figure above. When the firm uses 9 employee-hours, it will experience _____ in labor costs.
 - A. \$30
 - B. \$56
 - C. \$84
 - D. \$126
- 68. Refer to the figure above. When the firm uses 9 employee-hours, it will produce _____ units of output and experience total cost of _____.
 - A. 120, \$126.
 - B. 80, \$64.
 - C. 80, \$56.
 - D. 120, \$176.
- 69. Refer to the figure above. When the firm uses 9 employee-hours, it will collect total revenues of
 - A. \$240.
 - B. \$160.
 - C. \$120.
 - D. \$18.

- 70. Refer to the figure above. The firm earns a ______ of _____ when it produces 120 units of output.
 - A. loss; \$64
 - B. profit; \$64
 - C. loss; \$114
 - D. profit; \$114
- 71. Refer to the figure above. What is the marginal cost of the 9th employee hour?
 - A. \$126
 - B. \$14
 - C. \$50
 - D. \$48

Workers per day	Pizza per day	Fixed Cost (S/day)	Variable Cost (\$/day)
0	0	500	0
1	25	500	200
2	75	500	350
3	150	500	450
4	200	500	600
5	205	500	800

* Pizzas sell for \$10 a pie.

72. Refer to the figure above. The law of diminishing returns sets in after the _____ worker per day.

A. 1

B. 2

C. 3

D. 4

- 73. Refer to the figure above. When the pizza shop employs 3 workers per day, it will have ______ fixed cost and _____ total cost.
 - A. \$950; \$450
 - B. \$850; \$500
 - C. \$500; \$950
 - D. \$450; \$850
- 74. Refer to the figure above. When the pizza shop employs 2 workers per day, it will experience a marginal cost of _____ per pizza.
 - A. \$15
 - B. \$25
 - C. \$6
 - D. \$3
- 75. Refer to the figure above. When the pizza shop employs 3 workers per day, the pizza shop will collect total revenue of
 - A. \$2000
 - B. \$1500
 - C. \$900
 - D. \$750

- 76. Refer to the figure above. The pizza shop earns a _____ of _____ when it uses 3 workers per day.
 - A. loss, \$550
 - B. profit, \$550
 - C. loss, \$950
 - D. profit, \$ 950



77. Refer to the figure above. At quantities less than 50 doughnuts,

- A. marginal cost is declining.
- B. marginal returns to inputs must be increasing.
- C. average cost is declining because marginal cost is increasing.
- D. average cost is declining because marginal cost is less than average cost.

78. Refer to the figure above. Marginal Cost is upward sloping because

- A. marginal costs always increase when output increases.
- B. this firm is operating in the short run.
- C. marginal productivity of at least one input is declining.
- D. marginal productivity of at least one input is increasing.
- 79. Refer to the figure above. Given the cost functions shown, at an output of 100 doughnuts, average cost would be
 - A. less than 20 cents per doughnut.
 - B. exactly 20 cents per doughnut.
 - C. less than marginal cost.
 - D. greater than marginal cost.
- 80. Refer to the figure above. This doughnut shop will always produce
 - A. 50 doughnuts
 - B. 90 doughnuts
 - C. the quantity at which price equals marginal cost
 - D. a quantity less than 50 doughnuts
- 81. Refer to the figure above. When the market price of a doughnut is 10 cents, this firm will
 - A. shut down
 - B. produce 50 doughnuts
 - C. remain in operation only in the short run and shut down in the long run
 - D. earn negative profits (losses)

82. Refer to the figure above. When the market price of a doughnut is 25 cents, this firm will

- A. shut down
- B. produce 90 doughnuts
- C. produce 80 doughnuts
- D. produce 50 doughnuts
- 83. The price equals marginal cost rule for profit maximization is a specific example of which of the following core principles?
 - A. Scarcity.
 - B. Cost-benefit.
 - C. Comparative advantage.
 - D. Efficiency.

84. In the short run, if a firm chooses to operate and produce output, it must be the case that

- A. it earns a profit.
- B. it avoids a loss.
- C. total revenues are greater than or equal to the cost of fixed factors of production.
- D. total revenues are greater than or equal to the cost of variable factors of production.
- 85. The shutdown condition for a firm is where
 - A. total revenues are less than the total cost of fixed and variable factors of production.
 - B. total revenues are less than the cost of variable factors of production.
 - C. total revenues are less than the cost of fixed factors of production.
 - D. profits are zero.

86. The shutdown condition applies

- A. in the long run and in the short run
- B. only in the short run
- C. only to firms that are just breaking even
- D. to all firms, all the time
- 87. Suppose the firm knows that it is not going to shut down but it is going to earn a loss. It should pick the output level where
 - A. total costs are minimized.
 - B. price equals marginal costs.
 - C. total revenues are maximized.
 - D. the costs of the variable factors of production are minimized.
- 88. Suppose a firm is collecting \$1250 in total revenues and the total costs of its variable factors of production are \$1000 at its current level of output. In the short run, one can predict that the firm will

A. shut down.

- B. earn a profit.
- C. earn a loss.
- D. continue to operate.

