CHAPTER 9

Monopolistic Competition and Oligopoly

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1. Monopolistic competition means:
   A) a market situation where competition is based entirely on product differentiation and advertising.
   B) a large number of firms producing a standardized or homogeneous product.
   C) many firms producing differentiated products.
   D) a few firms producing a standardized or homogeneous product.

   Ans: C Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition Page: 219 Subtopic: Relatively large number of sellers Type: Definition

2. Monopolistic competition is characterized by a:
   A) few dominant firms and low entry barriers.
   B) large number of firms and low entry barriers.
   C) large number of firms and substantial entry barriers.
   D) few dominant firms and substantial entry barriers.

   Ans: B Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition Page: 219-220 Subtopic: Relatively large number of sellers Type: Application

3. If the number of firms in a monopolistically competitive industry increases and the degree of product differentiation diminishes:
   A) the likelihood of realizing economic profits in the long run would be enhanced.
   B) individual firms would now be operating at outputs where their average total costs would be higher.
   C) the likelihood of collusive pricing would increase
   D) the industry would more closely approximate perfect competition.

   Ans: D Level: Moderate Main Topic: 9.1 Characteristics of monopolistic competition Page: 219-220 Subtopic: Relatively large number of sellers Type: Application

4. A monopolistically competitive industry combines elements of both competition and monopoly. It is correct to say that the competitive element results from:
   A) a relatively large number of firms and the monopolistic element from product differentiation.
   B) product differentiation and the monopolistic element from high entry barriers.
   C) a perfectly elastic demand curve and the monopolistic element from low entry barriers.
   D) a highly inelastic demand curve and the monopolistic element from advertising and product promotion.

   Ans: A Level: Moderate Main Topic: 9.1 Characteristics of monopolistic competition Page: 220 Subtopic: Relatively large number of sellers Type: Application

5. Economic analysis of a monopolistically competitive industry is more complicated than that of perfect competition because:
   A) the number of firms in the industry is larger.
   B) monopolistically competitive firms cannot realize an economic profit in the long run.
   C) of product differentiation and consequent product promotion activities.
   D) monopolistically competitive producers are mutually interdependent in their pricing strategies.

   Ans: C Level: Moderate Main Topic: 9.1 Characteristics of monopolistic competition Page: 220 Subtopic: Differentiated products Type: Application

6. A monopolistically competitive industry combines elements of both competition and monopoly. The monopoly element results from:
   A) the likelihood of collusion.
   B) product differentiation.
   C) high entry barriers.
   D) mutual interdependence in decision making.

   Ans: B Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition Page: 220 Subtopic: Differentiated products Type: Application

7. A significant difference between a monopolistically competitive firm and a perfectly competitive firm is that the:
   A) former sells similar, although not identical, products
   B) latter recognizes that price must be reduced to sell more output.
   C) former does not seek to maximize profits.
   D) former's demand curve is perfectly inelastic.

   Ans: A Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition Page: 220 Subtopic: Differentiated products Type: Application

8. The goal of product differentiation and advertising in monopolistic competition is to make:
   A) the firm allocatively efficient even if it is not productively efficient.
   B) the firm productively efficient even if it is not allocatively efficient.
   C) price more of a factor and product differences less of a factor in consumer purchases.
   D) price less of a factor and product differences more of a factor in consumer purchases.

   Ans: D Level: Moderate Main Topic: 9.1 Characteristics of monopolistic competition Page: 220 Subtopic: Differentiated products Type: Application

9. Which of the following is not a basic characteristic of monopolistic competition?
   A) the use of trademarks and brand names
   B) recognized mutual interdependence
   C) product differentiation
   D) a relatively large number of sellers

   Ans: B Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition
   Page: 220-221 Subtopic: Differentiated products Type: Application

10. Which set best describes the basic features of monopolistic competition?
   A) easy entry, few firms, and standardized products
   B) barriers to entry, few firms, and differentiated products
   C) easy entry, many firms, and differentiated products
   D) barriers to entry, many firms, and standardized products

   Ans: C Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition
   Page: 220-221 Subtopic: Easy entry and exit Type: Application

11. Monopolistic competition resembles perfect competition because:
   A) both industries emphasize nonprice competition.
   B) in both instances firms will operate at the minimum point on their long-run average total cost curves.
   C) both industries entail the production of differentiated products.
   D) barriers to entry are either weak or nonexistent.

   Ans: D Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition
   Page: 221 Subtopic: Easy entry and exit Type: Application

12. Under monopolistic competition entry to the industry is:
   A) completely free of barriers.
   B) more difficult than under perfect competition but not nearly as difficult as under monopoly.
   C) more difficult than under monopoly.
   D) blocked.

   Ans: B Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition
   Page: 221 Subtopic: Easy entry and exit Type: Application

13. Monopolistically competitive and perfectly competitive industries are similar in that:
    A) both are assured of short-run economic profits.
    B) both produce differentiated products.
    C) the demand curves facing individual firms are perfectly elastic in both industries.
    D) there are few, if any, barriers to entry.

    Ans: D Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition
    Page: 221 Subtopic: Easy entry and exit Type: Application

14. Nonprice competition refers to:
    A) competition between products of different industries, for example, competition between aluminum and steel in the manufacture of automobile parts.
    B) price increases by a firm which are ignored by its rivals.
    C) advertising, product promotion, and changes in the real or perceived characteristics of a product.
    D) reductions in production costs which are not reflected in price reductions.

    Ans: C Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition
    Page: 221 Subtopic: Advertising Type: Definition

15. Nonprice competition refers to:
    A) low barriers to entry.
    B) product development, advertising, and product packaging.
    C) the differences in information which consumers have regarding various products.
    D) an industry or firm in long-run equilibrium.

    Ans: B Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition
    Page: 221 Subtopic: Advertising Type: Definition

16. The monopolistic competition model predicts that:
    A) allocative efficiency will be achieved.
    B) productive efficiency will be achieved.
    C) firms will engage in nonprice competition.
    D) firms will realize economic profits in the long run.

    Ans: C Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition
    Page: 221 Subtopic: Advertising Type: Application

17. The book publishing, furniture, and clothing industries are each illustrations of:
   A) countervailing power.
   B) homogeneous oligopoly.
   C) monopolistic competition.
   D) monopoly.

   Ans: C Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition
   Page: 222 Subtopic: Monopolistically competitive industries Type: Application

18. An example of a monopolistically competitive industry would be:
   A) steel.
   B) soybeans.
   C) electricity.
   D) retail clothing.

   Ans: D Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition
   Page: 222 Subtopic: Monopolistically competitive industries Type: Application

19. Concentration ratio measures the:
   A) geographic location of the largest corporations in each industry.
   B) degree to which product price exceeds marginal cost in various industries.
   C) percentage of total sales accounted for by the four largest firms in the industry.
   D) number of firms in an industry.

   Ans: C Level: Easy 9.1 Characteristics of monopolistic competition Page: 222
   Subtopic: Monopolistically competitive industries Type: Definition

20. An industry producing a differentiated product whose four-firm concentration ratio is 18 percent is an example of:
   A) monopolistic competition
   B) oligopoly
   C) monopoly
   D) perfect competition

   Ans: A Level: Moderate 9.1 Characteristics of monopolistic competition
   Page: 222 Subtopic: Monopolistically competitive industries Type: Definition

21. An industry comprised of 40 firms, none of which has more than 3 percent of the total market for a differentiated product is an example of:
    A) monopolistic competition
    B) oligopoly
    C) monopoly
    D) perfect competition

    Ans: A Level: Moderate 9.1 Characteristics of monopolistic competition
    Page: 222 Subtopic: Monopolistically competitive industries Type: Application

22. Suppose that firms in this industry miraculously split up such that there were 100 firms, each with a one percent market share. The four-firm concentration ratio and the Herfindahl Index respectively would be:
    A) 100 percent and 10,000.
    B) 4 percent and 4.
    C) 100 percent and 16.
    D) 4 percent and 16.

    Ans: D Level: Difficult 9.1 Characteristics of monopolistic competition
    Page: 222 Subtopic: Monopolistically competitive industries Type: Calculation

23. The Herfindahl index for a monopolist:
    A) would be 100.
    B) would be 10,000.
    C) would be 100,000.
    D) cannot be calculated.

    Ans: B Level: Moderate 9.1 Characteristics of monopolistic competition
    Page: 222 Subtopic: Monopolistically competitive industries Type: Application

24. Industries X and Y both have four-firm concentration ratios of 65 percent, but the Herfindahl index for X is 1,500 while that for Y is 2,000. These data suggest:
    A) greater market power in X than in Y.
    B) greater market power in Y than in X.
    C) that X is more technologically progressive than Y.
    D) that price competition is stronger in Y than in X.

    Ans: B Level: Moderate 9.1 Characteristics of monopolistic competition
    Page: 222 Subtopic: Monopolistically competitive industries Type: Application

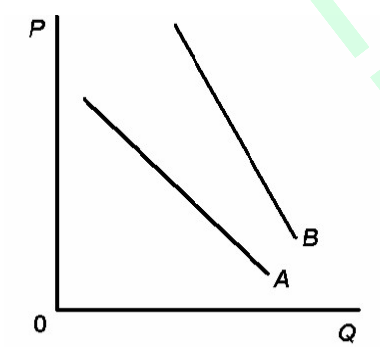
25. If you sum the squares of the market shares of each firm in an industry (as measured by percent of industry sales), you are calculating:
    A) the four-firm concentration ratio.
    B) the Herfindahl index..
    C) the degree of collusion.
    D) the Lerner index

    Ans: B Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition
    Page: 222 Subtopic: Monopolistically competitive industries Type: Definition

26. A monopolistically competitive firm has a:
    A) highly elastic demand curve.
    B) highly inelastic demand curve.
    C) perfectly inelastic demand curve.
    D) perfectly elastic demand curve.

    Ans: A Level: Easy Main Topic: 9.2 Price and output in monopolistic competition
    Page: 223 Subtopic: The firm's demand curve Type: Definition

27. Refer to the graph. A successful advertising campaign by a monopolistically competitive firm will cause the demand curve to shift from:



    A) A to B and become more elastic.
    B) A to B and become less elastic.
    C) B to A and become more elastic.
    D) B to A and become less elastic.

    Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The firm's demand curve Type: Graphic

28. The monopolistically competitive seller's demand curve will become more elastic the:
    A) more significant the barriers to entering the industry.
    B) greater the degree of product differentiation.
    C) larger the number of competitors.
    D) smaller the number of competitors.

    Ans: C Level: Easy Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The firm's demand curve Type: Application

29. The larger the number of firms and the smaller the degree of product differentiation the:
    A) greater the divergence between the demand and the marginal revenue curves of the monopolistically competitive firm.
    B) larger will be the monopolistically competitive firm's fixed costs.
    C) less elastic is the monopolistically competitive firm's demand curve.
    D) more elastic is the monopolistically competitive firm's demand curve.

    Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The firm's demand curve Type: Application

30. The demand curve of a monopolistically competitive producer is:
    A) less elastic than that of either a monopolist or a perfectly competitive seller.
    B) more elastic than that of a monopolist, but less elastic than that of a perfectly competitive seller.
    C) less elastic than that of a monopolist, but more elastic than that of a perfectly competitive seller.
    D) more elastic than that of either a monopolist or a perfectly competitive seller.

    Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The firm's demand curve Type: Application

31. A monopolistically competitive firm's marginal revenue curve:
    A) is downward sloping and coincides with the demand curve.
    B) coincides with the demand curve and is parallel to the horizontal axis.
    C) is downward sloping and lies below the demand curve.
    D) does not exist because the firm is a "price maker."

    Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The firm's demand curve Type: Application

32. In comparing the demand curve of a monopolist with that of a monopolistically competitive firm, we would expect the monopolistic competitor to have a:
   A) perfectly elastic demand curve and the monopolist to have a perfectly inelastic demand curve.
   B) more elastic demand curve.
   C) less elastic demand curve.
   D) demand curve whose elasticity coefficient is one at all possible prices.

   Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The firm's demand curve Type: Application

33. The price elasticity of a monopolistically competitive firm's demand curve varies:
   A) inversely with the number of competitors and the degree of product differentiation.
   B) directly with the number of competitors and the degree of product differentiation.
   C) directly with the number of competitors, but inversely with the degree of product differentiation.
   D) inversely with the number of competitors, but directly with the degree of product differentiation.

   Ans: C Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The firm's demand curve Type: Application

34. The demand curve faced by a monopolistically competitive firm:
   A) is more elastic than the monopolist's demand curve.
   B) is less elastic than the monopolist's demand curve.
   C) is more elastic than the demand curve faced by the perfectly competitive firm.
   D) will shift outward as new firms enter the industry.

   Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The firm's demand curve Type: Application

35. A major difference between perfect competition and monopolistic competition is that under perfect competition:
   A) individual firms have more elastic demand curves.
   B) the market demand curve is less elastic.
   C) there is a smaller number of producers.
   D) there are barriers to entry.

   Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The firm's demand curve Type: Application

36. Which would make an individual firm's demand curve less elastic?
    A) the purchase of more efficient machinery
    B) a reduction in the price of the firm's product
    C) increased brand loyalty toward the firm's product
    D) a reduction in advertising expenditures by the firm

    Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The firm's demand curve Type: Application

37. An important similarity between a monopolistically competitive firm and a monopolist is that both:
    A) realize an economic profit in the long run.
    B) face demand curves which are less than perfectly elastic.
    C) achieve allocative efficiency.
    D) achieve productive efficiency.

    Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The firm's demand curve Type: Application

38. The less elastic a monopolistic competitor's long-run demand curve, the:
    A) less its excess capacity.
    B) higher its price relative to that of a pure competitor having the same cost curves.
    C) higher its long-run profits.
    D) lower its average total cost at its equilibrium level of output.

    Ans: B Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The firm's demand curve Type: Application

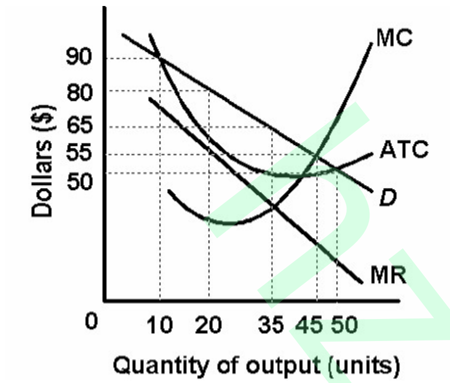
39. Monopolistically competitive firms:
    A) realize normal profits in the short run but losses in the long run.
    B) incur persistent losses in both the short run and long run.
    C) may realize either profits or losses in the short run, but realize normal profits in the long run.
    D) persistently realize economic profits in both the short run and long run.

    Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Application

40. The monopolistically competitive seller maximizes profit by producing at the point where:
    A) total revenue is at a maximum.
    B) average costs are at a minimum.
    C) price equals marginal cost.
    D) marginal revenue equals marginal cost.

    Ans: D Level: Easy Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Application

Use the following to answer questions 41- 43:



41. For the monopolistically competitive firm depicted above, it can be said that the firm is:

    A) making economic profit in the long run.
    B) making economic profit in the short run.
    C) earning only normal profit in the long run.
    D) earning only normal profit in the short run.

    Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Graphic

42. Refer to the graph above. In the short run, this monopolistically competitive firm will set price at:
    A) $65 and produce 45 units of output.
    B) $65 and produce 35 units of output.
    C) $50 and produce 35 units of output.
    D) $50 and produce 50 units of output.

    Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Graphic

43. Refer to the graph above. At the profit-maximizing level of short-run output, this monopolistically competitive firm will be making a profit of:
    A) $275.
    B) $350.
    C) $500.
    D) $525.

    Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Graphic

44. A monopolistically competitive firm is producing at a short-run output level where average total cost is $10.00, marginal cost is $5.00, marginal revenue is $6.00, and price is $12.00. In the short run, the firm should:
    A) decrease the level of output.
    B) increase the level of output.
    C) make no change in the level of output.
    D) increase product price.

    Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Application

45. A monopolistically competitive firm is operating at a short-run level of output where price is $21, average total cost is $15, marginal cost is $13, and marginal revenue is $13. In the short run this firm should:
    A) reduce product price.
    B) increase the level of output.
    C) decrease the level of output.
    D) make no change in the level of output.

    Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Application

Use the following to answer questions 46-47:

Price	Quantity Demanded	Total cost	Output
$20	1	$10	1
18	2	20	2
16	3	29	3
14	4	36	4
12	5	40	5
10	6	42	6

46. Refer to the table above. What output will the profit-maximizing monopolistic competitor produce?
A) 5
B) 4
C) 3
D) 6

Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Calculation

47. Refer to the table above. What will be the economic profit or loss for this monopolistic competitor at the profit-maximizing level of output?
A) -$15
B) +$10
C) +$20
D) +$27

Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Calculation

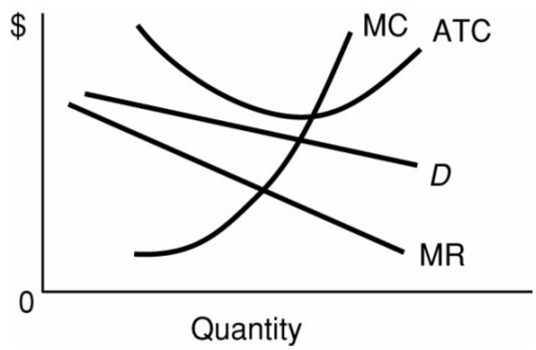
48. In the short run a monopolistically competitive firm's economic profit:
A) will be maximized where price equals average total cost.
B) may be positive, zero, or negative.
C) are always positive.
D) will always be zero.

Ans: B Level: Easy Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Application

49. In the short-run, the monopolistically competitive firm will experience:
A) an economic profit, and also one in the long-run.
B) a normal profit, but in the long-run only an economic profit.
C) economic profits and losses, but in the long-run only a normal profit.
D) economic profits and losses, but in the long-run only an economic profit.

Ans: C Level: Easy Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Application

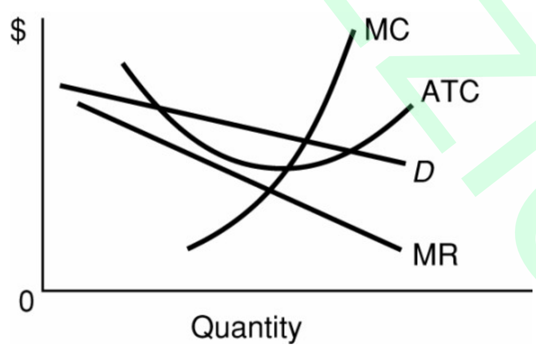
50. The monopolistically competitive firm shown in the figure:



A) is in long-run equilibrium.
B) might realize an economic profit or a loss, depending on its choice of output level.
C) can not realize an economic profit.
D) can not operate profitably.

Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Graphic

51. The monopolistically competitive firm shown in the figure:



A) will realize allocative efficiency at its profit-maximizing output.
B) cannot operate at a loss.
C) is in long-run equilibrium.
D) is realizing an economic profit.

Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Graphic

Use the following to answer questions 52-54:

Demand Data			Cost Data	
(1) Price	(2) Price	(3) Quantity	Total Output	cost
$11	$10	6	6	$61
9.99	8.85	7	7	62
9	8	8	8	64
8	7	9	9	67
7.10	6.10	10	10	72
6	5	11	11	79
5.15	4.15	12	12	86

52. If columns (1) and (3) of the demand data shown above are this firm's demand schedule, the profit-maximizing level of output will be:
A) 12 units.
B) 8 units.
C) 10 units.
D) 9 units.

Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Calculation

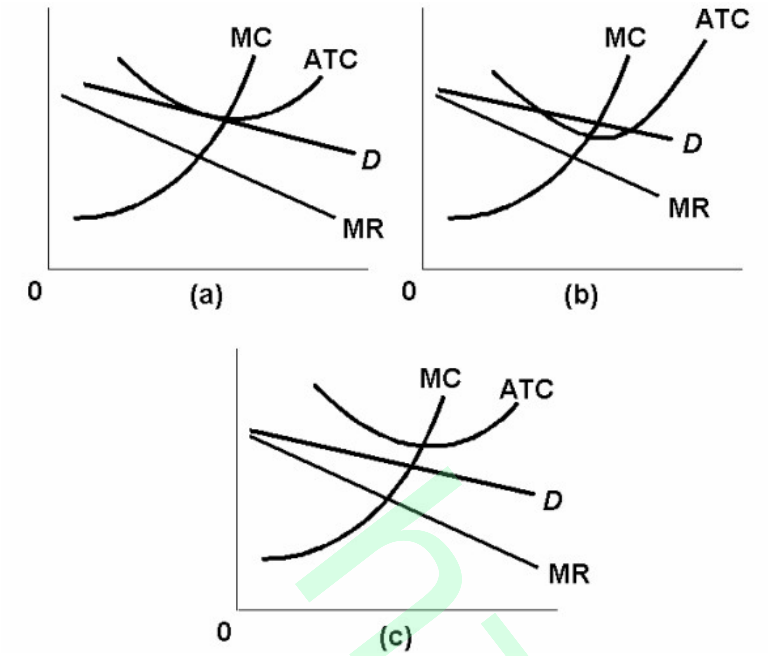
53. If columns (1) and (3) of the demand data shown above are this firm's demand schedule, the profit-maximizing price will be:
A) $9.
B) $7.
C) $11.
D) $6.

Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Application

54. If columns (1) and (3) of the demand data shown above are this firm's demand schedule, economic profit will be:
A) $10.
B) $19.
C) $6.
D) $8.

Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Calculation

Use the following to answer questions 55-56:



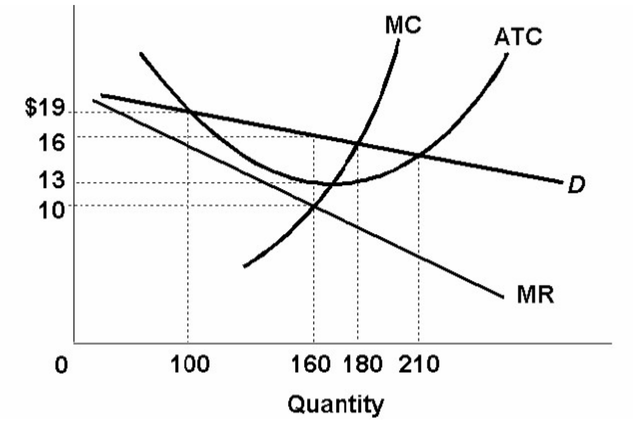
55. Refer to the diagrams above, which pertain to monopolistically competitive firms. Short-run equilibrium entailing economic loss is shown by:
A) diagram c only.
B) diagram b only.
C) diagram a only.
D) both diagrams a and c.

Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Graphic

56. Refer to the diagrams above, which pertain to monopolistically competitive firms. A short-run equilibrium entailing economic profits is shown by:
A) diagram a only.
B) diagram b only.
C) diagram c only.
D) both diagrams b and c.

Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Graphic

Use the following to answer questions 57-59:



57. Refer to the above diagram for a monopolistically competitive firm in short-run equilibrium. This firm's profit-maximizing price will be:
A) $16.
B) $13.
C) $10.
D) $19.

Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Graphic

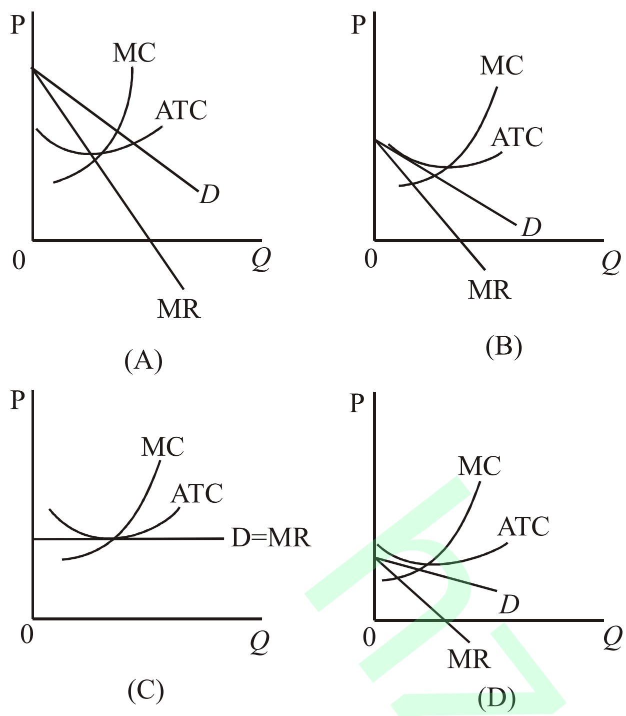
58. Refer to the above diagram for a monopolistically competitive firm in short-run equilibrium. The profit-maximizing output for this firm will be:
A) 210.
B) 180.
C) 100.
D) 160.

Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Graphic

59. Refer to the above diagram for a monopolistically competitive firm in short-run equilibrium. This firm will realize an economic:
A) loss of $320.
B) loss of $280.
C) profit of $480.
D) profit of $600.

Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The short run: Profit or loss Type: Graphic

Use the following to answer questions 60-63:



60. Refer to the graphs above. A short-run equilibrium that would produce profits for a monopolistically competitive firm would be represented by graph:
    A) A.
    B) B.
    C) C.
    D) D.

    Ans: A   Level: Moderate   Main Topic: 9.2 Price and output in monopolistic competition   Page: 223   Subtopic: The short run: Profit or loss   Type: Graphic

61. Refer to the graphs above. A short-run equilibrium that would produce losses for a monopolistically competitive firm would be represented by graph:
    A) A.
    B) B.
    C) C.
    D) D.

    Ans: D   Level: Moderate   Main Topic: 9.2 Price and output in monopolistic competition   Page: 223   Subtopic: The short run: Profit or loss   Type: Graphic

62. Refer to the graphs above. The long-run equilibrium for a monopolistically competitive firm is represented by graph:
A) A.
B) B.
C) C.
D) D.

Ans: B Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223 Subtopic: The long run: Only a normal profit
Type: Graphic

63. Refer to the graphs above. Which graph would not be a possible depiction of short-run or long-run outcomes for a monopolistically competitive firm?
A) A
B) B
C) C
D) D

Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit
Type: Graphic

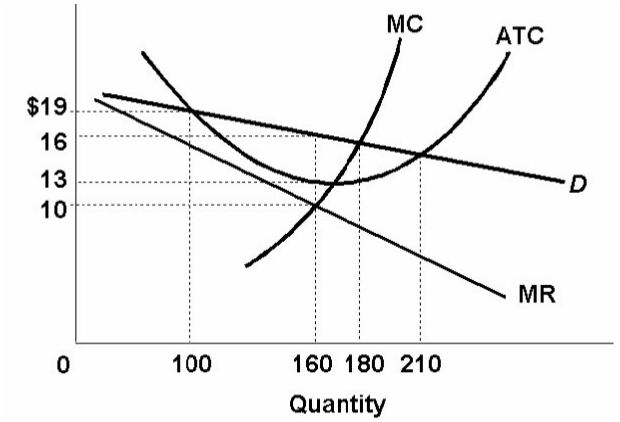
64. In long-run equilibrium a monopolistically competitive firm's price will:
A) be less than both MC and ATC.
B) exceed MC, but equal ATC.
C) exceed ATC, but equal MC.
D) exceed both MC and ATC.

Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit
Type: Application

65. Which of the following is correct for a monopolistically competitive firm in long-run equilibrium?
A) P exceeds minimum ATC.
B) MC exceeds MR
C) MC = ATC
D) P = MC

Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit
Type: Formula

66. Refer to the diagram below for a monopolistically competitive firm in short-run equilibrium. Assume the firm is part of an increasing-cost industry. In the long run firms will:



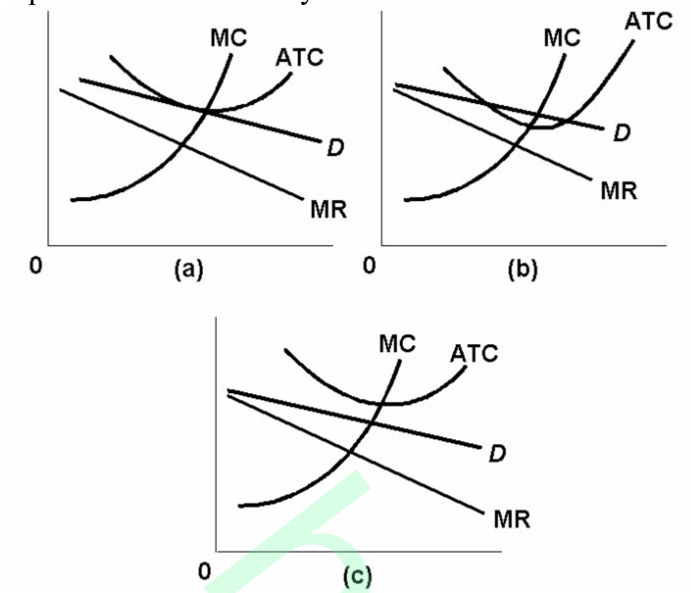
A) leave this industry, causing both demand and the ATC curve to shift upward.
B) enter this industry, causing demand to rise and the ATC curve to shift downward.
C) enter this industry, causing demand to fall and the ATC curve to shift upward.
D) enter this industry, causing both demand and the ATC curve to shift upward.

Ans: C Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Graphic

67. Long-run equilibrium for a monopolistically competitive firm where economic profits are zero results from:
A) relatively easy entry..
B) a perfectly elastic product demand curve.
C) rising marginal costs.
D) product differentiation and development.

Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Application

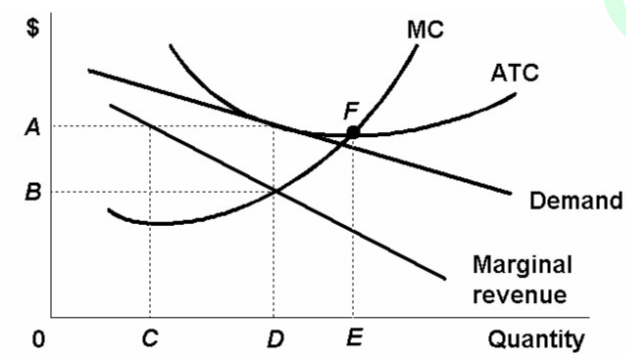
68. Refer to the diagrams, which pertain to monopolistically competitive firms. Long-run equilibrium is shown by:



A) diagram a only.
B) diagram b only.
C) diagram c only.
D) both diagrams b and c.

Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Graphic

Use the following to answer questions 69-71:



69. Refer to the above diagram for a monopolistically competitive firm. Long-run equilibrium price will be:
    A) above A.
    B) EF.
    C) B.
    D) A.

    Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Graphic

70. Refer to the above diagram for a monopolistically competitive firm. Long-run equilibrium output will be:
    A) greater than E.
    B) D.
    C) E.
    D) C.

    Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Graphic

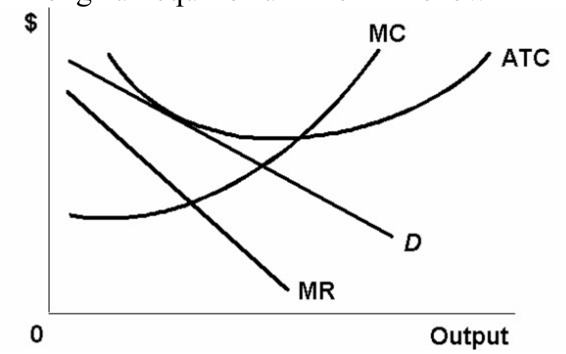
71. Refer to the above diagram for a monopolistically competitive firm. If more firms would enter the industry and product differentiation would weaken:
    A) resource misallocation would become more severe.
    B) the demand curve would become more elastic.
    C) equilibrium output would decline and equilibrium price would rise.
    D) equilibrium output would decline and equilibrium price would fall.

    Ans: B Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Graphic

72. Suppose some firms exit an industry characterized by monopolistic competition. We would expect the demand curve of a firm already in the industry to:
    A) shift to the right.
    B) shift to the left.
    C) become more elastic.
    D) remain the same since entering firms serve other customers in the market.

    Ans: A Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Application

73. In long-run equilibrium the firm shown in the diagram below will:



A) earn a normal profit.
B) go bankrupt.
C) realize a loss.
D) realize an economic profit.

Ans: A   Level: Moderate   Main Topic: 9.2 Price and output in monopolistic competition   Page: 223-224   Subtopic: The long run: Only a normal profit   Type: Graphic

74. When a monopolistically competitive firm is in long-run equilibrium:
A) production takes place where ATC is minimized.
B) marginal revenue equals marginal cost and price equals average total cost.
C) normal profit is zero and price equals marginal cost.
D) economic profit is zero and price equals marginal cost.

Ans: B   Level: Difficult   Main Topic: 9.2 Price and output in monopolistic competition   Page: 223-224   Subtopic: The long run: Only a normal profit   Type: Application

75. In the long run new firms will enter a monopolistically competitive industry:
A) provided economies of scale are being realized.
B) even though losses are incurred in the short run.
C) until minimum average total cost is achieved.
D) until economic profits are zero.

Ans: D   Level: Moderate   Main Topic: 9.2 Price and output in monopolistic competition   Page: 223-224   Subtopic: The long run: Only a normal profit   Type: Application

76. If some firms leave a monopolistically competitive industry, the demand curves of the remaining firms will:
    A) be unaffected.
    B) shift to the left.
    C) become more elastic.
    D) shift to the right.

    Ans: D Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Application

77. When a monopolistically competitive firm is in long-run equilibrium:
    A) $P = MC = ATC$.
    B) $MR = MC$ and minimum $ATC > P$.
    C) $MR > MC$ and $P =$ minimum ATC.
    D) $MR = MC$ and $P >$ minimum ATC.

    Ans: D Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Formula

78. Other things equal, if more firms enter a monopolistically competitive industry:
    A) the demand curves facing existing firms would shift to the right.
    B) the demand curves facing existing firms would shift to the left.
    C) the demand curves facing existing firms would become less elastic.
    D) losses would necessarily occur.

    Ans: B Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Application

79. Which of the following statements is correct?
    A) Perfectly competitive firms, monopolistically competitive firms, and pure monopolies all earn zero economic profits in the long run.
    B) Perfectly competitive firms, monopolistically competitive firms, and pure monopolies all earn positive economic profits in the long run.
    C) In the long run perfectly competitive firms and monopolistically competitive firms earn zero economic profits, while pure monopolies may or may not earn economic profits.
    D) Monopolistically competitive firms earn zero economic profits in both the short run and the long run.

    Ans: C Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Application

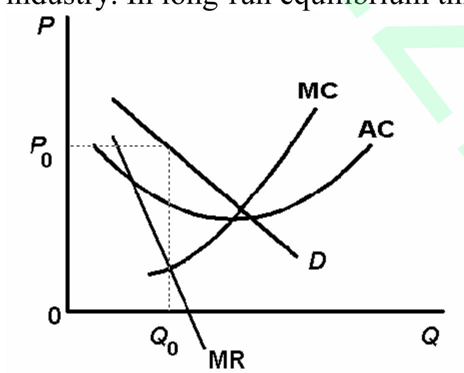
80. For a monopolistically competitive firm in long-run equilibrium:
    A) price will equal marginal cost.
    B) price will equal average total cost.
    C) marginal revenue will exceed marginal cost.
    D) economic profits will be some positive amount.

    Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Application

81. In long-run equilibrium both perfectly competitive and monopolistically competitive firms will:
    A) produce at minimum average total cost.
    B) earn economic profits.
    C) achieve allocative efficiency.
    D) equate marginal cost and marginal revenue.

    Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Application

82. The graph below represents a monopolistically competitive firm in a constant-cost industry. In long-run equilibrium this firm will:



    A) continue to earn economic profits because it has monopolistic power to set its price.
    B) become a perfectly competitive firm because there are no significant barriers to entry.
    C) break even because average total cost (ATC) and marginal cost (MC) will increase as more firms enter the market.
    D) break even because its demand curve will fall and become more elastic as it loses sales to other firms entering the market.

    Ans: D Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Graphic

83. The long-run equilibrium position of the monopolistically competitive firm is where average costs are:
A) constant.
B) increasing.
C) decreasing.
D) at their minimum point.

Ans: C Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Application

84. Which of the following statements concerning a monopolistically competitive industry is correct?
A) If there are short-run losses, firms will leave the industry and the demand curves of the remaining firms will shift to the right.
B) If there are short-run economic profits, firms will enter the industry and the demand curves of existing firms will shift to the right.
C) If there are short-run losses, firms will leave the industry and the demand curves of the remaining firms will shift to the left.
D) If there are short-run economic profits, firms will leave the industry and the demand curves of the remaining firms will shift to the right.

Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Application

85. An important similarity between a monopolistically competitive firm and a perfectly competitive firm is that:
A) both face perfectly elastic demand schedules.
B) economic profit tends toward zero for both.
C) both realize productive efficiency.
D) both realize allocative efficiency.

Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Application

86. In long-run equilibrium in a monopolistically competitive industry:
A) P = minimum AC.
B) P > minimum AC.
C) P = MC.
D) P < MC.

Ans: B Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Formula

87. With the demand schedule shown below by columns (2) and (3), in long-run equilibrium:

Demand Data			Cost Data	
(1) Price	(2) Price	(3) Quantity	Output	Total cost
$11	$10	6	6	$61
9.99	8.85	7	7	62
9	8	8	8	64
8	7	9	9	67
7.10	6.10	10	10	72
6	5	11	11	79
5.15	4.15	12	12	86

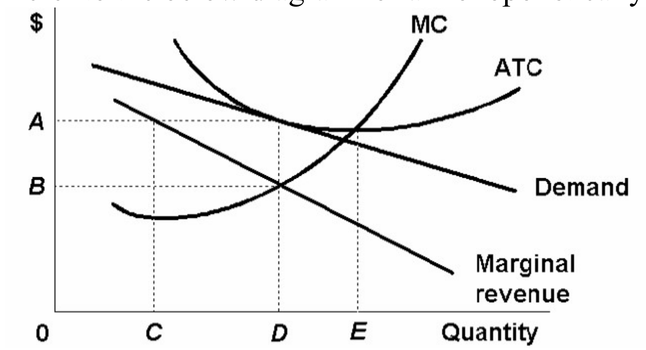
A) price will equal average total cost.
B) total cost will exceed total revenue.
C) marginal cost will exceed price.
D) price will equal marginal revenue.

Ans: A Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Application

88. In long-run equilibrium, a profit-maximizing firm in a monopolistically competitive industry will produce the quantity of output where:
A) AC = P, MR = MC = P.
B) AC < P, MR = MC = P.
C) AC < P, MR + MC < P.
D) AC = P, MR = MC < P.

Ans: D Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Formula

89. Refer to the below diagram for a monopolistically competitive producer. The firm is:



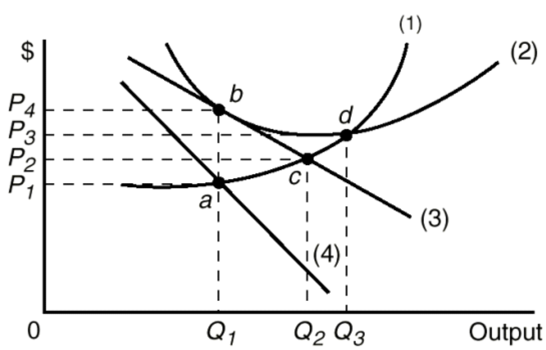
A) minimizing losses in the long run.
B) minimizing losses in the short run.
C) realizing a normal profit in the long run.
D) about to leave the industry.

Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Graphic

90. In the long run a monopolistically competitive firm:
A) earns an economic profit.
B) produces where P = ATC.
C) produces where MR exceeds MC.
D) achieves allocative efficiency.

Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Application

Use the following to answer questions 91-92:



91. Refer to the above graph of the representative firm in monopolistic competition. The long-run equilibrium price and output for this firm will be:
    A) P_1 and Q_1.
    B) P_2 and Q_2.
    C) P_3 and Q_3.
    D) P_4 and Q_1.

    Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Subtopic: The long run: Only a normal profit Type: Graphic

92. Refer to the above graph of the representative firm in monopolistic competition. Excess capacity for this firm would be illustrated by:
    A) Q_2 - Q_1.
    B) Q_3 - Q_2.
    C) Q_3 - Q_1.
    D) Q_1 + Q_3.

    Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 225-226 Subtopic: Monopolistic competition and efficiency Type: Graphic

93. Which of the following is correct?
    A) The excess capacity problem diminishes as the monopolistically competitive firm's demand curve becomes less elastic.
    B) The excess capacity problem means that monopolistically competitive firms typically produce at some point on the rising segment of their average total cost curve.
    C) The greater the degree of product variation, the lesser is the excess capacity problem.
    D) The greater the degree of product variation, the greater is the excess capacity problem.

    Ans: D Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 225-226 Subtopic: Monopolistic competition and efficiency Type: Application

94. Which of the following is not characteristic of monopolistic competition?
   A) relatively large numbers of sellers
   B) product differentiation
   C) production at minimum ATC in the long-run
   D) relatively easy entry to the industry

   Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 225-226 Subtopic: Monopolistic competition and efficiency Type: Application

95. Which of the following is not characteristic of long-run equilibrium under monopolistic competition?
   A) price equals minimum average total cost
   B) marginal cost equals marginal revenue
   C) price is equal to average total cost
   D) price exceeds marginal cost

   Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 225-226 Subtopic: Monopolistic competition and efficiency Type: Application

96. In long-run equilibrium a monopolistically competitive firm will:
   A) earn an economic profit.
   B) realize all economies of scale.
   C) equate price and marginal cost.
   D) have excess production capacity.

   Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 225-226 Subtopic: Monopolistic competition and efficiency Type: Application

97. "Excess capacity" refers to the:
   A) amount by which actual production falls short of the minimum ATC output.
   B) fact that entry barriers artificially reduce the number of firms in an industry.
   C) differential between price and marginal costs which characterizes monopolistically competitive firms.
   D) fact that most monopolistically competitive firms encounter diseconomies of scale.

   Ans: A Level: Easy Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Definition

98. Monopolistic competition is characterized by excess capacity because:
    A) firms are always profitable in the long run.
    B) firms charge a price that is less than marginal cost.
    C) firms produce at an output level less than the least-cost output.
    D) the demand for a product is perfectly elastic in this type of industry.

    Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

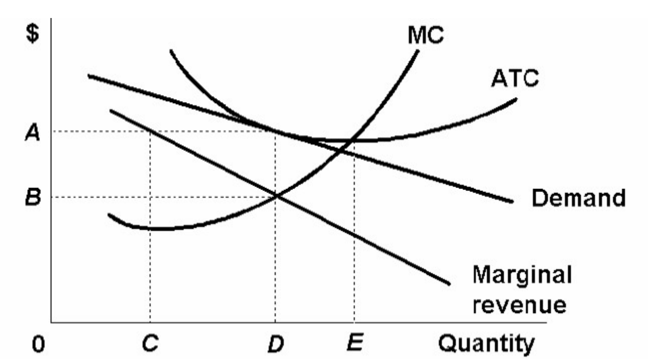
99. In the long run, the representative firm in monopolistic competition tends to have:
    A) excess capacity.
    B) economic profits.
    C) limited product differentiation.
    D) a perfectly elastic demand curve.

    Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

100. The less elastic a monopolistic competitor's long-run demand curve, the:
    A) greater its excess capacity.
    B) lower its price relative to that of a pure competitor having the same cost curves.
    C) higher its long-run economic profit.
    D) lower its average total cost at its equilibrium level of output.

    Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

Use the following to answer questions 101-102:



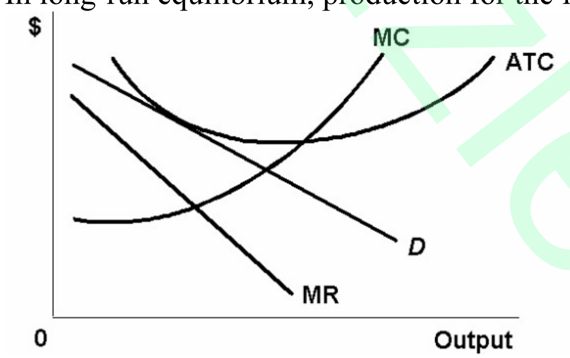
101. Refer to the above diagram for a monopolistically competitive producer. This firm is experiencing:
A) a shortage of production capacity.
B) excess capacity of CD.
C) excess capacity of DE.
D) diseconomies of scale.

Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Graphic

102. Refer to the above diagram for a monopolistically competitive producer. If this firm were to realize productive efficiency, it would:
A) also realize an economic profit.
B) realize a loss.
C) also achieve allocative efficiency.
D) have to produce a smaller output.

Ans: B Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Graphic

103. In long-run equilibrium, production for the firm shown in the diagram below is:



A) greater than would occur under perfect competition.
B) less efficient than in a perfectly competitive market.
C) more efficient than in a perfectly competitive market.
D) optimally efficient.

Ans: B Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Graphic

104. In long-run equilibrium monopolistic competition entails:
A) an efficient allocation of resources.
B) an overallocation of resources.
C) an underallocation of resources.
D) production at the minimum attainable average total cost.

Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

105. The more elastic a monopolistic competitor's long-run demand curve, the:
A) greater its excess capacity.
B) the higher its price relative to that of a pure competitor having the same cost curves.
C) lower its long-run profit.
D) lower its average total cost at its equilibrium level of output.

Ans: D Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

106. Monopolistically competitive industries are inefficient because:
A) they realize diseconomies of scale.
B) advertising costs retard technological advance and product development.
C) monopolistically competitive industries are overpopulated with firms whose plants are underutilized.
D) monopolistically competitive sellers engage in misleading advertising.

Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Definition

107. Inefficiencies occur under monopolistic competition because:
A) each firm's demand curve becomes more elastic as we move down the curve.
B) each firm's marginal revenue curve coincides with its demand curve.
C) each firm's downward sloping demand curve is tangent to the ATC curve in the long run.
D) entry barriers greatly restrict the entry of new firms.

Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

108. In monopolistic competition there is an underallocation of resources at the profit-maximizing level of output, which means that:
   A) minimum ATC is less than MC.
   B) minimum ATC is less than MR.
   C) price is greater than minimum ATC.
   D) price is greater than MC.

   Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

109. Monopolistic competitive firms are productively inefficient because production occurs where:
   A) marginal cost is greater than marginal revenue.
   B) marginal cost is less than marginal revenue.
   C) average total cost is greater than the minimum average total cost.
   D) average total cost is less than the difference between average total cost and average variable cost.

   Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

110. In monopolistically competitive markets resources are:
   A) overallocated because long-run equilibrium occurs where price exceeds marginal cost.
   B) underallocated because long-run equilibrium occurs where price exceeds marginal cost.
   C) overallocated because long-run equilibrium occurs where marginal cost exceeds price.
   D) underallocated because long-run equilibrium occurs where marginal cost exceeds price.

   Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

111. In long-run equilibrium a monopolistically competitive producer achieves:
   A) neither "productive efficiency" nor "allocative efficiency."
   B) both "productive efficiency" and "allocative efficiency."
   C) "productive efficiency," but not "allocative efficiency."
   D) "allocative efficiency," but not "productive efficiency."

   Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

112. The economic inefficiency of monopolistic competition means that:
   A) industries tend to evolve into oligopolies rather than become more competitive.
   B) industries spend money on advertising and sales promotion.
   C) producers produce at an output short of, and charge a price greater than, minimum average total cost.
   D) firms do not maximize profits at the MC equals MR output.

   Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

113. Which statement is true?
   A) Monopoly will result in higher price and a larger output than perfect competition.
   B) Monopoly will result in a higher price and a larger output than monopolistic competition.
   C) Perfect competition will result in a lower price and a higher output than monopolistic competition.
   D) Monopolistic competition will result in a lower price and a lower output than perfect competition.

   Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

114. Which statement concerning monopolistic competition is false?
   - A) Long-run equilibrium under monopolistic competition is achieved where economic profits are zero.
   - B) Monopolistic competition is likely to result in a greater variety of product brands than perfect competition.
   - C) The monopolistic competitive demand curve is more elastic than the demand curve facing a monopolistic firm.
   - D) Monopolistic competition does not lead to any economic inefficiency, since firms in this industry cannot sustain economic profits.

   Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

115. Which is true of perfect competition but not of monopolistic competition?
   - A) There are barriers to entry.
   - B) Long-run economic profits are zero.
   - C) There are a large number of firms in the market.
   - D) Long-run equilibrium occurs at the minimum point on the ATC curve.

   Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

116. Given identical costs, the long-run equilibrium of a perfectly competitive firm differs from that of a monopolistically competitive firm in that:
   - A) price and output are both greater under perfect competition.
   - B) price is greater, but quantity is the same, under perfect competition.
   - C) both price and quantity are lower under perfect competition.
   - D) price is lower, but quantity is greater, under perfect competition.

   Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

117. Were a monopolistically competitive industry in long-run equilibrium, a firm in that industry might be able to increase its economic profits by:
   - A) decreasing the price of its product.
   - B) increasing the price of its product.
   - C) increasing the demand for its product.
   - D) decreasing the production of its product.

   Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Subtopic: Monopolistic competition and efficiency Type: Application

118. The economic inefficiencies of monopolistic competition may be offset by the fact that:
A) advertising expenditures shift the average cost curve upward.
B) available capacity is fully utilized.
C) resources are optimally allocated to the production of the product.
D) consumers have a number of variations of the product from which to choose.

Ans: D Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 227 Subtopic: Benefits of product variety Type: Application

119. Compared to perfect competition, monopolistic competition:
A) provides greater product differentiation at the cost of some excess capacity.
B) offers less product differentiation but attains equal productive efficiency.
C) provides greater product differentiation and achieves greater productive efficiency.
D) offers less product differentiation and lower productive efficiency.

Ans: A Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 227 Subtopic: Benefits of product variety Type: Application

120. When the excess capacity problem under monopolistic competition becomes greater, there will be:
A) a narrower range of consumer choice.
B) fewer advertisements and promotions.
C) a wider range of consumer choice.
D) more entry by firms into the market.

Ans: C Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 227 Subtopic: Benefits of product variety Type: Application

121. The variety of products and product features which consumers may choose from in monopolistically competitive industries:
A) at least partially offsets the economic inefficiencies of this market structure.
B) leads to an optimal allocation of resources in the market structure.
C) guarantees that firms produce at full-capacity output levels.
D) makes the demand curves facing firms in these industries more elastic.

Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 227 Subtopic: Benefits of product variety Type: Application

122. In practice, the monopolistic competitive firms have to juggle three factors in order to maximize their profit. These factors are:
A) the behaviour of other competitors, price of the product, and the demand curve.
B) price of the product, quantity of output, and advertising.
C) advertising, price of the product , and marginal revenue.
D) marginal revenue, quantity of output, and advertising.

Ans: B Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 227 Subtopic: Further complexity Type: Application

123. The complexity in the ability of the firms to engage in nonprice competition under the monopolistic competition market structure is attributed to:
A) the assumption of a given product and a given level of advertising expenditure.
B) the assumption of a given price and quality of the product.
C) the assumption of a given marginal revenue.
D) the assumption of a given number of competitors.

Ans: A Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 227 Subtopic: Further complexity Type: Application

124. Oligopolistic industries are characterized by:
A) a few dominant firms and substantial entry barriers.
B) a few dominant firms and no barriers to entry.
C) a large number of firms and low entry barriers.
D) a few dominant firms and low entry barriers.

Ans: A Level: Easy Main Topic: 9.3 Oligopoly Page: 228 Subtopic: A few large producers Type: Definition

125. The characteristic most closely associated with oligopoly is:
A) easy entry into the industry.
B) a few large producers.
C) product standardization.
D) no control over price.

Ans: B Level: Easy Main Topic: 9.3 Oligopoly Page: 228 Subtopic: A few large producers Type: Application

126. An industry comprised of a small number of firms, each of which considers the potential reactions of its rivals in making price-output decisions is called:
A) monopolistic competition
B) oligopoly
C) monopoly
D) perfect competition

Ans: B   Level: Easy   Main Topic: 9.3 Oligopoly   Page: 228
Subtopic: A few large producers   Type: Application

127. The term "oligopoly" indicates:
A) a one-firm industry.
B) many producers of a differentiated product.
C) a few firms producing either a differentiated or a homogeneous product.
D) an industry whose four-firm concentration ratio is low.

Ans: C   Level: Easy   Main Topic: 9.3 Oligopoly   Page: 228
Subtopic: Homogeneous or differentiated products   Type: Definition

128. Product differentiation is present in:
A) perfectly competitive markets only.
B) monopolistically competitive markets only.
C) oligopolistic markets only.
D) both monopolistically competitive and oligopolistic markets.

Ans: D   Level: Easy   Main Topic: 9.3 Oligopoly   Page: 228
Subtopic: Homogeneous or differentiated products   Type: Application

129. The copper, aluminum, cement, and industrial alcohol industries are examples of:
A) interproduct competition.
B) homogeneous oligopoly.
C) monopolistic competition.
D) differentiated oligopoly.

Ans: B   Level: Easy   Main Topic: 9.3 Oligopoly   Page: 228
Subtopic: Homogeneous or differentiated products   Type: Application

130. Which of the following industries is an illustration of homogeneous oligopoly?
A) household laundry equipment
B) cigarettes
C) aluminum
D) the auto industry

Ans: C   Level: Easy   Main Topic: 9.3 Oligopoly   Page: 228
Subtopic: Homogeneous or differentiated products   Type: Application

131. Homogeneous oligopoly exists where a small number of firms are:
A) producing virtually identical products.
B) setting price and output independently.
C) setting price and output collusively.
D) producing differentiated products.

Ans: A Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Homogeneous or differentiated products Type: Definition

132. Which products are produced in an industry that best illustrates the concept of homogeneous oligopoly?
A) television receivers
B) cigarettes
C) copper
D) automobiles

Ans: C Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Homogeneous or differentiated products Type: Application

133. In an oligopolistic market:
A) one firm is always dominant.
B) products may be standardized or differentiated.
C) the four largest firms account for 20 percent or less of total sales.
D) the industry is monopolistically competitive.

Ans: B Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Homogeneous or differentiated products Type: Application

134. The automobile, household appliance, and brewery industries are all illustrations of:
A) homogeneous oligopoly.
B) monopolistic competition.
C) monopoly.
D) differentiated oligopoly.

Ans: D Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Homogeneous or differentiated products Type: Application

135. Which of the following is the best example of oligopoly?
A) women's dress manufacturing
B) automobile manufacturing
C) restaurants
D) cotton farming

Ans: B Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Homogeneous or differentiated products Type: Application

136. Oligopolistic industries:
A) are characterized by a relatively large number of small sellers.
B) may produce either standardized or differentiated products.
C) always produce differentiated products.
D) always produce standardized products.

Ans: B Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Homogeneous or differentiated products Type: Application

137. Which industry would be the best example of an oligopoly?
A) steel
B) beef
C) fast food
D) retail clothing

Ans: A Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Homogeneous or differentiated products Type: Application

138. Which of the following is an example of a differentiated oligopoly?
A) the beer industry
B) the primary aluminum industry
C) the polyester fibre industry
D) the cement industry

Ans: A Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Homogeneous or differentiated products Type: Application

139. Which of the following is an illustration of differentiated oligopoly?
A) the aluminum industry
B) the steel industry
C) the soft drink industry
D) retail stores in large cities

Ans: C Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Homogeneous or differentiated products Type: Application

140. Differentiated oligopoly exists where a small number of firms are:
A) producing goods which differ in terms of quality and design.
B) setting price and output collusively.
C) setting price and output independently.
D) producing virtually identical products.

Ans: A Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Homogeneous or differentiated products Type: Definition

141. The mutual interdependence which characterizes oligopoly arises because:
A) the products of various firms are homogeneous.
B) the products of various firms are differentiated.
C) a small number of firms produce a large proportion of industry output.
D) the demand curves of firms are kinked at the prevailing price.

Ans: C Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Control over price, but mutual interdependence Type: Application

142. Oligopoly is difficult to analyze primarily because:
A) the number of firms is too large to make collusion understandable.
B) the price and output decisions of any one firm depend on the reactions of its rivals.
C) output may be either homogenous or differentiated.
D) neither allocative nor productive efficiency is achieved.

Ans: B Level: Moderate Main Topic: 9.3 Oligopoly Page:228
Subtopic: Control over price, but mutual interdependence Type: Application

143. Oligopoly is more difficult to analyze than other market models because:
A) the number of firms is so large that market behaviour cannot be accurately predicted.
B) the marginal cost and marginal revenue curves of an oligopolist play no part in the determination of equilibrium price and quantity.
C) of mutual interdependence and the fact that oligopoly outcomes are less certain than in other market models.
D) unlike the firms of other market models, it cannot be assumed that oligopolists are profit maximizers.

Ans: C Level: Moderate Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Control over price, but mutual interdependence Type: Application

144. A unique feature of an oligopolistic industry is:
A) low barriers to entry.
B) standardized products.
C) diminishing marginal returns.
D) mutual interdependence.

Ans: D Level: Moderate Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Control over price, but mutual interdependence Type: Application

145. Which would be most characteristic of oligopoly?
A) easy entry into the industry
B) many large producers
C) product standardization
D) mutual interdependence

Ans: D Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Control over price, but mutual interdependence Type: Application

146. Which of the following is a unique feature of oligopoly?
A) mutual interdependence
B) advertising expenditures
C) product differentiation
D) nonprice competition

Ans: A Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Control over price, but mutual interdependence Type: Application

147. "Mutual interdependence" means that each oligopolistic firm:
A) faces a perfectly elastic demand for its product.
B) must consider the reactions of its rivals when it determines its price policy.
C) produces a product identical to those of its rivals.
D) produces a product similar but not identical to the products of its rivals.

Ans: B Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Control over price, but mutual interdependence Type: Definition

148. Which is a likely characteristic of a differentiated oligopolistic market?
A) There are minimal barriers to entry.
B) The market demand curve is inelastic.
C) There is minimal advertising expenditure.
D) Price and output decisions of firms are interdependent.

Ans: D Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Subtopic: Control over price, but mutual interdependence Type: Application

149. A major distinction between a monopolistically competitive firm and an oligopolistic firm is that:
   A) one is a price taker and the other is a price maker.
   B) a recognized interdependence exists between firms in one industry but not in the other.
   C) one always produces differentiated products and the other always produces a homogeneous product.
   D) one necessarily faces a downward-sloping demand curve and the other a horizontal demand curve.

   Ans: B Level: Moderate Main Topic: 9.3 Oligopoly Page: 228
   Subtopic: Control over price, but mutual interdependence Type: Application

150. Clear-cut mutual interdependence with respect to the price-output policies exists in:
   A) monopoly
   B) oligopoly
   C) monopolistic competition
   D) perfect competition

   Ans: B Level: Easy Main Topic: 9.3 Oligopoly Page: 228
   Subtopic: Control over price, but mutual interdependence Type: Application

151. In which of the following industry structures is the entry of new firms the most difficult?
   A) monopoly
   B) oligopoly
   C) monopolistic competition
   D) perfect competition

   Ans: A Level: Easy Main Topic: 9.3 Oligopoly Page: 228-229
   Subtopic: Entry barriers Type: Application

152. In which set of market models are there the most significant barriers to entry?
   A) monopolistic competition and perfect competition.
   B) monopolistic competition and monopoly.
   C) oligopoly and monopolistic competition.
   D) oligopoly and monopoly.

   Ans: D Level: Easy Main Topic: 9.3 Oligopoly Page: 228-229
   Subtopic: Entry barriers Type: Application

153. Barriers to entry in oligopolistic industries may consist of:
   A) economies of scale.
   B) patents.
   C) ownership of essential resources.
   D) all of the above.

   Ans: D Level: Easy Main Topic: 9.3 Oligopoly Page: 228-229
   Subtopic: Entry barriers Type: Application

154. If there are significant economies of scale in an industry, then:
   A) a firm which is large may be able to produce at a lower unit cost than can a small firm.
   B) a firm which is large will have to charge a higher price than will a small firm.
   C) entry to that industry will be easy.
   D) firms must differentiate their products to earn economic profits.

