I. MULTIPLE CHOICE (40 questions 2 points each). Choose the one alternative that best completes the statement or answers the question.

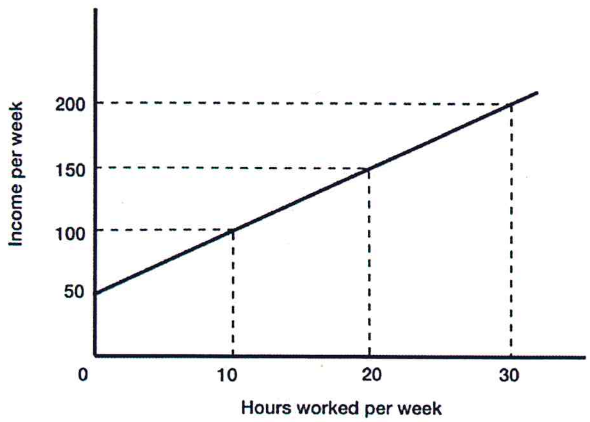


Figure 1A.1

1) Refer to Figure 1A.1. The slope of the line between the points where hours worked per week are 20 and hours worked per week are 30 is: 1) _______

A) 0.2. B) 5. C) 10. D) 50.

2) Which of the following is a microeconomic question? 2) _______
A) Should the government decrease unemployment benefits to reduce the unemployment rate?
B) Should congress decrease taxes to help stimulate the economy?
C) Why do some countries have higher inflation rates than other countries?
D) Should the government subsidize corn farmers to encourage the production of ethanol?

Hours of Operation	Marginal Cost
1	6
2	12
3	18
4	24
5	30
6	36
7	42

Table 2.2

3) Krystal runs a nail salon and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Krystal's marginal benefit of staying open per hour is $18. If she is following the marginal principle, how many hours should Krystal stay open? 3) _______

A) 3 hours B) 4 hours C) 6 hours D) 7 hours

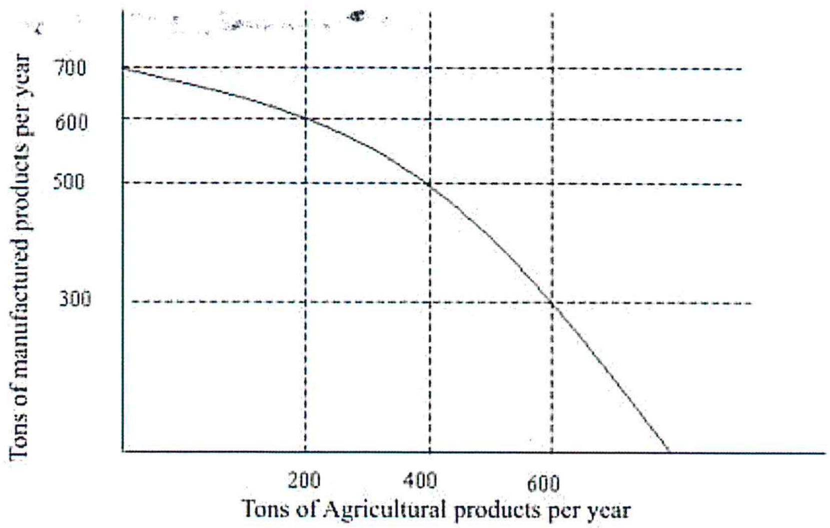


Figure 2.1

4) Refer to Figure 2.1. If you choose to produce only agricultural products, what is the maximum quantity you can produce per year? 4) ______

A) 200 tons B) 400 tons C) 600 tons D) > 600 tons

5) Suppose that your tuition to attend college is $24,000 per year and you spend $8,000 per year on room and board. If you were working full time, you could earn $30,000 per year. What is your opportunity cost of attending college for one year? 5) ______

A) $32,000 B) $38,000 C) $54,000 D) $62,000

Fertilizer and Corn Yield

Bags of Fertilizer	Bushels of Corn
0	85
1	120
2	135
3	144
4	147

6) Refer to the table above. The farmer increased his total production of corn by 9 bushels per acre after applying: 6) ______

A) the first bag of fertilizer. B) the second bag of fertilizer.
C) the third bag of fertilizer. D) the fourth bag of fertilizer.

