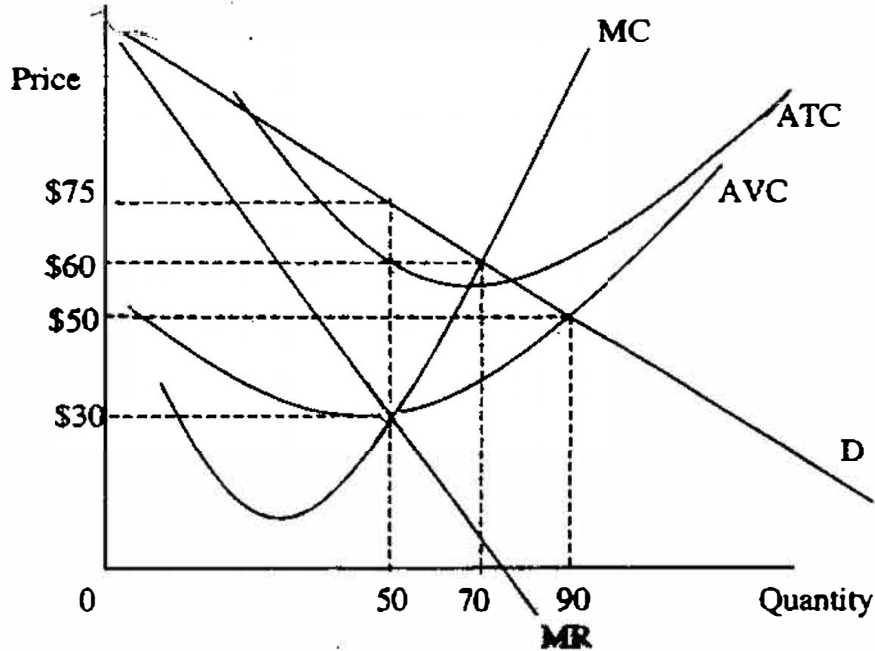


Refer to the graph below to answer questions 1 - 3.



1. The profit-maximizing quantity and price are:
 - a. 50 and \$75.
 - b. 70 and \$60.
 - c. 50 and \$30.
 - d. 90 and \$50.

2. At the profit-maximizing level of output, total cost (TC) is:
 - a. \$1,500.
 - b. \$3,000.
 - c. \$3,750.
 - d. \$4,500.

3. At the profit-maximizing level of output, this firm:
 - a. incurs an economic loss of \$750.
 - b. earns an economic profit of \$750.
 - c. incurs an economic loss of \$1,500.
 - d. earns an economic profit of \$1,500.

4. Which of the following is **not** true for a profit-maximizing monopolist?
 - a. Price is greater than marginal revenue
 - b. Marginal revenue equals marginal cost
 - c. Profits equal total revenue minus total cost
 - d. Marginal revenue is greater than price

5. Monopolists:
 - a. always earn zero economic profits in the long run.
 - b. can maintain short-run economic profits in the long run if barriers to entry exist.
 - c. cannot exit the industry in the long run even if short-run economic losses persist.
 - d. produce the output where price equals marginal cost.

6. Which of the following is a barrier to entry?
 - a. Diseconomies of scale
 - b. Government franchises and licenses
 - c. Sole ownership of a key resource
 - d. All of the above
 - e. (b) and (c) only

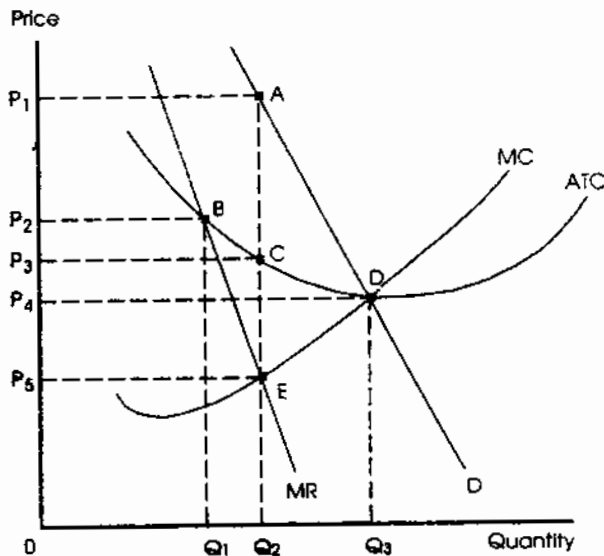
7. Which of the following is a characteristic of a monopoly market?
 - a. The product has many close substitutes.
 - b. There are no barriers to entry.
 - c. There are many sellers of the product.
 - d. The demand curve is downward-sloping.