89. If a firm shuts down in the short run, then

- A. total revenue and total cost will fall to zero.
- B. profit will equal zero.
- C. profit will equal the negative of fixed costs.
- D. profit will equal the negative of variable costs.
- 90. If a firm is earning zero profits
 - A. its revenues are sufficient to pay explicit costs, but not implicit costs.
 - B. the owner will not be able to pay himself or herself a salary.
 - C. it will shut down in the long run, but will continue to operate in the short run.
 - D. the owners are earning a return on their time and investment that is equal to the opportunity costs of that time and investment.
- 91. Suppose a firm is collecting \$1700 in total revenues and the total costs of its variable factors of production are \$1900 at its current level of output. One can predict that the firm will
 - A. shut down.
 - B. raise its price.
 - C. earn a loss.
 - D. continue to operate.

- 92. Fareed runs a fishing lodge, and has a very successful business during the summer. In the fall, the number of guests at the lodge starts to decline, and by November very few people stay at Fareed's Lodge. Fareed should
 - A. keep the lodge open all year because his summer profits offset any losses he has in the winter.
 - B. keep the lodge open only during those months in which revenues exceed total costs.
 - C. keep the lodge open only during those months in which revenues exceed the fixed costs of the lodge.
 - D. keep the lodge open only during those months in which revenues exceed the variable costs of serving guests.
- 93. Average variable cost is defined as
 - A. Total cost divided by output
 - B. Total cost divided by number of workers
 - C. Variable cost divided by output
 - D. Variable cost divided by price
- 94. Average total cost is defined as
 - A. Total cost divided by output
 - B. Total cost divided by price
 - C. Variable cost divided by output
 - D. Variable cost divided by price

Al Boom Dynamite has \$2000 of variable costs and \$500 of fixed costs when its output is 250 units. It sells each unit for \$25.

95. Average variable cost is _____ and average total cost is _____ at this output level.

- A. \$8; 2
- B. \$10; 10
- C. \$10; 2
- D. \$8; 10

96. Profit at this output level is

- A. \$6,250
- B. \$5,750
- C. \$4,250
- D. \$3,750

This graph shows the cost functions of a Mustafa's mushroom gathering business.



- 97. In the graph above, Average Variable Cost is labeled _____, Average Total Cost is labeled _____, and Marginal Cost is labeled _____.
 - A. A; B; C
 - B. C; B; A
 - C. B; C; A
 - D. C; A; B
- 98. The curve labeled A is upward sloping because
 - A. there are high fixed costs.
 - B. the first bushels of mushrooms are the easiest to find, but Mustafa has to really hunt to find additional mushrooms.
 - C. increased demand for mushrooms has increased quantity supplied.
 - D. supply has shifted to the left.

- 99. When mushrooms sell for \$10 per bushel, if Mustafa chooses the profit maximizing quantity Mustafa will gather
 - A. 10 bushels
 - B. 20 bushels
 - C. 30 bushels
 - D. zero bushels
- 100.When the market price of mushrooms is \$40 per bushel, if Mustafa chooses the profit maximizing quantity he will
 - A. earn zero profits
 - B. earn negative profits (losses)
 - C. earn positive profits
 - D. shut down
- 101.Mustafa's short run supply curve is
 - A. Curve C to the right of curve A
 - B. Curve B to the right of curve A
 - C. Curve A above curve B
 - D. Curve A above curve C

102.In order for a firm to choose to produce a positive amount of output, it must be the case that

- A. total revenues are greater than total costs.
- B. total revenues are greater than fixed costs.
- C. total revenues equal total costs.
- D. total revenues are greater than or equal to variable costs.

103.If the price of dynamite drops to \$10, should AI Boom continue to operate in the short run?

- A. No, because Price is less than Average Total Cost
- B. Yes, because Price is less than Average Variable Cost
- C. No, because Price is not greater than Average Total Cost
- D. Yes, because Price is greater than Average Variable Cost
- 104.If the price of the product drops to \$6 each, should this firm continue operation during the short run?
 - A. No, because Price is less than Average Total Cost.
 - B. Yes, because Price is greater than Average Variable Cost.
 - C. No, because Price is less than Average Variable Cost.
 - D. No, because Price is not greater than Average Total Cost.

105.When plotting marginal and average cost curves, the _____ cost curve always crosses the

_____ cost curve at its _____.

- A. average fixed; marginal; minimum
- B. marginal; average total; minimum
- C. marginal; average variable; maximum
- D. average variable; marginal; maximum

106.When a firm experiences diseconomies of scale

- A. it should use more resources
- B. it should increase its scale of operations to reduce its average total cost
- C. it should raise its price
- D. Its average total cost will decline if it reduces its scale of operation



Variable Inputs

107.Refer to the figure above. At which point is **Marginal Cost** highest?

