

Economics Bootcamp Comprehensive Exam

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- _____ 1. A higher price for batteries would result in a(n)
- increase in the demand for flashlights.
 - decrease in the demand for flashlights.
 - increase in the demand for batteries.
 - decrease in the demand for batteries.
- _____ 2. When quantity demanded has increased at every price, it might be because
- the number of buyers in the market has decreased.
 - income has increased and the good is an inferior good.
 - the costs incurred by sellers producing the good have decreased.
 - the price of a complementary good has decreased.

Table 4-4

Price	Firm A's Quantity Supplied	Firm B's Quantity Supplied	Firm C's Quantity Supplied	Firm D's Quantity Supplied
\$0	0	0	0	0
\$2	3	4	2	1
\$4	6	8	4	2
\$6	9	12	6	3
\$8	12	16	8	4
\$10	15	20	10	5

- _____ 3. **Refer to Table 4-4.** If these are the only four sellers in the market, then when the price decreases from \$10 to \$8, the market quantity supplied
- decreases by 2.5 units.
 - decreases by 4 units.
 - decreases by 10 units.
 - decreases by 50 units.
- _____ 4. Which of the following would *not* shift the supply curve for mp3 players?
- an increase in the price of mp3 players
 - a decrease in the number of sellers of mp3 players
 - an increase in the price of plastic, an input into the production of mp3 players
 - an improvement in the technology used to produce mp3 players
- _____ 5. A university's football stadium is never more than half-full during football games. This indicates
- the ticket price is above the equilibrium price.
 - the ticket price is below the equilibrium price.
 - the ticket price is at the equilibrium price.
 - nothing about the equilibrium price.

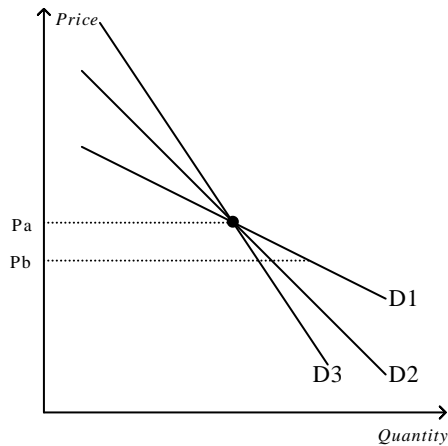
Table 4-6

A country club usually only allows members to purchase tickets for its celebrity golf tournament, but the club is considering allowing non-members to purchase tickets this year. The demand and supply schedules are as follows:

Price	Quantity Demanded by Members	Quantity Demanded by Non-members	Quantity Supplied
\$10	1000	500	600
\$15	800	400	600
\$20	600	300	600
\$25	400	200	600
\$30	200	100	600

- ___ 6. **Refer to Table 4-6.** If both members and non-members are allowed to purchase tickets to this year's celebrity golf tournament and the country club sets the ticket price at \$30, then there will be
- a shortage of 300 tickets.
 - a surplus of 300 tickets.
 - 600 tickets sold.
 - 600 tickets unsold.
- ___ 7. If the demand for a product decreases, then we would expect
- equilibrium price to increase and equilibrium quantity to decrease.
 - equilibrium price to decrease and equilibrium quantity to increase.
 - equilibrium price and equilibrium quantity to both increase.
 - equilibrium price and equilibrium quantity to both decrease.
- ___ 8. Which of the following events will definitely cause equilibrium quantity to rise?
- demand increases and supply decreases
 - demand and supply both decrease
 - demand decreases and supply increases
 - demand and supply both increase
- ___ 9. The signals that guide the allocation of resources in a market economy are
- surpluses and shortages.
 - quantities.
 - government policies.
 - prices.
- ___ 10. Which of the following is likely to have the most price inelastic demand?
- white chocolate chip with macadamia nut cookies
 - Mrs. Field's chocolate chip cookies
 - milk chocolate chip cookies
 - cookies

Figure 5-2



- ___ 11. **Refer to Figure 5-2.** As price falls from P_a to P_b , which demand curve represents the most elastic demand?
- D1
 - D2
 - D3
 - All of the above are equally elastic.
- ___ 12. When the local used bookstore prices economics books at \$15.00 each, it generally sells 70 books per month. If it lowers the price to \$7.00, sales increase to 90 books per month. Given this information, we know that the price elasticity of demand for economics books is about
- 2.91, and an increase in price from \$7.00 to \$15.00 results in an increase in total revenue.
 - 2.91, and an increase in price from \$7.00 to \$15.00 results in a decrease in total revenue.
 - 0.34, and an increase in price from \$7.00 to \$15.00 results in an increase in total revenue.
 - 0.34, and an increase in price from \$7.00 to \$15.00 results in a decrease in total revenue.
- ___ 13. The local pizza restaurant makes such great bread sticks that consumers do not respond much at all to a change in the price. If the owner is only interested in increasing revenue, he should
- lower the price of the bread sticks.
 - leave the price of the bread sticks alone.
 - raise the price of the bread sticks.
 - reduce costs.
- ___ 14. Last year, Joan bought 50 pounds of hamburger when her household's income was \$40,000. This year, her household income was only \$30,000 and Joan bought 60 pounds of hamburger. All else constant, Joan's income elasticity of demand for hamburger is
- positive, so Joan considers hamburger to be an inferior good.
 - positive, so Joan considers hamburger to be a normal good and a necessity.
 - negative, so Joan considers hamburger to be an inferior good.
 - negative, so Joan considers hamburger to be a normal good but not a necessity.
- ___ 15. Suppose goods A and B are substitutes for each other. We would expect the cross-price elasticity between these two goods to be
- positive.
 - negative.
 - either positive or negative. It depends whether A and B are normal goods or inferior goods.
 - either positive or negative. It depends whether the current price level is on the elastic or inelastic portion of the demand curve.

