

## Chapter 7 Consumers, Producers, and the Efficiency of Markets

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### MULTIPLE CHOICE

1. Which of the following statements is correct?

- a. Buyers always want to pay less and sellers always want to be paid more.
- b. Buyers always want to pay less and sellers always want to be paid less.
- c. Buyers always want to pay more and sellers always want to be paid more.
- d. Buyers always want to pay more and sellers always want to be paid less.

ANS: A                    PTS: 1                    DIF: 1                    REF: 7-0  
NAT: Analytic            LOC: Supply and demand            TOP: Welfare  
MSC: Interpretive

2. Welfare economics is the study of how

- a. the allocation of resources affects economic well-being.
- b. a price ceiling compares to a price floor.
- c. the government helps poor people.
- d. a consumer's optimal choice affects her demand curve.

ANS: A                    PTS: 1                    DIF: 1                    REF: 7-0  
NAT: Analytic            LOC: Supply and demand            TOP: Welfare  
MSC: Definitional

3. Welfare economics is the study of

- a. taxes and subsidies.
- b. how technology is best put to use in the production of goods and services.
- c. government welfare programs for needy people.
- d. how the allocation of resources affects economic well-being.

ANS: D                    PTS: 1                    DIF: 1                    REF: 7-0  
NAT: Analytic            LOC: Supply and demand            TOP: Welfare  
MSC: Definitional

4. Welfare economics is the study of

- a. the well-being of less fortunate people.
- b. welfare programs in the United States.
- c. how the allocation of resources affects economic well-being.
- d. the effect of income redistribution on work effort.

ANS: C                    PTS: 1                    DIF: 1                    REF: 7-0  
NAT: Analytic            LOC: Supply and demand            TOP: Welfare  
MSC: Definitional

5. The study of how the allocation of resources affects economic well-being is called

- a. consumer economics.
- b. macroeconomics.
- c. willingness-to-pay economics.
- d. welfare economics.

ANS: D                    PTS: 1                    DIF: 1                    REF: 7-0  
NAT: Analytic            LOC: Supply and demand            TOP: Welfare  
MSC: Definitional

6. An example of positive analysis is studying
- how market forces produce equilibrium.
  - whether equilibrium outcomes are fair.
  - whether equilibrium outcomes are socially desirable.
  - if income distributions are fair.

ANS: A                   PTS: 1                   DIF: 1                   REF: 7-0  
NAT: Analytic           LOC: Supply and demand           TOP: Positive statements  
MSC: Definitional

7. An example of normative analysis is studying
- how market forces produce equilibrium.
  - surpluses and shortages.
  - whether equilibrium outcomes are socially desirable.
  - income distributions.

ANS: C                   PTS: 1                   DIF: 1                   REF: 7-0  
NAT: Analytic           LOC: Supply and demand           TOP: Normative statements  
MSC: Definitional

8. Which of the *Ten Principles of Economics* does welfare economics explain more fully?
- The cost of something is what you give up to get it.
  - Markets are usually a good way to organize economic activity.
  - Trade can make everyone better off.
  - A country's standard of living depends on its ability to produce goods and services.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-0  
NAT: Analytic           LOC: Supply and demand           TOP: Welfare  
MSC: Interpretive

9. Which of the *Ten Principles of Economics* does welfare economics explain more fully?
- The cost of something is what you give up to get it.
  - Rational people think at the margin.
  - Markets are usually a good way to organize economic activity.
  - People respond to incentives.

ANS: C                   PTS: 1                   DIF: 2                   REF: 7-0  
NAT: Analytic           LOC: Supply and demand           TOP: Welfare  
MSC: Interpretive

10. One of the basic principles of economics is that markets are usually a good way to organize economic activity. This principle is explained by the study of
- factor markets.
  - energy markets.
  - welfare economics.
  - labor economics.

ANS: C                   PTS: 1                   DIF: 1                   REF: 7-0  
NAT: Analytic           LOC: Supply and demand           TOP: Welfare  
MSC: Interpretive

11. A result of welfare economics is that the equilibrium price of a product is considered to be the best price because it
- maximizes both the total revenue for firms and the quantity supplied of the product.
  - maximizes the combined welfare of buyers and sellers.
  - minimizes costs and maximizes output.
  - minimizes the level of welfare payments.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-0  
NAT: Analytic           LOC: Supply and demand           TOP: Welfare  
MSC: Interpretive

12. 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.

ANS: C                    PTS: 1                    DIF: 2                    REF: 7-0  
 NAT: Analytic            LOC: Supply and demand            TOP: Welfare  
 MSC: Interpretive

13. Welfare economics explains which of the following in the market for DVDs?
- The government sets the price of DVDs; firms respond to the price by producing a specific level of output.
  - The government sets the quantity of DVDs; firms respond to the quantity by charging a specific price.
  - The market equilibrium price for DVDs maximizes the total welfare to DVD buyers and sellers.
  - The market equilibrium price for DVDs maximizes consumer welfare but minimizes producer welfare.

ANS: C                    PTS: 1                    DIF: 2                    REF: 7-0  
 NAT: Analytic            LOC: Supply and demand            TOP: Welfare  
 MSC: Interpretive

### CONSUMER SURPLUS

1. The maximum price that a buyer will pay for a good is called the
- cost.
  - willingness to pay.
  - equity.
  - efficiency.

ANS: B                    PTS: 1                    DIF: 1                    REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Definitional

2. Suppose Larry, Moe, and Curly are bidding in an auction for a mint-condition video of Charlie Chaplin's first movie. Each has in mind a maximum amount that he will bid. This maximum is called
- a resistance price.
  - willingness to pay.
  - consumer surplus.
  - producer surplus.

ANS: B                    PTS: 1                    DIF: 1                    REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Definitional

3. Suppose Raymond and Victoria attend a charity benefit and participate in a silent auction. Each has in mind a maximum amount that he or she will bid for an oil painting by a locally famous artist. This maximum is called
- deadweight loss.
  - willingness to pay.
  - consumer surplus.
  - producer surplus.

ANS: B                    PTS: 1                    DIF: 1                    REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Definitional

## 4. Willingness to pay

- measures the value that a buyer places on a good.
- is the amount a seller actually receives for a good minus the minimum amount the seller is willing to accept.
- is the maximum amount a buyer is willing to pay minus the minimum amount a seller is willing to accept.
- is the amount a buyer is willing to pay for a good minus the amount the buyer actually pays for it.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Definitional

## 5. A consumer's willingness to pay directly measures

- the extent to which advertising and other external forces have influenced the consumer's preferences.
- the cost of a good to the buyer.
- how much a buyer values a good.
- consumer surplus.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Interpretive

## 6. When a buyer's willingness to pay for a good is equal to the price of the good, the

- buyer's consumer surplus for that good is maximized.
- buyer will buy as much of the good as the buyer's budget allows.
- price of the good exceeds the value that the buyer places on the good.
- buyer is indifferent between buying the good and not buying it.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Interpretive

## 7. In which of the following circumstances would a buyer be indifferent about buying a good?

- The amount of consumer surplus the buyer would experience as a result of buying the good is zero.
- The price of the good is equal to the buyer's willingness to pay for the good.
- The price of the good is equal to the value the buyer places on the good.
- All of the above are correct.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Interpretive

8. A demand curve reflects each of the following *except* the

- willingness to pay of all buyers in the market.
- value each buyer in the market places on the good.
- highest price buyers are willing to pay for each quantity.
- ability of buyers to obtain the quantity they desire.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Interpretive

## 9. Consumer surplus

- is closely related to the supply curve for a product.
- is represented by a rectangle on a supply-demand graph when the demand curve is a straight, downward-sloping line.
- is measured using the demand curve for a product.
- does not reflect economic well-being in most markets.

ANS: C                      PTS: 1                      DIF: 1                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Interpretive

## 10. Consumer surplus is

- the amount a buyer is willing to pay for a good minus the amount the buyer actually pays for it.
- the amount a buyer is willing to pay for a good minus the cost of producing the good.
- the amount by which the quantity supplied of a good exceeds the quantity demanded of the good.
- a buyer's willingness to pay for a good plus the price of the good.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Definitional

## 11. Consumer surplus

- is the amount a buyer pays for a good minus the amount the buyer is willing to pay for it.
- is represented on a supply-demand graph by the area below the price and above the demand curve.
- measures the benefit sellers receive from participating in a market.
- measures the benefit buyers receive from participating in a market.

ANS: D                      PTS: 1                      DIF: 1                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Interpretive

## 12. Consumer surplus

- is the amount of a good that a consumer can buy at a price below equilibrium price.
- is the amount a consumer is willing to pay minus the amount the consumer actually pays.
- is the number of consumers who are excluded from a market because of scarcity.
- measures how much a seller values a good.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Definitional

## 13. Consumer surplus is the

- amount of a good consumers get without paying anything.
- amount a consumer pays minus the amount the consumer is willing to pay.
- amount a consumer is willing to pay minus the amount the consumer actually pays.
- value of a good to a consumer.

ANS: C                      PTS: 1                      DIF: 1                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Definitional

## 14. Consumer surplus is equal to the

- Value to buyers - Amount paid by buyers.
- Amount paid by buyers - Costs of sellers.
- Value to buyers - Costs of sellers.
- Value to buyers - Willingness to pay of buyers.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Definitional

## 15. On a graph, the area below a demand curve and above the price measures

- producer surplus.
- consumer surplus.
- deadweight loss.
- willingness to pay.

ANS: B                      PTS: 1                      DIF: 1                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Interpretive

16. On a graph, consumer surplus is represented by the area
- between the demand and supply curves.
  - below the demand curve and above price.
  - below the price and above the supply curve.
  - below the demand curve and to the right of equilibrium price.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Interpretive

17. Consumer surplus in a market can be represented by the
- area below the demand curve and above the price.
  - distance from the demand curve to the horizontal axis.
  - distance from the demand curve to the vertical axis.
  - area below the demand curve and above the horizontal axis.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Interpretive

18. Consumer surplus is
- a concept that helps us make normative statements about the desirability of market outcomes.
  - represented on a graph by the area below the demand curve and above the price.
  - a good measure of economic welfare if buyers' preferences are the primary concern.
  - All of the above are correct.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Interpretive

19. In a market, the marginal buyer is the buyer
- whose willingness to pay is higher than that of all other buyers and potential buyers.
  - whose willingness to pay is lower than that of all other buyers and potential buyers.
  - who is willing to buy exactly one unit of the good.
  - who would be the first to leave the market if the price were any higher.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Marginal buyer  
 MSC: Definitional

**Table 7-1**

Buyer	Willingness To Pay
Lori	\$50.00
Audrey	\$30.00
Zach	\$20.00
Calvin	\$10.00

20. **Refer to Table 7-1.** If the price of the product is \$15, then who would be willing to purchase the product?
- Lori
  - Lori and Audrey
  - Lori, Audrey, and Zach
  - Lori, Audrey, Zach, and Calvin

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Willingness to pay  
 MSC: Applicative

21. **Refer to Table 7-1.** If the price of the product is \$22, then who would be willing to purchase the product?
- Lori
  - Lori and Audrey
  - Lori, Audrey, and Zach
  - Lori, Audrey, Zach, and Calvin

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Willingness to pay  
 MSC: Applicative

22. **Refer to Table 7-1.** If the price of the product is \$51, then who would be willing to purchase the product?
- Lori
  - Lori and Audrey
  - Lori, Audrey, and Zach
  - no one

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Willingness to pay  
 MSC: Applicative

23. **Refer to Table 7-1.** If the price of the product is \$18, then the total consumer surplus is
- \$38.
  - \$42.
  - \$46.
  - \$72.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Applicative

24. **Refer to Table 7-1.** If price of the product is \$30, then the total consumer surplus is
- \$10.
  - \$6.
  - \$20.
  - \$30.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Applicative

**Table 7-2**

This table refers to five possible buyers' willingness to pay for a case of Vanilla Coke.

Buyer	Willingness To Pay
David	\$8.50
Laura	\$7.00
Megan	\$5.50
Mallory	\$4.00
Audrey	\$3.50

25. **Refer to Table 7-2.** If the price of Vanilla Coke is \$6.90, who will purchase the good?
- all five individuals
  - Megan, Mallory and Audrey
  - David, Laura and Megan
  - David and Laura

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand                      TOP: Willingness to pay  
 MSC: Applicative

26. **Refer to Table 7-2.** Which of the following is *not* true?
- At a price of \$9.00, no buyer is willing to purchase Vanilla Coke.
  - At a price of \$5.50, Megan is indifferent between buying a case of Vanilla Coke and not buying one.
  - At a price of \$4.00, total consumer surplus in the market will be \$9.00.
  - All of the above are correct.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

27. **Refer to Table 7-2.** If the market price is \$5.50, the consumer surplus in the market will be
- \$3.00.
  - \$4.50.
  - \$15.50.
  - \$21.00.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

28. **Refer to Table 7-2.** If the market price is \$3.80,
- David's consumer surplus is \$4.70 and total consumer surplus for the five individuals is \$9.50.
  - Megan's consumer surplus is \$1.70 and total consumer surplus for the five individuals is \$9.80.
  - David, Laura, and Megan will be the only buyers of Vanilla Coke.
  - the demand curve for Vanilla Coke, taking the five individuals into account, is horizontal.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

**Table 7-3**

The only four consumers in a market have the following willingness to pay for a good:

Buyer	Willingness to Pay
Carlos	\$15
Quilana	\$25
Wilbur	\$35
Ming-la	\$45

29. **Refer to Table 7-3.** If the market price for the good is \$20, who will purchase the good?
- Ming-la only
  - Carlos and Quilana only
  - Quilana and Wilbur only
  - Quilana, Wilbur, and Ming-la only

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Applicative

30. **Refer to Table 7-3.** If there is only one unit of the good and if the buyers bid against each other for the right to purchase it, then the good will sell for
- \$15 or slightly less.
  - \$25 or slightly more.
  - \$35 or slightly more.
  - \$45 or slightly less.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative



31. **Refer to Table 7-3.** If there is only one unit of the good and if the buyers bid against each other for the right to purchase it, then the consumer surplus will be
- \$0 or slightly more.
  - \$10 or slightly less.
  - \$30 or slightly more.
  - \$45 or slightly less.

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

32. **Refer to Table 7-3.** If the price is \$20, then consumer surplus in the market is
- \$20, and Wilbur and Ming-la purchase the good.
  - \$45, and Carlos and Quilana purchase the good.
  - \$45, and Quilana, Wilbur, and Ming-la purchase the good.
  - \$55, and Carlos, Wilbur, and Ming-la purchase the good.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

33. **Refer to Table 7-3.** Who experiences the largest *loss* of consumer surplus when the price of the good increases from \$20 to \$22?
- Quilana
  - Wilbur
  - Ming-la
  - All three buyers experience the same loss of consumer surplus.

ANS: D                      PTS: 1                      DIF: 3                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

**Table 7-4**

The numbers in Table 7-1 reveal the maximum willingness to pay for a ticket to a Chicago Cubs vs. St. Louis Cardinal's baseball game at Wrigley Field.

Buyer	Willingness to Pay
Jennifer	\$10
Bryce	\$15
Dan	\$20
David	\$25
Ken	\$50
Lisa	\$60

34. **Refer to Table 7-4.** If you have a ticket that you sell to the group in an auction, what will be the selling price?
- \$21
  - \$26
  - \$51
  - \$61

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

35. **Refer to Table 7-4.** If you have a ticket that you sell to the group in an auction, who will buy the ticket?

- Dan
- David
- Ken
- Lisa

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

36. **Refer to Table 7-4.** If tickets sell for \$20 each, then what is the total consumer surplus in the market?

- \$5
- \$30
- \$40
- \$75

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

37. **Refer to Table 7-4.** If tickets sell for \$25 each, then what is the total consumer surplus in the market?

- \$25
- \$35
- \$60
- \$110

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

38. **Refer to Table 7-4.** If you have two (essentially) identical tickets that you sell to the group in an auction, what will be the selling price for each ticket?

- \$21
- \$26
- \$51
- \$61

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

**Table 7-5**

For each of three potential buyers of oranges, the table displays the willingness to pay for the first three oranges of the day. Assume Alex, Barb, and Carlos are the only three buyers of oranges, and only three oranges can be supplied per day.

	First Orange	Second Orange	Third Orange
Allison	\$2.00	\$1.50	\$0.75
Bob	\$1.50	\$1.00	\$0.80
Charisse	\$0.75	\$0.25	\$0

39. **Refer to Table 7-5.** If the market price of an orange is \$1.20, then the market quantity of oranges demanded per day is

- 1.
- 2.
- 3.
- 4.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Market demand  
 MSC: Analytical

40. **Refer to Table 7-5.** If the market price of an orange is \$0.70, then the market quantity of oranges demanded per day is
- 5.
  - 6.
  - 7.
  - 9.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Market demand  
 MSC: Analytical

41. **Refer to Table 7-5.** The market quantity of oranges demanded per day is exactly 5 if the price of an orange,  $P$ , satisfies
- $\$1.00 < P < \$1.50$ .
  - $\$0.80 < P < \$1.50$ .
  - $\$0.80 < P < \$1.00$ .
  - $\$0.75 < P < \$0.80$ .

ANS: D                      PTS: 1                      DIF: 3                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Market demand  
 MSC: Analytical

42. **Refer to Table 7-5.** If the market price of an orange is \$1.20, then consumer surplus amounts to
- \$0.70.
  - \$1.10.
  - \$1.40.
  - \$5.00.

ANS: C                      PTS: 1                      DIF: 3                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

43. **Refer to Table 7-5.** If the market price of an orange is \$0.40, then
- 6 oranges are demanded per day, and consumer surplus amounts to \$4.45.
  - 6 oranges are demanded per day, and consumer surplus amounts to \$5.10.
  - 7 oranges are demanded per day, and consumer surplus amounts to \$5.35.
  - 7 oranges are demanded per day, and consumer surplus amounts to \$5.50.

ANS: D                      PTS: 1                      DIF: 3                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand  
 TOP: Market demand | Consumer surplus            MSC: Analytical

44. **Refer to Table 7-5.** If the market price of an orange increases from \$0.60 to \$1.05, then consumer surplus
- increases by \$2.90.
  - decreases by \$2.25.
  - decreases by \$2.70.
  - decreases by \$3.85.

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

45. **Refer to Table 7-5.** If the market price of an orange increases from \$0.70 to \$1.40, then consumer surplus
- increases by \$2.50.
  - decreases by \$0.80.
  - decreases by \$2.60.
  - decreases by \$3.40.

ANS: C                      PTS: 1                      DIF: 3                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

46. **Refer to Table 7-5.** Who experiences the largest *loss* of consumer surplus when the price of an orange increases from \$0.70 to \$1.40?
- Allison
  - Bob
  - Charisse
  - All three individuals experience the same loss of consumer surplus.

ANS: A                    PTS: 1                    DIF: 3                    REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

47. **Refer to Table 7-5.** Who experiences the largest *gain* in consumer surplus when the price of an orange decreases from \$1.05 to \$0.75?
- Allison
  - Bob
  - Charisse
  - Allison and Bob experience the same gain in consumer surplus, and Charisse's gain is zero.

ANS: D                    PTS: 1                    DIF: 3                    REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

48. **Refer to Table 7-5.** Which of the following statements is correct?
- Neither Bob's consumer surplus nor Charisse's consumer surplus can exceed Allison's consumer surplus, for any price of an orange.
  - All three individuals will buy at least one orange only if the price of an orange is less than \$0.25.
  - If the price of an orange is \$0.60, then consumer surplus is \$4.90.
  - All of the above are correct.

ANS: A                    PTS: 1                    DIF: 3                    REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

**Table 7-6**

Buyer	Willingness to Pay
Michael	\$500
Earvin	\$400
Larry	\$350
Charles	\$300

49. **Refer to Table 7-6.** You have an extra ticket to the Midwest Regional Sweet 16 game in the men's NCAA basketball tournament. The table shows the willingness to pay of the four potential buyers in the market for a ticket to the game. You hold an auction to sell the ticket. Who makes the winning bid, and what does he offer to pay for the ticket?
- Michael; \$501
  - Michael; more than \$400 but less than or equal to \$500
  - Earvin; \$400
  - Earvin; more than \$350 but less than or equal to \$400

ANS: B                    PTS: 1                    DIF: 2                    REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Analytical

50. **Refer to Table 7-6.** You have an extra ticket to the Midwest Regional Sweet 16 game in the men's NCAA basketball tournament. The table shows the willingness to pay of the four potential buyers in the market for a ticket to the game. You hold an auction to sell the ticket. Michael bids \$410 for the ticket, and you sell him the ticket. What is his consumer surplus?
- \$410
  - \$90
  - \$10
  - \$0

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

51. **Refer to Table 7-6.** You have two essentially identical extra tickets to the Midwest Regional Sweet 16 game in the men's NCAA basketball tournament. The table shows the willingness to pay of the four potential buyers in the market for a ticket to the game. You hold an auction to sell the two tickets. Who makes the winning bids, and what do they offer to pay for the tickets?
- Michael and Earvin; more than \$350 but less than or equal to \$400
  - Michael and Earvin; more than \$400 but less than or equal to \$500
  - Earvin and Larry; more than \$300 but less than or equal to \$350
  - Larry and Charles; less than \$300

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Analytical

52. **Refer to Table 7-6.** You have two essentially identical extra tickets to the Midwest Regional Sweet 16 game in the men's NCAA basketball tournament. The table shows the willingness to pay of the four potential buyers in the market for a ticket to the game. You hold an auction to sell the two tickets. Michael and Earvin each offer to pay \$360 for a ticket, and you sell them the two tickets. What is the total consumer surplus in the market?
- \$720
  - \$180
  - \$140
  - \$40

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

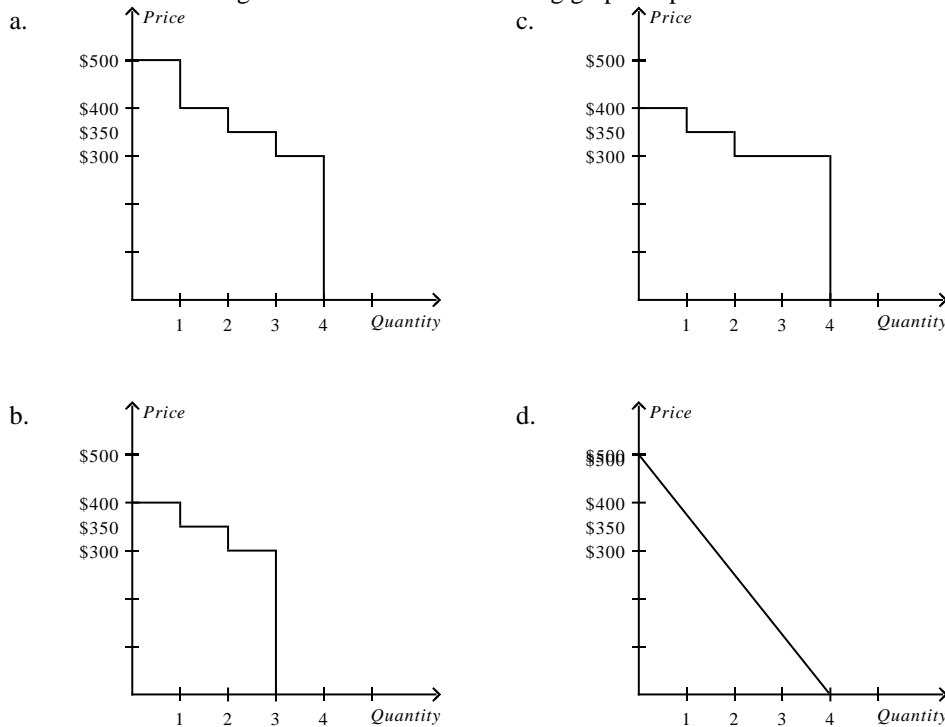
53. **Refer to Table 7-6.** You have four essentially identical extra tickets to the Midwest Regional Sweet 16 game in the men's NCAA basketball tournament. The table shows the willingness to pay of the four potential buyers in the market for a ticket to the game. You offer to sell the tickets for \$400. How many tickets do you sell, and what is the total consumer surplus in the market?
- one ticket; \$100
  - two tickets; \$100
  - two tickets; \$0
  - three tickets; \$0

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

54. **Refer to Table 7-6.** You have four essentially identical extra tickets to the Midwest Regional Sweet 16 game in the men's NCAA basketball tournament. The table shows the willingness to pay of the four potential buyers in the market for a ticket to the game. You offer to sell the tickets for \$325. How many tickets do you sell, and what is the total consumer surplus in the market?
- one ticket; \$175
  - two tickets; \$225
  - three tickets; \$225
  - three tickets; \$275

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

55. **Refer to Table 7-6.** You are selling extra tickets to the Midwest Regional Sweet 16 game in the men's NCAA basketball tournament. The table shows the willingness to pay of the four potential buyers in the market for a ticket to the game. Which of the following graphs represents the market demand curve?



ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Analytical

56. You are offered a free ticket to see the Chicago Cubs play the Chicago White Sox at Wrigley Field. Assume the ticket has no resale value. Willie Nelson is performing on the same night, and his concert is your next-best alternative activity. Tickets to see Willie Nelson cost \$40. On any given day, you would be willing to pay up to \$50 to see and hear Willie Nelson perform. Assume there are no other costs of seeing either event. Based on this information, at a minimum, how much would you have to value seeing the Cubs play the White Sox to accept the ticket and go to the game?

- a. \$0
- b. \$10
- c. \$40
- d. \$50

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

57. A drought in California destroys many red grapes. As a result of the drought, the consumer surplus in the market for red grapes

- a. increases, and the consumer surplus in the market for red wine increases.
- b. increases, and the consumer surplus in the market for red wine decreases.
- c. decreases, and the consumer surplus in the market for red wine increases.
- d. decreases, and the consumer surplus in the market for red wine decreases.

ANS: D                      PTS: 1                      DIF: 3                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

58. Chuck would be willing to pay \$20 to attend a dog show, but he buys a ticket for \$15. Chuck values the dog show at

- a. \$5.
- b. \$15.
- c. \$20.
- d. \$35.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

59. If a consumer places a value of \$15 on a particular good and if the price of the good is \$17, then the

- a. consumer has consumer surplus of \$2 if he or she buys the good.
- b. consumer does not purchase the good.
- c. market is not a competitive market.
- d. price of the good will fall due to market forces.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

60. If a consumer places a value of \$20 on a particular good and if the price of the good is \$25, then the

- a. consumer has consumer surplus of \$5 if he buys the good.
- b. consumer does not purchase the good.
- c. price of the good will rise due to market forces.
- d. market is out of equilibrium.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

61. If a consumer is willing and able to pay \$20 for a particular good and if he pays \$16 for the good, then for that consumer, consumer surplus amounts to
- \$4.
  - \$16.
  - \$20.
  - \$36.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
NAT: Analytic              LOC: Supply and demand              TOP: Consumer surplus  
MSC: Applicative

62. Kelly is willing to pay \$68 for a pair of shoes for a wedding. She finds a pair at her favorite outlet shoe store for \$58. Kelly's consumer surplus is
- \$10.
  - \$28.
  - \$58.
  - \$68.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
NAT: Analytic              LOC: Supply and demand              TOP: Consumer surplus  
MSC: Applicative

63. Brock is willing to pay \$400 for a new suit, but he is able to buy the suit for \$350. His consumer surplus is
- \$50.
  - \$150.
  - \$350.
  - \$400.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
NAT: Analytic              LOC: Supply and demand              TOP: Consumer surplus  
MSC: Applicative

64. Josh is willing to pay \$40 for a haircut, but he is able to pay \$25 at the local salon. His consumer surplus is
- \$0 because the cost exceeds his maximum willingness to pay.
  - \$15.
  - \$25.
  - \$65.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
NAT: Analytic              LOC: Supply and demand              TOP: Consumer surplus  
MSC: Applicative

65. 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.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
NAT: Analytic              LOC: Supply and demand              TOP: Consumer surplus  
MSC: Applicative



66. Suppose Brent, Callie, and Danielle each purchase a particular type of electric pencil sharpener at a price of \$20. Brent's willingness to pay was \$22, Callie's willingness to pay was \$25, and Danielle's willingness to pay was \$30. Which of the following statements is correct?
- Had the price of the pencil sharpener been \$24 rather than \$20, only Danielle would have been a buyer.
  - Brent's consumer surplus is the smallest of the three individual consumer surpluses.
  - For the three individuals together, consumer surplus amounts to \$60.
  - The fact that all three individuals paid \$20 for the same type of pencil sharpener indicates that each one placed the same value on that pencil sharpener.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic              LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Applicative

67. Suppose Katie, Kendra, and Kristen each purchase a particular type of cell phone at a price of \$80. Katie's willingness to pay was \$100, Kendra's willingness to pay was \$95, and Kristen's willingness to pay was \$80. Which of the following statements is correct?
- For the three individuals together, consumer surplus amounts to \$35.
  - Having bought the cell phone, Kristen is better off than she would have been had she not bought it.
  - Had the price of the cell phone been \$95 rather than \$80, Katie and Kendra definitely would have been buyers and Kristen definitely would not have been a buyer.
  - The fact that all three individuals paid \$80 for the same type of cell phone indicates that each one placed the same value on that cell phone.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic              LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Applicative

68. Sarah buys a new MP3 player for \$135. She receives consumer surplus of \$25 on her purchase if her willingness to pay is
- \$25.
  - \$110.
  - \$135.
  - \$160.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic              LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Applicative

69. Abraham drinks Mountain Dew. He can buy as many cans of Mountain Dew as he wishes at a price of \$0.55 per can. On a particular day, he is willing to pay \$0.95 for the first can, \$0.80 for the second can, \$0.60 for the third can, and \$0.40 for the fourth can. Assume Abraham is rational in deciding how many cans to buy. His consumer surplus is
- \$0.50.
  - \$0.60.
  - \$0.70.
  - \$1.00.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic              LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Applicative

70. Janine would be willing to pay \$50 to see *Les Misérables*, but she buys a ticket for only \$30. Janine values the performance at
- \$20.
  - \$30.
  - \$50.
  - \$80.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Applicative

71. Chad is willing to pay \$5.00 to get his first cup of morning latté. He buys a cup from a vendor selling latté for \$3.75 per cup. Chad's consumer surplus is
- \$8.75.
  - \$5.00.
  - \$3.75.
  - \$1.25.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

72. Chad is willing to pay \$5.00 to get his first cup of morning latté; he is willing to pay \$4.50 for a second cup. He buys his first cup from a vendor selling latté for \$3.75 per cup. He returns to that vendor later in the morning to find that the vendor has increased her price to \$3.90 per cup. Chad buys a second cup. Which of the following statements is correct?
- Chad's willingness to pay for his second cup of latté was smaller than his willingness to pay for his first cup of latté.
  - Chad's consumer surplus on his second cup of latté was larger than his consumer surplus on his first cup of latté.
  - Chad is irrational in that he is willing to pay a different price for his second cup of latté than what he is willing to pay for his first cup of latté.
  - Chad places a higher value on his second cup of latté than on his first cup of latté.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

73. Henry is willing to pay 45 cents, and Janine is willing to pay 55 cents, for 1 pound of bananas. When the price of bananas falls from 50 cents a pound to 40 cents a pound,
- Henry experiences an increase in consumer surplus, but Janine does not.
  - Janine experiences an increase in consumer surplus, but Henry does not.
  - both Janine and Henry experience an increase in consumer surplus.
  - neither Janine nor Henry experiences an increase in consumer surplus.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Interpretive

74. Alex is willing to pay \$10, and Bella is willing to pay \$8, for 1 pound of ribeye steak. When the price of ribeye steak increases from \$9 to \$11,
- Alex experiences a decrease in consumer surplus, but Bella does not.
  - Bella experiences a decrease in consumer surplus, but Alex does not.
  - both Bella and Alex experience a decrease in consumer surplus.
  - neither Bella nor Alex experiences a decrease in consumer surplus.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Interpretive

75. Pat bought a new car for \$15,500 but was willing to pay \$24,000. The consumer surplus is
- \$8,500.
  - \$15,500.
  - \$24,000.
  - \$39,500.

ANS: A                   PTS: 1                   DIF: 2                   REF: 7-1  
 NAT: Analytic        LOC: Supply and demand        TOP: Consumer surplus  
 MSC: Applicative

76. Dawn's bridal boutique is having a sale on evening dresses. The increase in consumer surplus comes from the benefit of the lower prices to
- only existing customers who now get lower prices on the gowns they were already planning to purchase.
  - only new customers who enter the market because of the lower prices.
  - both existing customers who now get lower prices on the gowns they were already planning to purchase and new customers who enter the market because of the lower prices.
  - Consumer surplus does not increase; it decreases.

ANS: C                   PTS: 1                   DIF: 2                   REF: 7-1  
 NAT: Analytic        LOC: Supply and demand        TOP: Consumer surplus  
 MSC: Interpretive

77. Jeff decides that he would pay as much as \$2,000 for a new laptop computer. He buys the computer and realizes a consumer surplus of \$300. How much did Jeff pay for his computer?
- \$300.
  - \$1,700.
  - \$2,000.
  - \$2,300.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-1  
 NAT: Analytic        LOC: Supply and demand        TOP: Consumer surplus  
 MSC: Applicative

78. Billie Jo values a stainless steel dishwasher for her new house at \$500, but she succeeds in buying one for \$425. Billie Jo's willingness to pay for the dishwasher is
- \$150.
  - \$425.
  - \$500.
  - \$850.

ANS: C                   PTS: 1                   DIF: 2                   REF: 7-1  
 NAT: Analytic        LOC: Supply and demand        TOP: Willingness to pay  
 MSC: Applicative

79. Denise values a stainless steel dishwasher for her new house at \$500, but she succeeds in buying one for \$350. Denise's consumer surplus is
- \$150.
  - \$350.
  - \$500.
  - \$850.

ANS: A                   PTS: 1                   DIF: 2                   REF: 7-1  
 NAT: Analytic        LOC: Supply and demand        TOP: Consumer surplus  
 MSC: Applicative

80. Michael values a stainless steel refrigerator for his new house at \$3,500, but he succeeds in buying one for \$3,000. Michael's willingness to pay is
- \$500.
  - \$3,000.
  - \$3,500.
  - \$6,500.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Applicative

81. Michael values a stainless steel refrigerator for his new house at \$3,500, but he succeeds in buying one for \$3,000. Michael's consumer surplus is
- \$500.
  - \$3,000.
  - \$3,500.
  - \$6,500.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

82. Denise values a stainless steel dishwasher for her new house at \$500. The actual price of the dishwasher is \$650. Denise
- buys the dishwasher, and on her purchase she experiences a consumer surplus of \$150.
  - buys the dishwasher, and on her purchase she experiences a consumer surplus of \$-150.
  - does not buy the dishwasher, and on her purchase she experiences a consumer surplus of \$150.
  - does not buy the dishwasher, and on her purchase she experiences a consumer surplus of \$0.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

83. Ray buys a new tractor for \$118,000. He receives consumer surplus of \$13,000 on his purchase. Ray's willingness to pay is
- \$13,000.
  - \$105,000.
  - \$118,000.
  - \$131,000.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Applicative

84. Jeff decides that he would pay as much as \$3,000 for a new laptop computer. He buys the computer and realizes consumer surplus of \$700. How much did Jeff pay for his computer?
- \$700
  - \$2,300
  - \$3,000
  - \$3,700

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

85. Cameron visits a sporting goods store to buy a new set of golf clubs. He is willing to pay \$750 for the clubs but buys them on sale for \$575. Cameron's consumer surplus from the purchase is
- \$175.
  - \$575.
  - \$750.
  - \$1,325.

ANS: A            PTS: 1            DIF: 2            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand    TOP: Consumer surplus  
 MSC: Applicative

86. If the price a consumer pays for a product is equal to a consumer's willingness to pay, then the consumer surplus relevant to that purchase is
- zero.
  - negative, and the consumer would not purchase the product.
  - positive, and the consumer would purchase the product.
  - There is not enough information given to answer this question.

ANS: A            PTS: 1            DIF: 2            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand    TOP: Consumer surplus  
 MSC: Interpretive

87. Suppose there is an early freeze in California that reduces the size of the lemon crop. What happens to consumer surplus in the market for lemons?
- Consumer surplus increases.
  - Consumer surplus decreases.
  - Consumer surplus is not affected by this change in market forces.
  - We would have to know whether the demand for lemons is elastic or inelastic to make this determination.

ANS: B            PTS: 1            DIF: 2            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand    TOP: Consumer surplus  
 MSC: Applicative

88. Suppose your own demand curve for tomatoes slopes downward. Suppose also that, for the last tomato you bought this week, you paid a price exactly equal to your willingness to pay. Then
- you should buy more tomatoes before the end of the week.
  - you already have bought too many tomatoes this week.
  - your consumer surplus on the last tomato you bought is zero.
  - your consumer surplus on all of the tomatoes you have bought this week is zero.

ANS: C            PTS: 1            DIF: 3            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand    TOP: Consumer surplus  
 MSC: Analytical

89. Suppose the market demand curve for a good passes through the point (quantity demanded = 100, price = \$25). If there are five buyers in the market, then
- the marginal buyer's willingness to pay for the 100<sup>th</sup> unit of the good is \$25.
  - the sum of the five buyers' willingness to pay for the 100<sup>th</sup> unit of the good is \$25.
  - the average of the five buyers' willingness to pay for the 100<sup>th</sup> unit of the good is \$25.
  - all of the five buyers are willing to pay at least \$25 for the 100<sup>th</sup> unit of the good.

ANS: A            PTS: 1            DIF: 2            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand    TOP: Marginal buyer  
 MSC: Interpretive

90. If the cost of producing sofas decreases, then consumer surplus in the sofa market will

- a. increase.
- b. decrease.
- c. remain constant.
- d. increase for some buyers and decrease for other buyers.

ANS: A                   PTS: 1                   DIF: 2                   REF: 7-1  
NAT: Analytic           LOC: Supply and demand           TOP: Consumer surplus  
MSC: Applicative

91. All else equal, what happens to consumer surplus if the price of a good increases?

- a. Consumer surplus increases.
- b. Consumer surplus decreases.
- c. Consumer surplus is unchanged.
- d. Consumer surplus may increase, decrease, or remain unchanged.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-1  
NAT: Analytic           LOC: Supply and demand           TOP: Consumer surplus  
MSC: Interpretive

92. All else equal, what happens to consumer surplus if the price of a good decreases?

- a. Consumer surplus increases.
- b. Consumer surplus decreases.
- c. Consumer surplus is unchanged.
- d. Consumer surplus may increase, decrease, or remain unchanged.

ANS: A                   PTS: 1                   DIF: 2                   REF: 7-1  
NAT: Analytic           LOC: Supply and demand           TOP: Consumer surplus  
MSC: Interpretive

93. Which of the following will cause an increase in consumer surplus?

- a. an increase in the production cost of the good
- b. a technological improvement in the production of the good
- c. a decrease in the number of sellers of the good
- d. the imposition of a binding price floor in the market

ANS: B                   PTS: 1                   DIF: 3                   REF: 7-1  
NAT: Analytic           LOC: Supply and demand           TOP: Consumer surplus  
MSC: Applicative

94. Which of the following will cause a decrease in consumer surplus?

- a. an increase in the number of sellers of the good
- b. a decrease in the production cost of the good
- c. sellers expect the price of the good to be lower next month
- d. the imposition of a binding price floor in the market

ANS: D                   PTS: 1                   DIF: 3                   REF: 7-1  
NAT: Analytic           LOC: Supply and demand           TOP: Consumer surplus  
MSC: Interpretive

95. When there is a technological advance in the pork industry, consumer surplus in that market will

- a. increase.
- b. decrease.
- c. not change, since technology affects producers and not consumers.
- d. not change, since consumers' willingness to pay is unaffected by the technological advance.

ANS: A                   PTS: 1                   DIF: 2                   REF: 7-1  
NAT: Analytic           LOC: Supply and demand           TOP: Consumer surplus  
MSC: Interpretive

96. 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.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-1  
 NAT: Analytic           LOC: Supply and demand           TOP: Consumer surplus  
 MSC: Interpretive

97. Which of the following is *not* true when the price of a good or service falls?
- Buyers who were already buying the good or service are better off.
  - Some new buyers, who are now willing to buy, enter the market.
  - The total consumer surplus in the market increases.
  - The total value of purchases before and after the price change is the same.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-1  
 NAT: Analytic           LOC: Supply and demand  
 TOP: Consumer surplus | Willingness to pay           MSC: Interpretive

98. When the demand for a good increases and the supply of the good remains unchanged, consumer surplus
- decreases.
  - is unchanged.
  - increases.
  - may increase, decrease, or remain unchanged.

ANS: D                   PTS: 1                   DIF: 3                   REF: 7-1  
 NAT: Analytic           LOC: Supply and demand           TOP: Consumer surplus  
 MSC: Applicative

99. Suppose televisions are a normal good and buyers of televisions experience a decrease in income. As a result, consumer surplus in the television market
- decreases.
  - is unchanged.
  - increases.
  - may increase, decrease, or remain unchanged.

ANS: D                   PTS: 1                   DIF: 3                   REF: 7-1  
 NAT: Analytic           LOC: Supply and demand           TOP: Consumer surplus  
 MSC: Applicative

100. Motor oil and gasoline are complements. If the price of motor oil increases, consumer surplus in the gasoline market

- decreases.
- is unchanged.
- increases.
- may increase, decrease, or remain unchanged.

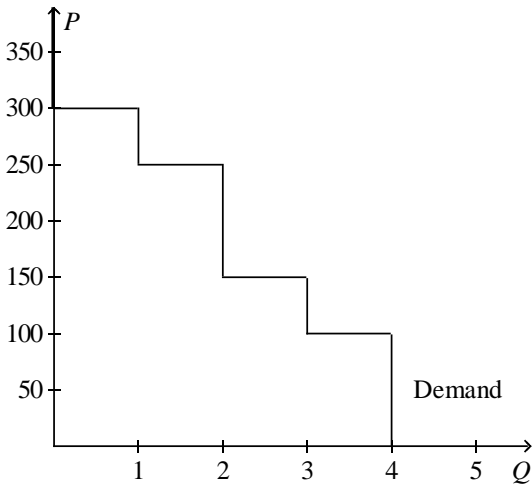
ANS: D                   PTS: 1                   DIF: 3                   REF: 7-1  
 NAT: Analytic           LOC: Supply and demand           TOP: Consumer surplus  
 MSC: Applicative

101. Dallas buys strawberries, and he would be willing to pay more than he now pays. Suppose that Dallas has a change in his tastes such that he values strawberries more than before. If the market price is the same as before, then

- Dallas's consumer surplus would be unaffected.
- Dallas's consumer surplus would increase.
- Dallas's consumer surplus would decrease.
- Dallas would be wise to buy fewer strawberries than before.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-1  
 NAT: Analytic           LOC: Supply and demand           TOP: Consumer surplus  
 MSC: Interpretive

Figure 7-1



102. Refer to Figure 7-1. If the price of the good is \$250, then consumer surplus amounts to
- \$50.
  - \$100.
  - \$150.
  - \$200.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic              LOC: Supply and demand              TOP: Consumer surplus  
 MSC: Applicative

103. Refer to Figure 7-1. If the price of the good is \$150, then consumer surplus amounts to
- \$150.
  - \$200.
  - \$250.
  - \$300.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic              LOC: Supply and demand              TOP: Consumer surplus  
 MSC: Applicative

104. Refer to Figure 7-1. If the price of the good is \$50, then consumer surplus amounts to
- \$400.
  - \$500.
  - \$600.
  - \$750.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic              LOC: Supply and demand              TOP: Consumer surplus  
 MSC: Applicative

105. Refer to Figure 7-1. If the price of the good is \$200, then
- consumer surplus is \$150.
  - consumer surplus is \$650.
  - producer surplus is \$650.
  - producer surplus is \$750.

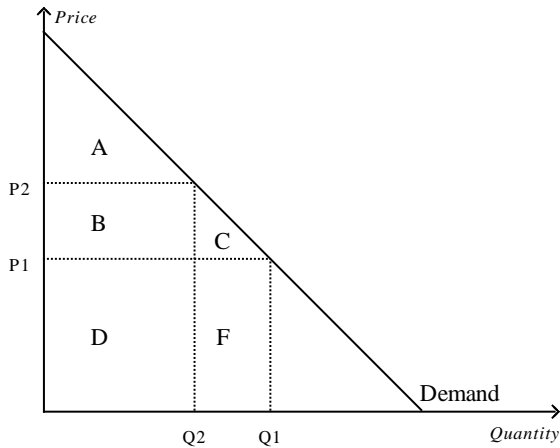
ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic              LOC: Supply and demand              TOP: Consumer surplus  
 MSC: Applicative



106. **Refer to Figure 7-1.** The value of the good to consumers minus the cost of the good to consumers amounts to \$325 if the price of the good is
- \$200.
  - \$150.
  - \$125.
  - \$100.

ANS: C      PTS: 1      DIF: 2      REF: 7-1  
 NAT: Analytic      LOC: Supply and demand      TOP: Consumer surplus  
 MSC: Applicative

**Figure 7-2**



107. **Refer to Figure 7-2.** When the price is P1, consumer surplus is
- A.
  - A+B.
  - A+B+C.
  - A+B+D.

ANS: C      PTS: 1      DIF: 2      REF: 7-1  
 NAT: Analytic      LOC: Supply and demand      TOP: Consumer surplus  
 MSC: Applicative

108. **Refer to Figure 7-2.** When the price is P2, consumer surplus is
- A.
  - B.
  - A+B.
  - A+B+C.