   Ans: A Level: Moderate Main Topic: 9.3 Oligopoly Page: 228-229
   Subtopic: Entry barriers Type: Application

155. Steel, airlines, banking, and entertainment industries are different examples of:
   A) oligopolistic industries producing homogeneous products.
   B) monopolistic competitive industries producing homogeneous products.
   C) industries which have gained substantial market power through merging.
   D) industries producing under perfectly competitive market structure.

   Ans: C Level: Easy Main Topic: 9.3 Oligopoly Page: 229
   Subtopic: Mergers Type: Application

156. Concentration ratios:
   A) may overstate the degree of competition because they ignore imported products.
   B) may overstate the degree of competition because interindustry competition is ignored.
   C) may understate the degree of competition because they ignore imported products.
   D) provide detailed insights as to the price and output behaviour of firms which comprise the various industries.

   Ans: C Level: Moderate Main Topic: 9.3 Oligopoly Page: 229
   Subtopic: Oligopolistic industries Type: Application

157. If the four-firm concentration ratio for industry X is 80:
   A) the four largest firms account for 80 percent of total sales.
   B) each of the four largest firms accounts for 20 percent of total sales.
   C) the four largest firms account for 20 percent of total sales.
   D) the industry is monopolistically competitive.

   Ans: A Level: Easy Main Topic: 9.3 Oligopoly Page: 229
   Subtopic: Oligopolistic industries Type: Application

158. An industry having a four-firm concentration ratio of 85 percent:
   A) approximates perfect competition.
   B) is monopolistically competitive.
   C) is a monopoly.
   D) is an oligopoly.

   Ans: D Level: Easy Main Topic: 9.3 Oligopoly Page: 229
   Subtopic: Oligopolistic industries Type: Definition

159. As a general rule, oligopoly exists when the four-firm concentration ratio:
   A) exceeds the Herfindahl index.
   B) is less than the Herfindahl index.
   C) is 40 percent or more.
   D) is 15 percent or more.

   Ans: C Level: Easy Main Topic: 9.3 Oligopoly Page: 229
   Subtopic: Oligopolistic industries Type: Definition

160. The four-firm sales concentration ratio for an industry measures the:
   A) geographic concentration of firms.
   B) extent to which the four largest firms dominate the production of a good.
   C) percentage of the industry's capital facilities owned by the four largest firms.
   D) degree of X-inefficiency in the industry.

   Ans: B Level: Moderate Main Topic: 9.3 Oligopoly Page: 229
   Subtopic: Oligopolistic industries Type: Application

161. "Interindustry competition" means that:
   A) in oligopolistic industries a few large firms compete with one another in bidding down product price.
   B) in some markets the producers of a particular product might face competition from products produced by other industries.
   C) business firms that sell a product at one stage of production are faced with business firms that buy the product at the next stage of production.
   D) in most industries there are usually a number of firms producing identical products.

   Ans: B Level: Moderate Main Topic: 9.3 Oligopoly Page: 229
   Subtopic: Oligopolistic industries Type: Definition

162. "Interindustry competition" refers to the fact that:
   A) oligopolistic producers establish a common price for their products.
   B) products are identical in a perfectly competitive industry.
   C) firms which sell a product at one stage of production buy materials and parts from other firms at prior stages of production.
   D) in some markets the producers of a certain commodity might face competition from products of other industries.

   Ans: D Level: Easy Main Topic: 9.3 Oligopoly Page: 229
   Subtopic: Oligopolistic industries Type: Definition

163. Concentration ratios may be inaccurate indicators of the degree of monopoly power in an industry because:
   A) they include interindustry competition.
   B) foreign competition is not considered.
   C) they are only calculated for local and regional markets.
   D) they do not distinguish between normal and economic profit.

   Ans: B Level: Easy Main Topic: 9.3 Oligopoly Page: 229
   Subtopic: Oligopolistic industries Type: Application

164. The increased use of plastic bags instead of paper bags in grocery stores and retail shops is an example of:
   A) overt collusion.
   B) covert collusion.
   C) import competition.
   D) interindustry competition.

   Ans: D Level: Moderate Main Topic: 9.3 Oligopoly Page: 229
   Subtopic: Oligopolistic industries Type: Application

165. One major problem with concentration ratios is that they fail to take into account:
A) the localized market for products.
B) excess capacity in production.
C) price leadership.
D) mutual interdependence.

Ans: A Level: Moderate Main Topic: 9.3 Oligopoly Page: 229
Subtopic: Oligopolistic industries Type: Application

166. Aluminum competes with copper in the market for power transmission lines. This illustrates:
A) mutual interdependence.
B) differentiated oligopoly.
C) interindustry competition.
D) homogeneous oligopoly.

Ans: C Level: Easy Main Topic: 9.3 Oligopoly Page: 229
Subtopic: Oligopolistic industries Type: Application

167. If a product such as cement or bricks is costly to ship and, therefore, markets are very localized, the national concentration ratio for that industry:
A) will be greater than 50 percent.
B) may understate the degree of monopoly.
C) may overstate the degree of monopoly.
D) will yield an accurate impression of the degree of monopoly.

Ans: B Level: Moderate Main Topic: 9.3 Oligopoly Page: 229
Subtopic: Oligopolistic industries Type: Application

168. If an industry evolves from monopolistic competition to oligopoly, we would expect:
A) the four-firm concentration ratio to decrease.
B) the four-firm concentration ratio to increase.
C) the four-firm concentration ratio might either increase or decrease.
D) that barriers to entry have weakened.

Ans: B Level: Easy Main Topic: 9.3 Oligopoly Page: 230
Subtopic: Oligopolistic industries Type: Application

169. Suppose that total sales in an industry in a particular year are $600 million and sales by the top four sellers are $200 million, $150 million, $100 million, and $50 million, respectively. We can conclude that:
A) price leadership exists in this industry.
B) the concentration ratio is more than 80 percent.
C) this industry is a differentiated oligopoly.
D) the firms in this industry face a downward sloping demand curve.

Ans: B Level: Moderate Main Topic: 9.3 Oligopoly Page: 230
Subtopic: Oligopolistic industries Type: Calculation

170. An industry comprised of four firms, each of which has approximately 25 percent of the total market for a product is an example of:
A) monopolistic competition
B) oligopoly
C) monopoly
D) perfect competition

Ans: B Level: Moderate Main Topic: 9.3 Oligopoly Page: 230
Subtopic: Oligopolistic industries Type: Application

171. An industry producing a homogeneous product whose four-firm concentration ratio is 76 percent is an example of:
A) monopolistic competition
B) oligopoly
C) monopoly
D) perfect competition

Ans: B Level: Easy Main Topic: 9.3 Oligopoly Page: 230
Subtopic: Oligopolistic industries Type: Application

Use the following to answer questions 172-173:

Firm	Market share (%)
A	20
B	20
C	20
D	20
E	10
F	10

172. The industry characterized by the information above is:
 A) an oligopoly.
 B) a monopolistically competitive industry.
 C) a perfectly competitive industry.
 D) a monopoly.

 Ans: A Level: Moderate Main Topic: 9.3 Oligopoly Page: 230
 Subtopic: Oligopolistic industries Type: Application

173. The four-firm concentration ratio for the industry above is:
 A) 100 percent.
 B) indeterminate, since we don't know which four firms are included.
 C) 80 percent.
 D) 20 percent.

 Ans: C Level: Moderate Main Topic: 9.3 Oligopoly Page: 230
 Subtopic: Oligopolistic industries Type: Calculation

174. The larger the Herfindahl index, the:
 A) less the degree of import competition in an industry.
 B) greater the degree of import competition in an industry.
 C) less the degree of market power in an industry.
 D) greater the degree of market power in an industry.

 Ans: D Level: Easy Main Topic: 9.3 Oligopoly Page: 230
 Subtopic: Oligopolistic industries Type: Application

175. Assume that an industry was significantly affected by import competition from foreign suppliers. Taking this factor into account, it would mean that:
 A) the Herfindahl index would be significantly higher in that industry because there are more firms in the industry.
 B) the industry is less concentrated than suggested by domestic concentration ratios.
 C) there is a high degree of interindustry competition.
 D) there is a low degree of interindustry competition

 Ans: B Level: Moderate Main Topic: 9.3 Oligopoly Page: 230
 Subtopic: Oligopolistic industries Type: Application

176. The Herfindahl index is a measure of:
   A) profitability in an industry.
   B) the price level in an industry.
   C) the cost level in an industry.
   D) market power in an industry.

   Ans: D Level: Easy Main Topic: 9.3 Oligopoly Page: 230
   Subtopic: Oligopolistic industries Type: Definition

177. The Herfindahl index:
   A) measures the prices charged by oligopolistic manufacturers.
   B) is another name for the four-firm concentration ratio.
   C) tells us whether oligopolistic firms are engaging in collusion.
   D) gives much greater weight to larger firms than to smaller firms in an industry.

   Ans: D Level: Easy Main Topic: 9.3 Oligopoly Page: 230
   Subtopic: Oligopolistic industries Type: Application

178. If the four-firm concentration ratio in an oligopolistic industry is 100 percent and each firm has an equal volume of sales, the Herfindahl Index is:
   A) 10,000.
   B) 2,500.
   C) 3,750.
   D) 1,000.

   Ans: B Level: Moderate Main Topic: 9.3 Oligopoly Page: 230
   Subtopic: Oligopolistic industries Type: Calculation

179. Assume six firms comprising an industry have market shares of 30, 30, 10, 10, 10, and 10 percent. The Herfindahl Index for this industry:
   A) is 2,525.
   B) is 1,600.
   C) is 2,200.
   D) is 80.

   Ans: C Level: Moderate Main Topic: 9.3 Oligopoly Page: 230
   Subtopic: Oligopolistic industries Type: Calculation

180. Industry X is dominated by four large firms that hold market shares of 30, 30, 20, and 20. The Herfindahl index for this industry is:
A) 100.
B) 2600.
C) 3200.
D) 4400.

Ans: B Level: Moderate Main Topic: 9.3 Oligopoly Page: 230
Subtopic: Oligopolistic industries Type: Calculation

181. Industry Y is dominated by five large firms that hold market shares of 20, 20, 25, 25, and 10. The Herfindahl index for this industry is:
A) 1560.
B) 2150.
C) 2340.
D) 3500.

Ans: B Level: Moderate Main Topic: 9.3 Oligopoly Page: 230
Subtopic: Oligopolistic industries Type: Calculation

182. The Herfindahl index for an industry is 2550. Which of the following sets of market shares and industry with four firms would produce such an index?
A) 20, 20, 30, and 30
B) 25, 25, 25, and 25
C) 20, 25, 25, and 30
D) 10, 20, 30, and 40

Ans: C Level: Difficult Main Topic: 9.3 Oligopoly Page: 230
Subtopic: Oligopolistic industries Type: Calculation

183. The Herfindahl index for an industry is 2750. Which of the following sets of market shares and industry with four firms would produce such an index?
A) 10, 30, 30, and 30
B) 15, 25, 25, and 35
C) 5, 25, 30, and 40
D) 15, 20, 30, and 35

Ans: D Level: Difficult Main Topic: 9.3 Oligopoly Page: 230
Subtopic: Oligopolistic industries Type: Calculation

184. Industry Y is dominated by four large firms that hold market shares of 15, 20, 30 and, 35. If all the firms in industry Y merged into a single firm, the Herfindahl Index would become:
A) 100.
B) 1,000.
C) 10,000.
D) 100,000.

Ans: C Level: Difficult Main Topic: 9.3 Oligopoly Page: 230
Subtopic: Oligopolistic industries Type: Calculation

185. Game theory can be used to demonstrate:
A) that oligopolistic firms are mutually interdependent.
B) that independent pricing will lead to low-price policies.
C) that oligopolists can increase their profits through collusion.
D) all of the above.

Ans: D Level: Easy Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 231 Subtopic: Basic concepts Type: Application

186. In an oligopoly game, each player tries to:
A) maximize its own profits.
B) minimize the market shares of its opponents.
C) minimize the profits of its opponents.
D) maximize its own market share.

Ans: A Level: Easy Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 231 Subtopic: Basic concepts Type: Application

187. In game theory, the dominant strategy equilibrium refers to a situation in which:
one player's strategy dominates the others.
A) one player is smarter than the others.
B) there is a best strategy for all the players in the game regardless of the strategy
C) chosen by other players.
D) there can be a best strategy only for one player regardless of the strategy chosen by other players.

Ans: C Level: Moderate Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 231 Subtopic: Basic concepts Type: Application

188. Prisoner's dilemma refers to a type of game where:
   A) whatever the other player does, each player is better off confessing.
   B) regardless of what a player does, the other should not confess.
   C) one player is smarter than the other.
   D) whether the players confess or not will not change the outcome.

   Ans: A Level: Difficult Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 232 Subtopic: Prisoner's dilemma Type: Application

189. The dominant strategy equilibrium in the prisoner's dilemma is:
   A) related to the personality of the players.
   B) confession by both players.
   C) denial by both players.
   D) one player denies while the other confesses.

   Ans: B Level: Difficult Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 232 Subtopic: Prisoner's dilemma Type: Application

190. In the prisoner's dilemma each player ideally is best off if:
   A) if both prisoners deny.
   B) if both prisoners confess.
   C) if one prisoner denies and the other confess.
   D) if the district attorney is Angie Harmon.

   Ans: A Level: Difficult Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 232 Subtopic: Prisoner's dilemma Type: Application

191. In a duopoly, if one firm increases its price, then the other firm can:
   A) keep its price constant and thus increase its market share.
   B) keep its price constant and thus decrease its market share.
   C) increase its price and thus increase its market share.
   D) decrease its price and thus decrease its market share.

   Ans: A Level: Moderate Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 233 Subtopic: Strategies in a two-firm oligopoly Type: Application

Use the following to answer questions 192-194:

		Y's prices		
	X \ Y	$6	$5	$4
X's prices	$7	16 \ 12	15 \ 14	13 \ 15
	$6	19 \ 9	16 \ 11	14 \ 13
	$5	18 \ 7	17 \ 9	15 \ 10

192. Refer to the above profits-payoff table for a duopoly. If the firms are acting independently and firm X sets its price at $6, firm Y will achieve the largest profit by selecting:
A) a price higher than $6.
B) a price between $5 and $6.
C) $6.
D) $4.

Ans: D Level: Difficult Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 233 Subtopic: Strategies in a two-firm oligopoly Type: Application

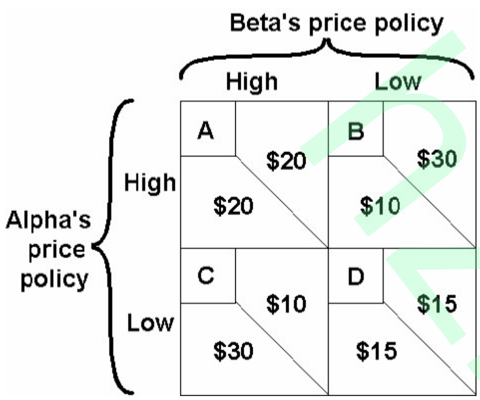
193. Refer to the above profits-payoff table for a duopoly. If initially firms X and Y are charging $5 and $4 respectively:
A) the two firms will be maximizing joint profits.
B) Y will find it advantageous to raise its price if it was certain X would not alter its price.
C) X will find it advantageous to raise its price if it was certain Y would not alter its price.
D) both firms would find it advantageous to collude to raise their prices by $1 each.