7) Markets exist: 7) ______
A) as an arrangement where buyers do not interact with sellers.
B) so people can buy and sell things.
C) because people are self-sufficient.
D) because each person specializes in the production of many products.

	Kites /hour	Snowboards /hour

Jesse	8	1
April	12	3

Table 3.1

8) Consider two individuals, Jesse and April, who hand paint kites and snowboards. Table 3.1 shows how much of each good Jesse and April can paint in one hour. April's opportunity cost of painting one kite is painting: 8) _______

A) 1/12 of a snowboard. B) 1/4 of a snowboard.
C) 3 snowboards. D) 4 snowboards.

	Wind Chimes	Sun Dials
Deena	9	12
Artie	6	8

Table 3.4

9) Consider two individuals, Artie and Deena, who produce wind chimes and sun dials. Artie's and Deena's weekly productivity are shown in Table 3.4. Which of the following is true? 9) _______

A) Artie has a comparative advantage in producing wind chimes but not sun dials.
B) Artie has a comparative advantage in producing sun dials but not wind chimes.
C) Artie has a comparative advantage in producing both goods.
D) Artie does not have a comparative advantage in producing either good.

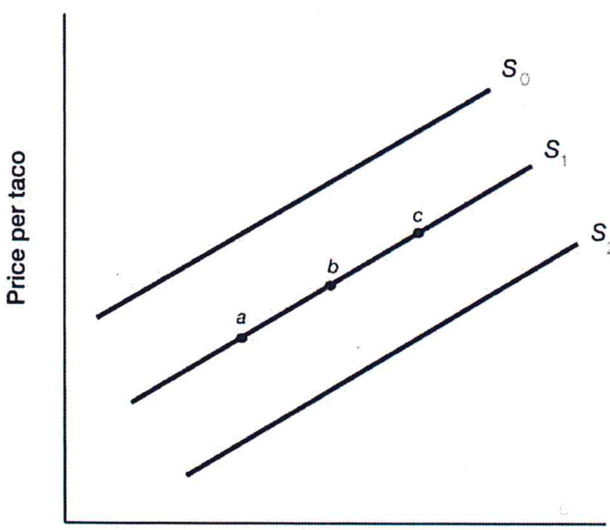


Figure 4.4

10) Figure 4.4 illustrates the supply of tacos. An increase in the supply of tacos is represented by a movement from: 10) ______

A) point *a* to point *b*. B) point *c* to point *b*.
C) S_2 to S_1. D) S_0 to S_1.

11) When demand decreases and the demand curve shifts to the left, equilibrium price ________ and equilibrium quantity

________.   11) ______

A) increases; increases B) increases; decreases
C) decreases; increases D) decreases; decreases

12) Suppose that a market for a product is in equilibrium at a price of $5 per unit. At any price above $5 per unit: 12) ______

A) there will be an excess supply of the product.
B) the quantity supplied of the product will be less than the quantity demanded of that product.
C) there will be a shortage of that product.
D) there will be an excess demand for the product.

13) If the price elasticity of supply is 1.3, supply is: 13) ______
A) unaffected by price changes. B) inelastic.
C) unitary elastic. D) elastic.

14) Which of the following factors would indicate more elastic demand? 14) ______
A) Demand is measured over a longer period of time.
B) The good is a necessity, rather than a luxury.
C) The good represents a small fraction of the budget.
D) There are few substitutes for the good.

15) When the price of pens went from $1 to $1.50, the quantity demanded of pencils changed from 50 to 75 a day. The cross-price elasticity of demand for pencils (using the initial value formula) is: 15) ______

A) 1. B) 0.4. C) 0.2. D) -0.2.

16) Suppose that the price of a coffee mug is $2. Lee's marginal cost of producing coffee mugs $0.50 for the first mug, Tammy's marginal cost of producing coffee mugs is $1 for the second mug, Stan's marginal cost of producing coffee mugs is $1.50 for the third mug, Joy's marginal cost of producing coffee mugs is $2 for the fourth mug, and Jody's marginal cost of producing coffee mugs is $3 for the fifth mug. In equilibrium, what is the producer surplus from producing coffee mugs? 16) ______