ANS: A      PTS: 1      DIF: 2      REF: 7-1  
 NAT: Analytic      LOC: Supply and demand      TOP: Consumer surplus  
 MSC: Applicative

109. **Refer to Figure 7-2.** When the price rises from P1 to P2, consumer surplus
- increases by an amount equal to A.
  - decreases by an amount equal to B+C.
  - increases by an amount equal to B+C.
  - decreases by an amount equal to C.

ANS: B      PTS: 1      DIF: 2      REF: 7-1  
 NAT: Analytic      LOC: Supply and demand      TOP: Consumer surplus  
 MSC: Applicative

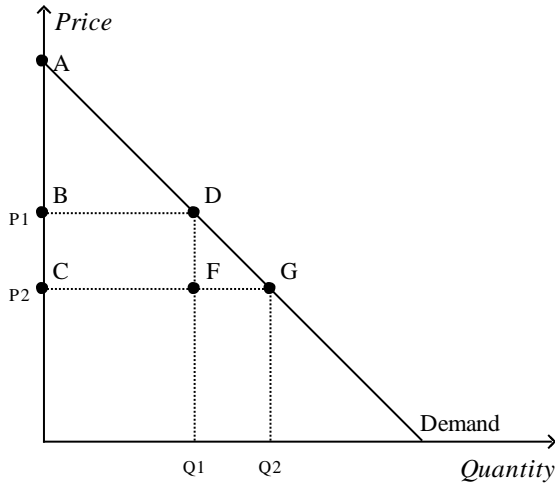
110. Refer to Figure 7-2. Area C represents the
- decrease in consumer surplus that results from a downward-sloping demand curve.
  - consumer surplus to new consumers who enter the market when the price falls from P2 to P1.
  - increase in producer surplus when quantity sold increases from Q2 to Q1.
  - decrease in consumer surplus to each consumer in the market when the price increases from P1 to P2.

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

111. Refer to Figure 7-2. When the price rises from P1 to P2, which of the following statements is *not* true?
- The buyers who still buy the good are worse off because they now pay more.
  - Some buyers leave the market because they are not willing to buy the good at the higher price.
  - Buyers place a higher value on the good after the price increase.
  - Consumer surplus in the market falls.

ANS: C                      PTS: 1                      DIF: 3                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

Figure 7-3



112. Refer to Figure 7-3. Which area represents consumer surplus at a price of P1?
- ABD
  - ACG
  - BCDF
  - DFG

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

113. Refer to Figure 7-3. Which area represents consumer surplus at a price of P2?
- ABD
  - ACG
  - BCDF
  - DFG

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-1  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

114. **Refer to Figure 7-3.** Which area represents the increase in consumer surplus when the price falls from P1 to P2?

- a. ABD
- b. ACG
- c. DFG
- d. BCGD

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
NAT: Analytic              LOC: Supply and demand              TOP: Consumer surplus  
MSC: Applicative

115. **Refer to Figure 7-3.** When the price falls from P1 to P2, which area represents the increase in consumer surplus to existing buyers?

- a. ABD
- b. ACG
- c. BCFD
- d. DFG

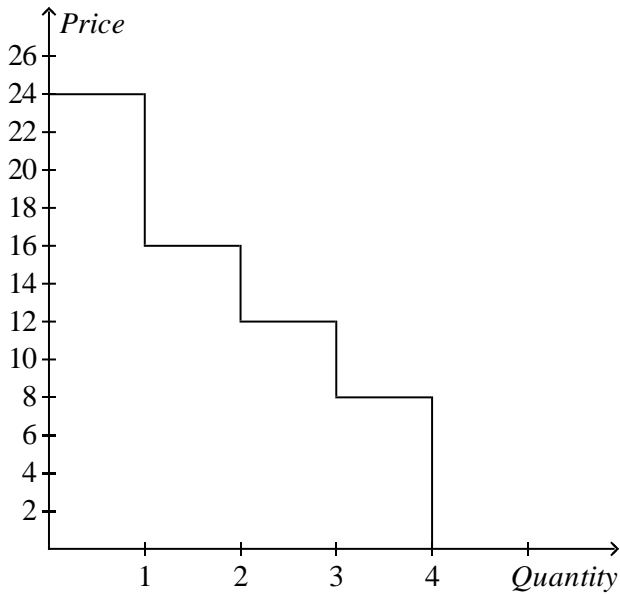
ANS: C                      PTS: 1                      DIF: 2                      REF: 7-1  
NAT: Analytic              LOC: Supply and demand              TOP: Consumer surplus  
MSC: Applicative

116. **Refer to Figure 7-3.** When the price falls from P1 to P2, which area represents the increase in consumer surplus to new buyers entering the market?

- a. ABD
- b. ACG
- c. BCDF
- d. DFG

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-1  
NAT: Analytic              LOC: Supply and demand              TOP: Consumer surplus  
MSC: Applicative

Figure 7-4



117. Refer to Figure 7-4. If the price of the good is \$6, then consumer surplus is

- a. \$16.
- b. \$24.
- c. \$30.
- d. \$36.

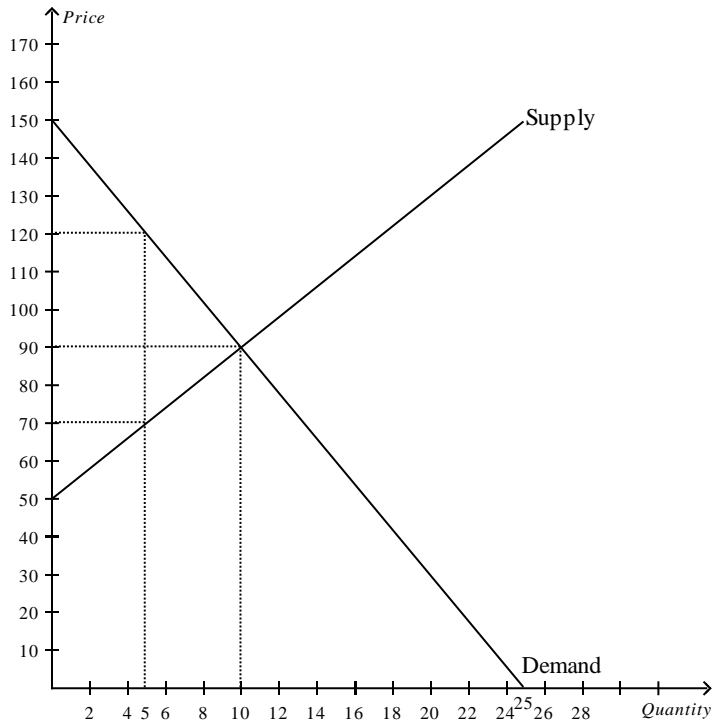
ANS: D      PTS: 1      DIF: 2      REF: 7-1  
 NAT: Analytic      LOC: Supply and demand      TOP: Consumer surplus  
 MSC: Applicative

118. Refer to Figure 7-4. If the price of the good is \$12, then consumer surplus is

- a. \$9.
- b. \$11.
- c. \$13.
- d. \$16.

ANS: D      PTS: 1      DIF: 2      REF: 7-1  
 NAT: Analytic      LOC: Supply and demand      TOP: Consumer surplus  
 MSC: Applicative

Figure 7-5



119. Refer to Figure 7-5. At the equilibrium price, consumer surplus is

- a. \$200.
- b. \$300.
- c. \$500.
- d. \$600.

ANS: B

PTS: 1

DIF: 3

REF: 7-1

NAT: Analytic

LOC: Supply and demand

TOP: Consumer surplus

MSC: Applicative

120. Refer to Figure 7-5. If the government imposes a price floor of \$120 in this market, then consumer surplus will decrease by

- a. \$75.
- b. \$125.
- c. \$225.
- d. \$300.

ANS: C

PTS: 1

DIF: 3

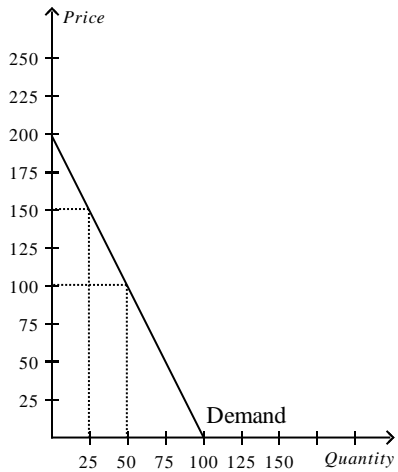
REF: 7-1

NAT: Analytic

LOC: Supply and demand

TOP: Consumer surplus

MSC: Applicative

**Figure 7-6**

121. Refer to Figure 7-6. What is the consumer surplus if the price is \$100?

- \$2,500
- \$5,000
- \$10,000
- \$20,000

ANS: A      PTS: 1      DIF: 3      REF: 7-1  
 NAT: Analytic      LOC: Supply and demand      TOP: Consumer surplus  
 MSC: Analytical

122. Refer to Figure 7-6. What happens to the consumer surplus if the price rises from \$100 to \$150?

- The new consumer surplus is half of the original consumer surplus.
- The new consumer surplus is 25 percent of the original consumer surplus.
- The new consumer surplus is double the original consumer surplus.
- The new consumer surplus is triple the original consumer surplus.

ANS: B      PTS: 1      DIF: 3      REF: 7-1  
 NAT: Analytic      LOC: Supply and demand      TOP: Consumer surplus  
 MSC: Analytical

123. When the supply of a good increases and the demand for the good remains unchanged, consumer surplus

- decreases.
- is unchanged.
- increases.
- may increase, decrease, or remain unchanged.

ANS: C      PTS: 1      DIF: 3      REF: 7-1  
 NAT: Analytic      LOC: Supply and demand      TOP: Consumer surplus  
 MSC: Applicative

124. Which of the following is true when the price of a good or service rises?

- Buyers who were already buying the good or service are better off.
- Some buyers exit the market.
- The total consumer surplus in the market increases.
- The total value of purchases before and after the price change is the same.

ANS: B      PTS: 1      DIF: 2      REF: 7-1  
 NAT: Analytic      LOC: Supply and demand  
 TOP: Consumer surplus | Willingness to pay      MSC: Interpretive

125. Motor oil and gasoline are complements. If the price of motor oil decreases, consumer surplus in the gasoline market
- decreases.
  - is unchanged.
  - increases.
  - may increase, decrease, or remain unchanged.

ANS: D                   PTS: 1                   DIF: 3                   REF: 7-1  
 NAT: Analytic        LOC: Supply and demand        TOP: Consumer surplus  
 MSC: Applicative

126. What happens to consumer surplus in the iPod market if iPods are normal goods and buyers of iPods experience an increase in income?
- Consumer surplus decreases.
  - Consumer surplus remains unchanged.
  - Consumer surplus increases.
  - Consumer surplus may increase, decrease, or remain unchanged.

ANS: D                   PTS: 1                   DIF: 3                   REF: 7-1  
 NAT: Analytic        LOC: Supply and demand        TOP: Consumer surplus  
 MSC: Applicative

127. As a result of a decrease in price,
- new buyers enter the market, increasing consumer surplus.
  - new buyers enter the market, decreasing consumer surplus.
  - existing buyers exit the market, increasing consumer surplus.
  - existing buyers exit the market, decreasing consumer surplus.

ANS: A                   PTS: 1                   DIF: 2                   REF: 7-1  
 NAT: Analytic        LOC: Supply and demand        TOP: Consumer surplus  
 MSC: Applicative

128. Economists normally assume people's preferences should be
- respected.
  - adjusted.
  - overruled.
  - ignored.

ANS: A                   PTS: 1                   DIF: 1                   REF: 7-1  
 NAT: Analytic        LOC: Supply and demand        TOP: Consumer surplus  
 MSC: Interpretive

129. Consumer surplus is a good measure of economic welfare if policymakers want to
- maximize total benefit.
  - minimize deadweight loss.
  - respect the preferences of sellers.
  - respect the preferences of buyers.

ANS: D                   PTS: 1                   DIF: 1                   REF: 7-1  
 NAT: Analytic        LOC: Supply and demand        TOP: Consumer surplus  
 MSC: Interpretive

130. When policymakers are considering a particular action, they can use consumer surplus as a(n)
- objective measure of the benefits to buyers as determined by policymakers.
  - measure of the benefits to buyers as the buyers perceive them.
  - potentially flawed measure of the benefits to buyers if the buyers are not rational.
  - Both b) and c) are correct.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-1  
 NAT: Analytic        LOC: Supply and demand        TOP: Consumer surplus  
 MSC: Interpretive

**PRODUCER SURPLUS**

1. A seller's opportunity cost measures the
  - a. value of everything she must give up to produce a good.
  - b. amount she is paid for a good minus her cost of providing it.
  - c. consumer surplus.
  - d. out of pocket expenses to produce a good but not the value of her time.

ANS: A                      PTS: 1                      DIF: 1                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Cost  
 MSC: Definitional

2. Cost is a measure of the
  - a. seller's willingness to sell.
  - b. seller's producer surplus.
  - c. producer shortage.
  - d. seller's willingness to buy.

ANS: A                      PTS: 1                      DIF: 1                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Cost  
 MSC: Interpretive

3. Justin builds fences for a living. Justin's out-of-pocket expenses (for wood, paint, etc.) plus the value that he places on his own time amount to his
  - a. producer surplus.
  - b. producer deficit.
  - c. cost of building fences.
  - d. profit.

ANS: C                      PTS: 1                      DIF: 1                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Cost  
 MSC: Definitional

4. A supply curve can be used to measure producer surplus because it reflects
  - a. the actions of sellers.
  - b. quantity supplied.
  - c. sellers' costs.
  - d. the amount that will be purchased by consumers in the market.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand  
 TOP: Producer surplus | Supply curve                      MSC: Interpretive

5. A seller is willing to sell a product only if the seller receives a price that is at least as great as the
  - a. seller's producer surplus.
  - b. seller's cost of production.
  - c. seller's profit.
  - d. average willingness to pay of buyers of the product.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Cost  
 MSC: Interpretive

6. Producer surplus is
  - a. measured using the demand curve for a good.
  - b. always a negative number for sellers in a competitive market.
  - c. the amount a seller is paid minus the cost of production.
  - d. the opportunity cost of production minus the cost of producing goods that go unsold.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Producer surplus  
 MSC: Definitional



7. Producer surplus measures the

- benefits to sellers of participating in a market.
- costs to sellers of participating in a market.
- price that buyers are willing to pay for sellers' output of a good or service.
- benefit to sellers of producing a greater quantity of a good or service than buyers demand.

ANS: A                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand        TOP: Producer surplus  
 MSC: Interpretive

8. A seller's willingness to sell is

- measured by the seller's cost of production.
- related to her supply curve, just as a buyer's willingness to buy is related to his demand curve.
- less than the price received if producer surplus is a positive number.
- All of the above are correct.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand        TOP: Producer surplus  
 MSC: Interpretive

9. Caroline sharpens knives in her spare time for extra income. Buyers of her service are willing to pay \$2.95 per knife for as many knives as Caroline is willing to sharpen. On a particular day, she is willing to sharpen the first knife for \$2.00, the second knife for \$2.25, the third knife for \$2.75, and the fourth knife for \$3.50. Assume Caroline is rational in deciding how many knives to sharpen. Her producer surplus is

- \$0.95.
- \$1.15.
- \$1.30.
- \$1.85.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand        TOP: Producer surplus  
 MSC: Analytical

10. Anita sharpens knives in her spare time for extra income. Buyers of her service are willing to pay \$3.50 per knife for as many knives as Anita is willing to sharpen. On a particular day, she is willing to sharpen the first knife for \$2.00, the second knife for \$2.50, the third knife for \$3.00, and the fourth knife for \$3.50. Assume Anita is rational in deciding how many knives to sharpen. Her producer surplus is

- \$3.50.
- \$3.00.
- \$2.00.
- \$0.50.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand        TOP: Producer surplus  
 MSC: Analytical

11. Tom tunes pianos in his spare time for extra income. Buyers of his service are willing to pay \$155 per tuning. One particular week, Tom is willing to tune the first piano for \$120, the second piano for \$125, the third piano for \$140, and the fourth piano for \$160. Assume Tom is rational in deciding how many pianos to tune. His producer surplus is

- \$95.
- \$80.
- \$75.
- \$60.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand        TOP: Producer surplus  
 MSC: Analytical

12. David tunes pianos in his spare time for extra income. Buyers of his service are willing to pay \$135 per tuning. One particular week, David is willing to tune the first piano for \$115, the second piano for \$125, the third pi-

ano for \$140, and the fourth piano for \$175. Assume David is rational in deciding how many pianos to tune.

His producer surplus is

- a. \$-15.
- b. \$20.
- c. \$30.
- d. \$75.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-2  
NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
MSC: Analytical

13. Ivana produces cookies. Her production cost is \$6 per dozen. She sells the cookies for \$8 per dozen. Her producer surplus per dozen cookies is

- a. \$2.
- b. \$6.
- c. \$8.
- d. \$14.

ANS: A                      PTS: 1                      DIF: 1                      REF: 7-2  
NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
MSC: Interpretive

14. Donald produces nails at a cost of \$200 per ton. If he sells the nails for \$350 per ton, his producer surplus per ton is

- a. \$150.
- b. \$200.
- c. \$350.
- d. \$550.

ANS: A                      PTS: 1                      DIF: 1                      REF: 7-2  
NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
MSC: Applicative

15. If Gina sells a shirt for \$40, and her producer surplus from the sale is \$32, her cost must have been

- a. \$72.
- b. \$32.
- c. \$8.
- d. We would have to know the consumer surplus in order to make this determination.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-2  
NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
MSC: Applicative

16. Ronnie operates a lawn-care service. On each day, the cost of mowing the first lawn is \$10, the cost of mowing the second lawn is \$12, and the cost of mowing the third lawn is \$15. His producer surplus on the first three lawns of the day is \$53. If Ronnie charges all customers the same price for lawn mowing, that price is

- a. \$25.
- b. \$30.
- c. \$36.
- d. \$45.

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-2  
NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
MSC: Applicative

17. At Nick's Bakery, the cost to make homemade chocolate cake is \$3 per cake. As a result of selling three cakes, Nick experiences a producer surplus in the amount of \$19.50. Nick must be selling his cakes for
- \$6.50 each.
  - \$7.50 each.
  - \$9.50 each.
  - \$10.50 each.

ANS: C                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

18. Kristi and Rebecca sell lemonade on the corner. It costs them 9 cents to make each cup. On a certain day, they sell 40 cups, and their producer surplus for that day amounts to \$12.40. Kristi and Rebecca sold each cup for
- 36 cents.
  - 40 cents.
  - 45 cents.
  - 52 cents.

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

**Table 7-7**

The following table represents the costs of five possible sellers.

Seller	Cost
Abby	\$1,500
Bobby	\$1,200
Carlos	\$1,000
Dianne	\$750
Evalina	\$500

19. **Refer to Table 7-7.** If the market price is \$1,000, the producer surplus in the market is
- \$700.
  - \$750.
  - \$2,250.
  - \$3,700.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Analytical

20. **Refer to Table 7-7.** If the market price is \$900, the producer surplus in the market is
- \$350.
  - \$550.
  - \$750.
  - \$1,000.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Analytical

21. **Refer to Table 7-7.** If the market price is \$1,100, the combined total cost of all participating sellers is
- \$3,700.
  - \$2,700.
  - \$2,250.
  - \$1,250.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Opportunity cost  
 MSC: Analytical

22. **Refer to Table 7-7.** If the market price is \$900, the combined total cost of all participating sellers is
- \$3,700.
  - \$2,700.
  - \$2,250.
  - \$1,250.

ANS: D                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Opportunity cost  
 MSC: Analytical

23. **Refer to Table 7-7.** If the price is \$1,000,
- Bobby is an eager supplier.
  - Dianne is an eager supplier.
  - Abby's producer surplus is \$500.
  - All of the above are correct.

ANS: B                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus | Supply  
 MSC: Applicative

24. **Refer to Table 7-7.** If the price is \$775, who would be willing to supply the product?
- Abby and Bobby
  - Abby, Bobby, and Carlos
  - Carlos, Dianne, and Evalina
  - Dianne and Evalina

ANS: D                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus | Supply  
 MSC: Applicative

25. **Refer to Table 7-7.** Suppose each of the five sellers can supply at most one unit of the good. The market quantity supplied is exactly 3 if the price is
- \$670.
  - \$770.
  - \$970.
  - \$1,170.

ANS: D                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus | Supply  
 MSC: Analytical

26. **Refer to Table 7-7.** Suppose each of the five sellers can supply at most one unit of the good. The market quantity supplied is exactly 4 if the price is
- \$770.
  - \$970.
  - \$1,170.
  - \$1,370.

ANS: D                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus | Supply  
 MSC: Analytical

27. **Refer to Table 7-7.** Who is a marginal seller when the price is \$1,200?
- Bobby
  - Bobby and Abby
  - Carlos, Dianne, and Evalina
  - Carlos, Dianne, Evalina, and Bobby

ANS: A                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Marginal seller  
 MSC: Applicative

**Table 7-8**

The only four producers in a market have the following costs:

Seller	Cost
Evan	\$50
Selena	\$100
Angie	\$150
Kris	\$200

28. **Refer to Table 7-8.** If the sellers bid against each other for the right to sell the good to a consumer, then the good will sell for
- \$50 or slightly more.
  - \$100 or slightly less.
  - \$150 or slightly less.
  - \$200 or slightly more.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Price | Cost  
 MSC: Analytical

29. **Refer to Table 7-8.** If the sellers bid against each other for the right to sell the good to a consumer, then the producer surplus will be
- \$0 or slightly more.
  - \$50 or slightly less.
  - \$150 or slightly less.
  - \$200 or slightly more.

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand  
 TOP: Price | Cost | Producer surplus            MSC: Analytical

30. **Refer to Table 7-8.** If Evan, Selena, and Angie sell the good, and the resulting producer surplus is \$300, then the price must have been
- \$200.
  - \$300.
  - \$450.
  - \$600.

ANS: A                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand  
 TOP: Price | Cost | Producer surplus            MSC: Analytical

31. **Refer to Table 7-8.** If Evan, Selena, Angie, and Kris sell the good, and the resulting producer surplus is \$700, then the price must have been
- \$200.
  - \$300.
  - \$500.
  - \$700.

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand  
 TOP: Price | Cost | Producer surplus            MSC: Analytical

**Table 7-9**

The numbers reveal the opportunity costs of providing 10 piano lessons of equal quality.

Seller	Cost
Marcia	\$200
Jan	\$250
Cindy	\$350
Greg	\$400
Peter	\$700
Bobby	\$800

32. **Refer to Table 7-9.** You wish to purchase 10 piano lessons, so you take bids from each of the sellers. You will not accept a bid below a seller's cost because you are concerned that the seller will not provide all 10 lessons. What bid will you accept?

- \$351
- \$251
- \$249
- \$199

ANS: C      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Analytical

33. **Refer to Table 7-9.** You wish to purchase 10 piano lessons for yourself and for your brother, so you take bids from each of the sellers. You will take lessons at the same time, so one teacher cannot provide lessons to both of you. You must pay the same price for both sets of lessons, and you will not accept a bid below a seller's cost because you are concerned that the seller will not provide all 10 lessons. What bid will you accept?