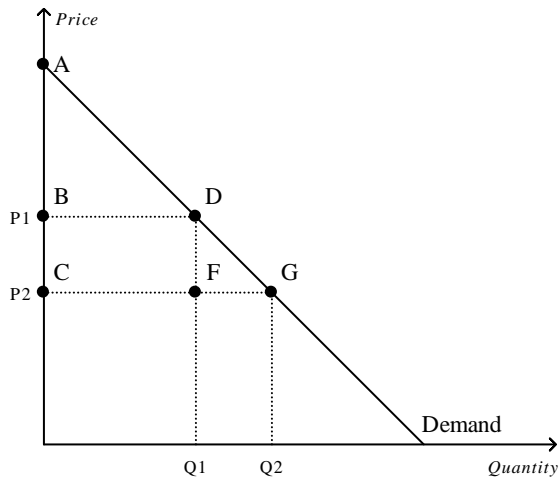
- _____ 16. An increase in the price of pure chocolate morsels from \$2.25 to \$2.45 causes suppliers of chocolate morsels to increase their quantity supplied from 125 bags per minute to 145 bags per minute. Supply is
- elastic, and the price elasticity of supply is 1.74.
 - elastic, and the price elasticity of supply is 0.57.
 - inelastic, and the price elasticity of supply is 1.74.
 - inelastic, and the price elasticity of supply is 0.57.
- _____ 17. Farm programs that pay farmers not to plant crops on all their land
- hurt farmers by lowering their total revenue and hurt consumers by causing shortages of some food items.
 - help farmers by cutting costs, which helps consumers by lowering food prices.
 - help farmers by increasing total revenue in the market but hurt consumers by raising prices.
 - help farmers directly since they receive government payments but have no real effects on consumers.

Scenario 5-3

Milk has an inelastic demand and beef has an elastic demand. Suppose that a mysterious increase in bovine infertility decreases both the population of dairy cows and the population of beef cattle by 50 percent.

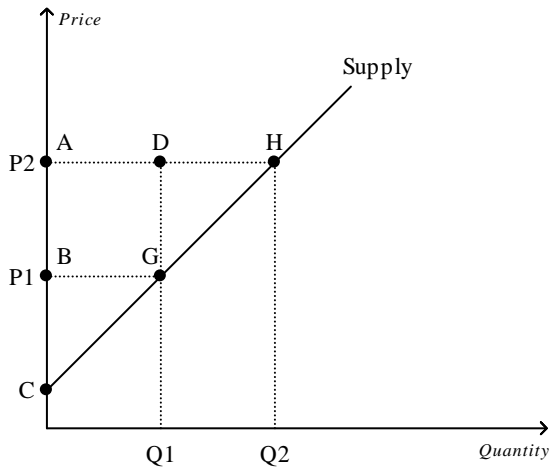
- _____ 18. **Refer to Scenario 5-3.** Total consumer spending on milk will
- increase, and total consumer spending on beef will increase.
 - increase, and total consumer spending on beef will decrease.
 - decrease, and total consumer spending on beef will increase.
 - decrease, and total consumer spending on beef will decrease.
- _____ 19. The particular price that results in quantity supplied being equal to quantity demanded is the best price because it
- maximizes costs of the seller.
 - maximizes tax revenue for the government.
 - maximizes the combined welfare of buyers and sellers.
 - minimizes the expenditure of buyers.
- _____ 20. Suppose Lauren, Leslie and Lydia all purchase bulletin boards for their rooms for \$15 each. Lauren's willingness to pay was \$35, Leslie's willingness to pay was \$25, and Lydia's willingness to pay was \$30. Total consumer surplus for these three would be
- \$15.
 - \$30.
 - \$45.
 - \$90.
- _____ 21. If the price of oak lumber increases, what happens to consumer surplus in the market for oak cabinets?
- Consumer surplus increases.
 - Consumer surplus decreases.
 - Consumer surplus will not change consumer surplus; only producer surplus changes.
 - Consumer surplus depends on what event led to the increase in the price of oak lumber.

Figure 7-2



22. Refer to Figure 7-2. Which area represents consumer surplus at a price of P1?
- ABD
 - ACG
 - BCDF
 - DFG

Figure 7-7



23. Refer to Figure 7-7. Which area represents producer surplus when the price is P1?
- BCG
 - ACH
 - ABGD
 - DGH

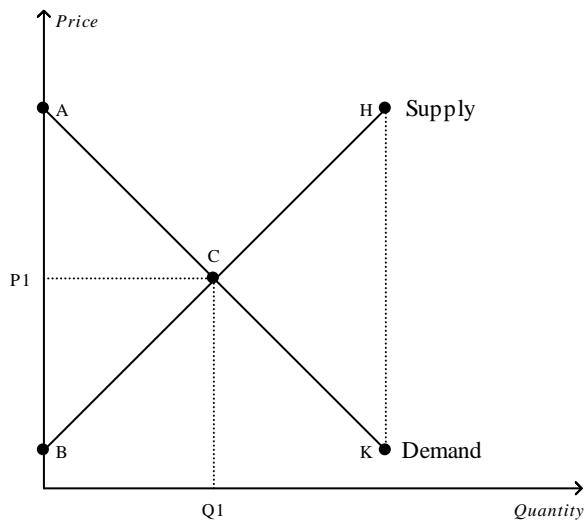
Table 7-9

Price	Quantity Demanded	Quantity Supplied
\$12.00	0	12

\$10.00	4	10
\$ 8.00	8	8
\$ 6.00	12	6
\$ 4.00	16	4
\$ 2.00	20	2
\$ 0.00	24	0

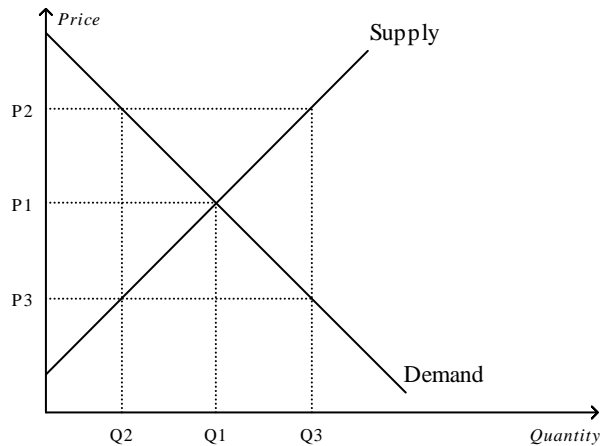
24. Refer to Table 7-9. Both the demand curve and the supply curve are straight lines. If the price is \$8 but *only 4 units* are bought and sold, consumer surplus will be
- \$8.
 - \$12.
 - \$16.
 - \$18.