Ans: D Level: Difficult Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 233 Subtopic: Strategies in a two-firm oligopoly Type: Application

194. Refer to the above profits-payoff table for a duopoly. If initially firm X's price was $6 and Y's price was $5:
   A) X would find it profitable to cut price, provided Y also cut price.
   B) Y would find it profitable to cut price, provided X also cut price.
   C) Y would find it profitable to raise price by $1, provided X would also raise price by $1.
   D) both firms would profit by simultaneously lowering their prices by $1.

   Ans: C Level: Difficult Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 233 Subtopic: Strategies in a two-firm oligopoly
   Type: Application

Use the following to answer questions 195-200:



195. The matrix above best illustrates:
   A) game theory.
   B) the principal-agent problem.
   C) product differentiation.
   D) price discrimination.

   Ans: A Level: Easy Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 233 Subtopic: Mutual interdependence revisited
   Type: Application

196. Refer to the diagram above where the numerical data show profits in millions of dollars. Beta's profits are shown in the northeast corner and Alpha's profits in the southwest corner of each cell. If both firms follow a high-price policy:
A) Alpha will realize a $10 million profit and Beta a $30 million profit.
B) each will realize a $20 million profit.
C) Beta will realize a $10 million profit and Alpha a $30 million profit.
D) each will realize a $15 million profit.

Ans: B Level: Moderate Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 233 Subtopic: Mutual interdependence revisited
Type: Application

197. Refer to the diagram above wherein the numerical data show profits in millions of dollars. Beta's profits are shown in the northeast corner and Alpha's profits in the southwest corner of each cell. If Beta commits to a high-price policy, Alpha will gain the largest profit by:
A) also adopting a high-price policy.
B) adopting a low-price policy.
C) adopting a low-price policy, but only if Beta agrees to do the same.

Ans: B Level: Moderate Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 233 Subtopic: Mutual interdependence revisited
Type: Application

198. Refer to the diagram above where the numerical data show profits in millions of dollars. Beta's profits are shown in the northeast corner and Alpha's profits in the southwest corner of each cell. With independent pricing the outcome of this duopoly game will gravitate to cell:
A) A.
B) B.
C) C.
D) D.

Ans: D Level: Difficult Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 233 Subtopic: Mutual interdependence revisited
Type: Application

199. Refer to the diagram above where the numerical data show profits in millions of dollars. Beta's profits are shown in the northeast corner and Alpha's profits in the southwest corner of each cell. If Alpha and Beta engage in collusion, the outcome of the game will be at cell:
A) A.
B) B.
C) C.
D) D.

Ans: A Level: Difficult Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 234 Subtopic: Collusion Type: Application

200. Refer to the diagram above where the numerical data show profits in millions of dollars. Beta's profits are shown in the northeast corner and Alpha's profits in the southwest corner of each cell. If Alpha and Beta agree to a high-price policy through collusion, the temptation to cheat on that agreement is demonstrated by the fact that:
A) Beta can increase its profit by lowering its price.
B) Beta can increase its profit by increasing its price still further.
C) both Alpha and Beta can earn even more profits if both agree to a low-price policy.
D) Alpha can increase its profit by reducing its production costs.

Ans: A Level: Difficult Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 234 Subtopic: Collusion Type: Application

201. When firms in an industry reach an agreement to fix prices, divide up market share, or otherwise restrict competition, they are practicing the strategy of:
A) interindustry competition.
B) limit pricing.
C) price leadership.
D) collusion.

Ans: D Level: Easy Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 234 Subtopic: Collusion Type: Definition

202. In imperfectly competitive industries, producers' agreements to restrict output tend to be unstable because each firm has an incentive to:
A) produce more than its output quota.
B) lower both its price and its output.
C) raise prices above the cooperative price.
D) establish competitive price and output levels.

Ans: A Level: Easy Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 234 Subtopic: Incentive to cheat Type: Application

203. Oligopolistic firms engage in collusion to:
A) minimize unit costs of production.
B) realize allocative efficiency, that is, the P = MC level of output.
C) earn greater profits.
D) increase production.

Ans: C Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 235-236 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

204. Suppose the only three existing manufacturers of widgets signed a written contract by which each agreed to charge the same price for products and to distribute their products only in the geographical area assigned them in the contract. This best describes:
A) cost-plus pricing.
B) multiproduct pricing.
C) a cartel.
D) price leadership.

Ans: C Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 235-236 Subtopic: Cartels and other collusion: Cooperative strategies Type: Definition

205. Which of the following statements is correct?
A) A cartel is usually a formal agreement among oligopolists which sets product price and determines each firm's market share.
B) The practice of price leadership is almost always based on a formal written agreement.
C) Most of the important technological advances of the last half century are attributable to the research efforts of large oligopolistic corporations.
D) Active and frequent price competition between firms is a basic characteristic of oligopoly.

Ans: A Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 235-236 Subtopic: Cartels and other collusion: Cooperative strategies Type: Definition

206. Which of the following will make it easier for a cartel to operate effectively over time?
A) Demand for the cartel's product decreases.
B) Demand for the cartel's product becomes more elastic.
C) The number of substitutes for the cartel's product increases.
D) Each member firm observes the pricing and output decisions of other firms in the cartel.

Ans: D Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 235-236 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

207. Collusive control over price may permit oligopolists to:
A) use new technology, achieve economies of scale, and get government subsidies.
B) achieve economies of scale, reduce costs, and prevent price cheating.
C) increase product demand, increase product supply, and lower cost.
D) reduce uncertainty, increase profits, and possibly limit entry of new firms.

Ans: D Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 236 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

208. Suppose a few powerful firms control all production in an industry and face identical demand and cost schedules. If they successfully collude and maximize joint profits, then price, output, and profit levels in the industry will be the same as those in:
A) monopoly.
B) regulated monopoly.
C) monopolistic competition.
D) a covert collusion

Ans: A Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 236 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

209. If the firms in an oligopolistic industry can establish an effective cartel, we would expect the resulting output and price to approximate those of:
A) a perfectly competitive producer.
B) a monopoly.
C) a monopolistically competitive producer.
D) an industry with a low four-firm concentration ratio.

Ans: B Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 236 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

210. If the several oligopolistic firms which comprise an industry behave collusively, the resulting price and output will most likely resemble those of:
A) bilateral monopoly.
B) monopoly.
C) monopolistic competition.
D) perfect competition.

Ans: B Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 236 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

211. OPEC provides an example of:
A) a tacit understanding.
B) non-collusive oligopoly.
C) an international cartel.
D) a monopolistically competitive industry.

Ans: C Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 237 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

212. OPEC was able to greatly increase its total revenue by increasing prices in the 1970s because:
A) it controlled 100 percent of the world's oil reserves.
B) the demand for oil was elastic.
C) the prices of coal and solar power were falling.
D) the demand for oil was inelastic.

Ans: D Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 237 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

213. The Organization of Petroleum Exporting Countries (OPEC) behaves in many ways like an international cartel. If the cartel were to hire a consulting firm to monitor the production rates of member countries, the economic reason for this monitoring is to:
A) make sure that each member country is producing at an output level at which price equals marginal cost.
B) make sure all the member countries produce at least their quotas so that there will be no oil shortage.
C) detect those member countries which are depressing prices by producing more than their assigned quotas.
D) make sure that the marginal revenue for the last barrel of oil sold by each member country is less than its price.

Ans: C Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 237 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

214. Which would make it easier to maintain an effective collusive agreement in a cartel?
A) the emergence of a number of potential entrant firms
B) a decrease in the elasticity of demand for the cartel's product
C) an increase in the number of substitutes for products produced by the cartel
D) a new method of pricing that makes it more difficult for firms in the cartel to determine the prices at which other cartel members are selling their product

Ans: B Level: Difficult Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 237-238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

215. The likelihood of a cartel being successful is greater when:
A) firms are producing a differentiated, rather than a homogeneous, product.
B) cost and demand curves of various participants are very similar.
C) the number of firms involved is relatively large.
D) the economy is in the recession phase of the business cycle.

Ans: B Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 237-238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

216. Cartels are difficult to maintain in the long run because:
A) they are illegal in all industrialized countries.
B) individual members may find it profitable to "cheat."
C) it is more profitable for the industry to charge a lower price and produce more output.
D) entry barriers are insignificant in oligopolistic industries.

Ans: B Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 237-238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

217. In Canada cartels are:
A) quite common in industries which produce nondurable goods.
B) in violation of anti-combines laws.
C) concentrated in monopolistically competitive industries.
D) encouraged by government policy so that firms can realize economies of scale.

Ans: B Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 237-238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

218. One would expect that collusion among oligopolistic producers would be easiest to achieve in which of the following cases?
A) a rather large number of firms producing a differentiated product
B) a very few firms producing a differentiated product
C) a rather large number of firms producing a homogeneous product
D) a very few firms producing a homogeneous product

Ans: D Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 237-238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

219. A cartel is formed among the major firms in an industry that maximizes joint profits of the firms. Each firm:
A) will operate at the level of output associated with the kink in the demand curve.
B) will be protected from the economic effects of a recession.
C) has a perfectly elastic demand for its product.
D) has the incentive to cheat by cutting its price.

Ans: D Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 237-238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

220. Other things being equal, a firm in a cartel will most likely cheat on a price-fixing agreement by:
A) increasing price and restricting its output.
B) organizing promotions of the product.
C) secretly increasing sales to a large number of small customers.
D) secretly lowering price and increasing sales to a few customers.

Ans: D Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 237-238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

221. Other things being equal, cartels and similar collusive arrangements are easier to establish and maintain:
A) when there are ample opportunities for the firms to make secret price concessions to selected buyers.
B) during periods of cyclical stability and full employment.
C) when the demand and cost conditions of the participating firms differ substantially.
D) when the number of firms is relatively large.

Ans: B Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 237-238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

222. Informal collusion to restrict output and increase prices is sometimes referred to as a:
A) merger.
B) cartel.
C) tacit understanding
D) overt collusion model.

Ans: C Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Definition

223. Assume the several manufacturers of ceramic tile in a city reach a verbal agreement to establish the price of their product at 55 cents per tile. This best describes:
A) multiproduct pricing.
B) a cartel.
C) a tacit understanding.
D) price leadership.

Ans: C Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

224. Three major means of collusion by oligopolists are:
   A) cartels, tacit understandings, and price leadership.
   B) market sharing, mutual interdependence, and product differentiation.
   C) cartels, product differentiation, and product differentiation.
   D) tacit understandings, P = MC pricing, and mutual interdependence.

   Ans: A Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

225. Which constitutes an obstacle to collusion among oligopolists?
   A) a standardized product
   B) a large number of firms
   C) prosperous economic conditions
   D) trademarks and copyrights

   Ans: B Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

226. To be successful, collusion requires that oligopolists be able to:
   A) increase prices to their highest level.
   B) increase the ease of entry for new producers.
   C) increase legal obstacles that protect market power.
   D) keep the domestic economy from experiencing high inflation.

   Ans: C Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 238 Subtopic: Cartels and other collusion: Cooperative strategies Type: Application

227. If a particular bank regularly announces changes in its interest rate schedules before its competitors, which then set rates very close to those announced by that bank, this could be described as:
   A) markup pricing.
   B) predatory pricing.
   C) price leadership.
   D) explicit price collusion.

   Ans: C Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 239 Subtopic: Price leadership model: Another cooperative strategy Type: Application

228. Suppose firms in a collusive oligopoly decide to establish their prices at a level which discourages new rivals from entering the industry. This is called:
A) mutual interdependence.
B) "pricing the demand curve."
C) limit pricing.
D) price leadership.

Ans: C Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 239 Subtopic: Price leadership model: Another cooperative strategy Type: Definition

229. One of the leadership tactics used by a price leader in the price leadership model of collusive oligopoly is:
A) limit pricing.
B) frequently changing prices.
C) starting a price war with competitors.
D) trying to hide price changes from competitors

Ans: A Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 239 Subtopic: Price leadership model: Another cooperative strategy Type: Application

230. The strategy of establishing a price that prevents the entry of new firms is called:
A) a price war.
B) limit pricing.
C) price leadership.
D) setting a profit maximizing price.

Ans: B Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 239 Subtopic: Price leadership model: Another cooperative strategy Type: Definition

231. A break-down in price leadership leading to successive rounds of price cuts is known as:
A) limit pricing.
B) a price war.
C) tacit pricing
D) price discrimination

Ans: B Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 239 Subtopic: Price leadership model: Another cooperative strategy Type: Definition

232. Suppose that an industry is characterized by a few firms and price leadership. We would expect that:
A) price would equal marginal cost.
B) price would equal average total cost.
C) price would exceed both marginal cost and average total cost.
D) marginal revenue would exceed marginal cost.

Ans: C Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 239 Subtopic: Price leadership model: Another cooperative strategy Type: Application

233. In recent years advertising expenditures in Canada have been:
A) 10 to 12 percent of GDP per year.
B) $1 to $2 billion per year.
C) more than $6 billion per year.
D) about $300 billion per year.

Ans: C Level: Easy Main Topic: 9.6 Oligopoly and advertising Page: 240 Subtopic: Positive effects of advertising Type: Application

234. Advertising can enhance economic efficiency when it:
A) increases brand loyalty.
B) raises entry barriers.
C) increases consumer awareness of substitute products.
D) boosts average total cost.

Ans: C Level: Easy Main Topic: 9.6 Oligopoly and advertising Page: 240 Subtopic: Positive effects of advertising Type: Application

235. Advertising can enhance economic efficiency when it:
A) increases the cost of production.
B) expands sales such that firms achieve substantial economies of scale.
C) keeps new firms from entering profitable industries.
D) is undertaken by pure competitors.

Ans: B Level: Easy Main Topic: 9.6 Oligopoly and advertising Page: 240 Subtopic: Positive effects of advertising Type: Application

236. Why do oligopolists use product development and advertising?
   A) They are less easily duplicated than price cuts as a competitive strategy.
   B) They enhance the public good by providing information and new products.
   C) They contribute to productive and allocative efficiency in markets.
   D) They create conditions for mutual interdependence and support.

   Ans: A Level: Moderate Main Topic: 9.6 Oligopoly and advertising Page: 240
   Subtopic: Positive effects of advertising Type: Application

237. In competing with rivals, oligopolistic firms will tend to use:
   A) price cuts because they do not add to costs like advertising.
   B) advertising because it is less easily duplicated than price cuts.
   C) collusion because it is a legal way to increase market share.
   D) price wars because they will increase the profits of firms.