- \$351
- \$349
- \$201
- \$199

ANS: B      PTS: 1      DIF: 3      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Analytical

34. **Refer to Table 7-9.** The equilibrium market price for 10 piano lessons is \$400. What is the total producer surplus in the market?

- \$0
- \$300
- \$400
- \$700

ANS: C      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Analytical

35. **Refer to Table 7-9.** The equilibrium market price for 10 piano lessons is \$300. What is the total producer surplus in the market?

- \$50
- \$150
- \$1,050
- \$1,500

ANS: B      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Analytical

36. **Refer to Table 7-9.** You wish to purchase 10 piano lessons, so you take bids from each of the sellers. The bids are required to be rounded to the nearest dollar. You will not accept a bid below a seller's cost because you are concerned that the seller will not provide all 10 lessons. Your parents have given you \$450 to spend

on piano lessons. You believe that the sellers with higher opportunity costs offer higher quality lessons. You want the highest quality lessons that you can afford, but you can spend any remaining money on dinner with friends. From whom will you take lessons, and how much money will you spend?

- Peter; \$450
- Cindy; \$450
- Greg; \$401
- Cindy; \$401

ANS: C                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Analytical

**Table 7-10**

Seller	Cost
LeBron	\$700
Kobe	\$600
Kevin	\$450
Steve	\$400

37. **Refer to Table 7-10.** You want to hire a professional photographer to take pictures of your family. The table shows the costs of the four potential sellers in the local photography market. You take bids from the sellers. Who offers the winning bid, and what does he offer to charge for the photography session?

- Steve; more than \$400 but less than \$450
- Steve; \$399
- LeBron; more than \$700
- LeBron; more than \$600 but less than \$700

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Cost  
 MSC: Analytical

38. **Refer to Table 7-10.** You and your best friend want to hire a professional photographer to take pictures of your two families. The table shows the costs of the four potential sellers in the local photography market. You and your friend take bids from the sellers. Who offers the two winning bids, and what do they offer to charge for the photography sessions?

- LeBron and Kobe; more than \$450 but less than \$600
- Kevin and Steve; more than \$450 but less than \$600
- LeBron and Kobe; more than \$700
- Kevin and Steve; less than \$400

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Cost  
 MSC: Analytical

39. **Refer to Table 7-10.** You want to hire a professional photographer to take pictures of your family. The table shows the costs of the four potential sellers in the local photography market. You hire Kevin for a price of \$500. What is his producer surplus?

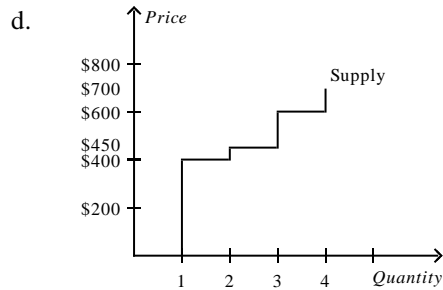
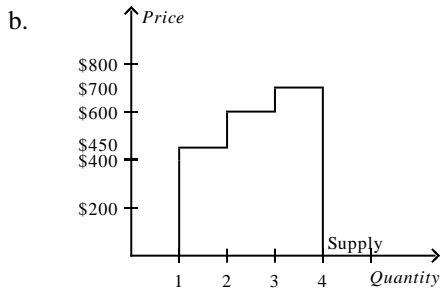
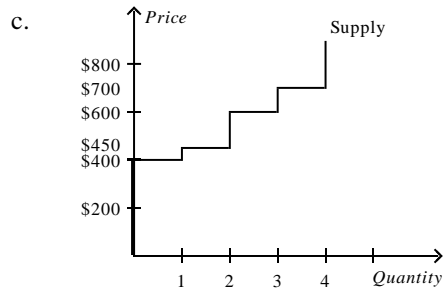
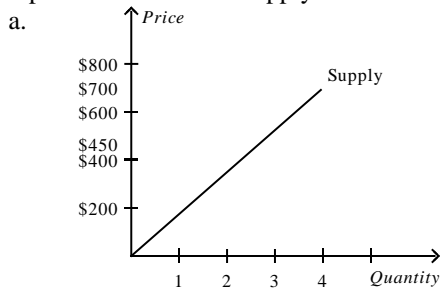
- \$500
- \$150
- \$100
- \$50

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Analytical

40. **Refer to Table 7-10.** You and your best friend want to hire a professional photographer to take pictures of your two families. The table shows the costs of the four potential sellers in the local photography market. You and your friend agree to offer \$500 for each session. Who accepts the offer, and what is the total producer surplus in the market?
- LeBron and Kobe; \$500
  - Kevin and Steve; \$500
  - LeBron and Kobe; \$300
  - Kevin and Steve; \$150

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Producer surplus  
 MSC: Analytical

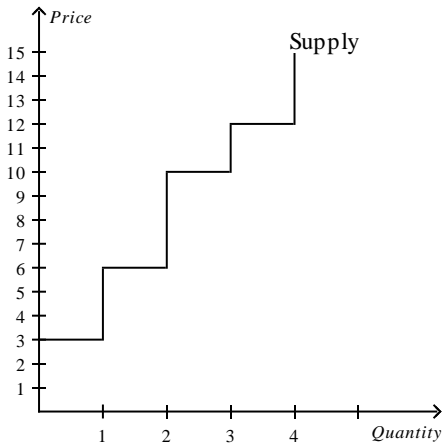
41. **Refer to Table 7-10.** You want to hire a professional photographer to take pictures of your family. The table shows the costs of the four potential sellers in the local photography market. Which of the following graphs represents the market supply curve?



ANS: C                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Cost  
 MSC: Analytical



Figure 7-7



42. Refer to Figure 7-7. If the price of the good is \$9.50, then producer surplus is
- \$2.50.
  - \$6.50.
  - \$8.00.
  - \$10.00.

ANS: D      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Applicative

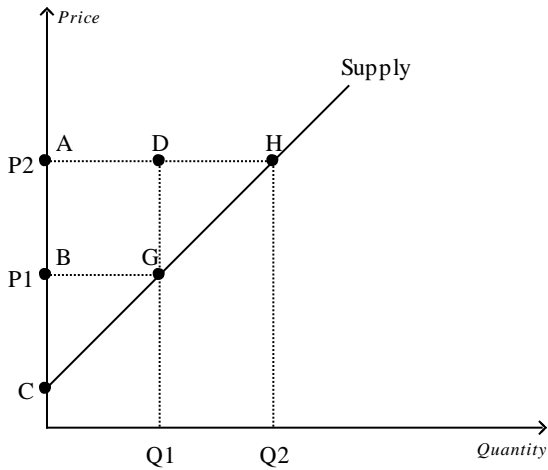
43. Refer to Figure 7-7. If the price of the good is \$14, then producer surplus is
- \$17.
  - \$22.
  - \$25.
  - \$28.

ANS: C      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Applicative

44. Refer to Figure 7-7. If producer surplus is \$14, then the price of the good is
- \$11.00.
  - \$12.00.
  - \$13.50.
  - \$14.75.

ANS: A      PTS: 1      DIF: 3      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Applicative

Figure 7-8



45. Refer to Figure 7-8. Which area represents producer surplus when the price is P1?

- BCG
- ACH
- ABGD
- DGH

ANS: A

PTS: 1

DIF: 2

REF: 7-2

NAT: Analytic

LOC: Supply and demand

TOP: Producer surplus

MSC: Applicative

46. Refer to Figure 7-8. Which area represents producer surplus when the price is P2?

- BCG
- ACH
- ABGD
- AHGB

ANS: B

PTS: 1

DIF: 2

REF: 7-2

NAT: Analytic

LOC: Supply and demand

TOP: Producer surplus

MSC: Applicative

47. Refer to Figure 7-8. Which area represents the *increase* in producer surplus when the price rises from P1 to P2?

- BCG
- ACH
- ABGD
- AHGB

ANS: D

PTS: 1

DIF: 2

REF: 7-2

NAT: Analytic

LOC: Supply and demand

TOP: Producer surplus

MSC: Applicative

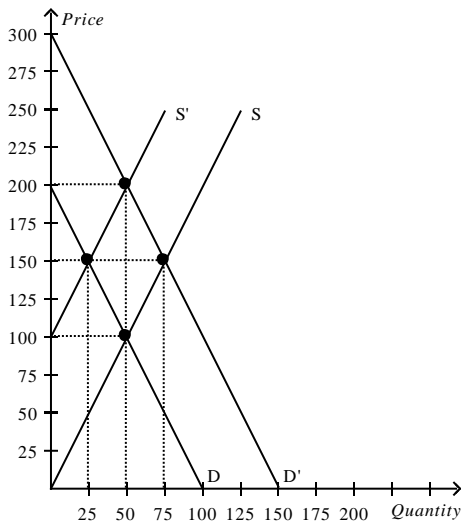
48. **Refer to Figure 7-8.** When the price rises from P1 to P2, which area represents the increase in producer surplus to existing producers?
- BCG
  - ACH
  - DGH
  - ABGD

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
 MSC: Applicative

49. **Refer to Figure 7-8.** Which area represents the increase in producer surplus when the price rises from P1 to P2 due to new producers entering the market?
- BCG
  - ACH
  - DGH
  - AHGB

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
 MSC: Applicative

**Figure 7-9**



50. **Refer to Figure 7-9.** If the supply curve is S, the demand curve is D, and the equilibrium price is \$100, what is the producer surplus?
- \$625
  - \$1,250
  - \$2,500
  - \$5,000

ANS: C                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
 MSC: Analytical

51. **Refer to Figure 7-9.** If the supply curve is  $S'$ , the demand curve is  $D$ , and the equilibrium price is \$150, what is the producer surplus?
- \$625
  - \$1,250
  - \$2,500
  - \$5,000

ANS: A                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
 MSC: Analytical

52. **Refer to Figure 7-9.** If the demand curve is  $D$  and the supply curve shifts from  $S'$  to  $S$ , what is the *change* in producer surplus?
- Producer surplus increases by \$625.
  - Producer surplus increases by \$1,875.
  - Producer surplus decreases by \$625.
  - Producer surplus decreases by \$1,875.

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
 MSC: Analytical

53. **Refer to Figure 7-9.** If the supply curve is  $S$  and the demand curve shifts from  $D$  to  $D'$ , what is the *change* in producer surplus?
- Producer surplus increases by \$3,125.
  - Producer surplus increases by \$5,625.
  - Producer surplus decreases by \$3,125.
  - Producer surplus decreases by \$5,625.

ANS: A                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
 MSC: Analytical

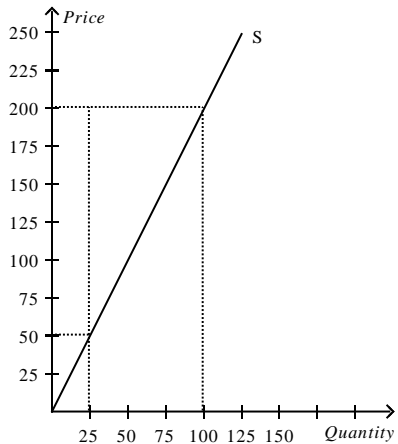
54. **Refer to Figure 7-9.** If the supply curve is  $S$  and the demand curve shifts from  $D$  to  $D'$ , what is the increase in producer surplus to existing producers?
- \$625
  - \$2,500
  - \$3,125
  - \$5,625

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
 MSC: Analytical

55. **Refer to Figure 7-9.** If the supply curve is  $S$  and the demand curve shifts from  $D$  to  $D'$ , what is the increase in producer surplus due to new producers entering the market?
- \$625
  - \$2,500
  - \$3,125
  - \$5,625

ANS: A                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
 MSC: Analytical

Figure 7-10



56. Refer to Figure 7-10. If the equilibrium price is \$50, what is the producer surplus?

- a. \$625
- b. \$3,750
- c. \$5,625
- d. \$10,000

ANS: A      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Analytical

57. Refer to Figure 7-10. If the equilibrium price is \$200, what is the producer surplus?

- a. \$625
- b. \$3,750
- c. \$10,000
- d. \$20,000

ANS: C      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Analytical

58. Refer to Figure 7-10. If the equilibrium price rises from \$50 to \$200, what is the additional producer surplus to *initial* producers?

- a. \$625
- b. \$3,750
- c. \$5,625
- d. \$10,000

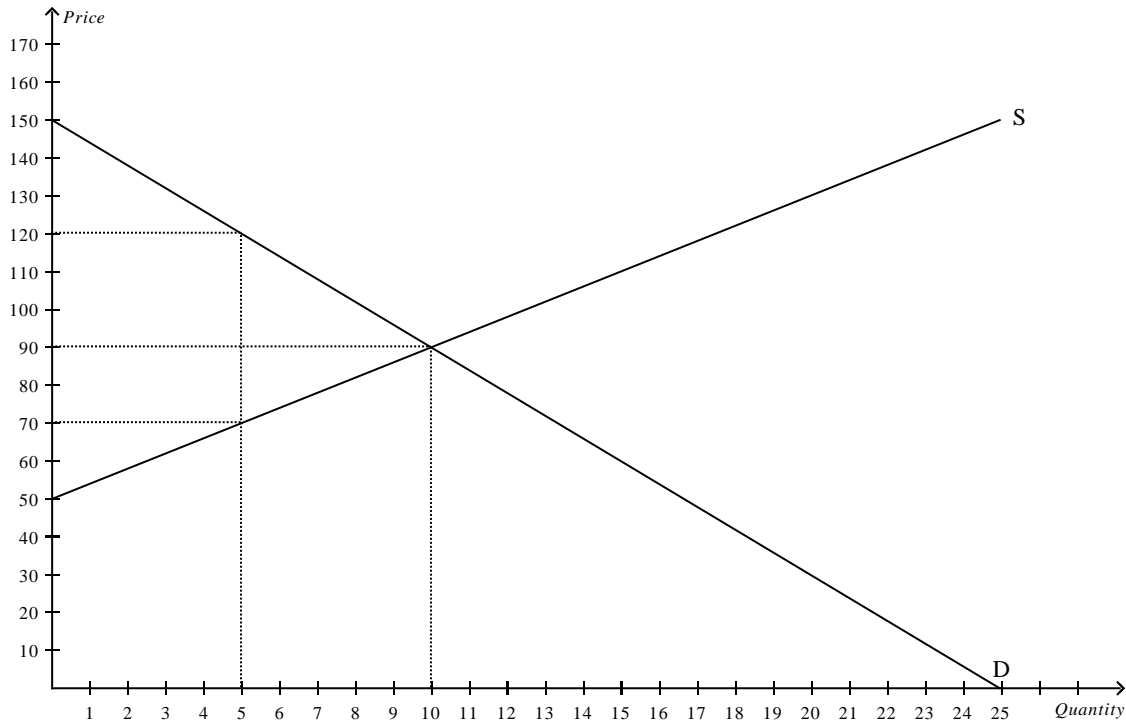
ANS: B      PTS: 1      DIF: 3      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Analytical

59. Refer to Figure 7-10. If the equilibrium price rises from \$50 to \$200, what is the producer surplus to *new* producers?

- a. \$625
- b. \$3,750
- c. \$5,625
- d. \$10,000

ANS: C      PTS: 1      DIF: 3      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Analytical

Figure 7-11



60. Refer to Figure 7-11. At the equilibrium price, producer surplus is

- a. \$200.
- b. \$400.
- c. \$450.
- d. \$900.

ANS: A

PTS: 1

DIF: 3

REF: 7-2

NAT: Analytic

LOC: Supply and demand

TOP: Producer surplus

MSC: Analytical

61. Refer to Figure 7-11. If the government imposes a price ceiling of \$70 in this market, then the new producer surplus will be

- a. \$50.
- b. \$100.
- c. \$175.
- d. \$350.

ANS: A

PTS: 1

DIF: 3

REF: 7-2

NAT: Analytic

LOC: Supply and demand

TOP: Producer surplus

MSC: Analytical

62. Refer to Figure 7-11. If the government imposes a price ceiling of \$70 in this market, then producer surplus will *decrease* by

- a. \$50.
- b. \$125.
- c. \$150.
- d. \$200.

ANS: C

PTS: 1

DIF: 3

REF: 7-2

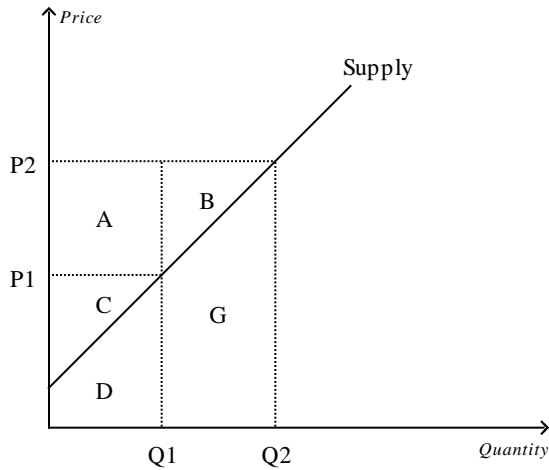
NAT: Analytic

LOC: Supply and demand

TOP: Producer surplus

MSC: Analytical

Figure 7-12



63. Refer to Figure 7-12. When the price is P2, producer surplus is

- A.
- A+C.
- A+B+C.
- D+G.

ANS: C      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Applicative

64. Refer to Figure 7-12. Suppose producer surplus is larger than C but smaller than A+B+C. The price of the good must be

- lower than P1.
- P1.
- between P1 and P2.
- higher than P2.

ANS: C      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Applicative

65. Refer to Figure 7-12. When the price is P1, producer surplus is

- A.
- C.
- A+B.
- C+D.

ANS: B      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Applicative

66. Refer to Figure 7-12. When the price falls from P2 to P1, producer surplus

- decreases by an amount equal to C.
- decreases by an amount equal to A+B.
- decreases by an amount equal to A+C.
- increases by an amount equal to A+B.

ANS: B      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Applicative

67. **Refer to Figure 7-12.** When the price rises from  $P_1$  to  $P_2$ , what area represents the increase in producer surplus?
- A
  - A+B
  - A+B+C
  - G

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

68. **Refer to Figure 7-12.** When the price rises from  $P_1$  to  $P_2$ , which area represents the increase in producer surplus to existing producers?
- A
  - A+B
  - A+B+C
  - G

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

69. **Refer to Figure 7-12.** When the price rises from  $P_1$  to  $P_2$ , which area represents the increase in producer surplus due to new producers entering the market?
- A
  - B
  - A+B
  - G

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

70. **Refer to Figure 7-12.** Area A represents
- producer surplus to new producers entering the market as the result of an increase in price from  $P_1$  to  $P_2$ .
  - the increase in consumer surplus that results from an upward-sloping supply curve.
  - the increase in total surplus when sellers are willing and able to increase supply from  $Q_1$  to  $Q_2$ .
  - the increase in producer surplus to those producers already in the market when the price increases from  $P_1$  to  $P_2$ .

ANS: D                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

71. **Refer to Figure 7-12.** Area B represents
- the combined profits of all producers when the price is  $P_2$ .
  - the increase in producer surplus to all producers as the result of an increase in the price from  $P_1$  to  $P_2$ .
  - producer surplus to new producers entering the market as the result of an increase in the price from  $P_1$  to  $P_2$ .
  - that portion of the increase in producer surplus that is offset by a loss in consumer surplus when the price increases from  $P_1$  to  $P_2$ .

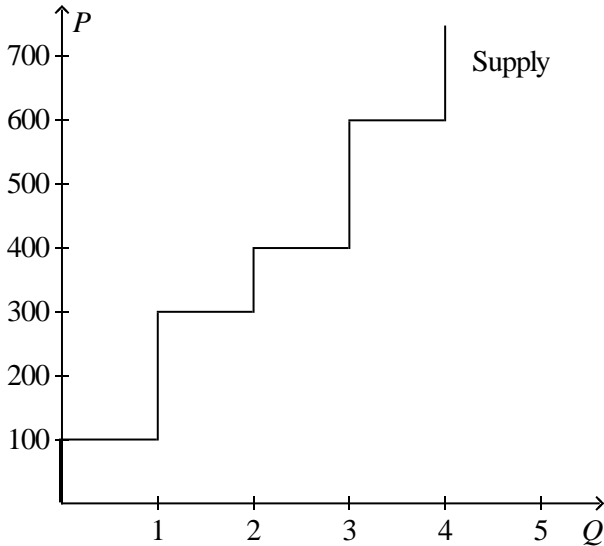
ANS: C                      PTS: 1                      DIF: 3                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative



72. **Refer to Figure 7-12.** When the price falls from  $P_2$  to  $P_1$ , which of the following would *not* be true?
- The sellers who still sell the good are worse off because they now receive less.
  - Some sellers leave the market because they are not willing to sell the good at the lower price.
  - The total cost of what is now sold by sellers is actually higher than it was before the decrease in the price.
  - Producer surplus would fall by area  $A + B$ .

ANS: C      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Applicative

**Figure 7-13**



73. **Refer to Figure 7-13.** If the price of the good is \$300, then producer surplus amounts to
- \$100.
  - \$200.
  - \$300.
  - \$400.

ANS: B      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Applicative

74. **Refer to Figure 7-13.** If the price of the good is \$500, then producer surplus amounts to
- \$450.
  - \$575.
  - \$700.
  - \$800.

ANS: C      PTS: 1      DIF: 2      REF: 7-2  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Applicative

75. **Refer to Figure 7-13.** If the price of the good is \$600, then producer surplus amounts to

- a. \$650.
- b. \$800.
- c. \$900.
- d. \$1,000.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-2  
NAT: Analytic           LOC: Supply and demand           TOP: Producer surplus  
MSC: Applicative

76. **Refer to Figure 7-13.** If the price of the good is \$600, then

- a. consumer surplus is \$800.
- b. consumer surplus is \$900.
- c. producer surplus is \$900.
- d. producer surplus is \$1,000.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-2  
NAT: Analytic           LOC: Supply and demand           TOP: Producer surplus  
MSC: Applicative

77. **Refer to Figure 7-13.** Suppose the price of the good is \$400. Then, on the first unit of the good that is sold, producer surplus amounts to

- a. \$200.
- b. \$300.
- c. \$400.
- d. \$450.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-2  
NAT: Analytic           LOC: Supply and demand           TOP: Producer surplus  
MSC: Applicative

78. **Refer to Figure 7-13.** Suppose the price of the good is \$450. Then, on the first unit of the good that is sold, producer surplus is

- a. \$250, and on the second unit of the good that is sold, producer surplus is \$100.
- b. \$250, and on the second unit of the good that is sold, producer surplus is \$150.
- c. \$350, and on the second unit of the good that is sold, producer surplus is \$100.
- d. \$350, and on the second unit of the good that is sold, producer surplus is \$150.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-2  
NAT: Analytic           LOC: Supply and demand           TOP: Producer surplus  
MSC: Applicative

79. **Refer to Figure 7-13.** Producer surplus amounts to \$300 if the price of the good is

- a. \$300.
- b. \$350.
- c. \$400.
- d. \$450.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-2  
NAT: Analytic           LOC: Supply and demand           TOP: Producer surplus  
MSC: Applicative

80. **Refer to Figure 7-13.** Sellers will be unwilling to sell more than

- a. 1 unit of the good if its price is below \$200.
- b. 2 units of the good if its price is below \$450.
- c. 3 units of the good if its price is below \$700.
- d. All of the above are correct.