Figure 7-18



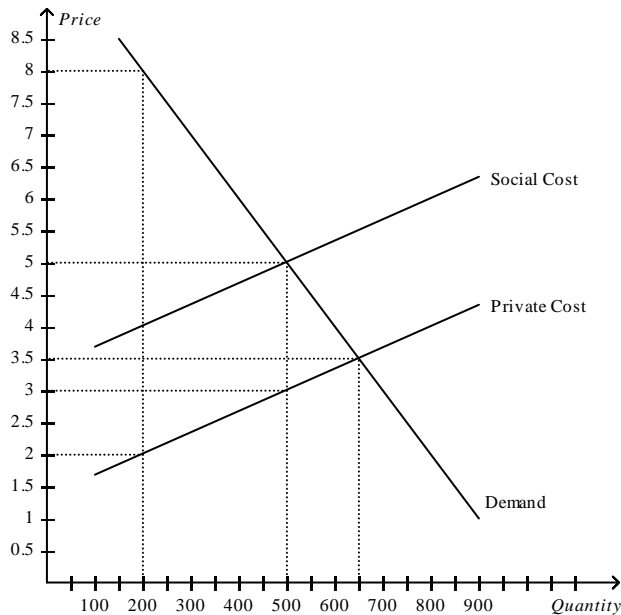
25. Refer to Figure 7-18. If the government mandated a price increase from P_1 to a higher price, then
- total surplus would decrease.
 - consumer surplus would increase.
 - total surplus would increase, since producer surplus would increase.
 - total surplus would remain unchanged.

Figure 7-19



- ___ 26. **Refer to Figure 7-19.** At the quantity Q2, the marginal value to buyers
- and the marginal cost to sellers are both P2.
 - is P2, and the marginal cost to sellers is P3.
 - and the marginal cost to sellers are both P3.
 - is P3, and the marginal cost to sellers is P2.
- ___ 27. Market power refers to the
- side effects that may occur in a market.
 - government regulations imposed on the sellers in a market.
 - ability of market participants to influence price.
 - forces of supply and demand in determining equilibrium price.
- ___ 28. Since restored historic buildings convey a positive externality, local governments may choose to
- regulate the demolition of them.
 - provide tax breaks to owners who restore them.
 - increase property taxes in historic areas.
 - Both a and b are correct.
- ___ 29. When producers operate in a market characterized by negative externalities, a tax that forces them to internalize the externality will
- give sellers the incentive to account for the external effects of their actions.
 - increase demand.
 - increase the amount of the commodity exchanged in market equilibrium.
 - restrict the producers' ability to take the costs of the externality into account when deciding how much to supply.

Figure 10-2



- ___ 30. **Refer to Figure 10-2.** Assume the production of plastic imposes a cost on society of \$2.00 per unit. If the free market equilibrium output is 650 units, the government should
- impose a tax of \$1.50 per unit.
 - increase the output of the firm by 50 units.
 - offer a subsidy of \$2.00 per unit.
 - impose a tax of \$2.00 per unit.
- ___ 31. Some environmentalists argue that we should protect the environment as much as possible, regardless of cost. Which of the following is *not* a likely outcome of pursuing such a course of action?
- lower levels of nutrition, health care, and housing
 - a lower standard of living
 - slowing or reversing technological advancement
 - the elimination of all pollution
- ___ 32. Which of the following is *not* an effective method to reduce negative externalities?
- relying on voluntary compliance
 - taxing the output of industries that pollute
 - creating legal environmental standards
 - increasing public spending on cleanup and reduction of pollution
- ___ 33. Two firms, A and B, each currently dump 50 tons of chemicals into the local river. The government has decided to reduce the pollution and from now on will require a pollution permit for each ton of pollution dumped into the river. The government will sell 40 pollution permits for \$75 each. It costs Firm A \$100 for each ton of pollution that it eliminates before it reaches the river, and it costs Firm B \$50 for each ton of pollution that it eliminates before it reaches the river. Neither firm produces any less output, but they both conform to the law. It is likely that between the cost of permits and the cost of additional pollution abatement,
- Firm B will spend \$3,500.
 - Firm A will spend \$4,000.
 - Firm A will spend \$4,500.
 - Firm B will spend \$3,000.

Table 10-3

The following table shows the marginal costs for each of four firms (A, B, C, and D) to eliminate units of pollution from their production processes. For example, for Firm A to eliminate one unit of pollution, it would cost \$54, and for Firm A to eliminate a second unit of pollution it would cost an additional \$67.

<i>Unit to be eliminated</i>	Firm			
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
First unit	54	57	54	62
Second unit	67	68	66	73
Third unit	82	86	82	91
Fourth unit	107	108	107	111

- ___ 34. **Refer to Table 10-3.** If the government charged a fee of \$69 per unit of pollution, how many units of pollution would the firms eliminate altogether?
- 7
 - 8
 - 9
 - 10
- ___ 35. **Refer to Table 10-3.** If the government wanted to reduce pollution from 16 units to 6 units, which of the following fees per unit of pollution would achieve that goal?
- \$67
 - \$68
 - \$81
 - \$83
- ___ 36. Suppose that Bill wants to dine at a fancy restaurant, but the only available table is in the smoking section. Bill dislikes the smell of cigarette smoke. He notices that only one person, Peter, is smoking in the smoking section. Bill values the absence of smoke at \$15. Peter values the ability to smoke in the restaurant at \$10. In order for Bill to pay Peter not to smoke, he will need to tip the waiter \$10 to facilitate the transaction. Which of the following represents an efficient solution?
- Peter continues to smoke because the cost to Bill to pay him not to smoke is between \$20 and \$25, which exceeds the benefit to him of no smoking (\$15).
 - Bill offers Peter between \$10 and \$15 not to smoke, and he pays the waiter \$10. Peter accepts, and both parties are better off.
 - Bill offers Peter between \$10 and \$15 not to smoke, and he pays the waiter \$10. Peter declines because he has a right to smoke in the smoking section.
 - Bill offers Peter \$5 not to smoke, and he pays the waiter \$10. Peter accepts, and both parties are better off.

Scenario 13-3

Tony is a wheat farmer, but he also spends part of his day teaching guitar lessons. Due to the popularity of his local country western band, Farmer Tony has more students requesting lessons than he has time for if he is to also maintain his farming business. Farmer Tony charges \$25 an hour for his guitar lessons. One spring day, he spends 10 hours in his fields planting \$130 worth of seeds on his farm. He expects that the seeds he planted will yield \$300 worth of wheat.

- ___ 37. **Refer to Scenario 13-3.** Tony's accounting profit equals
- \$80.

- b. \$130.
- c. \$170.
- d. \$260.