- A. Point a
- B. Point b
- C. Point c
- D. Point d

Chapter 06 Testbank Key

- 1. The economic theory of business behavior assumes that the goal of a firm is to
 - A. earn an accounting profit.
 - B. earn an economic profit.
 - C. earn maximum revenue.
 - D. maximize its profit.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #1 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 2. Explicit costs
 - A. measure the opportunity costs of the business owners.
 - B. are always fixed in the short run.
 - C. measure the payments made to the firm's factors of production.
 - D. are always variable in the short run.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #2 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit
- 3. Which of the following is not an example of explicit costs?
 - A. Wages paid to workers
 - B. Personal savings of the owner invested in the firm
 - C. Salaries paid to management
 - D. Office space rent

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #3 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

4. Explicit costs

- A. are the only costs that matter to business owners.
- B. usually exceed implicit costs.
- C. are difficult to measure.
- D. appear on the firm's balance sheet.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #4 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 5. Implicit costs
 - A. are always fixed.
 - B. measure the forgone opportunities of the owners of the business.
 - C. always exceed explicit costs.
 - D. are irrelevant to business decisions.

Blooms: Knowledge Frank - Chapter 06 #5 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

6. Accounting profits are

A. equal to total revenues minus implicit costs.

- B. the difference between total revenues and explicit costs.
- C. equal to total revenues minus explicit and implicit costs.
- D. less than economic profits.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #6 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

7. An example of an implicit cost is

- A. interest paid on a bank loan.
- B. wages paid to a family member.
- C. the value of a spare bedroom turned into a home office.
- D. operating costs of a company-owned car.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #7 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 8. If you were to start your own business, your implicit costs would include
 - A. rent that you have paid in advance for use of a building.
 - **B.** the opportunity cost of your time.
 - C. profit over and above normal profit.
 - D. interest that you pay on your business loans.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #8 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- Suppose you quit your job to start a business. In the first month, your total revenue was \$6,000. You paid
 - \$1,000 in monthly rent for office space.
 - \$ 200 in monthly rent for equipment.
 - \$3,000 to your workers in wages for the month.
 - \$1,000 for the supplies you used that month.
 - You determine that your true profit that month was negative \$200. Why?
 - A. You did the math incorrectly.
 - B. You accounted for lost salary of \$200.
 - C. You accounted for lost salary of \$1000.
 - D. Your equipment rent is an implicit cost.

AACSB: Reflective Thinking Skills Blooms: Analysis Frank - Chapter 06 #9 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 10. Kamal told Lutfiabout his new business venture: Kamal pays Anbar International \$1,000 per month for supplies and access to Anbar's network, works out of his own apartment on his own computer and earns monthly revenues of \$1500. Should Lutfiquit his job and do what Kamal is doing?
 - A. Yes, if Lutfihas at least \$1000 in savings to get started.
 - B. No, not if Lutfiis earning more than \$500 per month at his current job.
 - C. Yes, if Lutfican borrow the \$1000 monthly payment for less than 3% interest.
 - D. Yes, if Lutfialready owns a computer.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #10 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 11. If a firm is earning zero economic profits
 - A. its revenues are sufficient to pay explicit costs, but not implicit costs.
 - B. the owner will not be able to pay himself or herself a salary.
 - C. it will shut down in the long run, but will continue to operate in the short run.
 - <u>D.</u> the owners are earning a return on their time and investment that is equal to the opportunity costs of that time and investment.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #11 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 12. Which of the following would not be included in the calculation of accounting profits?
 - A. Wages of workers
 - B. The salary the owner could have earned working elsewhere
 - C. Rent
 - D. Medical insurance coverage for workers

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #12 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 13. Economic profits are
 - A. the same as accounting profits.
 - B. equal to total revenue minus the sum of explicit fixed and variable costs.
 - C. equal to total revenue minus both explicit and implicit costs.
 - D. greater than accounting profits.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #13 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 14. Accounting profits minus implicit costs equals
 - A. total revenues.
 - B. economic profits.
 - C. explicit costs.
 - D. fixed and variable costs.

