1. Price elasticity of demand measures
   A) how responsive suppliers are to price changes.
   B) how responsive sales are to changes in the price of a related good.
   C) how responsive quantity demanded is to a change in price.
   D) how responsive sales are to a change in buyers' incomes.

2. Suppose the value of the price elasticity of demand is -3. What does this mean?
   A) A 1 percent increase in the price of the good causes quantity demanded to increase by 3 percent.
   B) A 1 percent increase in the price of the good causes quantity demanded to decrease by 3 percent.
   C) A 3 percent increase in the price of the good causes quantity demanded to decrease by 1 percent.
   D) A $1 increase in price causes quantity demanded to fall by 3 units.

3. If the percentage increase in price is 15 percent and the value of the price elasticity of demand is -3, then quantity demanded
   A) will increase by 45 percent.
   B) will increase by 5 percent.
   C) will decrease by 45 percent.
   D) will decrease by 5 percent.

4. If 50 units are sold at a price of $20 and 80 units are sold at a price of $15, what is the absolute value of the price elasticity of demand? Use the midpoint formula.
   A) 0.17
   B) 0.62
   C) 1.62
   D) 5

5. If, for a given percentage increase in price, quantity demanded falls by a proportionately smaller percentage, then demand is
   A) unit-elastic.
   B) perfectly elastic.
   C) relatively inelastic.
   D) relatively elastic.
6. **Refer to the above figure.** Using the midpoint formula, calculate the absolute value of the price elasticity of demand between $e$ and $f$.

A) 0.32  
B) 0.4  
C) 2.5  
D) 3.125

7. If the demand for a life-saving drug was perfectly inelastic and the price doubled, the quantity demanded would

A) also double.  
B) decrease by 50%.  
C) be cut in half.  
D) remain constant.

8. If at a price of $24, Octavia sells 36 home-grown orchids and at $30 she sells 24 home-grown orchids, the demand for her orchids is

A) relatively elastic.  
B) relatively inelastic.  
C) unit-elastic.  
D) perfectly elastic.

9. Jonah lives in a small town where there is only one Mexican restaurant. Which of the following is likely to be true about the price elasticity of demand for meals at the Mexican restaurant?

A) Demand is likely to be perfectly inelastic.  
B) Demand is likely to be perfectly elastic.  
C) Demand is likely to be relatively elastic.  
D) Demand is likely to be relatively inelastic.
10. A demand curve that is horizontal indicates that the commodity
A) has few substitutes.
B) must be very cheap.
C) is a necessity.
D) has a large number of substitutes.

11. Which of the following goods would have the most inelastic demand?
A) ski vacations
B) bread
C) luxury cars
D) big screen TVs

12. Rank these three items in terms of the elasticity of the demand for them at any given price, from most elastic to least elastic: hot beverages, coffee and Peets' Coffee.
A) hot beverages, coffee, Peets' Coffee
B) Peets' Coffee, coffee, hot beverages
C) coffee, Peets' Coffee, hot beverages
D) coffee, hot beverages, Peets' Coffee

13. When demand is elastic, a fall in price causes total revenue to rise because
A) when price falls, quantity sold increases so total revenue automatically rises.
B) the increase in quantity sold is large enough to offset the lower price.
C) the percentage increase in quantity demanded is less than the percentage fall in price.
D) the demand curve shifts.

14. Suppose a decrease in the supply of bottled water results in a decrease in revenue. This indicates that
A) the demand for bottled water is inelastic in the price range considered.
B) the demand for bottled water is elastic in the price range considered.
C) the supply of bottled water is inelastic in the price range considered.
D) the supply of bottled water is elastic in the price range considered.