ANS: A                   PTS: 1                   DIF: 2                   REF: 7-2  
NAT: Analytic           LOC: Supply and demand           TOP: Producer surplus  
MSC: Applicative

81. Producer surplus equals

- Value to buyers - Amount paid by buyers.
- Amount received by sellers - Costs of sellers.
- Value to buyers - Costs of sellers.
- Value to buyers - Amount paid by buyers + Amount received by sellers - Costs of sellers.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand           TOP: Producer surplus  
 MSC: Definitional

82. Producer surplus is the

- area under the supply curve to the left of the amount sold.
- amount a seller is paid minus the cost of production.
- area between the supply and demand curves, above the equilibrium price.
- cost to sellers of participating in a market.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand           TOP: Producer surplus  
 MSC: Interpretive

83. Producer surplus is the area

- under the supply curve.
- between the supply and demand curves.
- below the price and above the supply curve.
- under the demand curve and above the price.

ANS: C                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand           TOP: Producer surplus  
 MSC: Interpretive

84. Producer surplus is

- represented on a graph by the area below the demand curve and above the supply curve.
- the amount a seller is paid minus the cost of production.
- also referred to as excess supply.
- All of the above are correct.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand           TOP: Producer surplus  
 MSC: Interpretive

85. Producer surplus directly measures

- the well-being of society as a whole.
- the well-being of buyers and sellers.
- the well-being of sellers.
- sellers' willingness to sell.

ANS: C                   PTS: 1                   DIF: 1                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand           TOP: Producer surplus  
 MSC: Interpretive

86. Producer surplus directly measures

- the well-being of sellers.
- production costs.
- excess demand.
- unsold inventories.

ANS: A                   PTS: 1                   DIF: 1                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand           TOP: Producer surplus  
 MSC: Interpretive

87. The marginal seller is the seller who
- cannot compete with the other sellers in the market.
  - would leave the market first if the price were any lower.
  - can produce at the lowest cost.
  - has the largest producer surplus.

ANS: B                      PTS: 1                      DIF: 1                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Marginal seller  
 MSC: Definitional

88. The marginal seller is the seller
- for whom the marginal cost of producing one more unit of output is the lowest among all sellers, and the marginal buyer is the buyer for whom the marginal benefit of one more unit of the good is the highest among all buyers.
  - who supplies the smallest quantity of the good among all sellers, and the marginal buyer is the buyer who demands the smallest quantity of the good among all buyers.
  - who would leave the market first if the price were any lower, and the marginal buyer is the buyer who would leave the market first if the price were any higher.
  - who has the largest producer surplus, and the marginal buyer is the buyer who has the largest consumer surplus.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Marginal seller  
 MSC: Definitional

89. Another way to think of the marginal seller is the seller who
- will accept the lowest price of any seller in the market.
  - requires the highest price of any potential seller in the market.
  - would leave the market first if the price were any lower.
  - would leave the market last if the price falls.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Cost  
 MSC: Analytical

90. Suppose the demand for peanuts increases. What will happen to producer surplus in the market for peanuts?
- It increases.
  - It decreases.
  - It remains unchanged.
  - It may increase, decrease, or remain unchanged.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Producer surplus  
 MSC: Applicative

91. Suppose the demand for peaches decreases. What will happen to producer surplus in the market for peaches?
- It increases.
  - It decreases.
  - It remains unchanged.
  - It may increase, decrease, or remain unchanged.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Producer surplus  
 MSC: Applicative

92. Which of the following will cause an increase in producer surplus?

- the imposition of a binding price ceiling in the market
- buyers expect the price of the good to be lower next month
- the price of a substitute increases
- income increases and buyers consider the good to be inferior

ANS: C                   PTS: 1                   DIF: 3                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand           TOP: Producer surplus  
 MSC: Applicative

93. If the demand for leather decreases, producer surplus in the leather market

- increases.
- decreases.
- remains the same.
- may increase, decrease, or remain the same.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand           TOP: Producer surplus  
 MSC: Applicative

94. If the demand for light bulbs increases, producer surplus in the market for light bulbs

- increases.
- decreases.
- remains the same.
- may increase, decrease, or remain the same.

ANS: A                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand           TOP: Producer surplus  
 MSC: Applicative

95. The Surgeon General announces that eating chocolate increases tooth decay. As a result, the equilibrium price of chocolate

- increases, and producer surplus increases.
- increases, and producer surplus decreases.
- decreases, and producer surplus increases.
- decreases, and producer surplus decreases.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand           TOP: Producer surplus  
 MSC: Applicative

96. Suppose consumer income increases. If grass seed is a normal good, the equilibrium price of grass seed will

- decrease, and producer surplus in the industry will decrease.
- increase, and producer surplus in the industry will increase.
- decrease, and producer surplus in the industry will increase.
- increase, and producer surplus in the industry will decrease.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand           TOP: Producer surplus  
 MSC: Applicative

97. Which of the following statements is *not* correct?

- A seller would be eager to sell her product at a price higher than her cost.
- A seller would refuse to sell her product at a price lower than her cost.
- A seller would be indifferent about selling her product at a price equal to her cost.
- Since sellers cannot set the price for their product, they must be willing to sell their product at any price.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand           TOP: Cost  
 MSC: Interpretive

98. Which of the following events would increase producer surplus?
- Sellers' costs stay the same and the price of the good increases.
  - Sellers' costs increase and the price of the good stays the same.
  - Sellers' costs increase and the price of the good decreases.
  - All of the above are correct.

ANS: A                    PTS: 1                    DIF: 1                    REF: 7-2  
NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
MSC: Interpretive

99. Which of the following will cause a decrease in producer surplus?
- the imposition of a binding price ceiling in the market
  - an increase in the number of buyers of the good
  - income increases and buyers consider the good to be normal
  - the price of a complement decreases

ANS: A                    PTS: 1                    DIF: 3                    REF: 7-2  
NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
MSC: Interpretive

100. ABC Company incurs a cost of 50 cents to produce a dozen eggs, while XYZ Company incurs a cost of 70 cents to produce a dozen eggs. Which of the following price increases would cause *both* companies to experience an increase in producer surplus?
- The price of a dozen eggs increases from 40 cents to 55 cents.
  - The price of a dozen eggs increases from 55 cents to 70 cents.
  - The price of a dozen eggs increases from 55 cents to 75 cents.
  - All of these price increases would cause both companies to experience a loss in producer surplus.

ANS: C                    PTS: 1                    DIF: 2                    REF: 7-2  
NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
MSC: Interpretive

101. The welfare of sellers is measured by
- consumer surplus.
  - producer surplus.
  - total surplus.
  - price.

ANS: B                    PTS: 1                    DIF: 1                    REF: 7-2  
NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
MSC: Interpretive

102. The Surgeon General announces that eating apples promotes healthy teeth. As a result, the equilibrium price of apples
- increases, and producer surplus increases.
  - increases, and producer surplus decreases.
  - decreases, and producer surplus increases.
  - decreases, and producer surplus decreases.

ANS: A                    PTS: 1                    DIF: 2                    REF: 7-2  
NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
MSC: Applicative

103. Kristi and Rebecca sell lemonade on the corner. It costs them 7 cents to make each cup. On a certain day, they sell 40 cups. Their producer surplus for that day amounts to \$19.20. Kristi & Rebecca sold each cup for
- 31 cents.
  - 38 cents.
  - 45 cents.
  - 55 cents.

ANS: D                    PTS: 1                    DIF: 3                    REF: 7-2  
NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
MSC: Applicative

104. Bill created a new software program he is willing to sell for \$200. He sells his first copy and enjoys a producer surplus of \$150. What is the price paid for the software?
- \$50.
  - \$150.
  - \$200.
  - \$350.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand        TOP: Producer surplus  
 MSC: Applicative

105. Bill created a new software program he is willing to sell for \$300. He sells his first copy and enjoys a producer surplus of \$250. What is the price paid for the software?
- \$50.
  - \$250.
  - \$300.
  - \$550.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand        TOP: Producer surplus  
 MSC: Applicative

106. Donald produces nails at a cost of \$350 per ton. If he sells the nails for \$500 per ton, his producer surplus is
- \$150.
  - \$350.
  - \$500.
  - \$850.

ANS: A                   PTS: 1                   DIF: 1                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand        TOP: Producer surplus  
 MSC: Applicative

107. At Nick's Bakery, the cost to make homemade chocolate cake is \$4 per cake. As a result of selling five cakes, Nick experiences a producer surplus in the amount of \$17.50. Nick must be selling his cakes for
- \$6.50 each.
  - \$7.50 each.
  - \$9.50 each.
  - \$10.50 each.

ANS: B                   PTS: 1                   DIF: 3                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand        TOP: Producer surplus  
 MSC: Applicative

108. Which of the following will cause a decrease in producer surplus?
- the imposition of a nonbinding price ceiling in the market
  - buyers expect the price of a good to be higher next month
  - the price of a substitute increases
  - income increases and buyers consider the good to be inferior

ANS: D                   PTS: 1                   DIF: 3                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand        TOP: Producer surplus  
 MSC: Applicative

109. Which of the following will cause no change in producer surplus?
- the imposition of a nonbinding price ceiling in the market
  - buyers expect the price of a good to be higher next month
  - the price of a substitute increases
  - income increases and buyers consider the good to be inferior

ANS: A                   PTS: 1                   DIF: 3                   REF: 7-2  
 NAT: Analytic        LOC: Supply and demand        TOP: Producer surplus  
 MSC: Applicative

110. Suppose that the market price for pizzas increases. The increase in producer surplus comes from the benefit of the higher prices to
- only existing sellers who now receive higher prices on the pizzas they were already selling.
  - only new sellers who enter the market because of the higher prices.
  - both existing sellers who now receive higher prices on the pizzas they were already selling and new sellers who enter the market because of the higher prices.
  - Producer surplus does not increase; it decreases.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand                      TOP: Producer surplus  
 MSC: Interpretive

### MARKET EFFICIENCY

1. Which tools allow economists to determine if the allocation of resources determined by free markets is desirable?
- profits and costs to firms
  - consumer and producer surplus
  - the equilibrium price and quantity
  - incomes of and prices paid by buyers

ANS: B                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Interpretive

2. Economists typically measure efficiency using
- the price paid by buyers.
  - the quantity supplied by sellers.
  - total surplus.
  - profits to firms.

ANS: C                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Interpretive

3. Consumer surplus equals the
- value to buyers minus the amount paid by buyers.
  - value to buyers minus the cost to sellers.
  - amount received by sellers minus the cost to sellers.
  - amount received by sellers minus the amount paid by buyers.

ANS: A                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Definitional

4. Producer surplus equals the
- value to buyers minus the amount paid by buyers.
  - value to buyers minus the cost to sellers.
  - amount received by sellers minus the cost to sellers.
  - amount received by sellers minus the amount paid by buyers.

ANS: C                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Producer surplus  
 MSC: Definitional



## 5. Total surplus

- a. can be used to measure a market's efficiency.
- b. is the sum of consumer and producer surplus.
- c. is the total value to buyers minus the cost to sellers.
- d. All of the above are correct.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic        LOC: Supply and demand        TOP: Total surplus  
 MSC: Interpretive

## 6. Total surplus is

- a. the total cost to sellers of providing the good minus the total value of the good to buyers.
- b. the total value of the good to buyers minus the cost to sellers of providing the good.
- c. the difference between consumer surplus and sellers' cost.
- d. always smaller than producer surplus.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic        LOC: Supply and demand        TOP: Total surplus  
 MSC: Interpretive

## 7. Total surplus is

- a. equal to producer surplus plus consumer surplus.
- b. equal to the total cost to sellers minus the total value to buyers.
- c. equal to consumers' willingness to pay plus producers' cost.
- d. greater than the sum of consumer surplus plus producer surplus.

ANS: A                   PTS: 1                   DIF: 1                   REF: 7-3  
 NAT: Analytic        LOC: Supply and demand        TOP: Total surplus  
 MSC: Definitional

## 8. Total surplus is equal to

- a. value to buyers - profit to sellers.
- b. value to buyers - cost to sellers.
- c. consumer surplus x producer surplus.
- d. (consumer surplus + producer surplus) x equilibrium quantity.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic        LOC: Supply and demand        TOP: Total surplus  
 MSC: Interpretive

## 9. Total surplus in a market is equal to

- a. value to buyers - amount paid by buyers.
- b. amount received by sellers - costs of sellers.
- c. value to buyers - costs of sellers.
- d. amount received by sellers - amount paid by buyers.

ANS: C                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic        LOC: Supply and demand        TOP: Total surplus  
 MSC: Interpretive

## 10. Total surplus in a market is equal to

- a. consumer surplus + producer surplus.
- b. value to buyers - amount paid by buyers.
- c. amount received by sellers - costs of sellers.
- d. producer surplus - consumer surplus.

ANS: A                   PTS: 1                   DIF: 1                   REF: 7-3  
 NAT: Analytic        LOC: Supply and demand        TOP: Total surplus  
 MSC: Definitional

11. Total surplus is represented by the area
- under the demand curve and above the price.
  - above the supply curve and up to the price.
  - under the supply curve and up to the price.
  - between the demand and supply curves up to the point of equilibrium.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic           LOC: Supply and demand           TOP: Total surplus  
 MSC: Interpretive

12. Which of the following equations is *not* valid?
- Consumer surplus = Value to buyers - Amount paid by buyers
  - Producer surplus = Amount received by sellers - Cost to sellers
  - Total surplus = Value to buyers - Amount paid by buyers + Amount received by sellers - Costs of sellers
  - Total surplus = Value to sellers - Cost to sellers

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic           LOC: Supply and demand           TOP: Total surplus  
 MSC: Definitional

13. Which of the following equations is valid?
- Consumer surplus = Total surplus - Cost to sellers
  - Producer surplus = Total surplus - Consumer surplus
  - Total surplus = Value to buyers - Amount paid by buyers
  - Total surplus = Amount received by sellers - Cost to sellers

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic           LOC: Supply and demand           TOP: Total surplus  
 MSC: Definitional

14. Total surplus is represented by the area below the
- demand curve and above the price.
  - price and up to the point of equilibrium.
  - demand curve and above the supply curve, up to the equilibrium quantity.
  - demand curve and above the horizontal axis, up to the equilibrium quantity.

ANS: C                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic           LOC: Supply and demand           TOP: Total surplus  
 MSC: Interpretive

15. Which of the following is correct?
- Consumer surplus refers to a situation in which there are more buyers than sellers in a market.
  - Producer surplus refers to a situation in which there are more sellers than buyers in a market.
  - Total surplus is measured as the area below the demand curve and above the supply curve, up to the equilibrium quantity.
  - All of the above are correct.

ANS: C                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic           LOC: Supply and demand           TOP: Total surplus  
 MSC: Interpretive

16. We can say that the allocation of resources is efficient if
- producer surplus is maximized.
  - consumer surplus is maximized.
  - total surplus is maximized.
  - sellers' costs are minimized.

ANS: C                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic           LOC: Supply and demand           TOP: Total surplus | Efficiency  
 MSC: Interpretive

17. Efficiency in a market is achieved when
- a social planner intervenes and sets the quantity of output after evaluating buyers' willingness to pay and sellers' costs.
  - the sum of producer surplus and consumer surplus is maximized.
  - all firms are producing the good at the same low cost per unit.
  - no buyer is willing to pay more than the equilibrium price for any unit of the good.

ANS: B                    PTS: 1                    DIF: 2                    REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

18. At the equilibrium price of a good, the good will be purchased by those buyers who
- value the good more than price.
  - value the good less than price.
  - have the money to buy the good.
  - consider the good a necessity.

ANS: A                    PTS: 1                    DIF: 1                    REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

19. Which of the following statements is *not* correct about a market in equilibrium?
- The price determines which buyers and which sellers participate in the market.
  - Those buyers who value the good more than the price choose to buy the good.
  - Those sellers whose costs are less than the price choose to produce and sell the good.
  - Consumer surplus will be equal to producer surplus.

ANS: D                    PTS: 1                    DIF: 2                    REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            MSC: Interpretive  
 TOP: Consumer surplus | Producer surplus

20. Efficiency is attained when
- total surplus is maximized.
  - producer surplus is maximized.
  - all resources are being used.
  - consumer surplus is maximized and producer surplus is minimized.

ANS: A                    PTS: 1                    DIF: 2                    REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Definitional

21. The distinction between efficiency and equality can be described as follows:
- Efficiency refers to maximizing the number of trades among buyers and sellers; equality refers to maximizing the gains from trade among buyers and sellers.
  - Efficiency refers to minimizing the price paid by buyers; equality refers to maximizing the gains from trade among buyers and sellers.
  - Efficiency refers to maximizing the size of the pie; equality refers to producing a pie of a given size at the least possible cost.
  - Efficiency refers to maximizing the size of the pie; equality refers to distributing the pie fairly among members of society.

ANS: D                    PTS: 1                    DIF: 2                    REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency | Equality  
 MSC: Interpretive

22. If an allocation of resources is efficient, then
- consumer surplus is maximized.
  - producer surplus is maximized.
  - all potential gains from trade among buyers and sellers are being realized.
  - the allocation achieves equality as well.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Efficiency  
 MSC: Interpretive

23. Moving production from a high-cost producer to a low-cost producer will
- lower total surplus.
  - raise total surplus.
  - lower producer surplus.
  - raise producer surplus but lower consumer surplus.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Total surplus  
 MSC: Interpretive

24. Which of the following is correct?
- Efficiency deals with the size of the economic pie, and equality deals with how fairly the pie is sliced.
  - Equality can be judged on positive grounds whereas efficiency requires normative judgments.
  - Efficiency is more difficult to evaluate than equality.
  - Equality and efficiency are both maximized in a society when total surplus is maximized.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Efficiency  
 MSC: Interpretive

**Table 7-11**

Price	Quantity Demanded	Quantity Supplied
\$12.00	0	36
\$10.00	3	30
\$ 8.00	6	24
\$ 6.00	9	18
\$ 4.00	12	12
\$ 2.00	15	6
\$ 0.00	18	0

25. Refer to Table 7-11. The equilibrium price is
- \$10.00.
  - \$8.00.
  - \$6.00.
  - \$4.00.

ANS: D                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Efficiency  
 MSC: Applicative

26. **Refer to Table 7-11.** At a price of \$2.00, total surplus is
- larger than it would be at the equilibrium price.
  - smaller than it would be at the equilibrium price.
  - the same as it would be at the equilibrium price.
  - There is insufficient information to make this determination.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Interpretive

27. **Refer to Table 7-11.** Both the demand curve and the supply curve are straight lines. At equilibrium, consumer surplus is
- \$24.
  - \$36.
  - \$42.
  - \$48.

ANS: D                      PTS: 1                      DIF: 3                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

28. **Refer to Table 7-11.** Both the demand curve and the supply curve are straight lines. At equilibrium, producer surplus is
- \$24.
  - \$32.
  - \$48.
  - \$64.

ANS: A                      PTS: 1                      DIF: 3                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Analytical

29. **Refer to Table 7-11.** Both the demand curve and the supply curve are straight lines. At equilibrium, total surplus is
- \$44.
  - \$56.
  - \$72.
  - \$96.

ANS: C                      PTS: 1                      DIF: 3                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Analytical

30. **Refer to Table 7-11.** Both the demand curve and the supply curve are straight lines. If the price is \$4 but *only 6 units* are bought and sold, consumer surplus will be
- \$21.
  - \$28.
  - \$36.
  - \$42.

ANS: C                      PTS: 1                      DIF: 3                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Analytical

31. **Refer to Table 7-11.** Both the demand curve and the supply curve are straight lines. If the price is \$4 but *only 6 units* are bought and sold, producer surplus will be
- \$16.
  - \$18.
  - \$24.
  - \$26.

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-3  
NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
MSC: Analytical

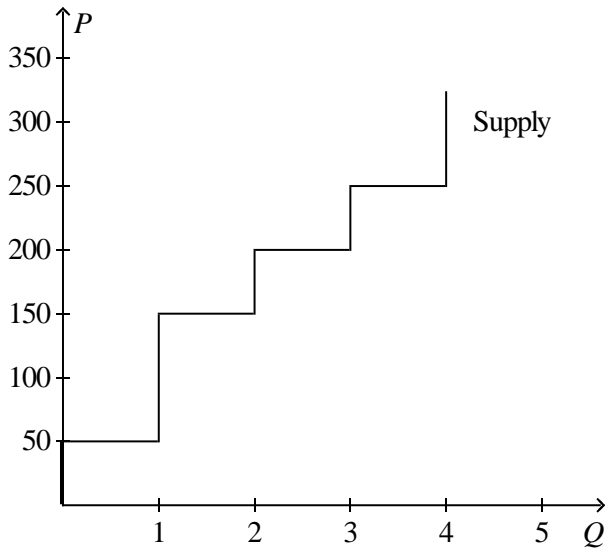
32. **Refer to Table 7-11.** Both the demand curve and the supply curve are straight lines. If the price is \$4 but *only 6 units* are bought and sold, total surplus will be
- \$42.
  - \$48.
  - \$54.
  - \$60.

ANS: C                      PTS: 1                      DIF: 3                      REF: 7-3  
NAT: Analytic              LOC: Supply and demand              TOP: Total surplus  
MSC: Analytical

33. **Refer to Table 7-11.** Both the demand curve and the supply curve are straight lines. If 6 units are bought and sold, then total surplus is
- \$18 lower than it would be if the equilibrium number of units were bought and sold.
  - \$22 lower than it would be if the equilibrium number of units were bought and sold.
  - \$26 lower than it would be if the equilibrium number of units were bought and sold.
  - \$6 higher than it would be if the equilibrium number of units were bought and sold.

ANS: A                      PTS: 1                      DIF: 3                      REF: 7-3  
NAT: Analytic              LOC: Supply and demand              TOP: Total surplus  
MSC: Analytical

Figure 7-14



34. **Refer to Figure 7-14.** Suppose the willingness to pay of the marginal buyer of the 3<sup>rd</sup> unit is \$225. Then total surplus is maximized if
- 1 unit of the good is produced and sold.
  - 2 units of the good are produced and sold.
  - 3 units of the good are produced and sold.
  - 4 units of the good are produced and sold.