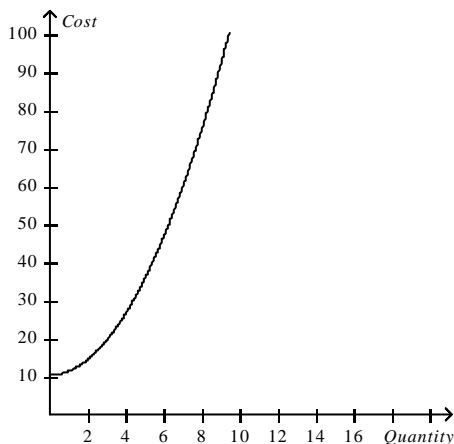
38. Which of these assumptions is often realistic for a firm in the short run?
- a. The firm can vary both the size of its factory and the number of workers it employs.
 - b. The firm can vary the size of its factory but not the number of workers it employs.
 - c. The firm can vary the number of workers it employs but not the size of its factory.
 - d. The firm can vary neither the size of its factory nor the number of workers it employs.

Table 13-4
Gallo Cork Factory

Number of Workers	Number of Machines	Output (corks produced per hour)	Marginal Product of Labor	Cost of Workers	Cost of Machines	Total Cost
1	2	5				
2	2	10				
3	2	20				
4	2	35				
5	2	55				
6	2	70				
7	2	80				

39. Refer to Table 13-4. Gallo's cork factory experiences diminishing marginal product of labor with the addition of which worker?
- a. the third worker
 - b. the fourth worker
 - c. the fifth worker
 - d. the sixth worker

Figure 13-3



40. Refer to Figure 13-3. Assuming that the firm depicted produces cookies, which of the statements below is most consistent with the shape of the total cost curve?

- a. Producing an additional cookie is always more costly than producing the previous cookie.
- b. Total production of cookies decreases with additional units of input.
- c. Producing additional cookies is equally costly, regardless of how many cookies are already being produced.
- d. Producing additional cookies becomes increasingly costly only when the number of cookies already being produced is large.

Table 13-6

Quantity of Output	Fixed Cost	Variable Cost
0	\$20	\$0
1	\$20	\$10
2	\$20	\$40
3	\$20	\$80
4	\$20	\$130
5	\$20	\$200
6	\$20	\$300

- ___ 41. Refer to Table 13-6. What is the average fixed cost of producing 5 units of output?
- a. \$4
 - b. \$5
 - c. \$40
 - d. \$44

Table 13-7

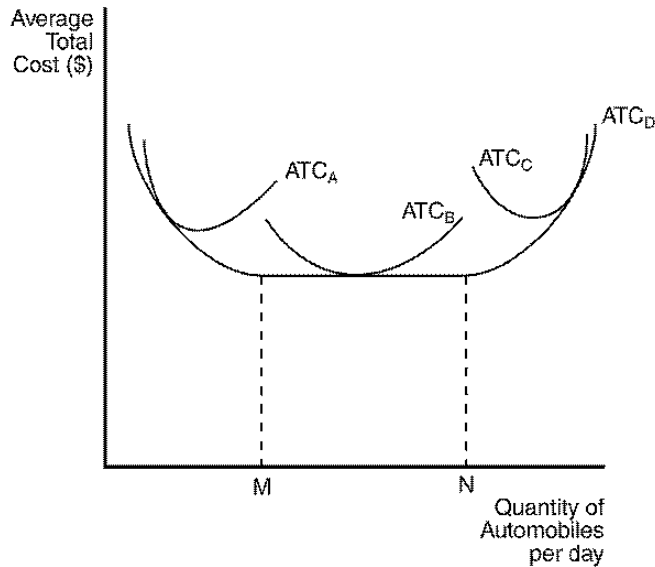
Measures of Cost for ABC Inc. Widget Factory			
Quantity of Widgets	Variable Costs	Total Costs	Fixed Costs
0			\$10
1	\$ 1		
2	\$ 3	\$13	
3	\$ 6	\$16	
4	\$10		
5		\$25	
6	\$21		\$10

- ___ 42. Refer to Table 13-7. The average total cost of producing one widget is
- a. \$1.00.
 - b. \$10.00.
 - c. \$11.00.
 - d. \$22.00.
- ___ 43. Which of the following factors is most likely to shift IBM's total cost and marginal cost curves downward?
- a. a technological advance resulting in increased productivity
 - b. higher property taxes charged by the municipal government
 - c. increased wages to attract additional computer operators
 - d. a reduction in subsidies from the state government
- ___ 44. When average cost is greater than marginal cost, marginal cost must be
- a. rising.

- b. falling.
- c. constant.
- d. The direction of change in marginal cost cannot be determined from this information.

Figure 13-9

The figure below depicts average total cost functions for a firm that produces automobiles.



- ___ 45. Refer to Figure 13-9. Which of the curves is most likely to characterize the short-run average total cost curve of the smallest factory?
- a. ATC_A
 - b. ATC_B
 - c. ATC_C
 - d. ATC_D
- ___ 46. Which of the following is *not* a characteristic of a perfectly competitive market?
- a. Firms are price takers.
 - b. Firms can freely enter the market.
 - c. Many firms have market power.
 - d. Goods offered for sale are largely the same.

Table 14-1

Quantity	Total Revenue
0	\$0
1	\$7
2	\$14
3	\$21
4	\$28

- ___ 47. Refer to Table 14-1. For a firm operating in a competitive market, the marginal revenue is
- a. \$0.
 - b. \$7.
 - c. \$14.
 - d. \$21.

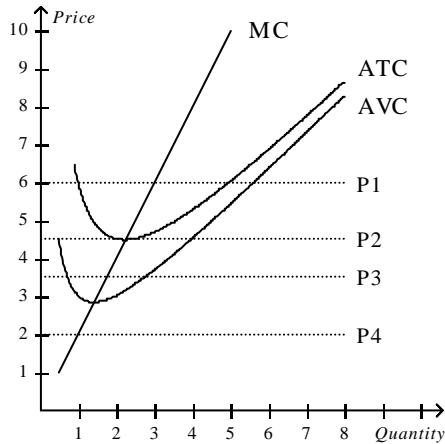
- ___ 48. At the profit-maximizing level of output,
- marginal revenue equals average total cost.
 - marginal revenue equals average variable cost.
 - marginal revenue equals marginal cost.
 - average revenue equals average total cost.
- ___ 49. A firm in a competitive market has the following cost structure:

Output	ATC
0	--
1	\$10
2	\$8
3	\$7
4	\$8
5	\$10

If the firm's fixed cost of production is \$3, and the market price is \$10, how many units should the firm produce to maximize profit?

