

Week #3 Worksheet Solutions - Markets ~ Graphs of Shifts

For questions 1-5 tell whether there is: an increase in quantity demanded; a decrease in quantity demanded; an increase in demand; a decrease in demand.

1. An increase in consumer income will result in **AN INCREASE IN DEMAND** for a normal good.
2. If Coke is now priced higher than Pepsi, there would be **A DECREASE IN QUANTITY DEMANDED** for Coke and **AN INCREASE IN DEMAND** for Pepsi.
3. If consumers expect the price of bananas to go down next week, then there will be **A DECREASE IN DEMAND** for bananas this week. If the price of bananas goes down today, then there would be **AN INCREASE IN THE QUANTITY DEMANDED** for bananas today.
4. Due to the popularity of iPhones, there has been **AN INCREASE IN DEMAND** for this product.
5. A price war in the computer industry has decreased the price of PC's. This has led to **AN INCREASE IN THE QUANTITY DEMANDED** for PC's and **AN INCREASE IN DEMAND** for scanner/printer combinations.

For questions 6-10 tell whether there is: an increase in quantity supplied; a decrease in quantity supplied; an increase in supply; a decrease in supply.

6. Advances in robotic technology can result in **AN INCREASE IN SUPPLY** of automobiles.
7. A textile manufacturer can use its inputs to make towels or terry cloth bath robes. If it becomes more profitable to make towels because of an increase in the price of towels, then there would be **INCREASE IN THE QUANTITY SUPPLIED** of towels and **A DECREASE IN SUPPLY** of bath robes.
8. The increased number of bagel stores on Hillsborough Street has led to **AN INCREASE IN SUPPLY** of bagels.
9. Poor weather in the Midwest would **DECREASE THE SUPPLY** of wheat.
10. A lower price for printers would **DECREASE THE QUANTITY SUPPLIED** of printers.
11. What happens to demand when prices increase? **Nothing, it is a movement along the curve.**
12. What happens to supply when prices decrease? **Nothing, it is a movement along the curve.**
13. Which of the following will NOT shift the current demand curve for a good?
 - A. A change in the expected future price of this good
 - B. A change in the current price of this good**
 - C. A change in the price of the substitute good
 - D. A change in consumer income

Changing in the price of the specific good we are looking at will not shift the demand curve for that good. Instead, it will move from one point to another point along the demand curve. Remember: in this case, it is called "change in quantity demanded" but not "change in demand"

14. A rightward shift in the demand curve of Dell laptops could be due to which of the following:

- A. HP laptop price decreases
- B. Dell issues coupons for laptops
- C. Dell reduces the prices for laptop mice and printers
- D. None of the above

For answer A, HP laptops are substitutes of Dell laptops. Therefore, when price of HP laptops decreases, people will buy more HP laptops but less Dell laptops. Demand of Dell laptops will shift to the left

For answer B, issuing coupon is a way to reduce price of Dell laptop. Therefore, the demand curve of Dell laptops won't shift. It only makes it moving from one point to another along the demand curve.

For answer C, mouse and printer are complements for Dell laptops. When prices of these complements decrease, people will consume more mouse and printers, and will consume more Dell laptops in the same time. Therefore, the demand curve of Dell laptops moves to the right. This is the right answer.

15. Pumped-Up is a sports drink intended to increase strength and endurance in exercises. Use the table below to answer following questions.

(millions of gallons of Pumped-Up per year)		
Price per Gallon	Quantity Demanded	Quantity Supplied
\$5	300	1000
\$4	400	800
\$3	600	600
\$2	800	400
\$1	1000	200
\$0	1200	0

- a. What is its equilibrium price and equilibrium quantity? → \$3
- b. At \$5 per gallon, there are 700 millions of gallons of surplus (shortage/surplus).
- c. At \$1 per gallon, there is 800 millions of gallons of shortage (shortage/surplus).

16. According to the change in the factor affecting supply or demand, fill in the blanks in the table by “I” for increase, “D” for decrease, “N” for no change, “U” for uncertain.

Factor	Demand	Supply	Equilibrium Price	Equilibrium Q.
Price of a complement rises	D	N	D	D
Technology advances	N	I	D	I
Less sellers and less buyers	D	D	U	D

17. Assume the market for coffee starts in equilibrium—draw a graph and determine whether the following events will increase/decrease equilibrium price & quantity in the coffee market

- a. A disease in coffee plants kills off much of the Brazilian crop.

Supply will decrease (shift inward), equilibrium price increase, equilibrium quantity decrease.

- b. The price of tea declines.

Tea and coffee are substitutes. A decrease in price of tea will lead the demand of coffee decrease (shift inward) → Lower price, less quantity.

18. The following table shows the data for rental apartments in Columbus, Ohio:

Monthly Rent	Quantity Demanded	Quantity Supplied
\$800	30	10
\$1000	25	14
\$1200	22	17
\$1400	19	19
\$1800	15	22

- a. What is the equilibrium price for apartments?

→\$1400

- b. Suppose a tornado destroys a significant amount of apartment buildings in Columbus but has no effect on peoples’ desire to live there. If the market was in equilibrium prior to the tornado, what would be the effect on equilibrium price and quantity after the tornado? (Draw a graph).

The supply of apartment will decrease (shift inward) due to the tornado. The demand is unchanged. Less quantity, but higher price.