Name: $\qquad$ Date: $\qquad$

## Combining Supply and Demand

Scenario: The following shows a demand and supply schedule listing CDs demanded and supplied (in the millions) per week at each price.

- Graph each the following demand/supply schedules on one demand graph and then answer the questions below:

| Price Per <br> Compact <br> Disc | Quantity <br> Demanded | Quantity <br> Supplied | Shortage/ <br> Surplus <br> (QS - QD) |
| :---: | :---: | :---: | :---: |
| $\$ 6$ | 0 | 9 |  |
| 5 | 2 | 6 |  |
| 4 | 3 | 5 |  |
| 3 | 4 | 4 |  |
| 2 | 6 | 3 |  |
| 1 | 9 | 0 |  |


a. What is the equilibrium price? $\qquad$
b. What is the QD and QS at the equilibrium price? $\qquad$
c. What is the surplus at $\$ 6$ ?
d. What is the shortage at $\$ 2$ $\qquad$
e. How does a surplus affect the price of a product? $\qquad$
f. How does a shortage affect the price of a product? $\qquad$

## Changes in Demand

Scenario: The following schedule shows a change in demand based on the price of a related product. The demand increased for CDs because the price of CD players dropped.

| Price Per <br> Compact <br> Disc | Quantity <br> Demanded <br> (CD <br> Players <br> \$75) | Quantity <br> Demanded <br> (CD <br> Players <br> \$50) | Quantity <br> Supplied | Shortage <br> or <br> Surplus <br> (QS - <br> new QD) |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 6$ | 0 | 4 | 9 |  |
| 5 | 2 | 6 | 6 |  |
| 4 | 3 | 7 | 5 |  |
| 3 | 4 | 8 | 4 |  |
| 2 | 6 | 11 | 3 |  |
| 1 | 9 | 13 | 0 |  |


a. What happened to the original demand curve?
b. How was the equilibrium point affected? $\qquad$
c. What is the surplus at $\$ 6.00$ ? $\qquad$
d. What is the shortage at $\$ 2.00$ ?
e. How did this scenario benefit the supplier of CDs?

## Changes in Supply

Scenario: The following schedule shows a change in supply based on new technology and methods of producing CDs. The supply increased for CDs because the new technology allowed the supplier to produce CDs at a reduced rate.

| Price Per <br> Compact <br> Disc | Quantity <br> Demanded | Quantity <br> Supplied <br> (old <br> technology) | Quantity <br> Supplied <br> (new <br> technology) | Shortage/ <br> Surplus <br> (New QS <br> minus <br> QD) |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 6$ | 0 | 9 | 14 |  |
| 5 | 2 | 6 | 12 |  |
| 4 | 3 | 5 | 10 |  |
| 3 | 4 | 4 | 8 |  |
| 2 | 6 | 3 | 6 |  |
| 1 | 9 | 0 | 3 |  |



0
a. What happened to the original supply curve? $\qquad$
b. How was the equilibrium point affected?
c. What is the surplus at $\$ 6.00$ ? $\qquad$
d. Why is there no longer a shortage at $\$ 2.00$ ?
e. How did this scenario benefit the consumers of CDs?

## Changes in Supply and Demand

Scenario: The following schedule shows a change in supply and demand simultaneously for CDs.

| Price Per <br> Compact <br> Disc | Quantity <br> Demanded <br> (CD <br> Players <br> $\$ 75)$ | Quantity <br> Demanded <br> (CD <br> Players <br> $\$ 50)$ | Quantity <br> Supplied <br> (old <br> technology) | Quantity <br> Supplied <br> (new <br> technology) |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 6$ | 0 | 4 | 9 | 14 |
| 5 | 2 | 6 | 6 | 12 |
| 4 | 3 | 7 | 5 | 10 |
| 3 | 4 | 8 | 4 | 8 |
| 2 | 6 | 11 | 3 | 6 |
| 1 | 9 | 13 | 0 | 3 |

a. How was the equilibrium point affected?
b. What would happen to the price of CD's if an alternative product, such as the iPod, became popular
 and shifted the demand curve back to D1? (all things remaining the same)
c. What would happen to the price of CD's if an input for creating cd increased and shifted the supply curve back to S1? (all things remaining the same)