Blooms: Knowledge Frank - Chapter 06 #14 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

15. It is always true that

- A. accounting profits are positive.
- B. economic profits are zero.
- C. economic profits are greater than or equal to accounting profits.
- **D.** accounting profits greater than or equal to economic profits.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #15 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

16. Normal profits occur when

- A. accounting profits are positive.
- B. economic profits are positive.
- C. economic profits are zero.
- D. total revenues are greater than explicit and implicit costs.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #16 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit 17. If economic profits are negative but accounting profits are positive, then

A. accounting profits are less than implicit costs.

- B. total revenues are greater than the sum of explicit and implicit costs.
- C. explicit costs exceed total revenues.
- D. normal profits are zero.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #17 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 18. What is Karim's explicit annual cost?
 - A. \$15,000
 - B. \$18,000
 - C. \$36,000
 - **D.** \$51,000

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #18 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 19. What is Karim's implicit cost?
 - A. \$15,000
 - B. \$18,000
 - C. \$36,000
 - **D.** \$40,000

Blooms: Application Frank - Chapter 06 #19 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

20. Karim's opportunity cost of running his own business is _____ which is the _____.

- A. \$ 15,000; implicit cost
- B. \$51,000; explicit cost
- C. \$ 40,000; implicit cost
- D. \$ 51,000; economic cost

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #20 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

21. Karim's accounting profit is _____.

- A. \$100,000
- B. \$64,000
- <u>C.</u> \$49,000
- D. \$9,000

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #21 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- A. \$100,000
- **B.** \$9,000
- C. \$64,000
- D. \$49,000

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #22 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 23. In order for Karim to earn normal profit, his accounting profit would have to be _____.
 - A. \$51,000
 - **B.** \$40,000
 - C. 0
 - D. \$9,000

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #23 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

Rania used to work as an aerobics instructor at the local gym earning \$35,000 a year. Rania quit that job and started working as a personal trainer. Rania makes \$50,000 in total annual revenue. Rania's only out-of-pocket costs are \$12,000 per year for rent and utilities, \$1,000 per year for advertising and \$3,000 per year for equipment.

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- A. \$12,000
- B. \$15,000
- <u>C.</u> \$16,000
- D. \$35,000

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #24 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 25. What is Rania's implicit cost?
 - A. \$12,000
 - B. \$16,000
 - <u>C.</u> \$35,000
 - D. \$51,000

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #25 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 26. Rania's accounting profit (loss) is _____.
 - A. \$50,000
 - **B.** \$34,000
 - C. \$15,000
 - D. -\$1000

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Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit.

Section: The Central Role of Economic Profit

27. Rania's economic profit (loss) is _____.

- A. \$50,000
- B. \$34,000
- C. \$15,000
- <u>D.</u> -\$1,000

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #27 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

28. For Rania to earn normal profit (loss), accounting profit would have to be _____.

- A. \$50,000
- **B.** \$35,000
- C. \$15,000
- D. 0

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #28 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 29. If owners of a business are receiving total revenues just sufficient to cover all their explicit and implicit costs, they are
 - A. doing better than their next best alternative.
 - B. earning a normal profit.
 - C. earning economic losses.
 - D. doing worse than their next best alternative.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #29 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

Quantity	Total Revenues	Explicit Costs	Implicit Costs
10	50	36	5
15	75	63	6
20	100	93	7
25	125	125	8
30	150	161	9

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- 30. Refer to the figure above. An output level of 25 units results in
 - A. economic profits of zero.
 - B. positive economic profits.
 - C. normal profits.
 - D. accounting profits of zero.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #30 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- A. an economic loss of \$8.
- B. accounting profits of \$8.
- C. normal profits.
- D. positive accounting profits.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #31 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 32. Refer to the figure above. An accountant would put the total cost of producing 15 units of output at
 - A. \$69.
 - **B.** \$63.
 - C. \$93.
 - D. \$125.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #32 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- Refer to the figure above. An economist would put the total cost of producing 15 units of output at
 - A. **\$6**.
 - B. **\$63.**
 - <u>C.</u> \$69.
 - D. \$75.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #33 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 34. Refer to the figure above. At what output level or levels are the business owners doing better than their next best alternative?
 - A. 10 units

B. 10 and 15 units

- C. 10, 15, and 20 units
- D. 10, 15, 20, and 25 units

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #34 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 35. Refer to the figure above. Suppose all firms in this industry have identical costs to this firm and are producing 15 units of output. One can predict that
 - A. new firms will enter the industry.
 - B. old firms will exit the industry.
 - C. firms will attempt to lower their implicit costs.
 - D. price must rise.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #35 Learning Objective: 06-01 Define and explain the differences between accounting profit and economic profit. Section: The Central Role of Economic Profit

- 36. It takes a bus and a driver to produce bus service for the students in college town. Therefore, the bus and the driver are the ______ for bus service.
 - A. short run output
 - B. variable cost
 - C. factors of production
 - D. only inputs in the long run

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #36 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

37. The short run is defined as

A. one year or less.

B. a period in which all factors of production are variable.

- C. the period of time between quarterly accounting reports.
- D. a period in which at least one factor of production is fixed.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #37 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

38. A fixed factor of production

- A. is fixed in the long run but variable in the short run.
- **B.** is fixed only in the short run.
- C. is fixed in both the short run and the long run.
- D. is common in large firms but rare in small firms.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #38 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

- 39. A variable factor of production
 - A. is fixed in the long run but variable in the short run.
 - B. plays no role in the law of diminishing marginal returns.
 - C. is variable in both the short run and the long run.
 - D. is variable only in the short run.

