

PROBLEM SET # 2
(CHP 3, Case, Fair and Oster)

1. The market demand and supply function for a commodity is given below:

$$Q_D = 120 - 4P$$

$$Q_S = -30 + 6P$$

- a. Find the equilibrium price and quantity.
2. For each of the following, draw a diagram that illustrates the likely effect on the market for sausages. Indicate in each case the impact on equilibrium price and equilibrium quantity.
- a. A surgeon general warns that sausages are high-cholesterol food and they cause heart attacks.
 - b. The price of egg, a complementary product, decreases.
 - c. An increase in the price of spice used in the production of sausages.
 - d. Hot-dogs become trendy in the cafes.
 - e. A technological improvement occurred in sausage production.

MULTIPLE CHOICE QUESTIONS

1. A movement along a demand curve from one price-quantity combination to another is called
 - a. a change in quantity demanded.
 - b. a change in demand.
 - c. a change in supply.
 - d. a change in quantity supplied.
 - e. a shift in the demand curve.

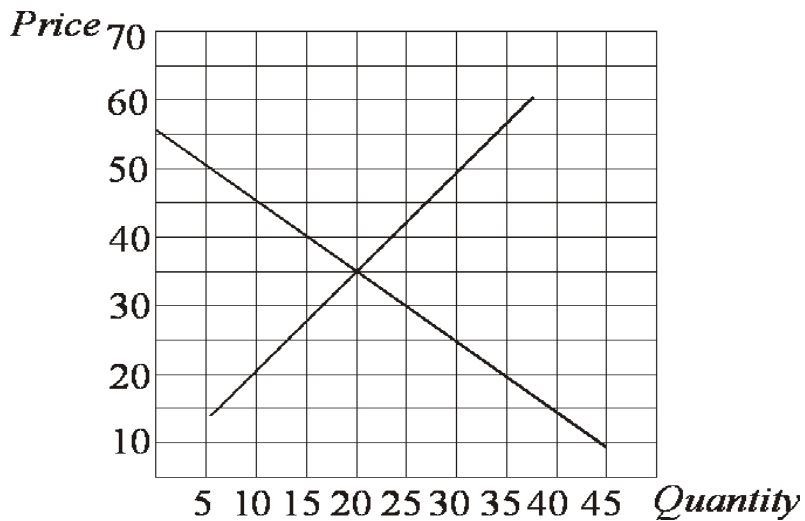
2. An increase in the price of Coca-Cola, a substitute for Pepsi, will cause
 - a. the quantity demanded of Coca-Cola to increase.
 - b. the demand for Coca-Cola to increase.
 - c. the demand for Pepsi to increase.
 - d. the quantity demanded of Pepsi to increase.
 - e. the demand for Coca-Cola to decrease

3. A shift of a demand curve to the right or to the left is called
 - a. a change in quantity demanded.
 - b. a change in quantity supplied.
 - c. a movement along a demand curve.
 - d. a change in supply.
 - e. a change in demand.

4. Which of the following is NOT a characteristic of a market in equilibrium?
 - a. Excess supply is zero.
 - b. All consumers are able to purchase as much as they wish.
 - c. Quantity demanded equals quantity supplied.
 - d. The equilibrium price is stable, i.e., there is no pressure for it to change.
 - e. Excess demand is zero.

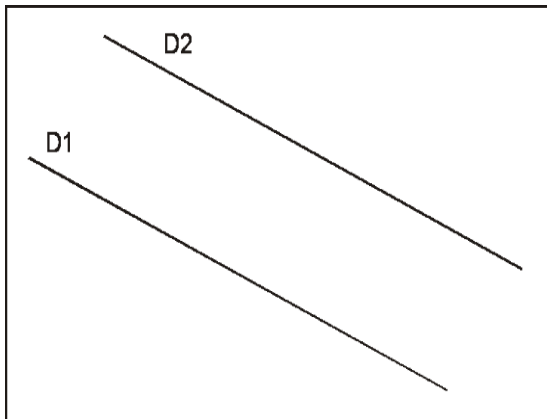
5. Assume the demand for sugar decreases while the supply increases. Which of the following outcomes will occur unambiguously?
- The equilibrium quantity of sugar will fall.
 - The equilibrium price of sugar will fall.
 - The equilibrium quantity of sugar will rise.
 - The equilibrium price of sugar will rise.
6. What might cause a demand function to shift to the right?
- An increase in the price of a substitute.
 - An increase in the price of a complement.
 - An increase in the product's own price.
 - A decrease in the price of a substitute.
7. Suppose that the supply of Cornell parking spaces is fixed at 5,000, and the annual demand for these parking spaces is given as $Q_D = 5150 - \frac{1}{2}P$. What is the equilibrium annual price for parking at Cornell?
- \$9,700
 - \$1,000
 - \$300
 - \$100
8. Good X is an inferior good. While the supply curve for Good X is positively sloped, a rise in consumer income will cause which one of the following?
- The demand for Good X to fall and price of good X to fall.
 - The demand for Good X to fall and price of good X to rise.
 - The demand for Good X to rise and price of good X to fall.
 - The demand for Good X to rise and price of good X to rise.

