Practice Questions

Economics 120 M. Babcock Exam 2, Part 1 Spring 2005

- 1. The price of product X is reduced from \$100 to \$90 and, as a result, the quantity demanded increases from 50 to 60 units. From this we can conclude that the demand for X in this price range:
 - a) is elastic.
 - b) is inelastic.
 - c) is of unit elasticity
 - d) had declined.
- 2. Suppose that as the price of Y falls from \$2.00 to \$1.90 the quantity of Y demanded increases from 110 to 118. It can be concluded that the price elasticity of demand is:
 - a) 0.79.
 - b) 3.94.
 - c) 1.37.
 - d) 2.09.
 - e) 4.00.
- 3. In which of the following instances will total revenue decline?
 - <u>a)</u> price rises and demand is elastic
 - b) price rises and demand is inelastic
 - c) price falls and demand is elastic
 - d) price rises and supply is elastic
- 4. The main determinant of elasticity of supply is the:
 - a) number of uses for the product.
 - b) urgency of consumer wants for the product.
 - c) amount of time the producer has to adjust inputs in response to a price change.
 - d) number of close substitutes for the product available to consumers.
- 5. In which of the following cases will total revenue increase?
 - a) price rises and demand is elastic
 - b) price rises and demand is inelastic
 - c) price falls and supply is elastic
 - d) price falls and demand is inelastic
- 6. The elasticity of demand for a product is likely to be greater:
 - a) the smaller the number of substitute products available.
 - b) the smaller the proportion of one's income spent on the product.
 - c) the greater the amount of time over which buyers adjust to a price change.
 - d) if the product is a "necessity," rather than a "luxury" good.

- 7. If the price of hand calculators falls from \$10 to \$9 and, as a result, the quantity demanded increases from 100 to 125, we can conclude that:
 - a) demand is elastic.
 - b) demand is inelastic.
 - c) demand is of unit elasticity.
 - d) not enough information is given to make a statement about elasticity.

8. Average fixed cost:

- <u>a)</u> declines so long as output increases.
- b) graphs as a U-shaped curve.
- c) may be found for any output by adding average variable cost and average total.
- d) is intersected by marginal cost at its minimum point.
- 9. The basic characteristic of the short run is that:
 - a) a firm does not have sufficient time to change the amounts of any of the resources it employs.
 - b) the firm does not have sufficient time to cut its rate of output to zero.
 - c) the firm does not have sufficient time to change the size of its plant.
 - d) barriers to entry prevent new firms from entering the industry.

10. Which of the following is correct?

- a) Marginal cost cuts average fixed cost at the latter's minimum point.
- b) Average fixed cost cuts marginal cost at the latter's minimum point.
- <u>c)</u> Marginal cost cuts average total cost at the latter's minimum point.
- d) Average variable cost cuts marginal cost at the latter's minimum point.

11. The law of diminishing returns indicates that:

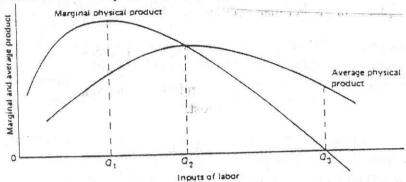
- a) beyond some point the extra utility derived from additional units of a product will yield the consumer smaller and smaller extra amounts of satisfaction.
- b) the demand for goods produced by purely competitive industries is downsloping.
- c) because of economics and diseconomies of scale a competitive firm's long-run average cost curve will be U-shaped.
- <u>d)</u> as extra units of a variable resource are added to a fixed resource the extra or marginal product will decline beyond some point.

12. Economics and diseconomies of scale explain:

- a) the distinction between fixed and variable costs.
- b) why the firm's short-run marginal cost curve cuts the short-run average variable cost curve at its minimum point.
- c) why the firm's long-run average cost curve is U-shaped.
- d) the profit-maximizing level of production.

- 13. When average fixed costs are falling:
 - a) average variable costs must also be falling.
 - b) average variable costs must be rising.
 - c) marginal cost must be falling.
 - average variable cost may be either rising or falling.
 - e) average total cost must be falling.

Use this figure to answer questions 14 to 16.



- 14. From the diagram, it is assumed that variable inputs of labor are being added to a constant amount of property resources. The total real output of this firm will cease to expand:
 - a) if a labor force in excess of Q1 is employed.
 - b) if a labor force in excess of Q2 is employed.
 - if a labor force in excess of Q3 is employed.
 - d) only if the marginal physical productivity curve becomes negative at all levels of output.
- 15. From the diagram, it is assumed that variable inputs of labor are being added to a constant amount of property resources. Marginal cost will be at a minimum when the firm is hiring:
 - a) less than Q1 workers
 - b) more than Q3 workers.
 - (c) Q1 workers MY Is max,
 - d) Q2 workers
 - e) Q3 workers.
- 16. In the diagram, it is assumed that variable inputs of labor are being added to a constant amount of property resources. Average variable cost will be at a minimum when the firm is hiring:
 - a) less than Q1 workers.
 - b) more than Q3 workers.
 - c) Q1 workers.
 - (d) Q2 workers. AP is max
 - e) Q3 workers.