A) $0 B) $2 C) $3 D) $6

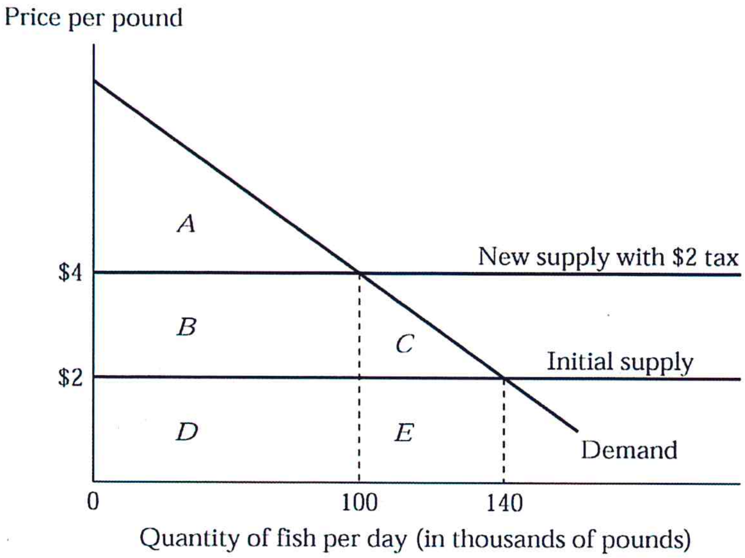


Figure 6.9

17) Figure 6.9 depicts a hypothetical fish market with a horizontal supply curve. Suppose the government imposes a tax of $2 per pound of fish, and the tax is paid in legal terms by producers. Which of the following shows the difference between the total burden of the tax and the amount of revenue collected by the government? 17) ______

A) Triangle *A* B) Rectangle *B* C) Triangle *C* D) Rectangle *E*

18) If demand is inelastic, and the government decides to raise the tax on water. Then the price for water will increase by a ________ amount and water consumers will bear a ________ share of the tax. 18) ______

A) large; large B) small; large C) small; small D) large; small

Quantity	Marginal Cost to Producers	Willingness to Pay by Consumers
1	5	45
2	10	40
3	15	35
4	20	30
5	25	25
6	30	20
7	35	15
8	40	10

Table 6.1

19) Refer to Table 6.1. When quantity = 3, this market is ________ because ________. 19) ______
A) inefficient; willingness to pay > marginal cost
B) inefficient; willingness to pay < marginal cost
C) efficient; willingness to pay = marginal cost
D) producing too much consumer surplus; willingness to pay > marginal cost

20) Money spent on one product cannot be used on another product, so the brain reacts in a negative way to the thought of spending money. This is consistent with the principle of: 20) ______

A) marginal utility. B) voluntary exchange.

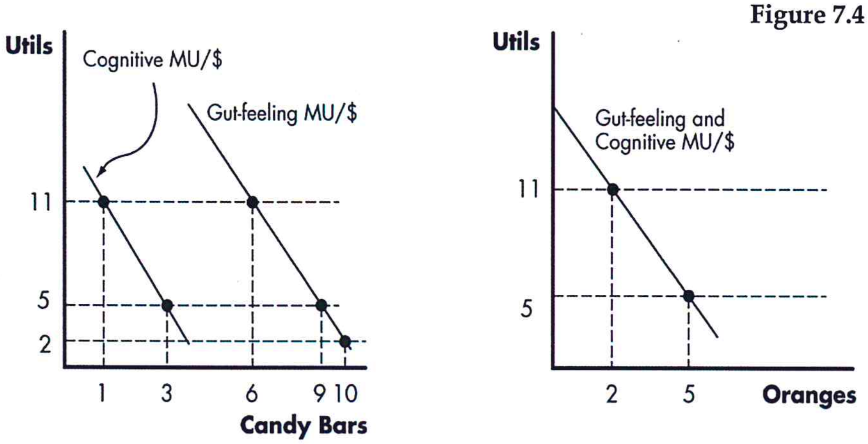
C) opportunity cost.   D) diminishing returns.

21) In the Iowa Gambling Task, scientists have found that on average, subjects are able to articulate why they stopped drawing cards from unfavorable decks after drawing: 21) ______

A) 5 cards.   B) 10 cards.   C) 50 cards.   D) 60 cards.

22) Consumers' ability to purchase a good or service is limited by: 22) ______
A) their income only.   B) the prices for the goods or services only.
C) their preferences.   D) both the prices and their income.