- 1 unit
 - 2 units
 - 3 units
 - 4 units
- ___ 50. We can measure the profits earned by a firm in a competitive industry as
- $(P - ATC) \times Q$.
 - $(P - MC) \times Q$.
 - $MR \times MC$.
 - $(MC - ATC) \times Q$.
- ___ 51. In the long run, all of a firm's costs are variable. In this case the exit criterion for a profit-maximizing firm is to shut down if
- price is less than average total cost.
 - price is greater than average total cost.
 - average revenue is greater than average fixed cost.
 - average revenue is greater than marginal cost.
- ___ 52. In the short run, a firm operating in a competitive industry will shut down if price is
- less than average total cost.
 - less than average variable cost.
 - greater than average variable cost but less than average total cost.
 - greater than marginal cost.
- ___ 53. In the long run, a firm will enter a competitive industry if
- total revenue exceeds total cost.
 - the price exceeds average total cost.
 - the firm can earn economic profits.
 - All of the above are correct.

Figure 14-10



- _____ 54. **Refer to Figure 14-10.** If the price is P3 in the short run, what will happen in the long run?
- Nothing. The price is consistent with zero economic profits, so there is no incentive for firms to enter or exit the industry.
 - Individual firms will earn positive economic profits in the short run, which will entice other firms to enter the industry.
 - Individual firms will earn negative economic profits in the short run, which will cause some firms to exit the industry.
 - Because the price is below the firm's average variable costs, the firms will shut down.
- _____ 55. The profit-maximization problem for a monopolist differs from that of a competitive firm in which of the following ways?
- A competitive firm maximizes profit at the point where marginal revenue equals marginal cost; a monopolist maximizes profit at the point where marginal revenue exceeds marginal cost.
 - A competitive firm maximizes profit at the point where average revenue equals marginal cost; a monopolist maximizes profit at the point where average revenue exceeds marginal cost.
 - For a competitive firm, marginal revenue at the profit-maximizing level of output is equal to marginal revenue at all other levels of output; for a monopolist, marginal revenue at the profit-maximizing level of output is smaller than it is for larger levels of output.
 - For a profit-maximizing competitive firm, thinking at the margin is much more important than it is for a profit-maximizing monopolist.
- _____ 56. Which of the following statements is correct for a monopolist?
- The firm maximizes profits by equating marginal revenue with marginal cost.
 - The firm maximizes profits by equating price with marginal cost.
 - Demand equals marginal revenue.
 - Average revenue equals price.
- i), iii), and iv) only
 - i) and iv) only
 - i), ii), and iv) only
 - i), ii), iii), and iv)
- _____ 57. Marginal revenue for a monopolist is computed as
- average revenue divided by quantity sold.

- b. average revenue times quantity divided by price.
- c. total revenue divided by quantity sold.
- d. change in total revenue per one unit increase in quantity sold.

- ___ 58. If a pharmaceutical company discovers a new drug and successfully patents it, patent law gives the firm
- a. partial ownership of the right to sell the drug for a limited number of years.
 - b. partial ownership of the right to sell the drug for an unlimited number of years.
 - c. sole ownership of the right to sell the drug for a limited number of years.
 - d. sole ownership of the right to sell the drug for an unlimited number of years.

Table 15-5

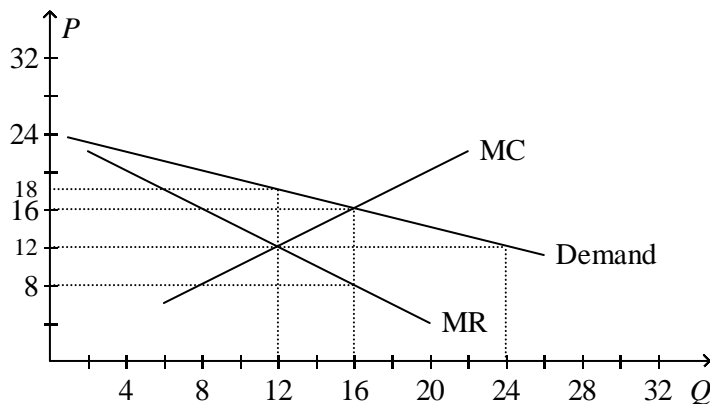
Quantity	Price
0	\$10
1	\$9
2	\$8
3	\$7
4	\$6
5	\$5
6	\$4
7	\$3
8	\$2
9	\$1
10	\$0

- ___ 59. **Refer to Table 15-5.** If the monopolist faces a constant marginal cost of \$5, how much output should the firm produce?
- a. 3 units
 - b. 4 units
 - c. 5 units
 - d. 6 units
- ___ 60. In order for antitrust laws to raise social welfare, the government must
- a. disallow synergy benefits from accruing to monopolists.
 - b. disallow any mergers from taking place.
 - c. be able to determine which mergers are desirable and which are not.
 - d. always attempt to keep markets in their most competitive form.
- ___ 61. Which of the following statements is *not* correct?
- a. Part of the deadweight loss associated with monopoly is measured by the monopolist's economic profit.
 - b. Marginal cost is always less than average total cost in a natural monopoly.
 - c. Discount coupons available free to the public are a type of price discrimination.
 - d. Anti-trust laws make it harder for firms to create synergies.
- ___ 62. One problem with government operation of monopolies is that
- a. a benevolent government is likely to be interested in generating profits for political gain.
 - b. monopolies typically have rising average costs.
 - c. the government typically has little incentive to reduce costs.
 - d. a government-regulated outcome will increase the profitability of the monopoly.
- ___ 63. One problem with regulating a monopolist on the basis of cost is that

- a. by focusing on costs, the regulators ignore profits.
- b. it does not provide an incentive for the monopolist to reduce its cost.
- c. a monopolist's costs, by definition, are higher than costs of perfectly competitive firms.
- d. a monopolist is still able to generate excessive economic profits.

- ___ 64. Which of the following goods are *not* likely to be sold in monopolistically competitive markets?
- a. compact discs
 - b. books
 - c. cookies
 - d. wheat
- ___ 65. In a monopolistically competitive industry, firms set price
- a. equal to marginal cost since each firm is a price taker.
 - b. below marginal cost since each firm is a price taker.
 - c. above marginal cost since each firm is a price setter.
 - d. always a fraction of marginal cost since each firm is a price setter.