15. Assume that the market for barley is in equilibrium and the demand for barley is relatively inelastic. Predict what happens to the revenue of barley farmers if a prolonged drought reduces the supply of barley. The drought will cause farm revenue to
A) rise because there will be a shortage of barley.
B) rise because the percentage decrease in quantity sold is less than the percentage increase in price.
C) rise because the percentage increase in quantity sold is greater than the percentage increase in price.
D) fall because of the decrease in the quantity of barley sold.
16. Suppose when Nablon's Bakery raised the price of its breads by 10 percent, the quantity demanded fell by 15 percent. What was the effect on sales revenue?
A) Sales revenue increased.
B) Sales revenue remained unchanged.
C) Sales revenue decreased.
D) It cannot be determined without information on prices.

17. Suppose at the current price, the demand for copper is estimated at -3.14. What happens to sales revenue if the government imposes a price ceiling below the free market equilibrium price in the copper market?
A) Sales revenue falls.
B) Sales revenue rises.
C) Sales revenue remains unchanged because copper is a necessity for most industries.
D) It cannot be determined without information on prices.

18. Income elasticity measures
A) how a good's quantity demanded responds to change in the goods price.
B) how a good's quantity demanded responds to change in the price of another good.
C) how a good's quantity demanded responds to change in buyers' incomes.
D) how a good's quantity demanded responds to producers' incomes.

19. Calculate the income elasticity if an 8 percent increase in income leads to a 4 percent increase in quantity demanded for organic produce.
A) -0.66
B) 0.5
C) 1.5
D) 2

20. Which of the following items is likely to have the highest income elasticity of demand?
A) a bus ride
B) a meal at Taco Bell
C) a vacation home in the Swiss Alps
D) a tank of gasoline

21. Last year, Sefton purchased 60 pounds of potatoes to feed his family of five when his household income was $30,000. This year, his household income fell to $20,000 and Sefton purchased 80 pounds of potatoes. All else constant, Sefton's income elasticity of demand for potatoes is
A) negative, so Sefton considers potatoes to be an inferior good.
B) positive, so Sefton considers potatoes to be an inferior good.
C) positive, so Sefton considers potatoes to be a normal good and a necessity.
D) negative, so Sefton considers potatoes to be a normal good.
22. Economists estimated that the price elasticity of beer is -0.23 and the income elasticity of beer is -0.09. This means that
A) an increase in the price of beer will increase the quantity demanded of beer and beer is a normal good.
B) an increase in the price of beer will lead to an increase in revenue for beer sellers and beer is an inferior good.
C) a decrease in the price of beer will lead to an increase in revenue for beer sellers and beer is an inferior good.
D) an increase in the price of beer will lead to a decrease in the quantity demanded of beer and beer is a necessity.

23. Cross-price elasticity of demand is calculated as the
A) percentage change in quantity demanded divided by percentage change in price of a good.
B) percentage change in quantity demanded of one good divided by percentage change in price of a different good.
C) percentage change in quantity sold divided by percentage change in buyers' incomes.
D) percentage change in quantity supplied divided by percentage change in price of a good.

24. If the cross-price elasticity of demand for computers and software is negative, this means the two goods are
A) substitutes.
B) complements.
C) inferior.
D) normal.

25. Suppose Tinsel Town Videos lowers the price of its movie club membership by 10 percent and as a result, CineArts Videos experienced a 16 percent decline in its movie club membership. What is the value of the cross-price elasticity between the two movie club memberships?
A) -1.6
B) -0.625
C) 0.625
D) 1.6

26. In September 2006, the Food and Drug Administration recommended that Americans avoid eating bagged raw spinach in the wake of an outbreak of E. coli bacteria. Following this recommendation, the food industry looked at alternatives and many turned to arugula. One Chicago distributor claimed, "The sale of the stuff has gone through the roof." Based on this information,
A) arugula is a normal good while raw spinach is an inferior good.
B) the cross-price elasticity between arugula and spinach is negative.
C) the cross-price elasticity between arugula and spinach is positive.
D) the price elasticity of arugula is positive while the price elasticity of spinach falls to zero.
Key

1. C
2. B
3. C
4. C
5. C
6. D
7. D
8. A
9. D
10. D
11. B
12. B
13. B
14. B
15. B
16. C
17. B
18. C
19. B
20. C
21. A
22. B
23. B
24. B
25. D
26. C