Figure 7.4



The above figure represents the marginal utility per dollar for candy bars and oranges for Sophia. The price of each product is $0.50, and Sophia has a budget of $4.

23) Refer to Figure 7.4. If Sophia bases her choice on cognition , she will maximize utility at a marginal utility per dollar of ________ utils for candy bars and ________ utils for oranges.   23) ______

A) 11; 5 B) 11; 11   C) 5; 5 D) 5; 11

24) ________ is a cost that changes with the quantity produced by the firm and is incurred by the firm in the short run.   24) ______

A) Economic cost   B) Average total cost
C) Fixed cost   D) Variable cost

25) Diminishing marginal returns implies that firms: 25) ______
A) require fewer and fewer workers to produce each additional unit of output.
B) get increasing amounts of revenue for each unit of output they produce.
C) get decreasing amounts of revenue for each unit of output they produce.
D) require more and more workers to produce each additional unit of output.

26) The effect of spreading out the fixed costs outweighing the effect of diminishing returns is illustrated by the ________ average cost curve ________.   26) ______

A) long-run; increasing B) long-run; decreasing
C) short-run; increasing D) short-run; decreasing

27) Suppose that your firm's marginal cost of producing a pencil is 5 cents and the average cost of producing a pencil is 3

cents. If your firm is interested in minimizing average total costs, what should your firm do? 27) ______

A) Maintain production at the current level. B) Look for ways to increase fixed costs.
C) Increase production. D) Decrease production.

28) If a firm has already paid or has agreed to pay for something we call it: 28) ______
A) a lost cost. B) a sunk cost. C) a fixed cost. D) a spent cost.

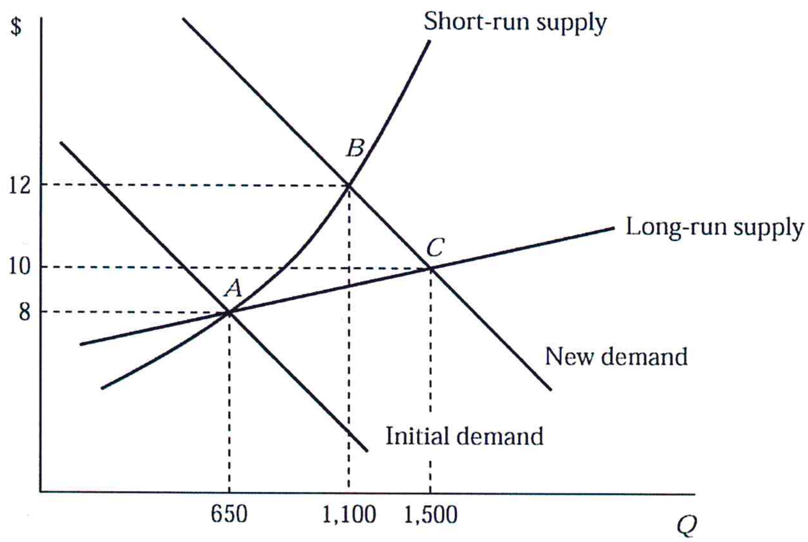


Figure 9.5

29) Figure 9.5 shows the short-run and long-run effects of an increase in demand of an industry with increasing cost. The market is in equilibrium at point *A*, where 100 identical firms produce 6 units of a product per hour. If the market demand curve shifts to the right, what will happen to an individual firm's profit? 29) ______

A) Each firm earns a positive profit at point *B*.
B) The profit of each firm decreases as more firms enter the market and share the benefits of an increase in demand pushing the market from point *A* to point *B*.
C) Each firm earns a zero profit at point *B* because the market is perfectly competitive.
D) none of the above