17. The vertical distance between a firm's ATC and AVC curves represents: marginal costs which increase as output increases. a) marginal costs which decrease as output decreases. b) AFC which decreases as output increases. AFC which increases as output increases. 18. Which of the following is not a valid generalization concerning the relationship between price and costs for a purely competitive seller in the short run? Price must be equal to or greater than average variable cost for the firm to continue a) producing. Price may be equal to, greater than, or less than average total cost. b) Price times quantity produced must be equal to or greater than total variable cost for c) some level of output or the firm will close down in the short run. Price must be at least equal to average total cost. d) 19. In the short run a purely competitive seller will close down if: price falls short of average total cost at all possible outputs. a) there is no point at which marginal revenue and marginal cost are equal. b) c) price falls short of average fixed cost at all outputs. price falls short of average variable cost at all outputs.. (d) it cannot produce at an economic profit. 20.

Which of the following will not hold true for a competitive firm in long-run equilibrium?

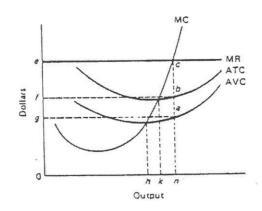
- a) P equals MC
- MC equals AC b)
- c) P equals AC
- (d) P equals AFC

Use this figure to answer questions 21 to 23.

Total product	Average fixed cost	Average variable cost	Average total cost	Marginal cost
I	\$100.00	\$17.00	\$117.00	517
2	50.00	16.00	66.00	15
3	33.33	15.00	48.33	13
4	25.00	14.25	39.25	12
5	20.00	14.00	34.00	13
6	16.67	14.00	30.67	14
7	14.29	15.71	30,00	26
8	12.50	17.50	30.00	30
9	11.11	19.44	30.55	35
10	10.00	21.60	31.60	41
11	9.09	24.00	33.09	48
12	8.33	26.67	35.00	56

- 21. Assume a firm is selling in a purely competitive market. If the market price for the firm's product is \$12, the competitive firm will:
 - a) produce 4 units at a loss of \$109.
 - b) produce 4 units at an economic profit of \$31.75.
 - c) produce zero units and "break even."
 - d) produce 8 units at a loss of \$48.80.
 - produce zero units at a loss of \$100.
- 22. Assume a firm is selling in a purely competitive market. If the market price for the firm's product is \$32, the competitive firm will:
 - (a) produce 8 units at an economic profit of \$16.
 - b) produce 5 units at a loss of \$10.
 - c) produce 8 units at a loss equal to the firm's total fixed cost.
 - d) produce 7 units at an economic profit of \$41.50.
 - e) close down the short run.
- 23. Assume a firm is selling in a purely competitive market. If the market price for the firm's product is \$28, the competitive firm will:
 - a) produce 4 units at a loss of \$17.40.
 - (b) produce 7 units at a loss of \$14.00.]
 - c) close down in the short run.
 - d) produce 6 units at a loss of \$23.80.
 - e) produce 9 units at a profit of \$31.66.

Use this figure to answer questions 24 to 25.



- 24. The profit-maximizing output:
 - a) is Oh.
 - b) is Ok.
 - (c) is On.
 - d) cannot be determined from the information given.

- 25. The short-run supply curve for the firm:
 - a) is the entire MC curve.
 - b) is the segment of the AVC curve lying to the right of the MC curve.
 - c) is the segment of the MC curve lying above the ATC curve.
 - d) is the segment of the MC curve lying above the AVC curve.
 - e) cannot be determined in this diagram.
- 26. Assume a purely competitive, increasing-cost industry is in long-run equilibrium. If a decline in demand occurs, firms will:
 - a) leave the industry and price and output will both decline.
 - b) leave the industry and price and output will both increase.
 - c) enter the industry and price and quantity will both increase.
 - d) leave the industry, price will decrease, and quantity produced will increase.
- 27. If for a firm P = AC = MC, we can conclude that:
 - a) "allocative efficiency" is being achieved, but "productive efficiency" is not.
 - b) both "allocative efficiency" and productive efficiency" are being achieved.
 - c) "productive efficiency" is being achieved, but "allocative efficiency" is not.
 - d) neither "allocative efficiency" nor "productive efficiency" is being achieved.