Figure 16-1. The figure is drawn for a monopolistically competitive firm.



- ___ 66. **Refer to Figure 16-1.** If the average variable cost is \$12 at the profit-maximizing quantity, and if the firm's fixed costs amount to \$30, then the firm's maximum profit is
- a. \$-30.
 - b. \$22.
 - c. \$36.
 - d. \$42.
- ___ 67. As new firms enter a monopolistically competitive market, profits of existing firms
- a. rise, and product diversity in the market increases.
 - b. rise, and product diversity in the market decreases.
 - c. decline, and product diversity in the market increases.
 - d. decline, and product diversity in the market decreases.
- ___ 68. Hotels in New York City frequently experience an average vacancy rate of about 20 percent (i.e., on an average night, 80 percent of the hotel rooms are full). This kind of excess capacity is indicative of what kind of market?
- a. monopoly
 - b. perfect competition
 - c. monopolistic competition

- d. oligopoly
- ___ 69. When consumers are exposed to additional choices that result from the introduction of a new product,
- their satisfaction is likely to be lowered as a result of their having to make additional choices.
 - a product-variety externality is said to occur.
 - an advertising externality is said to occur.
 - consumers are likely to experience negative consumption externalities.
- ___ 70. Which of the following is unique to a monopolistically competitive firm when compared to an oligopoly?
- The monopolistically competitive firm advertises.
 - The monopolistically competitive firm produces a quantity of output that falls short of the socially optimal level.
 - Monopolistic competition features many buyers.
 - Monopolistic competition features many sellers.
- ___ 71. Which of the following is a commonly-cited benefit of advertising?
- Advertising can be a signal of the quality of a product.
 - Advertising impedes competition.
 - Advertising reduces the deadweight loss associated with monopolistic competition.
 - Advertising encourages free entry, which increases profits.
- ___ 72. As a group, oligopolists would always be better off if they would act collectively
- as if they were each seeking to maximize their own individual profits.
 - in a manner that would prohibit collusive agreements.
 - as a single monopolist.
 - as a single perfectly competitive firm.
- ___ 73. In a duopoly situation, the logic of self-interest results in a total output level that
- equals the output level that would prevail in a competitive market.
 - equals the output level that would prevail in a monopoly.
 - exceeds the monopoly level of output, but falls short of the competitive level of output.
 - falls short of the monopoly level of output.

Table 17-9

Two cigarette manufacturers (Firm A and Firm B) are faced with lawsuits from states to recover the healthcare related expenses associated with cigarette smoking. Both cigarette firms have evidence that indicates that cigarette smoke causes lung cancer (and other related illnesses). State prosecutors do not have access to the same data used by cigarette manufacturers and thus will have difficulty recovering full costs without the help of at least one cigarette firm study. Each firm has been presented with an opportunity to lower its liability in the suit if it cooperates with attorneys representing the states.

		Firm B	
		<i>Concede that cigarette smoke causes lung cancer</i>	<i>Argue that there is no evidence that smoke causes cancer</i>
Firm A	<i>Concede that cigarette smoke causes lung cancer</i>	Firm A profit = \$-20 Firm B profit = \$-15	Firm A profit = \$-50 Firm B profit = \$-5
	<i>Argue that there is no evidence that smoke causes cancer</i>	Firm A profit = \$-5 Firm B profit = \$-50	Firm A profit = \$-10 Firm B profit = \$-10

74. Refer to Table 17-9. Pursuing its own best interests, Firm A will concede that cigarette smoke causes lung cancer
- only if Firm B concedes that cigarette smoke causes lung cancer.
 - only if Firm B does not concede that cigarette smoke causes lung cancer.
 - regardless of whether Firm B concedes that cigarette smoke causes lung cancer.
 - None of the above. In pursuing its own best interests, Firm A will in no case concede that cigarette smoke causes lung cancer.

Table 17-11

Two home-improvement stores (Big Box Deluxe and Homes R Us) in a growing urban area are interested in expanding their market share. Both are interested in expanding the size of their store and parking lot to accommodate potential growth in their customer base. The following game depicts the strategic outcomes that result from the game. Increases in annual profits of the two home-improvement stores are shown in the table below.

		Big Box Deluxe	
		<i>Increase the size of store and parking lot</i>	<i>Do not increase the size of store and parking lot</i>
Homes R Us	<i>Increase the size of store and parking lot</i>	Big Box Deluxe = \$0.50 million Homes R Us = \$0.75 million	Big Box Deluxe = \$0.20 million Homes R Us = \$1.70 million
	<i>Do not increase the size of store and parking lot</i>	Big Box Deluxe = \$1.60 million Homes R Us = \$0.30 million	Big Box Deluxe = \$1.00 million Homes R Us = \$1.25 million

75. Refer to Table 17-11. Suppose the owners of Big Box Deluxe and Homes R Us meet for a friendly game of golf one afternoon and happen to discuss a strategy to optimize growth related profit. They should both agree to
- increase their store and parking lot sizes.
 - refrain from increasing their store and parking lot sizes.
 - be more competitive in capturing market share.
 - share the context of their conversation with the Federal Trade Commission.
76. Games that are played more than once generally
- lead to outcomes dominated purely by self-interest.
 - lead to outcomes that do not reflect joint rationality.
 - encourage cheating on cartel production quotas.
 - make collusive arrangements easier to enforce.

Table 17-17. Consider a small town that has two grocery stores from which residents can choose to buy a gallon of milk. The store owners each must make a decision to set a high milk price or a low milk price. The payoff table, showing profit per week, is provided below. The profit in each cell is shown as (Store 1, Store 2).