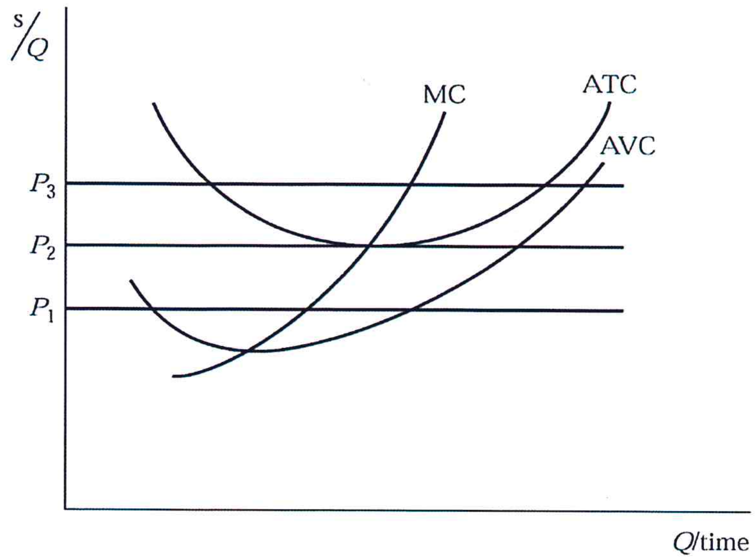


Figure 9.6

30) In Figure 9.6 if price is P_2 then the industry will: 30) ______
A) expand. B) cease to exist.
C) stay the same size. D) contract.

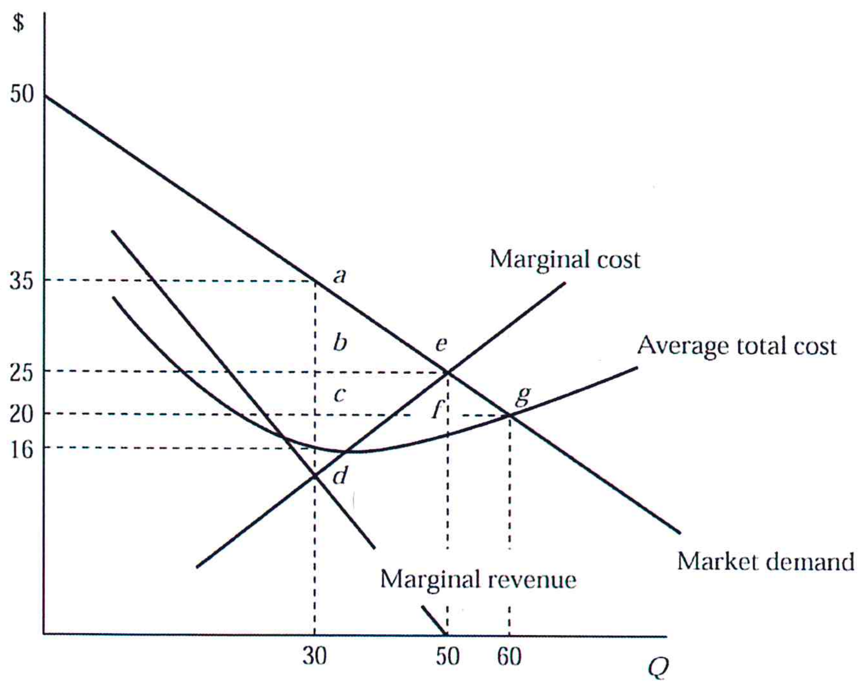


Figure 10.4

31) Refer to Figure 10.4. If the market was perfectly competitive, the consumer surplus would be: 31) ______
A) $850. B) $625. C) $300. D) $100.

32) Suppose that a price discriminating monopolist is able to divide its market into two groups. If the firm sells its product for $25 to the group whose customers have the least elastic demand, what price are they likely to charge to the group whose customers have the most elastic demand? 32) ______

A) $25
B) less than $25
C) more than $25
D) The answer depends on the marginal revenue for that group.