Blooms: Knowledge Frank - Chapter 06 #39 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

- 40. The long run is defined as
 - A. one year or more.
 - **B.** a period in which all factors of production are variable.
 - C. the period of time between annual accounting reports.
 - D. a period in which at least one factor of production is fixed.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #40 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

41. When some factors of production are fixed, in order to increase production by equal amounts a firm would need to add

- A. smaller increases in the variable factor.
- B. equal sized increases in the variable factor.
- C. larger increases in the variable factor.
- D. larger increases in the fixed factors.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #41 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

42. Which of the following factors of production is likely to be fixed in the short run?

- A. The location of the firm.
- B. The number of employee-hours.
- C. The amount of electricity consumed.
- D. The amount of paper used.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #42 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

43. Which of the following is most likely to be a fixed factor of production at a university?

- A. The number of personal computers.
- **B.** The number of lecture halls.
- C. The number of professors and lecturers.
- D. The amount of chalk.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #43 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

- 44. Which of the following is most likely to be a variable factor of production at a university?
 - A. The number of teaching assistants and work-study students.
 - B. The size of the basketball arena or football stadium.
 - C. The school mascot.
 - D. The location of the university.

Blooms: Understanding Frank - Chapter 06 #44 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

- 45. One reason that variable factors of production tend to show diminishing returns in the short run is that
 - A. too much capital equipment is idle.
 - B. there are too many workers using a fixed amount of productive resources.
 - C. the firm has become too large to effectively manage workers.
 - D. the cost of hiring additional workers increases as firms seek to hire more.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #45 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

46. To produce 150 units of output, the firm must use 3 employee-hours. To produce 300 units of output the firm must use 8 employee-hours. Apparently, the firm is

A. in the long run.

- B. experiencing diminishing marginal returns.
- C. not using any fixed factors of production.
- D. failing to profit maximize.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #46 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

- A. variable; the short
- B. fixed; both the short and long
- C. variable; the long
- D. fixed; the long

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #47 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

48. Congestion of the work space and fixed factors of production at the firm

- A. explain high employee turnover.
- B. cause increased workspace violence.
- C. demonstrate the law of diminishing marginal returns.
- D. result in increased self-employment.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #48 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

- 49. Suppose 30 employee-hours can produce 50 units of output. Assuming the law of diminishing marginal returns is present, to produce 100 units of output will require
 - A. an additional 30 employee-hours.
 - **B.** more than 30 additional employee-hours.
 - C. a total of 60 or less employee-hours.
 - D. less than 30 additional employee-hours.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #49 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

Output per day	Employee-hours
0	0
33	1
66	2
99	4
132	7
165	11

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- 50. Refer to the figure above. The marginal product of the second employee-hour is equal to
 - A. 33 units.
 - B. 66 units.
 - C. 99 units.
 - D. 132 units.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #50 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

- 51. Refer to the figure above. To increase output from 33 to 66 units requires _____ extra employee-hours; to increase output from 66 to 99 units requires _____ extra employee-hours.
 - A. 1; 1
 - **B.** 1; 2
 - C. 2; 1
 - D. 2; 4

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #51 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

- 52. Refer to the figure above. To increase output from 99 to 132 units requires _____ extra employee-hours; to increase output from 132 to 165 units requires _____ extra employee-hours.
 - A. 11; 18
 - B. 7; 11
 - C. 4; 3
 - **D.** 3; 4

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #52 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

- 53. Refer to the figure above. The law of diminishing marginal returns becomes evident at ______ units of output.
 - A. 33
 - B. 66
 - <u>C.</u> 99
 - D. 132

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #53 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms

This phone center uses only equipment and workers to provide service.

Output (units)	Equipment	Workers	Total Cost	Marginal Cost	Average Variable Cost
0.5	1	2			
1	1	4			
3	1	6			
8	1	8			
11	1	10			
12	1	12			

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- 54. Suppose that one unit of equipment costs \$10 and each worker earns \$5. What is the total cost of producing 3 units of output?
 - A. \$25
 - B. **\$30**
 - C. \$35
 - <u>D.</u> \$40

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #54 Learning Objective: 06-03 Discuss the various production costs that firms face.

