Micro, Spring 2016 with P. Stankov, Problem set on Elasticity and its applications
Source: Case/Fair
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) When the price of radios increases 5%, quantity demanded decreases 5%. The price elasticity of demand for radios is 1) _____
A) elastic. B) unitary elastic.
C) perfectly inelastic. D) inelastic.

2) The ABC Computer Company wants to increase the quantity of computers it sells by 5%. If the price elasticity of demand is -2.5, the company must _____ price by _____. 2) _____
A) decrease; 2.0% B) increase; 2.0% C) increase; 0.5% D) decrease; 0.5%

3) The government wants to reduce the consumption of electricity by 5%. The price elasticity of demand for electricity is 4. The government should _____ the price of electricity by _____. 3) _____
A) raise; 2.0% B) raise; 1.25% C) raise; 0.08% D) lower; 0.4%

4) The government wants to reduce the consumption of electricity by 10%. The price elasticity of demand for electricity is -.4. The government should _____ the price of electricity by _____. 4) _____
A) lower; 0.4% B) raise; 2.0% C) raise; 25.0% D) raise; 0.04%

5) When the price of fresh fish increases 5%, quantity demanded decreases 10%. The price elasticity of demand for fresh fish is 5) _____
A) perfectly inelastic. B) unitary elastic.
C) inelastic. D) elastic.

6) When the price of coffee increases 5%, quantity demanded decreases 3%. The elasticity for coffee is 6) _____
A) price elastic. B) perfectly price inelastic.
C) price unitary. D) price inelastic.

Refer to the information provided in Figure 5.2 below to answer the questions that follow.

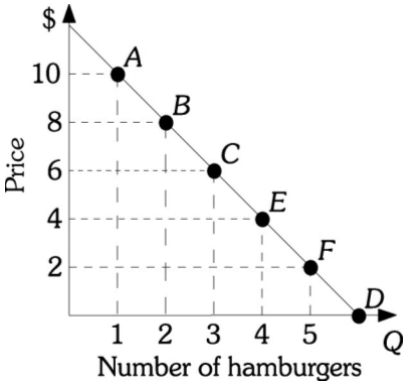

Figure 5.2

7) Refer to Figure 5.2. Using the midpoint formula, if the price of a hamburger is increased from $8 to $10, the price elasticity of demand equals 7) _____
A) 333. B) -2.5. C) -3.0. D) 0.36.

8) Refer to Figure 5.2. Using the midpoint formula, if the price of a hamburger is increased from $6 to $8, the price elasticity of demand equals 8) _____
A) 0.24. B) -2.0. C) 71.0. D) -1.4.

9) Refer to Figure 5.2. Using the midpoint formula, if the price of a hamburger is increased from $2 to $4, the price elasticity of demand equals 9) _____
A) -0.33. B) -3.0. C) -2.0. D) -5.0.

10) The owner of a local hot dog stand has estimated that if he lowers the price of hot dogs from $2.00 to $1.50, he will increase sales from 400 to 500 hot dogs per day. Using the midpoint formula, the demand for hot dogs is 10) _____
A) elastic. B) inelastic.
C) perfectly elastic. D) unitarily elastic.

11) At a price of $11, quantity demanded is 90; and at a price of $9, quantity demanded is 110. Using the midpoint formula, the price elasticity of demand is 11) _____
A) -1.0. B) -1.22. C) 0.0. D) 82.

12) At a price of $20, a store can sell 24 picture frames a day. At a price of $18 the store can sell 33 picture frames a day. Using the midpoint formula, the price elasticity of demand is 12) _____
A) 9.09. B) 0.33. C) -3.0. D) 3.75.

13) Price and total revenue are inversely related when demand is 13) _____
A) unitarily elastic. B) inelastic.
C) elastic. D) perfectly inelastic.

14) If price _____ and demand is _____, total revenue will increase. 14) _____
A) rises; elastic B) falls; elastic
C) falls; inelastic. D) rises; unitarily elastic

Refer to the information provided in Figure 5.4 below to answer the questions that follow.

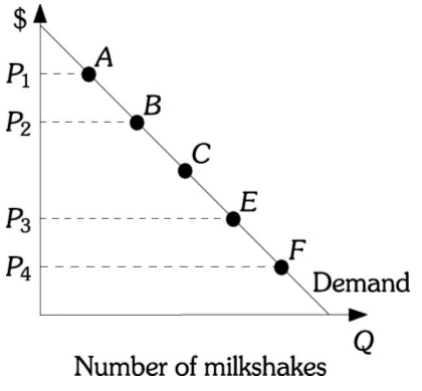

Figure 5.4

15) Refer to Figure 5.4. The demand for milkshakes is unitarily elastic at Point *C*. If the price of a milkshake is reduced from *P*3 to *P*4, total revenue 15) _____
A) could either increase or decrease. B) will remain constant.
C) will decrease. D) will increase.

16) A firm is currently producing in the inelastic portion of its demand curve. What course of action should you recommend to this firm assuming it wants to raise revenue? 16) _____

A) Increase price, because if demand is inelastic and price is increased, total revenue will increase.
B) Continue producing at the current output level, because the firm will maximize its total revenue by producing in the inelastic portion of its demand curve.
C) Reduce price, because if demand is inelastic and price is reduced, total revenue will increase.
D) Continue selling at the same price, but increase the number of units it produces.

17) Cross-price elasticity of demand measures the response in the 17) _____

A) quantity of one good demanded to a change in the price of another good.
B) income of consumers to the change in the price of goods.
C) quantity of one good demanded when the quantity demanded of another good changes.
D) price of a good to a change in the quantity of another good demanded.

18) If the quantity demanded of tea increases by 2% when the price of coffee increases by 8%, the cross-price elasticity of demand between tea and coffee is 18) _____

A) 0.25. B) -4. C) -25. D) 4.

19) If the quantity demanded of tea decreases by 8% when the price of coffee decreases by 16%, the cross-price elasticity of demand between tea and coffee is 19) _____

A) -2. B) 0.5. C) 2. D) -5.

Refer to the information provided in Figure 5.5 below to answer the questions that follow.

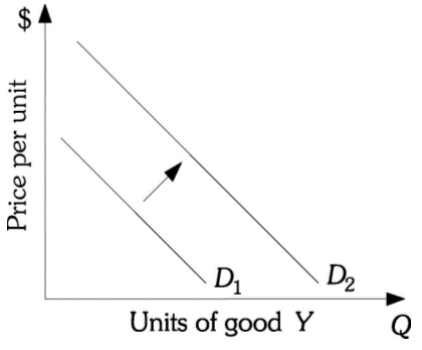

Figure 5.5

20) Refer to Figure 5.5. As the price of W increased, the demand for Y shifted from *D*1 to *D*2. The cross-price elasticity of demand between W and Y is 20) _____

A) negative. B) zero.
C) positive. D) indeterminate from this information.

21) If the elasticity of labor supply is positive, the labor-supply curve would be 21) _____

A) vertical. B) downward sloping.
C) horizontal. D) upward sloping.