   Ans: B Level: Easy Main Topic: 9.6 Oligopoly and advertising Page: 240
   Subtopic: Positive effects of advertising Type: Application

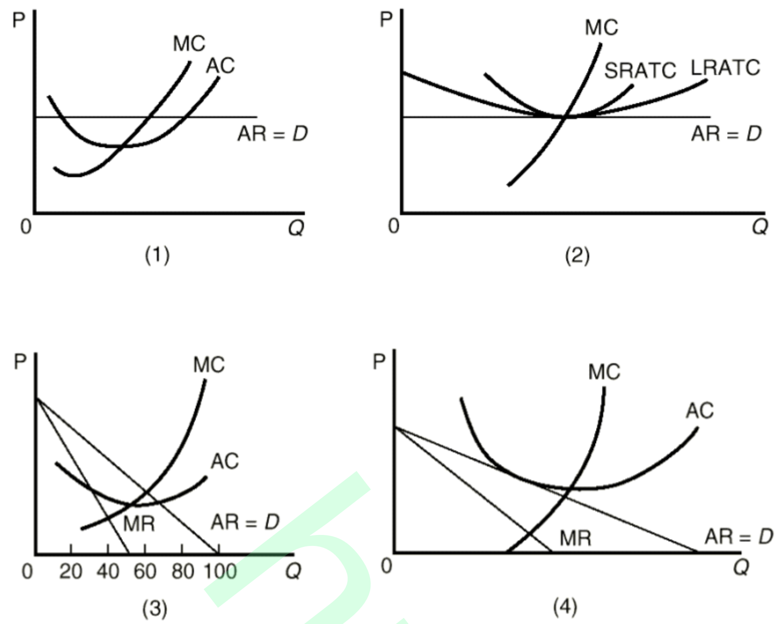
238. A positive effect of advertising for society is that it:
   A) increases market share for the dominant firm in the industry.
   B) provides useful information to reduce search cost for consumers.
   C) raises barriers to entry into the industry and protects existing firms.
   D) creates price leadership and gives firms guidance in dealing with rivals.

   Ans: B Level: Easy Main Topic: 9.6 Oligopoly and advertising Page: 240
   Subtopic: Positive effects of advertising Type: Application

239. What is a positive effect of advertising?
   A) It reduces economic efficiency in the economy.
   B) It promotes economic concentration in industry.
   C) It is designed to persuade rather than inform consumers.
   D) It provides information for reducing search costs.

   Ans: D Level: Easy Main Topic: 9.6 Oligopoly and advertising Page: 240
   Subtopic: Positive effects of advertising Type: Application

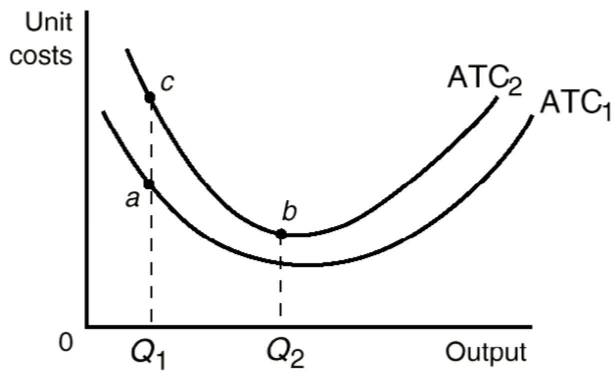
240. Which type of firms below would be expected to engage in advertising?



A) 1 and 2
B) 1 and 4
C) 2 and 3
D) 3 and 4

Ans: D Level: Difficult Main Topic: 9.6 Oligopoly and advertising Page: 240
Subtopic: Positive effects of advertising Type: Graphic

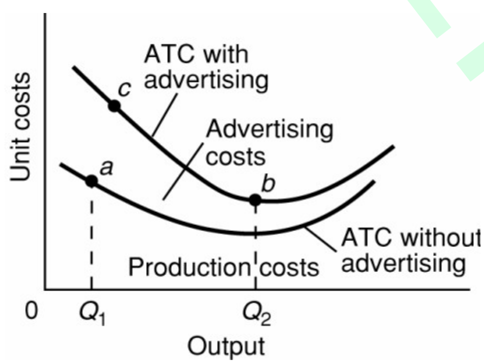
241. Refer to the below graph. Proponents of advertising claim it will:



A) lower costs from a to b and increase the level of output.
B) increase costs from ATC_1 to ATC_2 and decrease output levels for producers and consumers.
C) lower costs from ATC_2 to ATC_1, but leave output unchanged (e.g., moving from point c to point a at output level Q_1).
D) lower costs and increase output by moving a firm along its cost schedules, e.g., from point c to point b.

Ans: A Level: Difficult Main Topic: 9.6 Oligopoly and advertising Page: 240
Subtopic: Positive effects of advertising Type: Graphic

Use the following to answer questions 242-244:



242. The movement from point a to point b in the diagram above implies that:
   A) the increased unit costs caused by advertising exceeds the decline in unit costs from the realization of scale economies.
   B) advertising by various firms has been self-cancelling.
   C) advertising has shifted the ATC curve downward.
   D) the decline in unit costs from the realization of scale economies exceeds the increased unit costs caused by advertising.

   Ans: D Level: Difficult Main Topic: 9.6 Oligopoly and advertising Page: 240
   Subtopic: Positive effects of advertising Type: Graphic

243. In the diagram above, advertising is shown to be most conducive to economic efficiency in the movement from:
   A) a to c.
   B) a to b.
   C) b to a.
   D) c to a.

   Ans: B Level: Difficult Main Topic: 9.6 Oligopoly and advertising Page: 240
   Subtopic: Positive effects of advertising Type: Graphic

244. The movement from point a to point c in the diagram above implies that:
   A) the increased unit costs caused by advertising exceeds the decline in unit costs from the realization of scale economies.
   B) there are barriers to entry in this industry.
   C) advertising has shifted the AC curve downward.
   D) the decline in unit costs from the realization of scale economies exceeds the increased unit costs caused by advertising.

   Ans: A Level: Difficult Main Topic: 9.6 Oligopoly and advertising Page: 240
   Subtopic: Potential negative effects of advertising Type: Graphic

245. The presence of advertising in a particular market:
   A) tells us that the industry is an oligopoly.
   B) tells us that the industry is monopolistically competitive.
   C) means that barriers to entering the industry are high.
   D) may or may not mean substantial monopoly power in the industry.

   Ans: D Level: Moderate Main Topic: 9.6 Oligopoly and advertising
   Page: 240-241 Subtopic: Potential negative effects of advertising
   Type: Application

246. Under oligopoly, if one firm in an industry significantly increases advertising expenditures in order to capture a greater market share, it is most likely that other firms in that industry will:
A) pursue a strategy to reduce advertising expenditures to maintain profits.
B) decide to increase advertising expenditures even if it means a reduction in profits.
C) make no changes in advertising expenditures because advertising is effective in the short run, but not the long run.
D) increase the price of the product to improve profits and then increase advertising expenditures.

Ans: B Level: Moderate Main Topic: 9.6 Oligopoly and advertising
Page: 240-241 Subtopic: Potential negative effects of advertising
Type: Application

247. Advertising can impede economic efficiency when it:
A) increases entry barriers.
B) reduces brand loyalty.
C) enables firms to achieve substantial economies of scale.
D) increases consumer awareness of substitute products.

Ans: A Level: Easy Main Topic: 9.6 Oligopoly and advertising
Page: 240-241 Subtopic: Potential negative effects of advertising
Type: Application

248. Advertising can impede economic efficiency when it:
A) reduces entry barriers.
B) reduces brand loyalty.
C) leads to greater monopoly power.
D) provides consumers with useful information about product quality.

Ans: C Level: Easy Main Topic: 9.6 Oligopoly and advertising
Page: 240-241 Subtopic: Potential negative effects of advertising
Type: Application

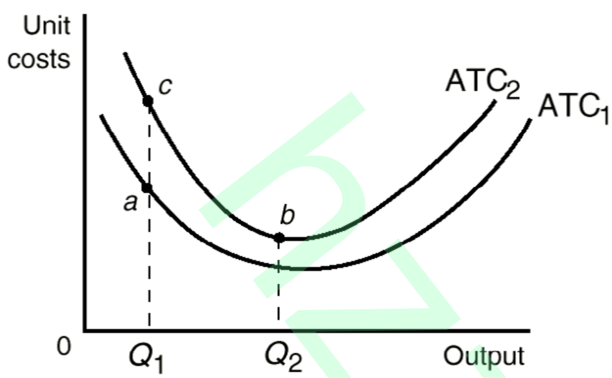
249. A potential negative effect of advertising for society is that it can:
A) be the major cause of price wars among firms in the industry.
B) reduce mutual interdependence and increase competition.
C) be self-cancelling and contribute to economic inefficiency.
D) lower barriers to entry and undermine profits in the industry.

Ans: C Level: Easy Main Topic: 9.6 Oligopoly and advertising
Page: 240-241 Subtopic: Potential negative effects of advertising
Type: Application

250. What is a potential negative effect of advertising?
A) It provides important information to consumers.
B) It promotes monopoly power in industry.
C) It contributes to allocative and productive efficiency.
D) It lowers search costs in product purchases.

Ans: B Level: Easy Main Topic: 9.6 Oligopoly and advertising
Page: 240-241 Subtopic: Potential negative effects of advertising
Type: Application

251. Refer to the below graph. Opponents of advertising contend that:



A) despite increasing output it increases costs, e.g., moving from point a to point b.
B) it has no effect on costs or output levels.
C) it raises costs without affecting output (e.g., moving from point a to point c) because competitor's ads are offsetting.
D) it offends many customers and thus raises costs and lowers output, e.g., from point b to point a.

Ans: C Level: Difficult Main Topic: 9.6 Oligopoly and advertising
Page: 240-241 Subtopic: Potential negative effects of advertising
Type: Graphic

252. Allocative and productive efficiency is achieved under the market structure of:
A) oligopoly.
B) perfect competition.
C) monopoly.
D) monopolistic competition.

Ans: B Level: Easy Main Topic: 9.6 Oligopoly and advertising
Page: 241-242 Subtopic: oligopoly and efficiency Type: Application

253. In an oligopolistic market there is likely to be:
   A) little consideration of the actions of rival firms.
   B) price taking behaviour on the part of firms.
   C) homogeneous but not differentiated products.
   D) neither allocative nor productive efficiency.

   Ans: D   Level: Moderate   Main Topic: 9.6 Oligopoly and advertising
   Page: 241-242   Subtopic: oligopoly and efficiency   Type: Application

254. Which would describe how many economists would view efficiency in oligopoly?
   A) $P > MC$ and $P =$ minimum ATC.
   B) $P = MC$ and $P >$ minimum ATC.
   C) $P = MC$ and $P =$ minimum ATC.
   D) $P > MC$ and $P >$ minimum ATC.

   Ans: D   Level: Difficult   Main Topic: 9.6 Oligopoly and advertising
   Page: 241-242   Subtopic: oligopoly and efficiency   Type: Formula

255. Which would be a qualification to the view that oligopoly is allocatively and productively inefficient?
   A) Less foreign competition has stimulated more price competition in oligopolies.
   B) Oligopolies are less technologically competitive so they lose market share.
   C) Oligopolies may purposely keep prices below short-run profit-maximizing levels to bolster barriers to entry.
   D) The more collusive practices of oligopolies lead to more profit-sharing among firms in the industry.

   Ans: C   Level: Moderate   Main Topic: 9.6 Oligopoly and advertising
   Page: 241-242   Subtopic: oligopoly and efficiency   Type: Application

256. We would expect the oligopoly to achieve:
   A) both allocative efficiency and productive efficiency.
   B) allocative efficiency, but not productive efficiency.
   C) productive efficiency, but not allocative efficiency.
   D) neither allocative efficiency nor productive efficiency.

   Ans: D   Level: Moderate   Main Topic: 9.6 Oligopoly and advertising
   Page: 241-242   Subtopic: oligopoly and efficiency   Type: Application

257. Suppose that a four-firm concentration ratio of 85 and a Herfindahl Index of 3000 characterize an industry. Most likely, this industry would achieve:
A) both productive efficiency and allocative efficiency.
B) allocative efficiency but not productive efficiency.
C) neither productive efficiency nor productive efficiency.
D) productive efficiency but not allocative efficiency.

Ans: C Level: Moderate Main Topic: 9.6 Oligopoly and advertising
Page: 241-242 Subtopic: oligopoly and efficiency Type: Application

258. The conclusion that oligopoly is inefficient relative to the competitive ideal must be qualified because:
A) industry price leaders often select a price equal to marginal cost.
B) over time oligopolistic industries may promote more rapid product development and greater improvement of production techniques than if they were perfectly competitive.
C) increased output due to persuasive advertising may perfectly offset the restriction of output caused by monopoly power.
D) many oligopolists sell their products in monopolistically competitive or even perfectly competitive industries.

Ans: B Level: Difficult Main Topic: 9.6 Oligopoly and advertising
Page: 241-242 Subtopic: oligopoly and efficiency Type: Application

259. The Canadian beer industry:
A) was formerly a monopolistically competitive industry, but is today more oligopolistic.
B) was made more competitive by technological advances such as faster bottling lines.
C) sells a growing proportion of its product for consumption in bars and taverns.
D) has experienced rapid growth in the number of independent brewers over the past forty years.

Ans: A Level: Easy Main Topic: The last word Page: 242-243
Type: Application

260. Which factor has most contributed to the increased concentration in the Canadian beer industry?
A) increased demand for strong beers
B) new technology for filling beer kegs
C) economies of scale in production
D) increased demand for soft drinks

Ans: C Level: Easy Main Topic: Last Word; The last word Page: 242-243
Type: Application

261. Monopolistic competitors have some control over the price of their products.

Ans: True Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition Page: 220 Type: Application

262. Brand names and packaging are forms of product differentiation under monopolistic competition.

Ans: True Level: Easy Main Topic: 9.1 Characteristics of monopolistic competition Page: 220 Type: Application

263. The demand curve of a monopolistically competitive producer is less elastic than that of a perfectly competitive producer.

Ans: True Level: Easy Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Type: Application

264. The demand curve of a monopolistically competitive firm is more elastic than that of a monopolist.

Ans: True Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Type: Application

265. The larger the number of firms and the less pronounced the degree of product differentiation, the greater will be the elasticity of a monopolistically competitive seller's demand curve.

Ans: True Level: Difficult Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Type: Definition

266. In the long run, typical firms that are monopolistically competitive earn economic profits.

Ans: False Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Type: Application

267. In the long run monopolistically competitive firms make normal profits because they are forced to operate at the minimum point on their average total cost curve.

Ans: False Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Type: Application

268. The monopolistically competitive seller maximizes profits by equating price and marginal cost.

Ans: False Level: Easy Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Type: Application

269. The monopolistically competitive seller equates price and marginal cost in maximizing profits.

Ans: False Level: Easy Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Type: Application

270. Monopolistically competitive sellers realize economic profits in the long run because entry barriers are significant.

Ans: False Level: Easy Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Type: Application

271. The economic profits earned by monopolistically competitive sellers are zero in the long run.

Ans: True Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 223-224 Type: Application

272. Monopolistically competitive sellers produce efficiently because they realize only normal profits in the long run.

Ans: False Level: Easy Main Topic: 9.2 Price and output in monopolistic competition Page: 225-226 Type: Application

273. Monopolistically competitive firms are inefficient because they produce at a point on the rising segment of their average cost curve.

Ans: False Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 225-226 Type: Application

274. The "excess capacity" problem associated with monopolistic competition implies that fewer firms could produce the same industry output at a lower total cost.