- 55. Assuming equipment costs \$10 per unit and each worker earns \$5, Average Variable Costs are minimized when output is approximately
 - A. 3 units.
 - B. 8 units.
 - <u>C.</u> 11 units.
 - D. 12 units.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #55 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

- 56. Relative to costs when equipment cost \$10, if the price of equipment increased to \$20 and nothing else changed,
 - A. Total Cost would increase by \$10 per unit of output.
 - B. Marginal Cost would increase by \$20 divided by units of output.
 - C. Marginal Cost would not change.
 - D. Average Total cost would increase by \$10 at each level of output.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #56 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

57. For this firm, Marginal Cost

A. equals Average Variable Cost at Average Variable Cost's minimum point.

B. equals Average Total Cost at Average Total Cost's maximum point.

- C. is always greater than Average Variable Cost.
- D. is always less than Average Variable Cost.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #57 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

- 58. If the firm spends \$400 to produce 20 units of output and spends \$880 to produce 40 units, then the marginal cost of increasing production from 20 to 40 units is
 - A. \$20.
 - <u>B.</u> \$24.
 - C. \$22.
 - D. \$480.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #58 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms A. total revenue minus total costs.

B. the change in output divided by the change in total costs.

C. the percentage change in total costs divided by the percentage change in output.

D. the change in total costs divided by the change in output.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #59 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

60. If a firm is experiencing diminishing marginal returns to a variable input, you might guess that

- A. marginal costs are also declining.
- B. marginal costs are increasing.
- C. average variable costs are constant.
- D. average fixed costs are increasing.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #60 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms 61. Assume that a firm uses 13 employee-hours and an office to produce 100 units of output. The price of output is \$5, the wage rate is \$10, and rent is \$200. The firm will earn a _____ of

A. profit; \$370

B. loss; \$200

- **C.** profit; \$170
- D. loss; \$170

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #61 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms

62. In general, if the price of a variable factor of production increases,

- A. total costs fall.
- B. the profit maximizing level of output rises.
- C. price rises.
- D. marginal costs rise.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #62 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms 63. In general, if the price of a fixed factor of production increases,

- A. price rises.
- B. marginal costs are unchanged.
- C. marginal costs increase.
- D. the profit maximizing level of output falls.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #63 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms

- 64. Suppose a firm is collecting \$1345 in total revenues and the total cost of its fixed factors of production rise from \$200 to \$300. One can speculate that the firm will
 - A. expand output.
 - B. raise price.
 - C. earn greater profits or smaller losses.
 - D. learn smaller profits or greater losses.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #64 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms

- 65. Suppose a firm is collecting \$1999 in total revenues and the total cost of its fixed factors of production fall from \$500 to \$400. One can speculate that the firm will
 - A. expand output.
 - B. lower price.
 - C. earn greater profits or smaller losses.
 - D. contract output.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #65 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms

Employee hours per day	Output per day	Output price	Hourly wage rate	Rent
0	0	\$2	\$14	\$50
1	40	\$2	\$14	\$50
4	80	\$2	\$14	\$50
9	120	\$2	\$14	\$50
15	160	\$2	\$14	\$50
23	200	\$2	\$14	\$50

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- 66. Refer to the figure above. Fixed cost for this firm is
 - A. \$66
 - B. **\$64**
 - <u>C.</u> \$50
 - D. \$14

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #66 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

- 67. Refer to the figure above. When the firm uses 9 employee-hours, it will experience _____ in labor costs.
 - A. \$30
 - B. \$56
 - C. \$84
 - <u>D.</u> \$126

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #67 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

- 68. Refer to the figure above. When the firm uses 9 employee-hours, it will produce _____ units of output and experience total cost of _____.
 - A. 120, \$126.
 - B. 80, \$64.
 - C. 80, \$56.
 - <u>D.</u> 120, \$176.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #68 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms

- 69. Refer to the figure above. When the firm uses 9 employee-hours, it will collect total revenues of
 - **A.** \$240.
 - B. \$160.
 - C. **\$120.**
 - D. **\$18**.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #69 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms

- 70. Refer to the figure above. The firm earns a ______ of _____ when it produces 120 units of output.
 - A. loss; \$64
 - **B.** profit; \$64
 - C. loss; \$114
 - D. profit; \$114

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #70 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms 71. Refer to the figure above. What is the marginal cost of the 9th employee hour?

A. \$126

- **B.** \$14
- C. \$50
- D. \$48

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #71 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

Workers per day	Pizza per day	Fixed Cost (S/day)	Variable Cost (\$/day)
0	0	500	0
1	25	500	200
2	75	500	350
3	150	500	450
4	200	500	600
5	205	500	800

* Pizzas sell for \$10 a pie.

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72. Refer to the figure above. The law of diminishing returns sets in after the _____ worker per day.

- A. 1
- B. 2
- <u>C.</u> 3
- D. 4

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #72 Learning Objective: 06-02 Understand the law of diminishing returns. Section: Profit-Maximizing Firms 73. Refer to the figure above. When the pizza shop employs 3 workers per day, it will have ______ fixed cost and _____ total cost.