		Store 2	
		<i>Low Price</i>	<i>High Price</i>
Store 1	<i>Low Price</i>	(500, 500)	(800, 100)
	<i>High Price</i>	(100, 800)	(650, 650)

77. Refer to Table 17-17. If grocery store 2 sets a high price, what price should grocery store 1 set? And what will grocery store 1's payoff equal?
- Low price, \$800
 - High price, \$650
 - Low price, \$100
 - High price, \$800

Figure 17-2. John and Michael are roommates. On a particular day, their apartment needs to be cleaned. Each person has to decide whether to take part in cleaning. At the end of the day, either the apartment will be completely clean (if one or both roommates take part in cleaning), or it will remain dirty (if neither roommate cleans). With happiness measured on a scale of 1 (very unhappy) to 10 (very happy), the possible outcomes are as follows:

		John's Decision	
		Clean	Don't clean
Michael's Decision	Clean	John's happiness = 7 Michael's happiness = 8	John's happiness = 10 Michael's happiness = 3
	Don't clean	John's happiness = 3 Michael's happiness = 10	John's happiness = 6 Michael's happiness = 4

78. Refer to Figure 17-2. In pursuing his own self-interest, John will
- refrain from cleaning whether or not Michael cleans.
 - clean only if Michael cleans.
 - clean only if Michael refrains from cleaning.
 - clean whether or not Michael cleans.
79. From society's standpoint, cooperation among oligopolists is
- desirable, because it leads to less conflict among firms and a wider variety of products for consumers.
 - desirable, because it leads to an outcome closer to the competitive outcome than what would be observed in the absence of cooperation.
 - undesirable, because it leads to output levels that are too low and prices that are too high.
 - undesirable, because it leads to output levels that are too high and prices that are too high.

Scenario 17-5

Assume that a local bank sells two services, checking accounts and ATM card services. The bank's only two customers are Mr. Donethat and Ms. Beenthere. Mr. Donethat is willing to pay \$8 a month for the bank to service his checking account and \$2 a month for unlimited use of his ATM card. Ms. Beenthere is willing to pay only \$5 for a checking account, but is willing to pay \$9 for unlimited use of her ATM card. Assume that the bank can provide each of these services at zero marginal cost.

- _____ 80. **Refer to Scenario 17-5.** If the bank is able to use tying to price checking account and ATM services, what is the profit-maximizing price to charge for the "tied" good?
- a. \$14
 - b. \$10
 - c. \$9
 - d. \$8

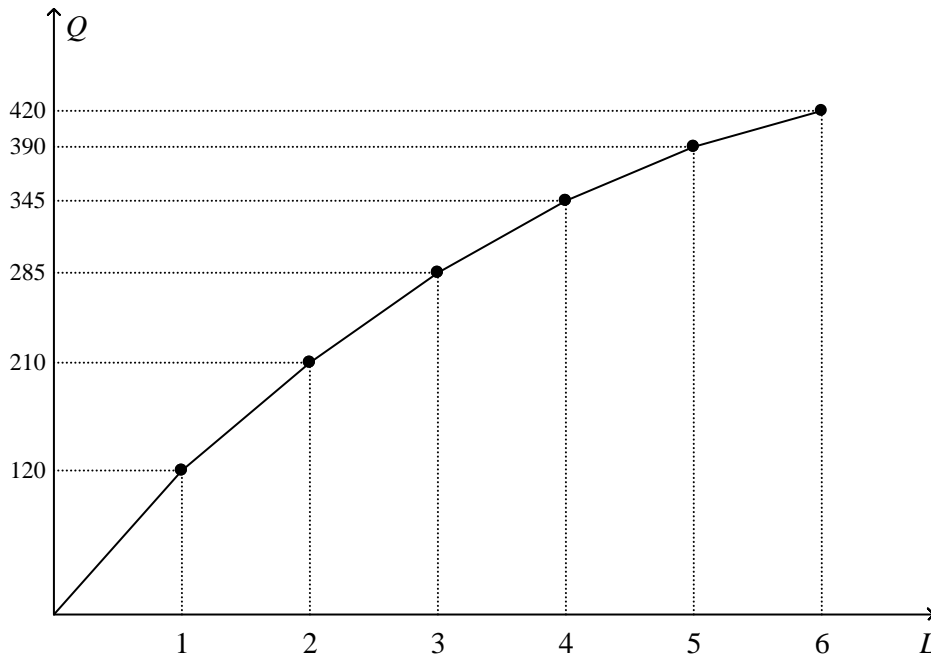
Table 18-2

The following table shows the production function for a particular business. The numbers represent the various labor and output combinations the firm may choose for its output on a daily basis.

Labor	Output
0	0
1	70
2	130
3	180
4	220
5	250

- _____ 81. **Refer to Table 18-2.** Suppose this firm charges a price of \$5 per unit of output and pays workers a wage equal to \$160 per day. How many workers should this firm hire to maximize its profit?
- a. 2 workers
 - b. 3 workers
 - c. 4 workers
 - d. 5 workers

Figure 18-1. On the graph, L represents the quantity of labor and Q represents the quantity of output per week.



82. Refer to Figure 18-1. Suppose the firm sells its output for \$12 per unit, and it pays each of its workers \$700 per week. How many workers will the firm hire to maximize its profit?
- 2
 - 3
 - 4
 - 5
83. John owns a number of hot dog stands in New York City. He hires workers to sell hot dogs at his stands. Which of the following events will lead to a decrease in John's demand for hot dog vendors?
- Hollywood glamorization of a new movie about a hot dog vendor leads hundreds of high-school students in New York City to apply for a job at John's.
 - The price of hot dogs falls.
 - The local hot dog vendors form a union increasing hot dog vendor wages.
 - The demand curve for hot dogs shifts to the right.
84. Suppose that eight workers can manufacture 70 radios per day and that nine workers can manufacture 90 radios per day. If radios can be sold for \$10 each, the value of marginal product of the ninth worker is
- 20 radios.
 - 90 radios.
 - \$200.
 - \$900.

Table 18-3

Quantity of Labor	Number of Baseballs Per Day
0	0
1	100
2	240
3	360

4	440
5	500

85. Refer to Table 18-3. This table describes the number of baseballs a manufacturer can produce per day with different quantities of labor. Each baseball sells for \$2.50 in a competitive market and the firm pays each unit of labor a wage equal to \$225 per day. How many units of labor should the firm hire to maximize profit?
- 2 units
 - 3 units
 - 4 units
 - 5 units