Answer the following 2 questions according to the figure below:



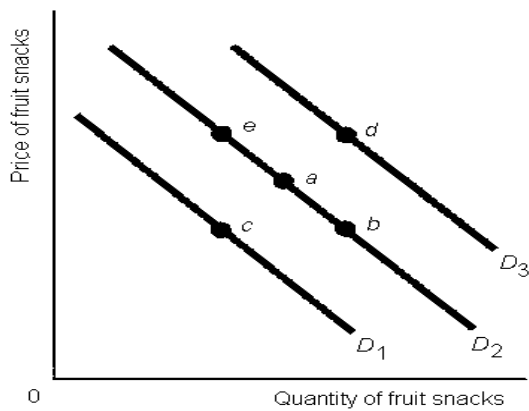
9. At a price of \$20,
- there would be an excess supply of 25 units.
 - there would be an excess supply, but it is impossible to know by how much.
 - there would be an excess demand of 25 units.
 - the market would be in equilibrium.
10. When this market is in equilibrium,
- price is \$35, and the quantity that will be sold is 20.
 - price is \$25, and the quantity that will be sold is 20.
 - price is \$35, and the quantity that will be sold is 15.
 - price is \$30, and the quantity that will be sold is 15.
11. If the demand for steak increases as income increases, this means that steak is a(n)
- inferior good.
 - complementary good.
 - substitute good.
 - consumer good.
 - normal good.

Answer the following 2 questions according to the figure below:



12. Moving from demand curve D1 to demand curve D2 illustrates a(n)
- a. decrease in demand.
 - b. increase in demand.
 - c. increase in quantity demanded.
 - d. decrease in quantity demanded.
13. Moving from demand curve D1 to demand curve D2 could be caused by a(n)
- a. increase in the price of a complement.
 - b. decrease in consumers' incomes, if the good is normal good.
 - c. decrease in the size of the population.
 - d. increase in the price of a substitute.

Figure 4.1



14. In the figure above, which change reflects an increase in the price of a substitute for fruit snacks?

- a. From a to e.
- b. From a to b.
- c. From a to c.
- d. From a to d.

15. Which of the following is NOT held constant along a supply curve?

- a. Expected future prices.
- b. The number of sellers.
- c. The price of the good itself.
- d. Prices of resources used in production.

16. The law of demand states that, other things constant, there is:

- a) a positive relationship between income and quantity demanded.
- b) a negative relationship between income and quantity demanded.
- c) a positive relationship between price and quantity demanded.
- d) a negative relationship between price and quantity demanded.

17. Which of the following could not cause an increase in the demand for a commodity?

- a) An increase in income, if the good is a normal good
- b) A decrease in the price of a substitute
- c) A decrease in the price of a complement
- d) An increase in preferences for the commodity

18. A decrease in quantity demanded is represented by a

- a) Rightward shift of the demand curve
- b) Leftward shift of the demand curve
- c) Movement upward and to the left along the demand curve
- d) Movement downward and to the right along the demand curve

19. If L and M are complementary goods, an increase in the price of L will result in:

- a) An increase in the sales of L
- b) No change in either the price or sales of M.
- c) A decrease in the sales of M.
- d) An increase in the sales of M.

20. Excess demand will exist when:

- a) market price is less than the equilibrium price.
- b) market price is equal to the equilibrium price.
- c) quantity supplied exceeds quantity demanded.
- d) market price exceeds the equilibrium price.

21. In moving along a stable demand curve which of the following is not held constant

- a) The price of the product for which the demand curve is relevant
- b) Consumer incomes
- c) The prices of complementary goods
- d) The prices of substitute goods

22. Which of the following statements is incorrect?

- a) If demand increases and supply decreases, equilibrium price will rise
- b) If supply increases and demand decreases, equilibrium price will fall
- c) If both demand and supply increases, equilibrium quantity will fall
- d) If supply declines and demand remains constant, equilibrium price will rise

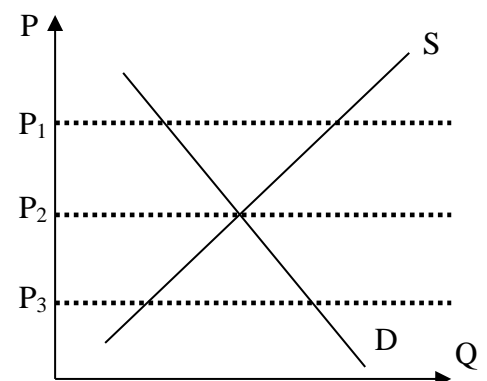
Answer the questions 23 – 24 according to the figure;

23. A price at which there would be a surplus of this product is

- a) P_1
- b) P_2
- c) both P_2 and P_3
- d) P_3

24. The price at which there would be a shortage of this good is

- a) P_1
- b) P_2
- c) both P_2 and P_3
- d) P_3



25. If supply were to increase, we would predict

- a) an increase in both P and Q
- b) a decrease in both P and Q
- c) an increase in P and a decrease in Q
- d) a decrease in P and an increase in Q

26. Suppose that in 1988, 1 million computers were sold at a price of \$3,000 and in 1989, 3 million computers were sold at a price of \$3,200. The most likely explanation for this is that in 1989 the _____ curve shifted to the _____.

- a) supply; left
- b) supply; right
- c) demand; left
- d) demand; right

27. Which of the following influences does NOT shift the supply curve?

- a) A rise in the wages paid workers
- b) Development of new technology
- c) People deciding that they want to buy more of the product
- d) A decrease in the number of suppliers

28. To say that “supply increases” for any reason, means there is a

- a) movement rightward along a supply curve.
- b) movement leftward along a supply curve.
- c) rightwards shift in the supply curve.
- d) leftwards shift in the supply curve.

29. The price of a good will tend to fall if

- a) there is surplus at the current price.
- b) the current price is above equilibrium.
- c) the quantity supplied exceeds the quantity demanded at the current price.
- d) all of the above are true.

30. A shift of the supply curve for coffee will be caused by

- a) a change in the price of a related good that is a substitute for coffee.
- b) a change in income.
- c) a change in price of coffee.
- d) None of the above