- A. \$950; \$450
- B. \$850; \$500
- <u>C.</u> \$500; \$950
- D. \$450; \$850

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #73 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

- 74. Refer to the figure above. When the pizza shop employs 2 workers per day, it will experience a marginal cost of _____ per pizza.
 - A. \$15
 - B. \$25
 - C. \$6
 - <u>D.</u> \$3

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #74 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

- 75. Refer to the figure above. When the pizza shop employs 3 workers per day, the pizza shop will collect total revenue of
 - A. \$2000
 - **B.** \$1500
 - C. \$900
 - D. \$750

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #75 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms

- 76. Refer to the figure above. The pizza shop earns a _____ of _____ when it uses 3 workers per day.
 - A. loss, \$550
 - **B.** profit, \$550
 - C. loss, \$950
 - D. profit, \$ 950

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #76 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms



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- 77. Refer to the figure above. At quantities less than 50 doughnuts,
 - A. marginal cost is declining.
 - B. marginal returns to inputs must be increasing.
 - C. average cost is declining because marginal cost is increasing.
 - D. average cost is declining because marginal cost is less than average cost.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #77 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

- 78. Refer to the figure above. Marginal Cost is upward sloping because
 - A. marginal costs always increase when output increases.
 - B. this firm is operating in the short run.
 - C. marginal productivity of at least one input is declining.
 - D. marginal productivity of at least one input is increasing.

- 79. Refer to the figure above. Given the cost functions shown, at an output of 100 doughnuts, average cost would be
 - A. less than 20 cents per doughnut.
 - B. exactly 20 cents per doughnut.
 - C. less than marginal cost.
 - D. greater than marginal cost.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #79 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

- 80. Refer to the figure above. This doughnut shop will always produce
 - A. 50 doughnuts
 - B. 90 doughnuts
 - C. the quantity at which price equals marginal cost
 - D. a quantity less than 50 doughnuts

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #80 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms
81. Refer to the figure above. When the market price of a doughnut is 10 cents, this firm will

- A. shut down
- **B.** produce 50 doughnuts
- C. remain in operation only in the short run and shut down in the long run
- D. earn negative profits (losses)

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #81 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

82. Refer to the figure above. When the market price of a doughnut is 25 cents, this firm will

- A. shut down
- B. produce 90 doughnuts
- C. produce 80 doughnuts
- D. produce 50 doughnuts

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #82 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

- 83. The price equals marginal cost rule for profit maximization is a specific example of which of the following core principles?
 - A. Scarcity.
 - B. Cost-benefit.
 - C. Comparative advantage.
 - D. Efficiency.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #83 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms

84. In the short run, if a firm chooses to operate and produce output, it must be the case that

- A. it earns a profit.
- B. it avoids a loss.
- C. total revenues are greater than or equal to the cost of fixed factors of production.
- **D.** total revenues are greater than or equal to the cost of variable factors of production.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #84 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

85. The shutdown condition for a firm is where

A. total revenues are less than the total cost of fixed and variable factors of production.

- **B.** total revenues are less than the cost of variable factors of production.
- C. total revenues are less than the cost of fixed factors of production.
- D. profits are zero.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #85 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

86. The shutdown condition applies

- A. in the long run and in the short run
- B. only in the short run
- C. only to firms that are just breaking even
- D. to all firms, all the time

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #86 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

- 87. Suppose the firm knows that it is not going to shut down but it is going to earn a loss. It should pick the output level where
 - A. total costs are minimized.
 - B. price equals marginal costs.
 - C. total revenues are maximized.
 - D. the costs of the variable factors of production are minimized.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #87 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

- 88. Suppose a firm is collecting \$1250 in total revenues and the total costs of its variable factors of production are \$1000 at its current level of output. In the short run, one can predict that the firm will
 - A. shut down.
 - B. earn a profit.
 - C. earn a loss.
 - D. continue to operate.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #88 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

89. If a firm shuts down in the short run, then

- A. total revenue and total cost will fall to zero.
- B. profit will equal zero.
- C. profit will equal the negative of fixed costs.
- D. profit will equal the negative of variable costs.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #89 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

90. If a firm is earning zero profits

- A. its revenues are sufficient to pay explicit costs, but not implicit costs.
- B. the owner will not be able to pay himself or herself a salary.
- C. it will shut down in the long run, but will continue to operate in the short run.
- <u>D.</u> the owners are earning a return on their time and investment that is equal to the opportunity costs of that time and investment.

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #90 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

- 91. Suppose a firm is collecting \$1700 in total revenues and the total costs of its variable factors of production are \$1900 at its current level of output. One can predict that the firm will
 - A. shut down.
 - B. raise its price.
 - C. earn a loss.
 - D. continue to operate.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #91 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

- 92. Fareed runs a fishing lodge, and has a very successful business during the summer. In the fall, the number of guests at the lodge starts to decline, and by November very few people stay at Fareed's Lodge. Fareed should
 - A. keep the lodge open all year because his summer profits offset any losses he has in the winter.
 - B. keep the lodge open only during those months in which revenues exceed total costs.
 - C. keep the lodge open only during those months in which revenues exceed the fixed costs of the lodge.
 - <u>D.</u> keep the lodge open only during those months in which revenues exceed the variable costs of serving guests.