ANS: C      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Total surplus  
 MSC: Applicative

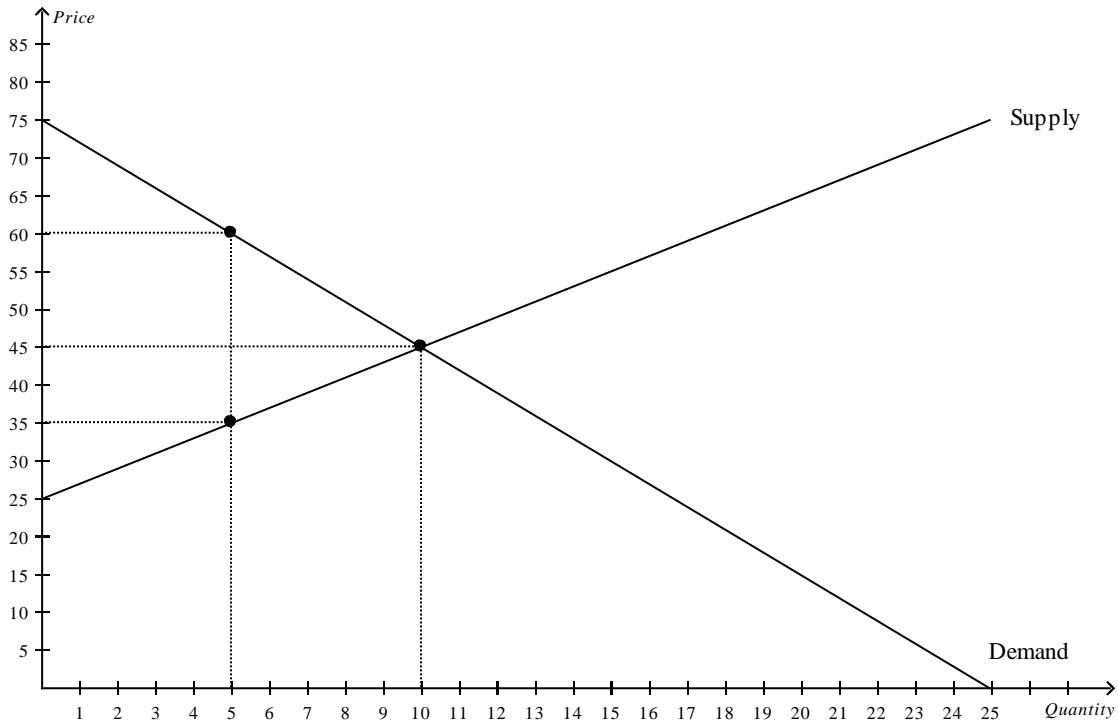
35. **Refer to Figure 7-14.** If total surplus is \$750 and consumer surplus is
- \$500, then the price of the good is \$200.
  - \$450, then the price of the good is \$200.
  - \$600, then the price of the good is \$175.
  - \$500, then the price of the good is \$175.

ANS: C      PTS: 1      DIF: 3      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Total surplus  
 MSC: Applicative

36. **Refer to Figure 7-14.** Total surplus amounts to \$800 if consumer surplus amounts to
- \$450 and if the price of the good is \$250.
  - \$450 and if the price of the good is \$300.
  - \$350 and if the price of the good is \$300.
  - \$250 and if the price of the good is \$325.

ANS: A      PTS: 1      DIF: 3      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Applicative

Figure 7-15



37. Refer to Figure 7-15. At the equilibrium price, consumer surplus is

- a. \$150.
- b. \$200.
- c. \$250.
- d. \$350.

ANS: A

PTS: 1

DIF: 3

REF: 7-3

NAT: Analytic

LOC: Supply and demand

TOP: Consumer surplus

MSC: Applicative

38. Refer to Figure 7-15. At the equilibrium price, producer surplus is

- a. \$80.
- b. \$100.
- c. \$120.
- d. \$135.

ANS: B

PTS: 1

DIF: 3

REF: 7-3

NAT: Analytic

LOC: Supply and demand

TOP: Producer surplus

MSC: Applicative

39. Refer to Figure 7-15. At the equilibrium price, total surplus is

- a. \$150.
- b. \$200.
- c. \$250.
- d. \$300.

ANS: C

PTS: 1

DIF: 3

REF: 7-3

NAT: Analytic

LOC: Supply and demand

TOP: Total surplus

MSC: Applicative



40. **Refer to Figure 7-15.** If the government imposes a price ceiling of \$60 in this market, then total surplus will be
- \$187.50.
  - \$212.50.
  - \$250.00.
  - \$266.67.

ANS: C      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Total surplus  
 MSC: Applicative

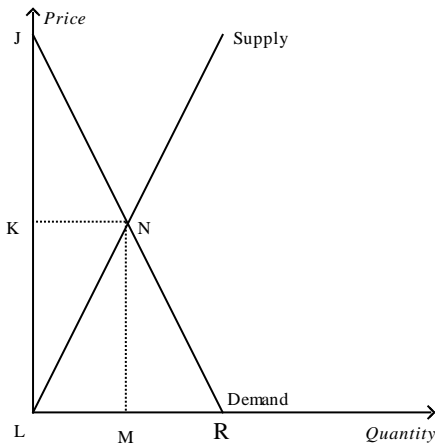
41. **Refer to Figure 7-15.** If the government imposes a price floor of \$60 in this market, then total surplus will be
- higher by \$57.50 than it would be without the price floor.
  - lower by \$20.00 than it would be without the price floor.
  - lower by \$45.00 than it would be without the price floor.
  - lower by \$62.50 than it would be without the price floor.

ANS: D      PTS: 1      DIF: 3      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Total surplus  
 MSC: Applicative

42. **Refer to Figure 7-15.** If the government imposes a price floor of \$60 in this market, then total surplus will be
- \$110.50.
  - \$125.00.
  - \$187.50.
  - \$225.25..

ANS: C      PTS: 1      DIF: 3      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Total surplus  
 MSC: Applicative

**Figure 7-16**



43. **Refer to Figure 7-16.** Total surplus can be measured as the area
- JNK.
  - JNML.
  - JRL.
  - JNL.

ANS: D      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Total surplus  
 MSC: Applicative

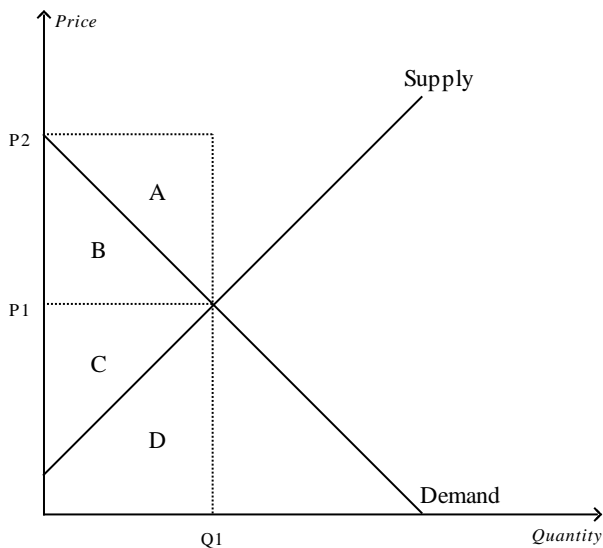
44. **Refer to Figure 7-16.** For quantities less than  $M$ , the value to the marginal buyer is
- greater than the cost to the marginal seller, so increasing the quantity increases total surplus.
  - less than the cost to the marginal seller, so increasing the quantity increases total surplus.
  - greater than the cost to the marginal seller, so decreasing the quantity increases total surplus.
  - less than the cost to the marginal seller, so decreasing the quantity increases total surplus.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Total surplus  
 MSC: Interpretive

45. **Refer to Figure 7-16.** For quantities greater than  $M$ , the value to the marginal buyer is
- greater than the cost to the marginal seller, so increasing the quantity increases total surplus.
  - less than the cost to the marginal seller, so increasing the quantity increases total surplus.
  - greater than the cost to the marginal seller, so decreasing the quantity increases total surplus.
  - less than the cost to the marginal seller, so decreasing the quantity increases total surplus.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Total surplus  
 MSC: Interpretive

**Figure 7-17**



46. **Refer to Figure 7-17.** Which area represents consumer surplus when the price is  $P1$ ?
- A
  - B
  - C
  - D

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Applicative

47. **Refer to Figure 7-17.** When the price is  $P_1$ , area B represents

- total surplus.
- producer surplus.
- consumer surplus.
- profits.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

48. **Refer to Figure 7-17.** Which area represents producer surplus when the price is  $P_1$ ?

- A
- B
- C
- D

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

49. **Refer to Figure 7-17.** When the price is  $P_1$ , area C represents

- total benefit.
- producer surplus.
- consumer surplus.
- None of the above is correct.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

50. **Refer to Figure 7-17.** When the price is  $P_1$ , area A represents

- total benefit.
- producer surplus.
- consumer surplus.
- None of the above is correct.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Applicative

51. **Refer to Figure 7-17.** When the price is  $P_1$ , area B+C represents

- total surplus.
- producer surplus.
- consumer surplus.
- None of the above is correct.

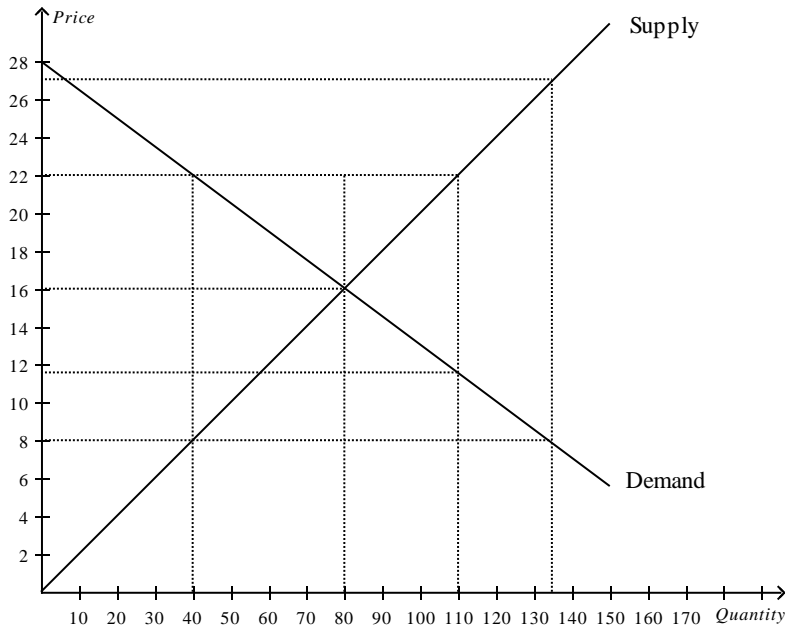
ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Applicative

52. **Refer to Figure 7-17.** Which area represents total surplus in the market when the price is  $P_1$ ?

- A+B
- B+C
- C+D
- A+B+C+D

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Applicative

Figure 7-18



53. Refer to Figure 7-18. At the equilibrium price, consumer surplus is

- a. \$480.
- b. \$640.
- c. \$1,120.
- d. \$1,280.

ANS: A      PTS: 1      DIF: 3      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Consumer surplus  
 MSC: Applicative

54. Refer to Figure 7-18. If the price decreases from \$22 to \$16 due to a shift in the supply curve, consumer surplus increases by

- a. \$120.
- b. \$360.
- c. \$480.
- d. \$600.

ANS: B      PTS: 1      DIF: 3      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Consumer surplus  
 MSC: Applicative

55. Refer to Figure 7-18. At the equilibrium price, producer surplus is

- a. \$480.
- b. \$640.
- c. \$1,120.
- d. \$1,280.

ANS: B      PTS: 1      DIF: 3      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Producer surplus  
 MSC: Applicative

56. **Refer to Figure 7-18.** At the equilibrium price, total surplus is

- a. \$480.
- b. \$640.
- c. \$1,120.
- d. \$1,280.

ANS: C                      PTS: 1                      DIF: 3                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Applicative

57. **Refer to Figure 7-18.** Assume demand increases and as a result, equilibrium price increases to \$22 and equilibrium quantity increases to 110. The increase in producer surplus due to new producers entering the market would be

- a. \$90.
- b. \$210.
- c. \$360.
- d. \$480.

ANS: A                      PTS: 1                      DIF: 3                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

58. **Refer to Figure 7-18.** Assume demand increases and as a result, equilibrium price increases to \$22 and equilibrium quantity increases to 110. The increase in producer surplus to producers already in the market would be

- a. \$90.
- b. \$210.
- c. \$360.
- d. \$480.

ANS: D                      PTS: 1                      DIF: 3                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

59. **Refer to Figure 7-18.** Assume demand increases and as a result, equilibrium price increases to \$22 and equilibrium quantity increases to 110. The increase in producer surplus would be

- a. \$210.
- b. \$360.
- c. \$480.
- d. \$570.

ANS: D                      PTS: 1                      DIF: 3                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

60. **Refer to Figure 7-18.** The efficient price is

- a. \$22, and the efficient quantity is 40.
- b. \$22, and the efficient quantity is 110.
- c. \$16, and the efficient quantity is 80.
- d. \$8, and the efficient quantity is 40.

ANS: C                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Applicative

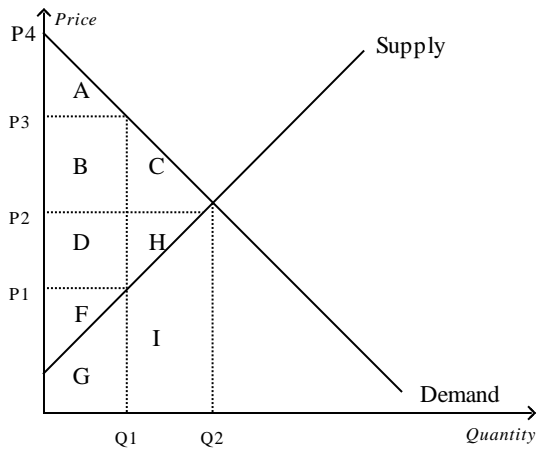
61. **Refer to Figure 7-18.** If 110 units of the good are being bought and sold, then
- the marginal cost to sellers is equal to the marginal value to buyers.
  - the marginal value to buyers is greater than the marginal cost to sellers.
  - the marginal cost to sellers is greater than the marginal value to buyers.
  - producer surplus is greater than consumer surplus.

ANS: C      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Efficiency  
 MSC: Applicative

62. **Refer to Figure 7-18.** If 40 units of the good are being bought and sold, then
- the marginal cost to sellers is equal to the marginal value to buyers.
  - the marginal value to buyers is greater than the marginal cost to sellers.
  - the marginal cost to sellers is greater than the marginal value to buyers.
  - producer surplus would be greater than consumer surplus.

ANS: B      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Efficiency  
 MSC: Interpretive

**Figure 7-19**



63. **Refer to Figure 7-19.** The equilibrium price is
- P1.
  - P2.
  - P3.
  - P4.

ANS: B      PTS: 1      DIF: 1      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Efficiency  
 MSC: Applicative

64. **Refer to Figure 7-19.** At equilibrium, consumer surplus is represented by the area
- A.
  - A+B+C.
  - D+H+F.
  - A+B+C+D+H+F.

ANS: B      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Consumer surplus  
 MSC: Applicative

65. **Refer to Figure 7-19.** If the price were  $P_3$ , consumer surplus would be represented by the area
- A.
  - $A+B+C$ .
  - $D+H+F$ .
  - $A+B+C+D+H+F$ .

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Applicative

66. **Refer to Figure 7-19.** At equilibrium, producer surplus is represented by the area
- F.
  - $F+G$ .
  - $D+H+F$ .
  - $D+H+F+G+I$ .

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

67. **Refer to Figure 7-19.** If the price were  $P_1$ , producer surplus would be represented by the area
- F.
  - $F+G$ .
  - $D+H+F$ .
  - $D+H+F+G+I$ .

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

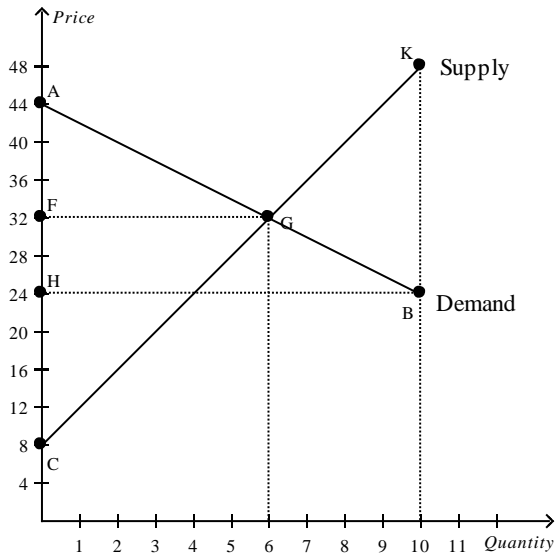
68. **Refer to Figure 7-19.** At equilibrium, total surplus is represented by the area
- $A+B+C$ .
  - $A+B+D+F$ .
  - $A+B+C+D+H+F$ .
  - $A+B+C+D+H+F+G+I$ .

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Applicative

69. **Refer to Figure 7-19.** The efficient price-quantity combination is
- $P_1$  and  $Q_1$ .
  - $P_2$  and  $Q_2$ .
  - $P_3$  and  $Q_1$ .
  - $P_4$  and 0.

ANS: B                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Applicative

Figure 7-20



70. Refer to Figure 7-20. At equilibrium, consumer surplus is measured by the area

- ACG.
- AFG.
- KBG.
- CFG.

ANS: B

PTS: 1

DIF: 1

REF: 7-3

NAT: Analytic

LOC: Supply and demand

TOP: Consumer surplus

MSC: Interpretive

71. Refer to Figure 7-20. At equilibrium, consumer surplus is

- \$36.
- \$72.
- \$108.
- \$144.

ANS: A

PTS: 1

DIF: 1

REF: 7-3

NAT: Analytic

LOC: Supply and demand

TOP: Consumer surplus

MSC: Interpretive

72. Refer to Figure 7-20. At equilibrium, producer surplus is measured by the area

- ACG.
- AFG.
- KBG.
- CFG.

ANS: D

PTS: 1

DIF: 1

REF: 7-3

NAT: Analytic

LOC: Supply and demand

TOP: Producer surplus

MSC: Interpretive



73. **Refer to Figure 7-20.** At equilibrium, producer surplus is

- a. \$36.
- b. \$72.
- c. \$108.
- d. \$144.

ANS: B                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Interpretive

74. **Refer to Figure 7-20.** At equilibrium, total surplus is measured by the area

- a. ACG.
- b. AFG.
- c. KBG.
- d. CFG.

ANS: A                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Interpretive

75. **Refer to Figure 7-20.** At equilibrium, total surplus is

- a. \$36.
- b. \$72.
- c. \$108.
- d. \$144.

ANS: C                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Interpretive

76. **Refer to Figure 7-20.** The equilibrium allocation of resources is

- a. efficient because total surplus is maximized at the equilibrium.
- b. efficient because consumer surplus is maximized at the equilibrium.
- c. inefficient because consumer surplus is larger than producer surplus at the equilibrium.
- d. inefficient because total surplus is maximized when 10 units of output are produced and sold.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

77. **Refer to Figure 7-20.** If 4 units of the good are produced and sold, then

- a. the cost to sellers exceeds the value to buyers.
- b. producer surplus is maximized.
- c. total surplus is minimized.
- d. the allocation of resources is inefficient.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

78. **Refer to Figure 7-20.** If 10 units of the good are produced and sold, then

- a. the marginal cost to sellers exceeds the marginal value to buyers.
- b. producer surplus is maximized.
- c. total surplus is minimized.
- d. the marginal value to buyers exceeds the marginal cost to sellers.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

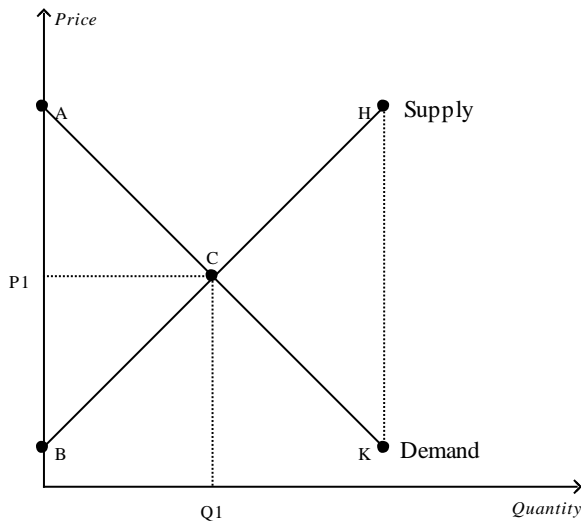
79. **Refer to Figure 7-20.** If 6 units of the good are produced and sold, then
- consumer surplus is maximized.
  - producer surplus is maximized.
  - the sum of consumer surplus and producer surplus is maximized.
  - the marginal value to buyers exceeds the marginal cost to sellers.

ANS: C      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Efficiency  
 MSC: Interpretive

80. **Refer to Figure 7-20.** If 6 units of the good are produced and sold, then
- efficiency is achieved in this market.
  - the marginal value to buyers equals the marginal cost to sellers.
  - the sum of consumer surplus and producer surplus is maximized.
  - All of the above are correct.

ANS: D      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Efficiency  
 MSC: Interpretive

**Figure 7-21**



81. **Refer to Figure 7-21.** Buyers who value this good more than the equilibrium price are represented by which line segment?
- AC.
  - CK.
  - BC.
  - CH.

ANS: A      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Efficiency  
 MSC: Interpretive

82. **Refer to Figure 7-21.** Buyers who value this good less than the equilibrium price are represented by which line segment?

- a. AC.
- b. CK.
- c. BC.
- d. CH.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

83. **Refer to Figure 7-21.** Sellers whose costs are less than the equilibrium price are represented by which line segment?

- a. AC.
- b. CK.
- c. BC.
- d. CH.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

84. **Refer to Figure 7-21.** Sellers whose costs are greater than the equilibrium price are represented by segment

- a. AC.
- b. CK.
- c. BC.
- d. CH.

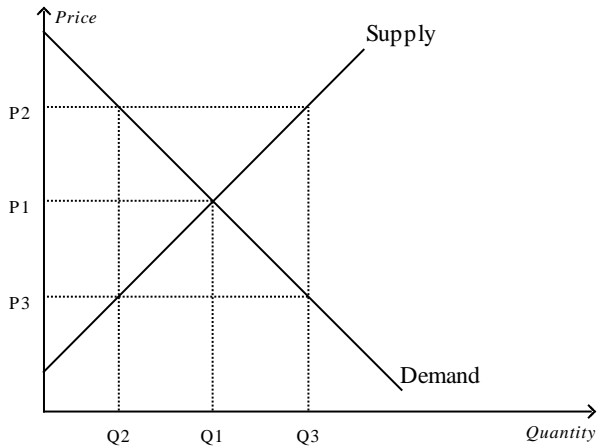
ANS: D                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

85. **Refer to Figure 7-21.** If the government mandated a price increase from  $P_1$  to a higher price, then

- a. total surplus would decrease.
- b. consumer surplus would increase.
- c. total surplus would increase, since producer surplus would increase.
- d. total surplus would remain unchanged.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Interpretive

Figure 7-22



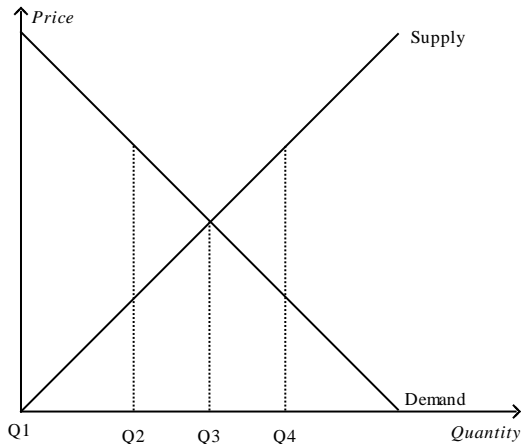
86. Refer to Figure 7-22. At the quantity  $Q_3$ ,
- the market is in equilibrium.
  - consumer surplus is maximized.
  - the sum of consumer surplus and producer surplus is maximized.
  - the marginal value to buyers is less than the marginal cost to sellers.