8. The defining characteristic of a natural monopoly is:
 - a. economies of scale over the relevant range of output.
 - b. diseconomies of scale over the relevant range of output.
 - c. marginal cost is U-shaped over the relevant range of output.
 - d. marginal cost is constant over the relevant range of output.

9. The demand curve for a monopoly firm is:
 - a. more elastic than the industry, or market, demand curve for its product.
 - b. the same as the industry, or market, demand curve for its product.
 - c. less elastic than the industry, or market, demand curve for its product.
 - d. perfectly inelastic at the output where $MR=MC$.

10. If MC is greater than MR, then a profit-maximizing monopolist should:
- increase output to increase profit.
 - decrease output to increase profit.
 - do nothing since it is already maximizing profit.
 - decrease output to decrease profit.

Refer to the graph below to answer questions 11 and 12.



11. This profit-maximizing firm will produce ____ units of output and charge a price of ____.
- Q_1 ; P_2 .
 - Q_2 ; P_1 .
 - Q_2 ; P_3 .
 - Q_3 ; P_4 .
12. The deadweight loss of this industry being monopolistic rather than perfectly competitive is equal to the area:
- Q_1BDQ_3 .
 - ADE.
 - P_1ACP_3 .
 - Q_1ADQ_3 .
13. Government attempts to reduce the inefficiency associated with monopoly in all of the following ways **except**:
- enforcing antitrust laws that increase competition.
 - regulating the price a monopoly can charge for output.
 - operating the monopoly itself.
 - limiting the amount of output the monopoly may sell in order to limit profit.

14. A monopoly produces:
- more than the efficient level of output because marginal benefit exceeds marginal cost.
 - less than the efficient level of output because marginal benefit exceeds marginal cost.
 - more than the efficient level of output because marginal benefit is less than marginal cost.
 - less than the efficient level of output because marginal benefit is less than marginal cost.
15. Price discrimination is the practice of:
- charging lower prices in the short run than the long run.
 - charging lower prices in the long run than the short run.
 - selling the same good at different prices to different customers.
 - selling more output in one market than in another market.

Use the information in the table below to answer the next two questions.

<u>Price per unit</u>	<u>Quantity Demanded</u>
\$12	0
10	1
8	2
6	3
4	4
2	5

16. For a monopolist that is unable to price discriminate, the marginal revenue of the 3rd unit is ____ and the marginal revenue for the 4th unit is ____.
- \$18; \$16
 - \$6; \$2
 - \$2; \$0
 - \$2; -\$2
17. A monopolist that is able to perfectly price discriminate would earn total revenue of _____ if it sold 4 units of output and total revenue of _____ if it sold 5 units of output.
- \$16; \$10
 - \$16; \$30
 - \$28; \$30
 - \$28; \$10

18. An industry dominated by a few large firms whose pricing and output decisions are dependent on one another is:
- illegal in the United States.
 - oligopolistic.
 - monopolistic.
 - more efficient than a perfectly competitive industry.
19. The game theory model assumes that:
- firms ignore rival firms' decisions when they make their own decisions.
 - firms anticipate rival firms' decisions when they make their own decisions.
 - markets are contestable because there are no barriers to entry.
 - a firm will always follow the pricing strategy of the dominant firm in the industry.
20. When an oligopoly market is in a Nash equilibrium:
- market price will always be different for each firm.
 - individual firms will not behave as profit maximizers.
 - each firm chooses its best strategy given the strategies that the other firms have chosen.
 - average total cost equals marginal revenue.

Use the information below to answer the next question.

Suppose that two laundry detergent producers, Proctor & Gamble (P&G) and Lever Brothers, are attempting to increase their profits. Each is considering advertising, but is concerned about what the other will do. The results of their decisions are shown below.

		P&G	
		Advertise	Don't Advertise
Lever	Advertise	P & G profits = \$3b Lever profits = \$3b	P & G profits = \$2b Lever profits = \$5b
	Don't Advertise	P & G profits = \$5b Lever profits = \$2b	P & G profits = \$4b Lever profits = \$4b

21. When this game reaches a Nash equilibrium, P & G will earn a profit of _____ and Lever will earn a profit of _____.
- \$4 billion; \$4 billion.
 - \$3 billion; \$3 billion.
 - \$5 billion; \$2 billion.
 - \$2 billion; \$5 billion.