Ans: True Level: Moderate Main Topic: 9.2 Price and output in monopolistic competition Page: 226 Type: Application

275. Generally speaking, oligopolistic industries producing raw materials and semi-finished goods usually offer differentiated products, while oligopolists producing consumer goods usually offer standardized products.

Ans: False Level: Moderate Main Topic: 9.3 Oligopoly Page: 228
Type: Application

276. Mutual interdependence means that oligopolistic producers rely on price competition in determining their shares of the total market for their product.

Ans: False Level: Easy Main Topic: 9.3 Oligopoly Page: 228
Type: Definition

277. Concentration ratios include adjustments for foreign competition in measuring concentration in an industry.

Ans: False Level: Easy Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 230 Type: Application

278. Game theory analysis of oligopolist behaviour suggests that oligopolists will benefit from collusion.

Ans: True Level: Easy Main Topic: 9.4 Oligopoly pricing behaviour: A game theory overview Page: 231 Type: Application

279. If three or four homogeneous oligopolists collude, the resulting price and production outcomes will be similar to those of monopoly.

Ans: True Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 235-236 Type: Application

280. Generally speaking, the larger the number of firms in an oligopolistic industry, the more difficult it is for those firms to behave collusively.

Ans: True Level: Moderate Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 235-236 Type: Application

281. The most comprehensive form of collusion is the cartel.

Ans: True Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 235-236 Type: Definition

282. The price leadership is a type of implicit understanding by which oligopolists can coordinate prices.

Ans: True Level: Easy Main Topic: 9.5 The incentives and obstacles to collusion: Two oligopoly strategies Page: 239 Type: Definition

283. Oligopolists do not have sufficient financial resources to engage in product development and advertising.

Ans: False Level: Easy Main Topic: 9.6 Oligopoly and advertising Page: 240 Type: Application

284. Advertisings have both positive and negative effects.

Ans: True Level: Easy Main Topic: 9.6 Oligopoly and advertising Page: 240 Type: Application

285. Oligopolies are neither allocatively nor productively efficient when compared with the standard set in perfect competition.

Ans: True Level: Moderate Main Topic: 9.6 Oligopoly and advertising Page: 241-242 Type: Application

286. Dominant strategy in game theory is:
A) an option in which both firms want to deviate from it.
B) an option in which the parties make their move in turn .
C) an option which is inferior to any other option considering what the other firm does.
D) an option that is better than any alternative option regardless of what the other firm does.

Ans: D Level: Moderate Main Topic: Appendix to Chapter 9 Page: 247 Subtopic: A one-time game: Strategies and equilibrium Type: Definition

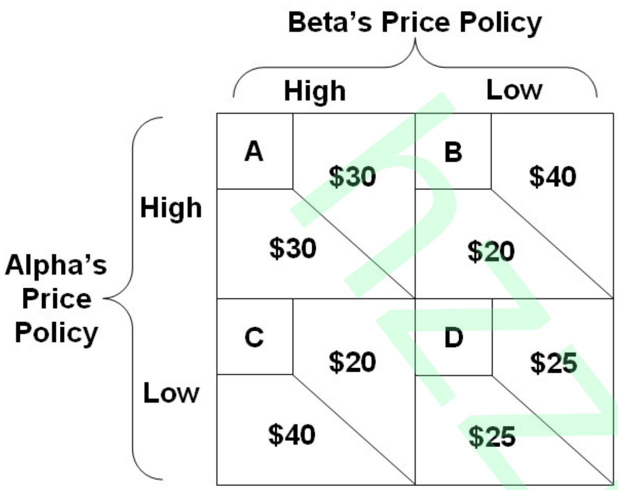
287. A simultaneous game is said to exist when:
A) Firms are playing pricing games in different markets at the same time.
B) firms choose their strategies at the same time as their rivals .
C) firms can set multiple prices for the same good at the same time.
D) strategies are set without regard to possible interactions in future time periods.

Ans: B Level: Easy Main Topic: Appendix to Chapter 9 Page: 247 Subtopic: A one-time game: Strategies and equilibrium Type: Definition

288. A positive-sum game occurs:
    A) when the sum of the two firms' outcomes is positive.
    B) whenever any of the values in the payoff matrix are positive .
    C) when the gains received by one player are exactly offset by the losses to the other.
    D) whenever the payoffs to the two players are equal.

    Ans: A Level: Moderate Main Topic: Appendix to Chapter 9 Page: 247
    Subtopic: A one-time game: Strategies and equilibrium Type: Definition

Use the following to answer questions 289-294:



289. The payoff matrix above represents:
    A) a zero-sum game.
    B) a negative-sum game .
    C) a positive-sum game.
    D) a game that can only be played in a single time period.

    Ans: C Level: Easy Main Topic: Appendix to Chapter 9 Page: 247
    Subtopic: A one-time game: Strategies and equilibrium Type: Application

290. In the payoff matrix above :
    A) both firms have a dominant strategy.
    B) neither firm has a dominant strategy .
    C) Alpha has a dominant strategy but Beta does not.
    D) Beta has a dominant strategy but Alpha does not.

    Ans: A Level: Moderate Main Topic: Appendix to Chapter 9 Page: 247
    Subtopic: A one-time game: Strategies and equilibrium Type: Application

291. In the payoff matrix shown above :
A) neither firm has a dominant strategy.
B) both firms have a dominant strategy to price high.
C) both firms have a dominant strategy to price low.
D) one firm has a dominant strategy to price high, the other to price low.

Ans: C Level: Moderate Main Topic: Appendix to Chapter 9 Page: 247
Subtopic: A one-time game: Strategies and equilibrium Type: Application

292. Refer to the above payoff matrix. Which cell represents the outcome of this game?
A) A.
B) B.
C) C.
D) D.

Ans: D Level: Moderate Main Topic: Appendix to Chapter 9 Page: 247
Subtopic: A one-time game: Strategies and equilibrium Type: Application

293. Refer to the above matrix. Suppose that Alpha and Beta agree that they will both pursue a high price strategy. If Beta then cheats on the agreement in order to increase profits, which of the following is true?
A) if this is a repeated game, Alpha can be expected to pursue a low price strategy in future games.
B) if this is a one-time game, a Nash equilibrium will result.
C) a Nash equilibrium cannot be reached through repeated playing of this game.
D) the game is a negative sum-game.

Ans: A Level: Moderate Main Topic: Appendix to Chapter 9 Page: 247-248
Subtopic: A one-time game: Strategies and equilibrium Type: Application

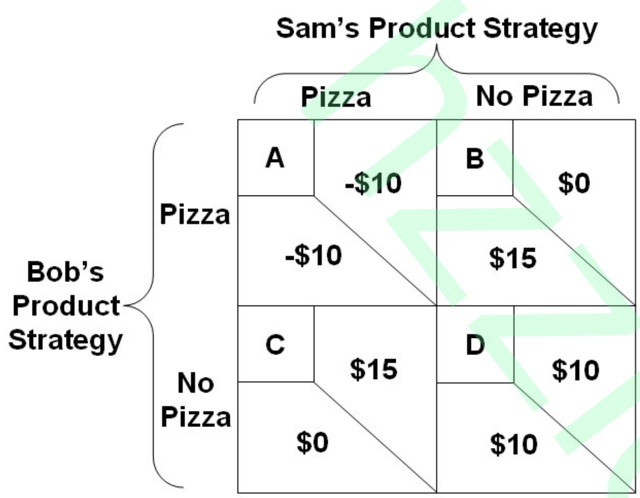
294. Refer to the above payoff matrix. Which of the following statements is true regarding the outcome of this game?
A) both firms will price high, and this outcome is a Nash equilibrium.
B) both firms will price low, and this outcome is a Nash equilibrium.
C) both firms will price high, but this outcome is not a Nash equilibrium.
D) both firms will price low, but this outcome is not a Nash equilibrium.

Ans: B Level: Moderate Main Topic: Appendix to Chapter 9 Page: 248
Subtopic: A one-time game: Strategies and equilibrium Type: Application

295. In Nash equilibrium:
   A) one rival see its current strategy as optimal given the other firm's strategic choice.
   B) both rivals see their current strategy as optimal given the other firm's strategic choice.
   C) none of the rivals see their current strategy as optimal given the other firm's strategic choice.
   D) the outcome regarding strategies of two firms is not stable and therefore not lasting.

   Ans: B Level: Moderate Main Topic: Appendix to Chapter 9 Page: 248
   Subtopic: A one-time game: Strategies and equilibrium Type: Definition

Use the following to answer question 296:



296. Refer to the above payoff matrix. Bob's burger and Sam's Sandwiches are competing restaurants in a small town. Both are considering adding pizza to their line of products. If this is a sequential game but we don't know who moves first, what can we say about the final outcome?
   A) there is Nash equilibrium attainable for this game.
   B) Cell A represents the only Nash equilibrium possible for this game.
   C) Cell D represents the only Nash equilibrium possible for this game.
   D) Cells B and C both represent possible Nash equilibrium for this game.

   Ans: D Level: Moderate Main Topic: Appendix to Chapter 9 Page: 248
   Subtopic: A one-time game: Strategies and equilibrium Type: Application

297. Which of the following best describes a Nash equilibrium?
   A) an outcome from which one or both competitors can improve their position by adopting an alternative strategy.
   B) the unstable outcome of a repeated game.
   C) an outcome that is table onlt because of credible threats.
   D) an outcome which both competitors see as optimal, given the strategy of their rivals.

   Ans: D Level: Moderate Main Topic: Appendix to Chapter 9 Page: 248
   Subtopic: Credible and empty threats Type: Definition

298. Collusive agreements between two firms are most likely to be honoured when the game:
   A) is a one-time game with the opportunity for a prisoner's dilemma.
   B) has a Nash equilibrium that differs from the outcome that maximizes the payoffs to the two firms.
   C) is a zero-sum game.
   D) is repeated and both firms offer credible threats if the other violates the agreement.

   Ans: D Level: Moderate Main Topic: Appendix to Chapter 9 Page: 248
   Subtopic: Credible and empty threats Type: Definition

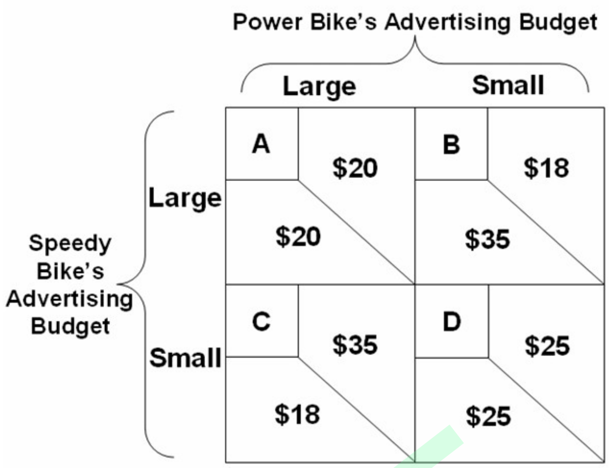
299. Credible threat is:
   A) the outcome of a new entry into the oligopolistic industry.
   B) a statement of harmful intent which should not be taken seriously.
   C) a statement of harmful intent by one party that the other party views as believable.
   D) a statement of harmful intent by one party that the other party does not take seriously.

   Ans: C Level: Easy Main Topic: Appendix to Chapter 9 Page: 248
   Subtopic: Credible and empty threats Type: Definition

300. In a repeated game:
   A) both firms engage in competing strategies.
   B) the optimal strategy is to always move first before your rival gets the chance.
   C) only one firm repeatedly comes up with a new strategy.
   D) the optimal strategy is to cooperate and restrain from competing so long as the other firm reciprocates by also not competing.

   Ans: D Level: Easy Main Topic: Appendix to Chapter 9 Page: 248-249
   Subtopic: Repeated games and reciprocity strategies Type: Definition

Use the following to answer question 301:



301. Refer to the above payoff matrix. Suppose that Speedy Bike and Power Bike are the only two bicycle manufacturing firms serving the market. Both can choose large and small advertising budgets. If this is a repeated game with no cooperation or reciprocity, which cell represents the final outcome we would expect to occur?
A) A.
B) B.
C) C.
D) D.

Ans: A Level: Easy Main Topic: Appendix to Chapter 9 Page: 248-249
Subtopic: Repeated games and reciprocity strategies Type: Application

302. Sequential game is:
A) the game in which the parties make their moves in turn.
B) the game in which the parties make their move simultaneously.
C) the game in which only one of the firms make the move over and over again.
D) the game in which each party makes its move regardless of how the other firm reacts.

Ans: C Level: Easy Main Topic: Appendix to Chapter 9 Page: 249-250
Subtopic: First-mover advantages and pre-emption of entry Type: Definition

303. In a sequential game with two firms, the first mover into a new market:
A) is guaranteed positive economic profits.
B) is assured of blocking any potential second mover from entering the market.
C) runs the risk that the untested new market will not provide enough customers.
D) will likely set a high price to reap greater profits until the second mover enters.

Ans: C Level: Easy Main Topic: Appendix to Chapter 9 Page: 249-250
Subtopic: First-mover advantages and pre-emption of entry Type: Application

304. A positive sum game is defined as a game where neither player can receive a negative payoff.

Ans: False Level: Easy Main Topic: 9.5 Appendix to Chapter 9 Page: 247
Type: Definition

305. Negative-sum games do not exist because neither player has an incentive to play the game.

Ans: False Level: Easy Main Topic: 9.5 Appendix to Chapter 9 Page: 247
Type: Definition

306. In a zero-sum game, the gains by one player will be exactly offset by the losses of the other.

Ans: True Level: Easy Main Topic: 9.5 Appendix to Chapter 9 Page: 247
Type: Definition

307. If one player in game has a dominant strategy, the other player must also have a dominant strategy.

Ans: False Level: Easy Main Topic: 9.5 Appendix to Chapter 9 Page: 247
Type: Definition

308. A player is said to have a dominant strategy when one of the options available is superior, regardless of what strategy the other player chooses.

Ans: True Level: Easy Main Topic: 9.5 Appendix to Chapter 9 Page: 247
Type: Definition

309. If neither player has an incentive to deviate from the outcome of a game, the outcome is a Nash equilibrium.

Ans: True Level: Easy Main Topic: 9.5 Appendix to Chapter 9 Page: 248
Type: Definition

310. A Nash equilibrium can only occur in repeated games.

Ans: False Level: Easy Main Topic: 9.5 Appendix to Chapter 9 Page: 248
Type: Application

311. Repeated games may involve either simultaneous or sequential decision-making.

Ans: True Level: Easy Main Topic: 9.5 Appendix to Chapter 9 Page: 248
Type: Application

312. In repeated games, players may be willing to accept lower payoffs in the short run in exchange for greater net payoffs over the long run.

Ans: True Level: Easy Main Topic: 9.5 Appendix to Chapter 9 Page: 248
Type: Application

313. One characteristic of sequential games is that they all have first-mover advantages.

Ans: False Level: Easy Main Topic: 9.5 Appendix to Chapter 9 Page: 249
Type: Application

314. The first mover in a sequential game always has the advantage over the second.

Ans: False Level: Easy Main Topic: 9.5 Appendix to Chapter 9 Page: 249-250
Type: Application