ANS: D      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Efficiency  
 MSC: Interpretive

87. Refer to Figure 7-22. At the quantity  $Q_2$ , the marginal value to buyers
- and the marginal cost to sellers are both  $P_2$ .
  - is  $P_2$ , and the marginal cost to sellers is  $P_3$ .
  - and the marginal cost to sellers are both  $P_3$ .
  - is  $P_3$ , and the marginal cost to sellers is  $P_2$ .

ANS: B      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Efficiency  
 MSC: Interpretive

Figure 7-23



88. Refer to Figure 7-23. Which of the following statements is correct?

- The market is in equilibrium at Q1.
- At Q2, the cost to sellers exceeds the value to buyers.
- At Q4, the value to buyers is less than the cost to sellers.
- At Q3, the market is producing too much output.

ANS: C      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Efficiency  
 MSC: Interpretive

89. Inefficiency exists in an economy when a good is

- not being consumed by buyers who value it most highly.
- not distributed fairly among buyers.
- not produced because buyers do not value it very highly.
- being produced with less than all available resources.

ANS: A      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Efficiency  
 MSC: Interpretive

90. Inefficiency exists in an economy when a good is

- being produced with less than all available resources.
- not distributed fairly among buyers.
- not being produced by the lowest-cost producers.
- being consumed by buyers who value it most highly.

ANS: C      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Efficiency  
 MSC: Interpretive

91. The "invisible hand" refers to

- the marketplace guiding the self-interests of market participants into promoting general economic well-being.
- the fact that social planners sometimes have to intervene, even in perfectly competitive markets, to make those markets more efficient.
- the equality that results from market forces allocating the goods produced in the market.
- the automatic maximization of consumer surplus in free markets.

ANS: A      PTS: 1      DIF: 2      REF: 7-3  
 NAT: Analytic      LOC: Supply and demand      TOP: Invisible hand  
 MSC: Interpretive

92. The "invisible hand" is
- used to describe the welfare system in the United States.
  - a concept developed by Adam Smith to describe the virtues of free markets.
  - a concept used by J.M. Keynes to describe the role of government in guiding the allocation of resources in the economy.
  - a term used by some economists to characterize the role of government in an economy — inevitable but invisible.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Invisible hand  
 MSC: Interpretive

93. *Laissez-faire* is a French expression which literally means
- to make do.
  - to get involved.
  - whatever works.
  - allow them to do.

ANS: D                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Laissez-faire policy  
 MSC: Definitional

94. The French expression used by free-market advocates, which literally translates as "allow them to do," is
- laissez-faire*.
  - je ne sais pas*.
  - si'l vous plait*.
  - tête-à-tête*.

ANS: A                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Laissez-faire policy  
 MSC: Definitional

95. If the government allowed a free market for transplant organs such as kidneys to exist, the
- shortage of organs would be eliminated, and there would be no surplus of organs.
  - shortage of organs would be eliminated, but a surplus of organs would develop.
  - shortage of organs would persist.
  - overall well-being of society would remain unchanged.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

96. If the government allowed a free market for transplant organs such as kidneys to exist, critics argue that such a market would
- not reduce the shortage of organs.
  - benefit rich people but not poor people.
  - be inefficient because markets are not good at allocating scarce resources.
  - be inferior to a plan imposed by a benevolent dictator.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

97. If the government allowed a free market in organs for transplant there would be
- a decrease in the shortage of organs for transplant.
  - a decrease in producer surplus.
  - an decrease in consumer surplus
  - an increase in the waiting period for transplant organs.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Market efficiency  
 MSC: Interpretive

98. At present, the maximum legal price for a human kidney is \$0. The price of \$0 maximizes
- consumer surplus but not producer surplus.
  - producer surplus but not consumer surplus.
  - both consumer and producer surplus.
  - neither consumer nor producer surplus.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic           LOC: Supply and demand  
 TOP: Consumer surplus | Producer surplus                   MSC: Applicative

99. If the United States changed its laws to allow for the legal sale of a kidney, which of the following is likely to occur?
- The price of kidneys would rise to balance supply and demand.
  - The gains from trade would make both buyers and sellers better off.
  - Thousands of lives would be saved.
  - All of the above are correct.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic           LOC: Supply and demand                   TOP: Market failures  
 MSC: Interpretive

100. If the United States changed its laws to allow for the legal sale of a kidney, which of the following is *least* likely to occur?
- The supply of kidneys would increase.
  - The shortage of kidneys would decrease.
  - Many lives would be saved.
  - The allocation of kidneys would be fair.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic           LOC: Supply and demand                   TOP: Market failures  
 MSC: Interpretive

101. According to many economists, government restrictions on ticket scalping do all of the following *except*
- inconvenience the public.
  - reduce the audience for cultural and sports events.
  - waste police officers' time.
  - keep the cost of tickets to all consumers low.

ANS: D                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic           LOC: Supply and demand                   TOP: Efficiency  
 MSC: Interpretive

102. Economists tend to see ticket scalping as
- a way for a few to profit without producing anything of value.
  - an inequitable interference in the orderly process of ticket distribution.
  - a way of increasing the efficiency of ticket distribution.
  - an unproductive activity which should be made illegal everywhere.

ANS: C                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic           LOC: Supply and demand                   TOP: Efficiency  
 MSC: Interpretive

103. Many economists believe that restrictions against ticket scalping result in each of the following *except*
- a smaller audience for cultural and sporting events.
  - shorter lines at cultural and sporting events.
  - less tax revenue for the state.
  - an increase in ticket prices.

ANS: B                   PTS: 1                   DIF: 2                   REF: 7-3  
 NAT: Analytic           LOC: Supply and demand                   TOP: Efficiency  
 MSC: Interpretive

104. The 2005 *Boston Globe* article discussing ticket scalping points out that the price people will pay for tickets will rise when
- supply and demand are both limited.
  - supply is limited and demand is not limited.
  - supply is limited and demand is not limited.
  - supply and demand are both not limited.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-3  
NAT: Analytic              LOC: Supply and demand              TOP: Efficiency  
MSC: Interpretive

105. Suppose that the equilibrium price in the market for widgets is \$5. If a law increased the minimum legal price for widgets to \$6, producer surplus
- would necessarily increase even if the higher price resulted in a surplus of widgets.
  - would necessarily decrease because the higher price would create a surplus of widgets.
  - might increase or decrease.
  - would be unaffected.

ANS: C                      PTS: 1                      DIF: 3                      REF: 7-3  
NAT: Analytic              LOC: Supply and demand              TOP: Producer surplus  
MSC: Analytical

106. Suppose that the equilibrium price in the market for widgets is \$5. If a law reduced the maximum legal price for widgets to \$4,
- any possible increase in consumer surplus would be larger than the loss of producer surplus.
  - any possible increase in consumer surplus would be smaller than the loss of producer surplus.
  - the resulting increase in producer surplus would be larger than any possible loss of consumer surplus.
  - the resulting increase in producer surplus would be smaller than any possible loss of consumer surplus.

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-3  
NAT: Analytic              LOC: Supply and demand  
TOP: Consumer surplus | Producer surplus              MSC: Analytical

107. Suppose that the equilibrium price in the market for widgets is \$5. If a law increased the minimum legal price for widgets to \$6,
- the resulting increase in consumer surplus would be larger than any possible loss of producer surplus.
  - the resulting increase in consumer surplus would be smaller than any possible loss of producer surplus.
  - any possible increase in producer surplus would be larger than the loss of consumer surplus.
  - any possible increase in producer surplus would be smaller than the loss of consumer surplus.

ANS: D                      PTS: 1                      DIF: 3                      REF: 7-3  
NAT: Analytic              LOC: Supply and demand  
TOP: Consumer surplus | Producer surplus              MSC: Analytical

108. Total surplus in a market will increase when the government
- imposes a binding price floor or a binding price ceiling on that market.
  - imposes a tax on that market.
  - Both a and b are correct.
  - Neither a nor b is correct.

ANS: D                      PTS: 1                      DIF: 3                      REF: 7-3  
NAT: Analytic              LOC: Supply and demand              TOP: Total surplus  
MSC: Applicative



109. Total surplus in a market will increase when the government

- imposes a tax on that market.
- imposes a binding price floor on that market.
- removes a binding price ceiling from that market.
- None of the above is correct.

ANS: C                      PTS: 1                      DIF: 3                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Total surplus  
 MSC: Applicative

110. If a market is allowed to adjust freely to its equilibrium price and quantity, then an increase in demand will

- increase producer surplus.
- reduce producer surplus.
- not affect producer surplus.
- Any of the above are possible.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Producer surplus  
 MSC: Applicative

111. If a market is allowed to move freely to its equilibrium price and quantity, then an increase in supply will

- increase consumer surplus.
- reduce consumer surplus.
- not affect consumer surplus.
- Any of the above are possible.

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Applicative

112. A simultaneous increase in both the demand for MP3 players and the supply of MP3 players would imply that

- both the value of MP3 players to consumers and the cost of producing MP3 players has increased.
- both the value of MP3 players to consumers and the cost of producing MP3 players has decreased.
- the value of MP3 players to consumers has decreased, and the cost of producing MP3 players has increased.
- the value of MP3 players to consumers has increased, and the cost of producing MP3 players has decreased.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      TOP: Efficiency  
 MSC: Interpretive

113. Raisin bran and milk are complementary goods. A decrease in the price of raisins will

- increase consumer surplus in the market for raisin bran and decrease producer surplus in the market for milk.
- increase consumer surplus in the market for raisin bran and increase producer surplus in the market for milk.
- decrease consumer surplus in the market for raisin bran and increase producer surplus in the market for milk.
- decrease consumer surplus in the market for raisin bran and decrease producer surplus in the market for milk.

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                      MSC: Applicative  
 TOP: Consumer surplus | Producer surplus

114. Raisin bran and milk are complements. An increase in the price of raisins will
- increase consumer surplus in the market for raisin bran and decrease producer surplus in the market for milk.
  - increase consumer surplus in the market for raisin bran and increase producer surplus in the market for milk.
  - decrease consumer surplus in the market for raisin bran and increase producer surplus in the market for milk.
  - decrease consumer surplus in the market for raisin bran and decrease producer surplus in the market for milk.

ANS: D                   PTS: 1                   DIF: 3                   REF: 7-3

NAT: Analytic           LOC: Supply and demand

TOP: Consumer surplus|Producer surplus MSC: Applicative

115. Coffee and tea are substitutes. Bad weather that sharply reduces the coffee bean harvest would
- increase consumer surplus in the market for coffee and decrease producer surplus in the market for tea.
  - increase consumer surplus in the market for coffee and increase producer surplus in the market for tea.
  - decrease consumer surplus in the market for coffee and increase producer surplus in the market for tea.
  - decrease consumer surplus in the market for coffee and decrease producer surplus in the market for tea.

ANS: C                   PTS: 1                   DIF: 3                   REF: 7-3

NAT: Analytic           LOC: Supply and demand

TOP: Consumer surplus | Producer surplus                   MSC: Applicative

116. Coffee and tea are substitutes. Good weather that sharply increases the coffee bean harvest would
- increase consumer surplus in the market for coffee and decrease producer surplus in the market for tea.
  - increase consumer surplus in the market for coffee and increase producer surplus in the market for tea.
  - decrease consumer surplus in the market for coffee and increase producer surplus in the market for tea.
  - decrease consumer surplus in the market for coffee and decrease producer surplus in the market for tea.

ANS: A                   PTS: 1                   DIF: 3                   REF: 7-3

NAT: Analytic           LOC: Supply and demand

TOP: Consumer surplus|Producer surplus MSC: Applicative

117. PlayStations and PlayStation games are complementary goods. A technological advance in the production of PlayStations will
- increase consumer surplus in the market for PlayStations and decrease producer surplus in the market for PlayStation games.
  - increase consumer surplus in the market for PlayStations and increase producer surplus in the market for PlayStation games.
  - decrease consumer surplus in the market for PlayStations and increase producer surplus in the market for PlayStation games.
  - decrease consumer surplus in the market for PlayStations and decrease producer surplus in the market for PlayStation games.

ANS: B                   PTS: 1                   DIF: 3                   REF: 7-3

NAT: Analytic           LOC: Supply and demand

TOP: Consumer surplus | Producer surplus                   MSC: Applicative

118. If the current allocation of resources in the market for hammers is *inefficient*, then it must be the case that
- producer surplus exceeds consumer surplus in the market for hammers.
  - consumer surplus exceeds producer surplus in the market for hammers.
  - the sum of consumer surplus and producer surplus could be increased by moving to a different allocation of resources.
  - the costs that sellers of hammers are incurring could be reduced by moving to a different allocation of resources.

ANS: C                    PTS: 1                    DIF: 2                    REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency | Total surplus  
 MSC: Applicative

119. If the current allocation of resources in the market for wallpaper is *efficient*, then it must be the case that
- producer surplus equals consumer surplus in the market for wallpaper.
  - the market for wallpaper is in equilibrium.
  - on the last unit of wallpaper that was produced and sold, the value to buyers exceeded the cost to sellers.
  - All of the above are correct.

ANS: B                    PTS: 1                    DIF: 2                    REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency | Equilibrium  
 MSC: Interpretive

120. Five hundred units of good  $x$  are currently bought and sold. The marginal buyer is willing to pay \$40 for the 500<sup>th</sup> unit, and the cost to the marginal seller is \$35 for the 500<sup>th</sup> unit. We know that
- the equilibrium price of good  $x$  is somewhere between \$35 and \$40.
  - the equilibrium quantity of good  $x$  exceeds 500 units.
  - 500 units is not an efficient quantity of good  $x$ .
  - All of the above are correct.

ANS: D                    PTS: 1                    DIF: 3                    REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency | Equilibrium  
 MSC: Interpretive

121. A simultaneous decrease in both the demand for MP3 players and the supply of MP3 players would imply that
- both the value of MP3 players to consumers and the cost of producing MP3 players has increased.
  - both the value of MP3 players to consumers and the cost of producing MP3 players has decreased.
  - the value of MP3 players to consumers has decreased, and the cost of producing MP3 players has increased.
  - the value of MP3 players to consumers has increased, and the cost of producing MP3 players has decreased.

ANS: C                    PTS: 1                    DIF: 2                    REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

122. Economists say that a market where goods are *not* consumed by those valuing the goods most highly is
- laissez-faire*.
  - unequal.
  - inefficient.
  - rational.

ANS: C                    PTS: 1                    DIF: 2                    REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

123. Which of the following is *not* equal to total surplus?
- consumer surplus - producer surplus
  - buyers' willingnesses to pay - sellers' costs
  - value to buyers - amount paid by buyers + amount received by sellers - cost to sellers
  - value to buyers - cost to sellers

ANS: A                      PTS: 1                      DIF: 2                      REF: 7-3  
NAT: Analytic              LOC: Supply and demand              TOP: Total surplus  
MSC: Applicative

124. Total surplus measures the
- loss to buyers from paying higher prices plus the benefit to sellers from receiving lower prices.
  - buyers' willingnesses to pay less the sellers' costs.
  - fairness of the distribution of resources in society.
  - value to the government of goods and services sold in society.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-3  
NAT: Analytic              LOC: Supply and demand              TOP: Total surplus  
MSC: Interpretive

125. Suppose that Firms A and B each produce high-resolution computer monitors, but Firm A can do so at a lower cost. Cassie and David each want to purchase a high-resolution computer monitor, but David is willing to pay more than Cassie. Which of the following market outcomes is efficient?
- Firm A produces a monitor that Cassie buys. David does not purchase a monitor.
  - Firm A produces a monitor that David buys.
  - Firm B produces a monitor that Cassie buys. David does not purchase a monitor.
  - Firm B produces a monitor that David buys.

ANS: B                      PTS: 1                      DIF: 3                      REF: 7-3  
NAT: Analytic              LOC: Supply and demand              TOP: Efficiency  
MSC: Applicative

126. Suppose that Firms A and B each produce high-resolution computer monitors, but Firm A can do so at a lower cost. Cassie and David each want to purchase a high-resolution computer monitor, but David is willing to pay more than Cassie. If Firm B produces a monitor that David buys, then the market outcome illustrates which of the following principles?
- Free markets allocate the supply of goods to the buyers who value them most highly, as measured by their willingness to pay.
  - Free markets allocate the demand for goods to the sellers who can produce them at the least cost.
- (i) only
  - (ii) only
  - both (i) and (ii)
  - neither (i) nor (ii)

ANS: A                      PTS: 1                      DIF: 3                      REF: 7-3  
NAT: Analytic              LOC: Supply and demand              TOP: Efficiency  
MSC: Applicative

127. Suppose that Firms A and B each produce high-resolution computer monitors, but Firm A can do so at a lower cost. Cassie and David each want to purchase a high-resolution computer monitor, but David is willing to pay more than Cassie. If Firm A produces a monitor that Cassie buys but David does not, then the market outcome illustrates which of the following principles?

- (i) Free markets allocate the supply of goods to the buyers who value them most highly, as measured by their willingness to pay.
- (ii) Free markets allocate the demand for goods to the sellers who can produce them at the least cost.
- a. (i) only
- b. (ii) only
- c. both (i) and (ii)
- d. neither (i) nor (ii)

ANS: B                    PTS: 1                    DIF: 2                    REF: 7-3  
 NAT: Analytic            LOC: Supply and demand                    TOP: Efficiency  
 MSC: Applicative

### CONCLUSION

1. Which of the following statements is *not* correct?

- a. An invisible hand leads buyers and sellers to an equilibrium that maximizes total surplus.
- b. Market power can cause markets to be inefficient.
- c. Externalities can cause markets to be inefficient.
- d. The invisible hand can remedy most if not all types of market failures.

ANS: D                    PTS: 1                    DIF: 2                    REF: 7-4  
 NAT: Analytic            LOC: Supply and demand                    TOP: Market failure | Externalities  
 MSC: Interpretive

2. Inefficiency can be caused in a market by the presence of

- a. market power.
- b. externalities.
- c. imperfectly competitive markets.
- d. All of the above are correct.

ANS: D                    PTS: 1                    DIF: 2                    REF: 7-4  
 NAT: Analytic            LOC: Supply and demand                    TOP: Market failure  
 MSC: Interpretive

3. Market power refers to the

- a. side effects that may occur in a market.
- b. government regulations imposed on the sellers in a market.
- c. ability of market participants to influence price.
- d. forces of supply and demand in determining equilibrium price.

ANS: C                    PTS: 1                    DIF: 1                    REF: 7-4  
 NAT: Analytic            LOC: Supply and demand                    TOP: Market power  
 MSC: Definitional

4. Externalities are

- a. side effects passed on to a party other than the buyers and sellers in the market.
- b. side effects of government intervention in markets.
- c. external forces that cause the price of a good to be higher than it otherwise would be.
- d. external forces that help establish equilibrium price.

ANS: A                    PTS: 1                    DIF: 1                    REF: 7-4  
 NAT: Analytic            LOC: Supply and demand                    TOP: Externalities  
 MSC: Definitional

5. The decisions of buyers and sellers that affect people who are not participants in the market create
- market power.
  - externalities.
  - profiteering.
  - market equilibrium.

ANS: B                      PTS: 1                      DIF: 1                      REF: 7-4  
 NAT: Analytic            LOC: Supply and demand                      TOP: Externalities  
 MSC: Definitional

6. Market failure is the inability of
- buyers to interact harmoniously with sellers in the market.
  - a market to establish an equilibrium price.
  - buyers to place a value on the good or service.
  - some unregulated markets to allocate resources efficiently.

ANS: D                      PTS: 1                      DIF: 2                      REF: 7-4  
 NAT: Analytic            LOC: Supply and demand                      TOP: Market failure  
 MSC: Definitional

7. When markets fail, public policy can
- do nothing to improve the situation.
  - potentially remedy the problem and increase economic efficiency.
  - always remedy the problem and increase economic efficiency.
  - in theory, remedy the problem, but in practice, public policy has proven to be ineffective.

ANS: B                      PTS: 1                      DIF: 2                      REF: 7-4  
 NAT: Analytic            LOC: Supply and demand                      TOP: Market failure  
 MSC: Interpretive

8. The consumption of water by local residents that may include pesticide runoff from local farmers' fields is an example of
- market equilibrium.
  - market power.
  - externalities.
  - laissez-faire*.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-4  
 NAT: Analytic            LOC: Supply and demand                      TOP: Market failure|Externalities  
 MSC: Definitional

9. Market power and externalities are examples of
- laissez-faire* economics.
  - public policy.
  - market failure.
  - welfare economics.

ANS: C                      PTS: 1                      DIF: 1                      REF: 7-4  
 NAT: Analytic            LOC: Supply and demand                      TOP: Market failure|Externalities  
 MSC: Definitional

10. Which of the following is *not* correct?
- Market power can cause markets to be inefficient.
  - When the decisions of buyers and sellers affect nonparticipants, markets may be inefficient.
  - The tools of welfare economics cannot help economists when markets are inefficient.
  - Externalities can cause markets to be inefficient.