22. Mutual interdependence means that each oligopolistic firm:
- faces a perfectly elastic demand for its product.
 - must consider the reactions of its rivals when it determines its price policy.
 - produces a product identical to those of its rivals.
 - produces a product similar but not identical to the products of its rivals.
23. Game theory is especially relevant to understanding:
- perfectly competitive markets.
 - monopoly markets.
 - oligopoly markets.
 - none of the above is correct.
24. A cartel is an organization of firms:
- that attempts to decrease total (or industry) demand for their product.
 - that reduces output and raises price in an effort to increase joint profits.
 - dominated by one firm, which is usually referred to as the price leader.
 - that deliberately attempts to disrupt the market for political reasons.
25. Cartels are often short-lived because:
- laws often prohibit explicit collusive agreements among competitors.
 - self-interest often conflicts with cooperation.
 - it is difficult to enforce agreements reached by cartel members.
 - all of the above are correct.
26. One difference between oligopoly and monopolistic competition is that:
- under oligopoly, firms choose their best strategy without consideration to the strategies chosen by others.
 - fewer firms compete in oligopolies than in monopolistic competition.
 - in monopolistic competition, the products are identical.
 - monopolistic competition has many barriers to entry.
27. A market characterized by many firms producing differentiated products and entry and exit are relatively easy is:
- oligopolistic.
 - perfectly competitive.
 - monopolistic.
 - monopolistically competitive.

28. An important similarity between a monopolistically competitive firm and a monopolist is that both:
- realize an economic profit in the long run.
 - fail to produce where $P = MC$, resulting in deadweight loss.
 - face demand curves which are perfectly inelastic.
 - face significant barriers to entry.
29. Suppose at the profit-maximizing/loss-minimizing level of output, $P = \$10$, $ATC = \$13$, and $AVC = \$11$. A firm in this position would:
- earn a short-run economic profit, so it should continue to produce where $MR = MC$.
 - in the short run minimize its losses by shutting down its operations.
 - in the short run minimize its losses by continuing to produce where $MR = MC$.
 - continue to produce, but cut back production to a point where $MR < MC$ to reduce production costs.
30. Compared to a monopolist, a monopolistically competitive firm produces a good with _____ substitutes, so it has a _____ elastic demand curve.
- fewer; more
 - fewer; less
 - more; more
 - more; less
31. If a monopolistically competitive firm earns a positive economic profit in the short run, it will in the long run:
- earn positive economic profits because of barriers to entry.
 - earn a normal profit (zero economic profit) due to the absence of barriers to entry.
 - earn an economic loss because there are no barriers to entry.
 - exit the industry.
32. In the long run, a monopolistically competitive firm will produce where:
- $MC = MR = P < ATC$.
 - $MC = MR < ATC = P$.
 - $MC = MR = P = ATC$.
 - $MC = MR = ATC < P$.

33. In a graph illustrating a perfectly competitive labor market, the supply curve of labor for the individual **firm** is _____, and the **market** supply curve of labor is _____.
- perfectly elastic; upward-sloping
 - perfectly inelastic; upward-sloping
 - upward-sloping; upward-sloping
 - upward-sloping; perfectly elastic
34. The demand for labor:
- is derived from the demand for the output the labor helps produce.
 - cannot be analyzed using conventional supply and demand graphs.
 - depends on the cost of labor.
 - is perfectly elastic for the market as a whole, but downward-sloping for an individual employer.
35. A decrease in the **market** supply of labor will _____ the equilibrium wage and cause a _____ a perfectly competitive **firm's** value of the marginal product curve.
- raise; shift in
 - raise; movement along
 - lower; shift in
 - lower; movement along
36. If the price of televisions decreases, the value of the marginal product of workers making televisions will:
- decrease.
 - increase.
 - not change.
 - rise then fall.
37. A competitive, profit-maximizing firm will choose to hire workers up to the point in which the value of the marginal product:
- begins to decrease.
 - is equal to the wage.
 - is equal to zero.
 - is equal to the price of the good being produced.

Refer to the table below of a firm in a perfectly competitive labor market to answer questions 38 - 40.

(L) # of workers	(TP=Q) Output (per Hour)	(MP) Marginal Product	(P) Price of Output	(VMP) Value of Marginal Product (per hour)
0	0	----	\$3	----
1	9		\$3	
2	24	15	\$3	
3	30		\$3	\$18
4	35		\$3	
5	34	-1	\$3	

38. Marginal product (MP) of the fourth worker is _____.
- 8.75
 - 10
 - 5
 - 35
39. Value of the marginal product (VMP) of the first worker is _____.
- \$9
 - \$27
 - \$15
 - \$30
40. According to the table above, if the wage rate is \$15 per hour, what is the amount of labor that this firm should hire to maximize profits?
- 5 workers
 - 4 workers
 - 2 workers
 - 1 worker.

Answer Key:

1. A
2. B
3. B
4. D
5. B
6. E
7. D
8. A
9. B
10. B
11. B
12. B
13. D
14. B
15. C
16. D
17. C
18. B
19. B
20. C
21. B
22. B
23. C
24. B
25. D
26. B
27. D
28. B
29. B
30. C
31. B
32. B
33. A
34. A
35. B
36. A
37. B
38. C
39. B
40. B