Table 18-5

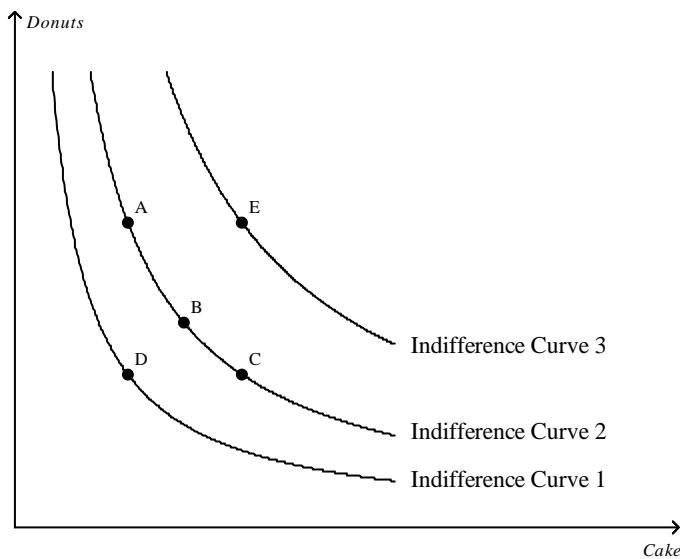
Number of Workers	Output	Marginal Product of Labor	Value of Marginal Product of Labor	Wage	Marginal Profit
0	0				
1	100		\$1,000	\$500	\$500
2		80	\$ 800	\$500	
3		60		\$500	\$100
4	280		\$ 400	\$500	
5		20		\$500	

86. Refer to Table 18-5. It is apparent from this table that increasing marginal product
- occurs only after the first worker is hired.
 - occurs only after the second worker is hired.
 - occurs only after the third worker is hired.
 - never occurs.
87. Refer to Table 18-5. The fact that the production function exhibits diminishing marginal productivity implies that
- total production decreases beyond a certain level of output.
 - labor markets are not always competitive.
 - the additions to total output get smaller as more workers are hired.
 - marginal profit is negative.
88. If the value of the marginal product of labor exceeds the wage, then the firm could
- increase profit by hiring additional labor.
 - increase profit by reducing the amount of labor hired.
 - increase revenue by lowering output.
 - reduce total cost by hiring additional workers.
89. Which of the following would shift a market labor supply curve to the right?
- an increase in the price of output
 - an increase in immigration
 - a labor-saving technological change
 - a decrease in the wage rate
90. Owners of land are compensated according to the
- absolute level of production from the land.
 - number of laborers the land can support.
 - purchase price of the land stock.

d. value of the marginal product of land.

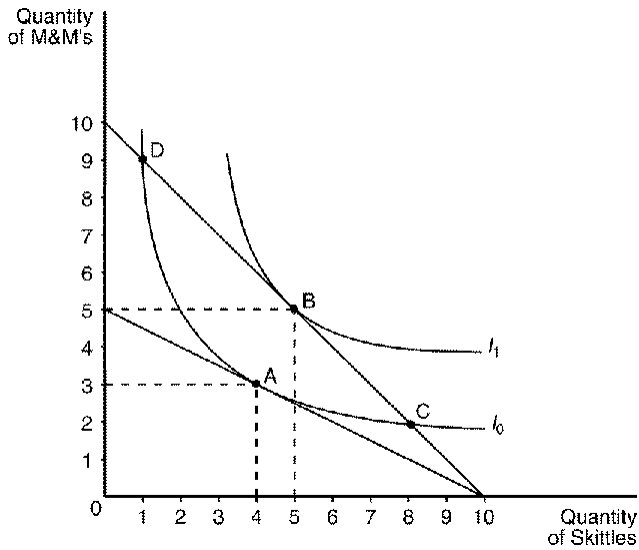
- ___ 91. Karen, Tara, and Chelsea each buy ice cream and paperback novels to enjoy on hot summer days. Ice cream costs \$5 per gallon, and paperback novels cost \$8 each. Karen has a budget of \$80, Tara has a budget of \$60, and Chelsea has a budget of \$40 to spend on ice cream and paperback novels. Who can afford to purchase 5 gallons of ice cream and 8 paperback novels?
- Karen, Tara, and Chelsea
 - Karen only
 - Tara and Chelsea but not Karen
 - none of the women
- ___ 92. Diana and Sarah each like jewelry and music by the Rolling Stones. If we were to graph an indifference curve with jewelry on the horizontal axis and cd's by the Rolling Stones on the vertical axis, then
- Diana and Sarah would have identical indifference curves.
 - Diana's indifference curve would be higher than Sarah's indifference curve.
 - Sarah's indifference curve would be higher than Diana's indifference curve.
 - Because we do not know the intensity of each woman's preferences, we do not have enough information to compare their indifference curves.

Figure 21-7



- ___ 93. **Refer to Figure 21-7.** A person that chooses to consume bundle C is likely to
- receive higher total satisfaction at bundle C than at bundle A.
 - spend more on bundle C than bundle A.
 - receive higher marginal utility from cake than from donuts.
 - receive higher marginal utility from donuts than from cake.
- ___ 94. The bowed shape of the indifference curve reflects the consumer's
- unwillingness to give up a good that he already has in large quantity.
 - unwillingness to purchase a good that he already has in large quantity.
 - greater willingness to give up a good that he already has in large quantity.
 - greater willingness to purchase a good that he already has in large quantity.

Figure 21-10



95. Refer to Figure 21-10. Assume that the consumer depicted in the figure has an income of \$20. The price of Skittles is \$2 and the price of M&M's is \$4. This consumer will choose consumption bundle
- A.
 - B.
 - C.
 - D.
96. Ken consumes two goods, Sprite and potato chips. Sprite costs \$1 per can, and he consumes it to the point where the marginal utility he receives from his last Sprite is 3. Potato chips cost \$2 per bag, and the relationship between the marginal utility he gets from eating a bag of potato chips and the number of bags he eats per month is as follows:

Bags of potato chips	1	2	3	4	5	6
Marginal utility	30	20	12	6	2	0

- If Ken is maximizing his utility, how many bags of potato chips does he buy each month?
- 2
 - 3
 - 4
 - 5
97. An individual's demand curve for a good is derived by varying the
- income level and observing the resulting total utility derived from both goods.
 - price of one good and observing the resulting quantities of the other good.
 - budget line to the left and calculating the loss in total utility.
 - price of one good and observing the resulting quantities demanded of that good.
98. Consider the budget constraint between “spending today” on the horizontal axis and “spending a year from today” on the vertical axis. Suppose that you have \$100 today and expect to receive \$100 one year from today. Your money market account pays an annual interest rate of 25%, and you may borrow money at that interest rate. Suppose now that the interest rate decreases to 10%. What happens to the slope of your budget constraint relative to when the interest rate was 25%? The slope

- a. becomes steeper.
- b. becomes flatter.
- c. doesn't change because the budget constraint shifts in parallel to the original budget constraint.
- d. doesn't change because the budget constraint shifts out parallel to the original budget constraint.