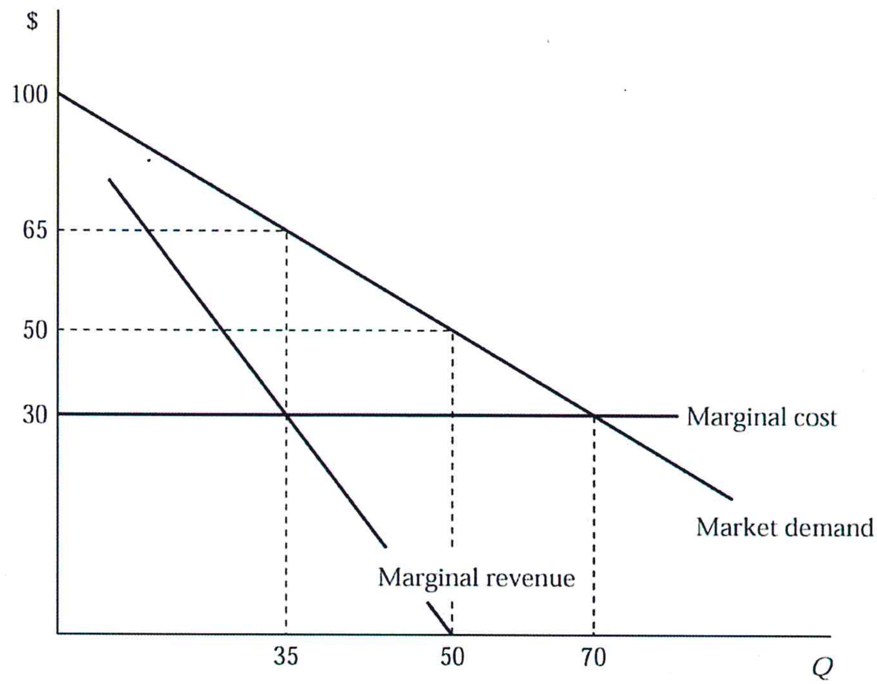


Figure 10.5

33) Suppose that Figure 10.5 shows an industry's market demand, its marginal revenue, and the production costs of a representative firm. If the industry was perfectly competitive, the consumer surplus would be: 33) ______

A) $2,450. B) $1,225. C) $612.5. D) $262.5.

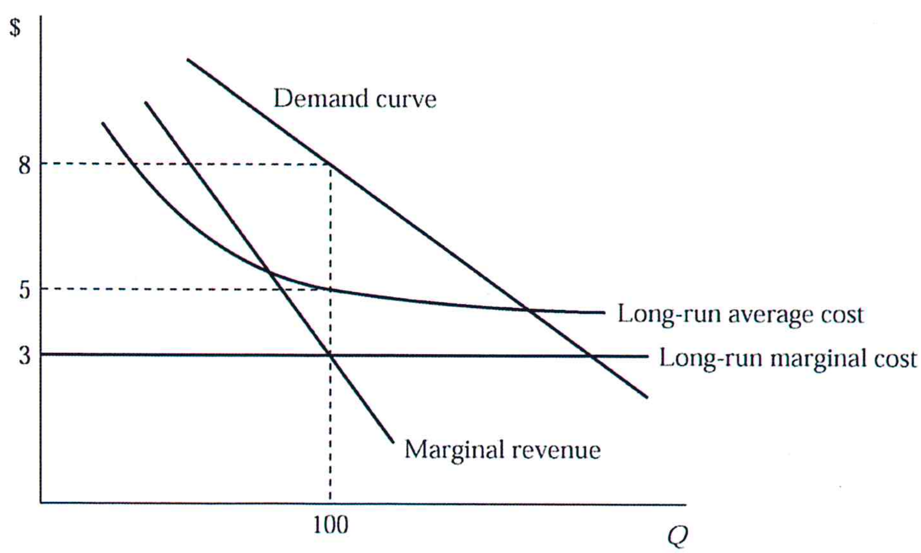


Figure 11.4

34) Figure 11.4 depicts demand and costs for a monopolistically competitive firm. In the long run we expect: 34) ______

A) the firm's average cost of production to increase.
B) more firms to enter the market.
C) the firm's demand curve to shift to the left.
D) all of the above

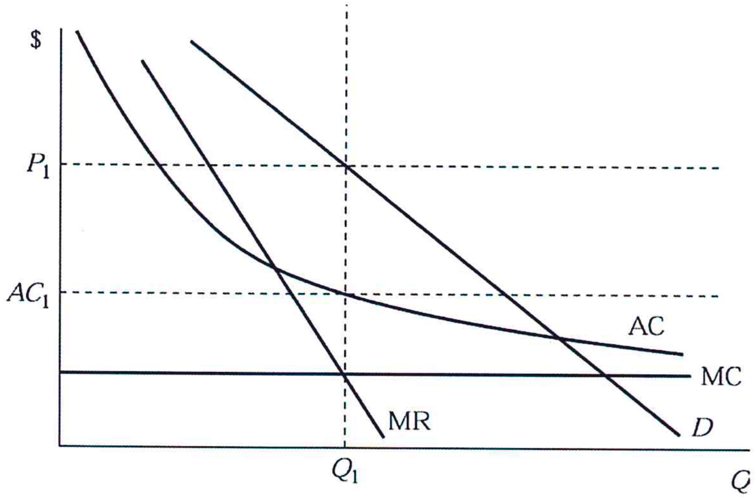


Figure 11.1

35) Figure 11.1 depicts demand and costs for a monopolistically competitive firm. At the profit maximizing output level: 35) ______

A) this firm is in long-run equilibrium.
B) this firm is earning economic profits equal to $P_1(Q_1 - AC_1)$.
C) this firm is earning economic profits equal to $Q_1(P_1 - AC_1)$.
D) this firm is earning economic profits equal to zero.