ANS: C                      PTS: 1                      DIF: 2                      REF: 7-4  
 NAT: Analytic            LOC: Supply and demand                      TOP: Market failures  
 MSC: Interpretive

**TRUE/FALSE**

1. Welfare economics is the study of the welfare system.  
 ANS: F            PTS: 1            DIF: 1            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand            TOP: Welfare  
 MSC: Definitional
2. The willingness to pay is the maximum amount that a buyer will pay for a good and measures how much the buyer values the good.  
 ANS: T            PTS: 1            DIF: 1            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Definitional
3. For any given quantity, the price on a demand curve represents the marginal buyer's willingness to pay.  
 ANS: T            PTS: 1            DIF: 2            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Interpretive
4. A buyer is willing to buy a product at a price greater than or equal to his willingness to pay, but would refuse to buy a product at a price less than his willingness to pay.  
 ANS: F            PTS: 1            DIF: 1            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand            TOP: Willingness to pay  
 MSC: Definitional
5. Consumer surplus is the amount a buyer actually has to pay for a good minus the amount the buyer is willing to pay for it.  
 ANS: F            PTS: 1            DIF: 1            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Definitional
6. Consumer surplus is the amount a buyer is willing to pay for a good minus the amount the buyer actually has to pay for it.  
 ANS: T            PTS: 1            DIF: 1            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Definitional
7. Consumer surplus measures the benefit to buyers of participating in a market.  
 ANS: T            PTS: 1            DIF: 1            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Interpretive
8. Consumer surplus can be measured as the area between the demand curve and the equilibrium price.  
 ANS: T            PTS: 1            DIF: 1            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Interpretive
9. Consumer surplus can be measured as the area between the demand curve and the supply curve.  
 ANS: F            PTS: 1            DIF: 1            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Interpretive
10. Joel has a 1966 Mustang, which he sells to Susie, an avid car collector. Susie is pleased since she paid \$8,000 for the car but would have been willing to pay \$11,000 for the car. Susie's consumer surplus is \$2,000.  
 ANS: F            PTS: 1            DIF: 1            REF: 7-1  
 NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
 MSC: Interpretive

11. If Darby values a soccer ball at \$50, and she pays \$40 for it, her consumer surplus is \$10.  
ANS: T            PTS: 1            DIF: 1            REF: 7-1  
NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
MSC: Applicative
12. If Darby values a soccer ball at \$50, and she pays \$40 for it, her consumer surplus is \$90.  
ANS: F            PTS: 1            DIF: 1            REF: 7-1  
NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
MSC: Applicative
13. All else equal, an increase in supply will cause an increase in consumer surplus.  
ANS: T            PTS: 1            DIF: 2            REF: 7-1  
NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
MSC: Applicative
14. Suppose there is an increase in supply that reduces market price. Consumer surplus increases because (1) consumer surplus received by existing buyers increases and (2) new buyers enter the market.  
ANS: T            PTS: 1            DIF: 2            REF: 7-1  
NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
MSC: Interpretive
15. If the government imposes a binding price floor in a market, then the consumer surplus in that market will increase.  
ANS: F            PTS: 1            DIF: 2            REF: 7-1  
NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
MSC: Applicative
16. If the government imposes a binding price floor in a market, then the consumer surplus in that market will decrease.  
ANS: T            PTS: 1            DIF: 2            REF: 7-1  
NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
MSC: Applicative
17. All else equal, an increase in demand will always increase consumer surplus.  
ANS: F            PTS: 1            DIF: 2            REF: 7-1  
NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
MSC: Applicative
18. If Rosa is willing to pay \$450 for hockey tickets and has consumer surplus of \$175, the price of the tickets is \$625.  
ANS: F            PTS: 1            DIF: 2            REF: 7-1  
NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
MSC: Applicative
19. Suppose you buy an iPod for \$100. If your consumer surplus is \$30, your willingness to pay is \$70.  
ANS: F            PTS: 1            DIF: 2            REF: 7-1  
NAT: Analytic    LOC: Supply and demand            TOP: Willingness to pay  
MSC: Applicative
20. The lower the price, the lower the consumer surplus, all else equal.  
ANS: F            PTS: 1            DIF: 2            REF: 7-1  
NAT: Analytic    LOC: Supply and demand            TOP: Consumer surplus  
MSC: Interpretive



21. In order to calculate consumer surplus in a market, we need to know willingness to pay and price.  
 ANS: T                   PTS: 1                   DIF: 1                   REF: 7-1  
 NAT: Analytic           LOC: Supply and demand                   TOP: Consumer surplus  
 MSC: Interpretive
22. An increase in price increases consumer surplus.  
 ANS: F                   PTS: 1                   DIF: 1                   REF: 7-1  
 NAT: Analytic           LOC: Supply and demand                   TOP: Consumer surplus | Price  
 MSC: Interpretive
23. Each seller of a product is willing to sell as long as the price he or she can receive is greater than the opportunity cost of producing the product.  
 ANS: T                   PTS: 1                   DIF: 1                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand                   TOP: Opportunity cost  
 MSC: Interpretive
24. At any quantity, the price given by the supply curve shows the cost of the lowest-cost seller.  
 ANS: F                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand                   TOP: Opportunity cost  
 MSC: Interpretive
25. In a competitive market, sales go to those producers who are willing to supply the product at the lowest price.  
 ANS: T                   PTS: 1                   DIF: 1                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand                   TOP: Efficiency  
 MSC: Interpretive
26. Producer surplus is the amount a seller is paid minus the cost of production.  
 ANS: T                   PTS: 1                   DIF: 1                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand                   TOP: Producer surplus  
 MSC: Definitional
27. Producer surplus is the cost of production minus the amount a seller is paid.  
 ANS: F                   PTS: 1                   DIF: 1                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand                   TOP: Producer surplus  
 MSC: Definitional
28. All else equal, an increase in demand will cause an increase in producer surplus.  
 ANS: T                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand                   TOP: Producer surplus  
 MSC: Applicative
29. All else equal, a decrease in demand will cause an increase in producer surplus.  
 ANS: F                   PTS: 1                   DIF: 2                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand                   TOP: Producer surplus  
 MSC: Applicative
30. If producing a soccer ball costs Jake \$5, and he sells it for \$40, his producer surplus is \$45.  
 ANS: F                   PTS: 1                   DIF: 1                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand                   TOP: Producer surplus  
 MSC: Applicative
31. If producing a soccer ball costs Jake \$5, and he sells it for \$40, his producer surplus is \$35.  
 ANS: T                   PTS: 1                   DIF: 1                   REF: 7-2  
 NAT: Analytic           LOC: Supply and demand                   TOP: Producer surplus  
 MSC: Applicative

32. Connie can clean windows in large office buildings at a cost of \$1 per window. The market price for window-cleaning services is \$3 per window. If Connie cleans 100 windows, her producer surplus is \$100.

ANS: F                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

33. Connie can clean windows in large office buildings at a cost of \$1 per window. The market price for window-cleaning services is \$3 per window. If Connie cleans 100 windows, her producer surplus is \$200.

ANS: T                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

34. The area below the price and above the supply curve measures the producer surplus in a market.

ANS: T                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Interpretive

35. The area below the demand curve and above the supply curve measures the producer surplus in a market.

ANS: F                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Interpretive

36. If the government imposes a binding price ceiling in a market, then the producer surplus in that market will increase.

ANS: F                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

37. When demand increases so that market price increases, producer surplus increases because (1) producer surplus received by existing sellers increases, and (2) new sellers enter the market.

ANS: T                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Interpretive

38. The lower the price, the lower the producer surplus, all else equal.

ANS: T                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Interpretive

39. Producer surplus measures the benefit to sellers from receiving a price above their costs.

ANS: T                    PTS: 1                    DIF: 1                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Definitional

40. If the government removes a binding price ceiling in a market, then the producer surplus in that market will increase.

ANS: T                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

41. Let  $P$  represent price; let  $Q^S$  represent quantity supplied; and assume the equation of the supply curve is  $P = 10 + (1/4)Q^S$ . If 80 units of the good are produced and sold, then producer surplus amounts to \$1,200.

ANS: F                    PTS: 1                    DIF: 2                    REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

42. Let  $P$  represent price; let  $Q^S$  represent quantity supplied; and assume the equation of the supply curve is  $P = 15 + (1/3)Q^S$ . If 90 units of the good are produced and sold, then producer surplus amounts to \$1,350.

ANS: T                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

43. The cost of production plus producer surplus is the price a seller is paid.

ANS: T                      PTS: 1                      DIF: 2                      REF: 7-2  
 NAT: Analytic            LOC: Supply and demand            TOP: Producer surplus  
 MSC: Applicative

44. Total surplus in a market is consumer surplus minus producer surplus.

ANS: F                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Definitional

45. Total surplus = Value to buyers - Costs to sellers.

ANS: T                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Interpretive

46. Total surplus in a market can be measured as the area below the supply curve plus the area above the demand curve, up to the point of equilibrium.

ANS: F                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Interpretive

47. Producing a soccer ball costs Jake \$5. He sells it to Darby for \$35. Darby values the soccer ball at \$50. For this transaction, the total surplus in the market is \$40.

ANS: F                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Total surplus  
 MSC: Applicative

48. The equilibrium of supply and demand in a market maximizes the total benefits to buyers and sellers of participating in that market.

ANS: T                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

49. Efficiency refers to whether a market outcome is fair, while equality refers to whether the maximum amount of output was produced from a given number of inputs.

ANS: F                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency | Equality  
 MSC: Definitional

50. Efficiency is related to the size of the economic pie, whereas equality is related to how the pie gets sliced and distributed.

ANS: T                      PTS: 1                      DIF: 1                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency | Equality  
 MSC: Definitional

51. Free markets allocate (a) the supply of goods to the buyers who value them most highly and (b) the demand for goods to the sellers who can produce them at least cost.

ANS: T                      PTS: 1                      DIF: 2                      REF: 7-3  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

52. Economists generally believe that, although there may be advantages to society from ticket-scalping, the costs to society of this activity outweigh the benefits.

ANS: F            PTS: 1            DIF: 2            REF: 7-3  
 NAT: Analytic    LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

53. Economists argue that restrictions against ticket scalping actually drive up the cost of many tickets.

ANS: T            PTS: 1            DIF: 2            REF: 7-3  
 NAT: Analytic    LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

54. Ticket scalping can increase total surplus in the market for tickets to sporting events.

ANS: T            PTS: 1            DIF: 2            REF: 7-3  
 NAT: Analytic    LOC: Supply and demand            TOP: Total surplus  
 MSC: Interpretive

55. If the United States legally allowed for a market in transplant organs, it is estimated that one kidney would sell for at least \$100,000.

ANS: F            PTS: 1            DIF: 2            REF: 7-3  
 NAT: Analytic    LOC: Supply and demand            TOP: Efficiency | Equality  
 MSC: Interpretive

56. Even though participants in the economy are motivated by self-interest, the "invisible hand" of the marketplace guides this self-interest into promoting general economic well-being.

ANS: T            PTS: 1            DIF: 2            REF: 7-3  
 NAT: Analytic    LOC: Supply and demand            TOP: Invisible hand  
 MSC: Interpretive

57. The current policy on kidney donation effectively sets a price ceiling of zero.

ANS: T            PTS: 1            DIF: 2            REF: 7-3  
 NAT: Analytic    LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

58. Wendy is willing to pay \$50 for a concert ticket and Bruce would like to receive \$25. If the market price is \$40 for this transaction, then the total surplus would be \$15.

ANS: F            PTS: 1            DIF: 2            REF: 7-3  
 NAT: Analytic    LOC: Supply and demand            TOP: Total surplus  
 MSC: Applicative

59. Suppose you sell a kayak for \$600, but you were willing to sell it for \$450. The buyer was willing to pay \$650. The total surplus is \$200.

ANS: T            PTS: 1            DIF: 2            REF: 7-3  
 NAT: Analytic    LOC: Supply and demand            TOP: Total surplus  
 MSC: Applicative

60. If a market is in equilibrium, then it is impossible for a social planner to raise economic welfare by increasing or decreasing the quantity of the good.

ANS: T            PTS: 1            DIF: 2            REF: 7-3  
 NAT: Analytic    LOC: Supply and demand            TOP: Efficiency | Equilibrium  
 MSC: Applicative

61. Unless markets are perfectly competitive, they may fail to maximize the total benefits to buyers and sellers.

ANS: T            PTS: 1            DIF: 2            REF: 7-4  
 NAT: Analytic    LOC: Supply and demand            TOP: Efficiency  
 MSC: Interpretive

62. In order to conclude that markets are efficient, we assume that they are perfectly competitive.

ANS: T                    PTS: 1                    DIF: 2                    REF: 7-4  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Applicative

63. Markets will always allocate resources efficiently.

ANS: F                    PTS: 1                    DIF: 2                    REF: 7-4  
 NAT: Analytic            LOC: Supply and demand            TOP: Efficiency  
 MSC: Applicative

64. When markets fail, public policy can potentially remedy the problem and increase economic efficiency.

ANS: T                    PTS: 1                    DIF: 2                    REF: 7-4  
 NAT: Analytic            LOC: Supply and demand            TOP: Market failure  
 MSC: Interpretive

65. Market power and externalities are examples of market failures.

ANS: T                    PTS: 1                    DIF: 2                    REF: 7-4  
 NAT: Analytic            LOC: Supply and demand            TOP: Market failure  
 MSC: Interpretive

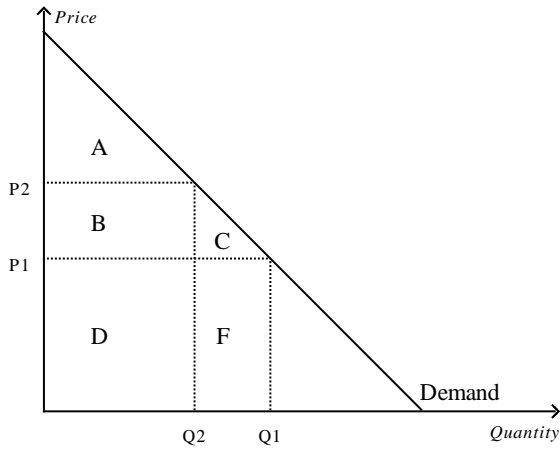
### SHORT ANSWER

1. Answer each of the following questions about demand and consumer surplus.

- What is consumer surplus, and how is it measured?
- What is the relationship between the demand curve and the willingness to pay?
- Other things equal, what happens to consumer surplus if the price of a good falls? Why? Illustrate using a demand curve.
- In what way does the demand curve represent the benefit consumers receive from participating in a market? In addition to the demand curve, what else must be considered to determine consumer surplus?

ANS:

- Consumer surplus measures the benefit to buyers of participating in a market. It is measured as the amount a buyer is willing to pay for a good minus the amount a buyer actually pays for it. For an individual purchase, consumer surplus is the difference between the willingness to pay, as shown on the demand curve, and the market price. For the market, total consumer surplus is the area under the demand curve and above the price, from the origin to the quantity purchased.
- Because the demand curve shows the maximum amount buyers are willing to pay for a given market quantity, the price given by the demand curve represents the willingness to pay of the marginal buyer.
- When the price of a good falls, consumer surplus increases for two reasons. First, those buyers who were already buying the good receive an increase in consumer surplus because they are paying less (area B). Second, some new buyers enter the market because the price of the good is now lower than their willingness to pay (area C); hence, there is additional consumer surplus generated from their purchases. The graph should show that as price falls from  $P_2$  to  $P_1$ , consumer surplus increases from area A to area  $A+B+C$ .
- Since the demand curve represents the maximum price the marginal buyer is willing to pay for a good, it must also represent the maximum benefit the buyer expects to receive from consuming the good. Consumer surplus must take into account the amount the buyer actually pays for the good, with consumer surplus measured as the difference between what the buyer is willing to pay and what he/she actually paid. Consumer surplus, then, measures the benefit the buyer didn't have to "pay for."



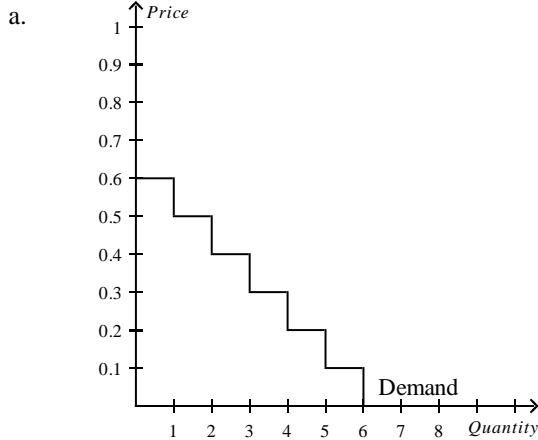
PTS: 1                      DIF: 2                      REF: 7-1                      NAT: Analytic  
 LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Interpretive

2. Tammy loves donuts. The table shown reflects the value Tammy places on each donut she eats:

Value of first donut	\$0.60
Value of second donut	\$0.50
Value of third donut	\$0.40
Value of fourth donut	\$0.30
Value of fifth donut	\$0.20
Value of sixth donut	\$0.10

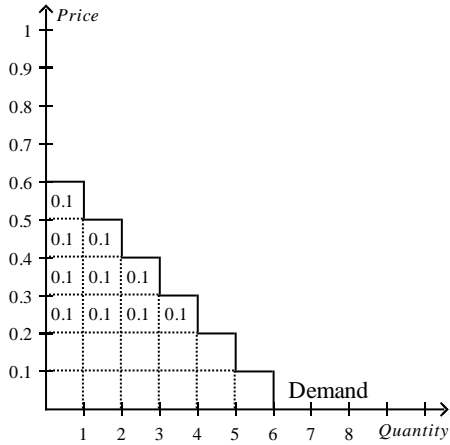
- Use this information to construct Tammy's demand curve for donuts.
- If the price of donuts is \$0.20, how many donuts will Tammy buy?
- Show Tammy's consumer surplus on your graph. How much consumer surplus would she have at a price of \$0.20?
- If the price of donuts rose to \$0.40, how many donuts would she purchase now? What would happen to Tammy's consumer surplus? Show this change on your graph.

ANS:

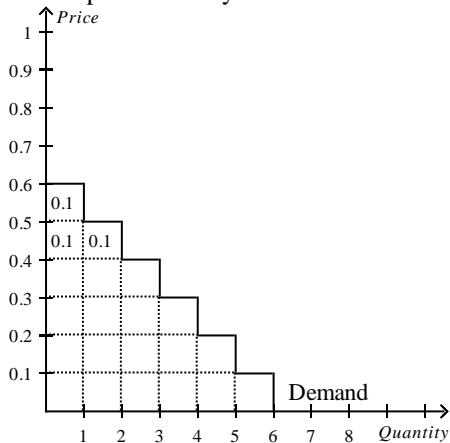


b. At a price of \$0.20, Tammy would buy 5 donuts.

c. The figure below shows Tammy's consumer surplus. At a price of \$0.20, Tammy's consumer surplus would be \$1.00.



d. If the price of donuts rose to \$0.40, Tammy's consumer surplus would fall to \$0.30 and she would purchase only 3 donuts.

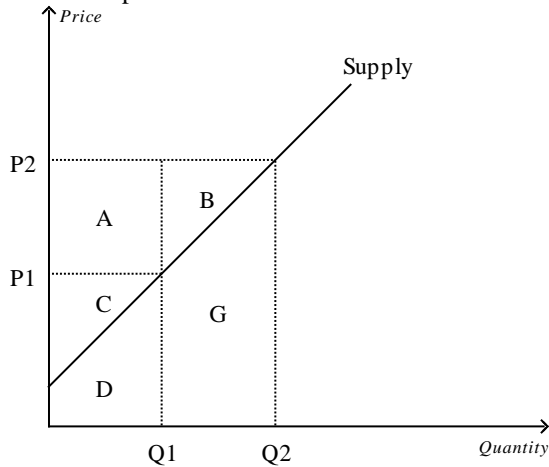


PTS: 1                      DIF: 2                      REF: 7-1                      NAT: Analytic  
 LOC: Supply and demand                      TOP: Consumer surplus  
 MSC: Applicative

3. Answer each of the following questions about supply and producer surplus.
- What is producer surplus, and how is it measured?
  - What is the relationship between the cost to sellers and the supply curve?
  - Other things equal, what happens to producer surplus when the price of a good rises? Illustrate your answer on a supply curve.

ANS:

- Producer surplus measures the benefit to sellers of participating in a market. It is measured as the amount a seller is paid minus the cost of production. For an individual sale, producer surplus is measured as the difference between the market price and the cost of production, as shown on the supply curve. For the market, total producer surplus is measured as the area above the supply curve and below the market price, between the origin and the quantity sold.
- Because the supply curve shows the minimum amount sellers are willing to accept for a given quantity, the supply curve represents the cost of the marginal seller.
- When the price of a good rises, producer surplus increases for two reasons. First, those sellers who were already selling the good have an increase in producer surplus because the price they receive is higher (area A). Second, new sellers will enter the market because the price of the good is now higher than their willingness to sell (area B); hence, there is additional producer surplus generated from their sales. The graph should show that as price rises from  $P_1$  to  $P_2$ , producer surplus increases from area C to area A+B+C.



PTS: 1                      DIF: 2                      REF: 7-2                      NAT: Analytic  
 LOC: Supply and demand                      TOP: Producer surplus  
 MSC: Interpretive



4. Given the following two equations:

- 1) Total Surplus = Consumer Surplus + Producer Surplus
- 2) Total Surplus = Value to Buyers - Cost to Sellers

Show how equation (1) can be used to derive equation (2).

ANS:

Start with the equation: Total Surplus = Consumer Surplus + Producer Surplus. Then, since Consumer Surplus = Value to buyers - Amount paid by buyers, and since Producer Surplus = Amount received by sellers - Costs of sellers, Total Surplus can be written as: Value to buyers - Amount paid by buyers + Amount received by sellers - Costs of sellers. Since the Amount paid by buyers equals the Amount received by sellers, the middle two terms cancel out and the result is:

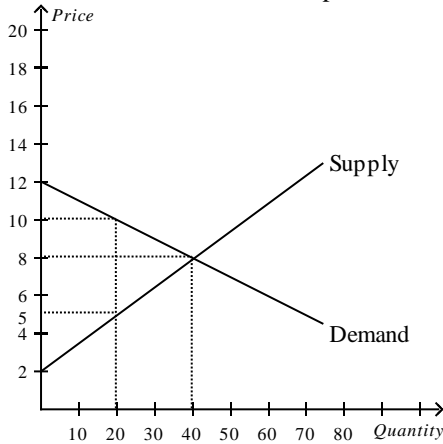
Total Surplus = Value to buyers - Costs of sellers.

PTS: 1                      DIF: 2                      REF: 7-3                      NAT: Analytic

LOC: Supply and demand                      TOP: Total surplus

MSC: Analytical

5. Answer the following questions based on the graph that represents J.R.'s demand for ribs per week at Judy's Rib Shack.
- At the equilibrium price, how many ribs would J.R. be willing to purchase?
  - How much is J.R. willing to pay for 20 ribs?
  - What is the magnitude of J.R.'s consumer surplus at the equilibrium price?
  - At the equilibrium price, how many ribs would Judy be willing to sell?
  - How high must the price of ribs be for Judy to supply 20 ribs to the market?
  - At the equilibrium price, what is the magnitude of total surplus in the market?
  - If the price of ribs rose to \$10, what would happen to J.R.'s consumer surplus?
  - If the price of ribs fell to \$5, what would happen to Judy's producer surplus?
  - Explain why the graph that is shown verifies the fact that the market equilibrium (quantity) maximizes the sum of producer and consumer surplus.



ANS:

- 40
- \$10.00
- \$80.00.
- 40
- \$5
- \$200
- It would fall from \$80 to only \$20.
- It would fall from \$120 to only \$30.
- At quantities less than the equilibrium quantity, the marginal value to buyers exceeds the marginal cost to sellers. Increasing the quantity in this region raises total surplus until equilibrium quantity is reached. At quantities greater than the equilibrium quantity, the marginal cost to sellers exceeds the marginal value to buyers and total surplus falls.

PTS: 1

DIF: 3

REF: 7-3

NAT: Analytic

LOC: Supply and demand

TOP: Consumer surplus | Producer surplus | Total surplus

MSC: Analytical