AACSB: Reflective Thinking Skills Blooms: Analysis Frank - Chapter 06 #92 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

93. Average variable cost is defined as

- A. Total cost divided by output
- B. Total cost divided by number of workers
- C. Variable cost divided by output
- D. Variable cost divided by price

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #93 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

- 94. Average total cost is defined as
 - A. Total cost divided by output
 - B. Total cost divided by price
 - C. Variable cost divided by output
 - D. Variable cost divided by price

AACSB: Analytical Skills Blooms: Knowledge Frank - Chapter 06 #94 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

Al Boom Dynamite has \$2000 of variable costs and \$500 of fixed costs when its output is 250 units. It sells each unit for \$25.

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- A. \$8; 2
- B. \$10; 10
- C. \$10; 2 <u>D.</u> \$8; 10

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #95 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

- 96. Profit at this output level is
 - A. \$6,250
 - B. \$5,750
 - C. \$4,250
 - <u>D.</u> \$3,750

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #96 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms This graph shows the cost functions of a Mustafa's mushroom gathering business.



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97. In the graph above, Average Variable Cost is labeled _____, Average Total Cost is labeled _____, and Marginal Cost is labeled _____.

- A. A; B; C
- <u>**B.</u> C; B; A**</u>
- C. B; C; A
- D. C; A; B

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #97 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms

- A. there are high fixed costs.
- **<u>B.</u>** the first bushels of mushrooms are the easiest to find, but Mustafa has to really hunt to find additional mushrooms.
- C. increased demand for mushrooms has increased quantity supplied.
- D. supply has shifted to the left.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #98 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms in Perfectly Competitive Markets

- 99. When mushrooms sell for \$10 per bushel, if Mustafa chooses the profit maximizing quantity Mustafa will gather
 - A. 10 bushels
 - B. 20 bushels
 - C. 30 bushels
 - D. zero bushels

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #99 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms

- 100. When the market price of mushrooms is \$40 per bushel, if Mustafa chooses the profit maximizing quantity he will
 - A. earn zero profits
 - B. earn negative profits (losses)
 - C. earn positive profits
 - D. shut down

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #100 Learning Objective: 06-04 Determine a firm s profit-maximizing decision in the short run. Section: Profit-Maximizing Firms

- 101. Mustafa's short run supply curve is
 - A. Curve C to the right of curve A
 - B. Curve B to the right of curve A
 - C. Curve A above curve B
 - D. Curve A above curve C

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #101 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms in Perfectly Competitive Markets 102. In order for a firm to choose to produce a positive amount of output, it must be the case that

A. total revenues are greater than total costs.

B. total revenues are greater than fixed costs.

C. total revenues equal total costs.

D. total revenues are greater than or equal to variable costs.

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #102 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms in Perfectly Competitive Markets

103. If the price of dynamite drops to \$10, should Al Boom continue to operate in the short run?

A. No, because Price is less than Average Total Cost

B. Yes, because Price is less than Average Variable Cost

C. No, because Price is not greater than Average Total Cost

D. Yes, because Price is greater than Average Variable Cost

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #103 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

- 104. If the price of the product drops to \$6 each, should this firm continue operation during the short run?
 - A. No, because Price is less than Average Total Cost.
 - B. Yes, because Price is greater than Average Variable Cost.
 - C. No, because Price is less than Average Variable Cost.
 - D. No, because Price is not greater than Average Total Cost.

AACSB: Analytical Skills Blooms: Application Frank - Chapter 06 #104 Learning Objective: 06-05 Describe a firm s shutdown decision. Section: Profit-Maximizing Firms

105. When plotting marginal and average cost curves, the _____ cost curve always crosses the _____ cost curve at its _____.

- A. average fixed; marginal; minimum
- B. marginal; average total; minimum
- C. marginal; average variable; maximum
- D. average variable; marginal; maximum

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #105 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Profit-Maximizing Firms A. it should use more resources

a

- B. it should increase its scale of operations to reduce its average total cost
- C. it should raise its price
- D. Its average total cost will decline if it reduces its scale of operation



Variable Inputs

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- 107. Refer to the figure above. At which point is Marginal Cost highest?
 - A. Point a
 - B. Point b
 - C. Point c
 - D. Point d

AACSB: Analytical Skills Blooms: Understanding Frank - Chapter 06 #107 Learning Objective: 06-03 Discuss the various production costs that firms face. Section: Costs of Production

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