36) A firm announces that it will refund the difference between its price and any price of a competitor that is lower. This is an example of: 36) ______

A) marginal cost pricing. B) guaranteed price matching.
C) predatory pricing. D) tying contracting.

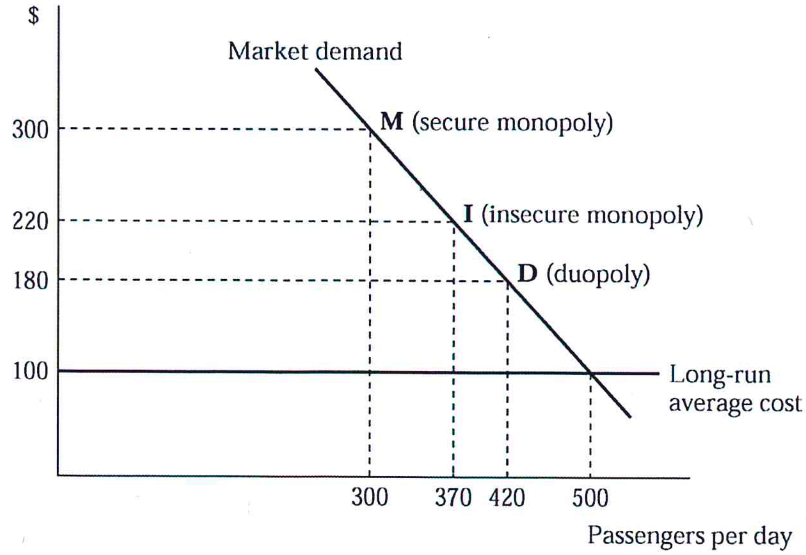


Figure 12.6

37) In Figure 12.6, airline Fly Smart is initially a secure monopoly between two cities X and Y at point M, serving 300 passengers per day at the profit maximizing price of $300 per ticket. Suppose that Fly Smart discovers that a second airline is contemplating entering the market. If the minimum market entry quantity is zero passenger per day, what is Fly Smart's profit when it commits to the entry-deterring quantity? 37) ______

A) $60,000   B) $44,400   C) $33,600   D) $0

38) If a regulatory agency mandates that a natural monopoly charge a price equal to its average cost: 38) ______
A) the firm will earn economic profits greater than zero.
B) the firm will earn economic profits equal to zero.
C) the firm will eventually exit the industry.
D) other firms will find it profitable to enter this industry.

39) Suppose a monopolist has costs such that when output is 500 units per hour, average costs are $3. If the monopolist is regulated by a policy of average-cost pricing, the monopolist will charge a price of: 39) ______

A) $3 only if the quantity demanded is greater than 500 units at a price of $3.
B) $3 only if the quantity demanded is 500 units per hour at a price of $3.
C) $3 only if the quantity demanded is less than 500 units per hour at a price of $3.
D) $3.

Number of workers	Units of output
2	120
3	170
4	210
5	240
6	260
7	270
8	275

Table 17.2

40) Refer to Table 17.2. The marginal product of the third unit of labor is: 40) ______
A) 25.   B) 50.   C) 60.   D) 160.

II. SHORT ANSWER. (5 questions 4 points each). Please write a separate paragraph to explain your answer to each of the following questions.

41) Describe the changes in the variables that will cause supply for a product to increase, shifting the supply curve down and to the right. 41) ____________

42) Restaurants and retail stores often give 10% senior citizen discounts. Use the concept of elasticity to explain how this can be profit maximizing behavior. 42) ____________

43) What is a price ceiling and why must it be below the equilibrium price to be effective? 43) ____________

44) In a perfectly competitive market, what would you expect to happen to the number of firms and firm profitability in the short run and long run if demand for the product rises? 44) ____________

45) What is rent seeking? 45) ____________