## Equilibrium Price and Equilibrium Quantity

## Part A

Figure 7.1 below shows the demand for Greebes and the supply of Greebes. Plot these data on the axes in Figure 7.2. Label the demand curve D and label the supply curve S. Then answer the questions that follow. Fill in the answer blanks, or underline the correct answer in parentheses.

Figure 7.1
Demand for and Supply of Greebes

| Price <br> (\$ per Greebe) | Quantity Demanded <br> (millions of Greebes) | Quantity Supplied <br> (millions of Greebes) |
| :---: | :---: | :---: |
| $\$ .15$ | 300 | 100 |
| .20 | 250 | 150 |
| .25 | 200 | 200 |
| .30 | 150 | 250 |
| .35 | 100 | 300 |

## Figure 7.2

## Demand for and Supply of Greebes



1. Under these conditions, competitive market forces would tend to establish an equilibrium price of
$\qquad$ per Greebe and an equilibrium quantity of $\qquad$ million Greebes.
2. If the price currently prevailing in the market is $\$ 0.30$ per Greebe, buyers would want to buy
$\qquad$ million Greebes and sellers would want to sell $\qquad$ million Greebes. Under these conditions, there would be a (shortage / surplus) of $\qquad$ million Greebes. Competitive market forces would tend to cause the price to (increase / decrease) to a price of $\qquad$ per Greebe.

At this new price, buyers would now want to buy $\qquad$ million Greebes, and sellers now want to sell $\qquad$ million Greebes. Because of this change in (price / underlying conditions),

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the (demand / quantity demanded) changed by $\qquad$ million Greebes, and the (supply / quantity supplied) changed by $\qquad$ million Greebes.
3. If the price currently prevailing in the market is $\$ 0.20$ per Greebe, buyers would want to buy
$\qquad$ million Greebes, and sellers would want to sell $\qquad$ million Greebes. Under these conditions, there would be a (shortage / surplus) of $\qquad$ million Greebes. Competitive market forces would tend to cause the price to (increase / decrease) to a price of $\qquad$ per Greebe. At this new price, buyers would now want to buy $\qquad$ million Greebes, and sellers now want to sell $\qquad$ million Greebes. Because of this change in (price / underlying conditions), the (demand / quantity demanded) changed by $\qquad$ million Greebes, and the (supply / quantity supplied) changed by $\qquad$ million Greebes.
4. Now, suppose a mysterious blight causes the supply schedule for Greebes to change to the following:

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Figure 7.3
New Supply of Greebes

| Price <br> (\$ per Greebe) | Quantity Supplied <br> (millions of Greebes) |
| :---: | :---: |
| $\$ .20$ | 50 |
| .25 | 100 |
| .30 | 150 |
| .35 | 200 |

Plot the new supply schedule on the axes in Figure 7.2 and label it $\mathrm{S}_{1}$. Label the new equilibrium $\mathrm{E}_{1}$. Under these conditions, competitive market forces would tend to establish an equilibrium price of
$\qquad$ per Greebe and an equilibrium quantity of $\qquad$ million Greebes.

Compared with the equilibrium price in Question 1, we say that because of this change in (price / underlying conditions), the (supply / quantity supplied) changed; and both the equilibrium price and the equilibrium quantity changed. The equilibrium price (increased / decreased), and the equilibrium quantity (increased / decreased).
5. Now, with the supply schedule at $S_{1}$, suppose further that a sharp drop in people's incomes as the result of a prolonged recession causes the demand schedule to change to the following:

Figure 7.4
New Demand for Greebes

| Price <br> (\$ per Greebe) | Quantity Demanded <br> (millions of Greebes) |
| :--- | :---: |
| $\$ .15$ | 200 |
| .20 | 150 |
| .25 | 100 |
| .30 | 50 |

MECROECOMOMACE

## LESSON 4 aCTIVITY 7 (continued)

Plot the new demand schedule on the axes in Figure 7.2 and label it $\mathrm{D}_{1}$. Label the new equilibrium $\mathrm{E}_{2}$. Under these conditions, with the supply schedule at $\mathrm{S}_{1}$, competitive market forces would tend to establish an equilibrium price of $\qquad$ per Greebe and an equilibrium quantity of
$\qquad$ million Greebes. Compared with the equilibrium price in Question 4, because of this change in (price / underlying conditions), the (demand / quantity demanded) changed. The equilibrium price (increased / decreased), and the equilibrium quantity (increased / decreased).
6. The movement from the first equilibrium price and quantity to the new equilibrium price and quantity is the result of a (price / nonprice) effect.

## Part B

The following questions refer to a group of related markets in the United States during a given time period. Assume that the markets are perfectly competitive and that the supply and demand model is completely applicable. The figures show the supply and demand in each market before the assumed change occurs. Trace through the effects of the assumed change, other things constant. Work your way from left to right. Shift only one curve in each market. For each market, draw whatever new supply or demand curves are needed, labeling each new curve $\mathrm{S}_{1}$ or $\mathrm{D}_{1}$. Then circle the correct symbol under each diagram ( $\uparrow$ for increase, - for unchanged, and $\downarrow$ for decrease). Remember to shift only one curve in each market.
7. Assume that a new fertilizer dramatically increases the amount of wheat that can be harvested with no additional labor or machinery. Also assume that this fertilizer does not affect potato farming and that people are satisfied to eat either bread made from wheat flour or potatoes.

Figure 7.5
Effects of a New Fertilizer


## LESSON 4 ACTIVITY 7 (continued)

8. Assume that a heavy frost destroys half the world's coffee crop and that people use more cream in coffee than they do in tea.

Figure 7.6
Effects of a Loss of Coffee Crop


## LESSON 4 ACTIVITY 7 (continued)

9. Assume beef and pork are perfect substitutes. The price of pork rises dramatically. Catsup is a complement to beef; mustard is a complement to pork.

Figure 7.7
Effects of a Change in the Price of Pork


