Equilibrium Price and Equilibrium Quantity

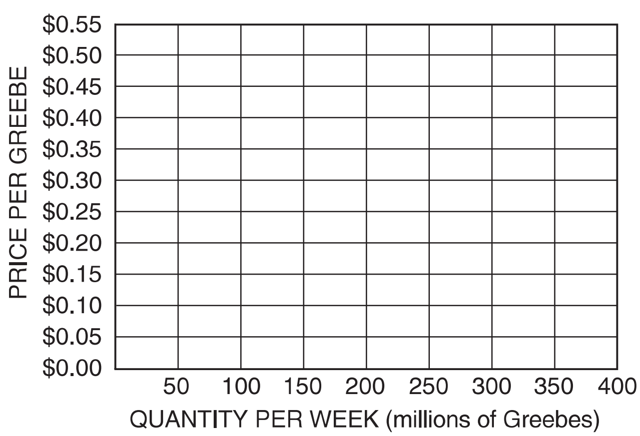
Table 1-8.1 below shows the demand for Greebes and the supply of Greebes. Plot these data on the axes in Figure 1-8.1. Label the demand curve D and label the supply curve S. Then answer the questions that follow.

Student Alert: **A "change in demand" or a "change in supply" results in a change in price, while a "change in quantity demanded" or a "change in quantity supplied" is the result of a change in price.**

Table 1-8.1
Demand for and Supply of Greebes

Price (per Greebe)	Quantity demanded (millions of Greebes)	Quantity supplied (millions of Greebes)
$0.05	400	0
$0.10	350	50
$0.15	300	100
$0.20	250	150
$0.25	200	200
$0.30	150	250
$0.35	100	300
$0.40	50	350
$0.45	0	400

Figure 1-8.1
Demand for and Supply of Greebes



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1. Under these conditions, competitive market forces would tend to establish an equilibrium price of ________ per Greebe and an equilibrium quantity of ________ million Greebes.

2. If the price currently prevailing in the market is \$0.30 per Greebe, buyers would want to buy ________ million Greebes and sellers would want to sell ________ million Greebes. Under these conditions, there would be a (*shortage / surplus*) of ________ million Greebes. Competitive market forces would cause the price to (*increase / decrease*) to a price of ________ per Greebe. At this new price, buyers would now want to buy ________ million Greebes, and sellers now want to sell ________ million Greebes. Because of this change in (*price / underlying conditions*), the (*demand / quantity demanded*) (*increased / decreased*) by ________ million Greebes, and the (*supply / quantity supplied*) (*increased / decreased*) by ________ million Greebes.

3. If the price currently prevailing in the market is \$0.20 per Greebe, buyers would want to buy ________ million Greebes, and sellers would want to sell ________ million Greebes. Under these conditions, there would be a (*shortage / surplus*) of ________ million Greebes. Competitive market forces would cause the price to (*increase / decrease*) to a price of ________ per Greebe. At this new price, buyers would now want to buy ________ million Greebes, and sellers now want to sell ________ million Greebes. Because of this change in (*price / underlying conditions*), the (*demand / quantity demanded*) (*increased / decreased*) by ________ million Greebes, and the (*supply / quantity supplied*) (*increased / decreased*) by ________ million Greebes.

4. At equilibrium, is each of the following true or false? Explain.

   (A) The quantity demanded is equal to the quantity supplied.

   (B) Demand equals supply.

5. Now, suppose a mysterious blight causes the supply schedule for Greebes to change as shown in Table 1-8.2:

Table 1-8.2
New Supply of Greebes

Price (per Greebe)	Quantity supplied (millions of Greebes)
$0.15	0
$0.20	50
$0.25	100
$0.30	150
$0.35	200

Plot the new supply schedule on the axes in Figure 1-8.1 and label it S_1. Label the new equilibrium E_1. Under these conditions, competitive market forces would establish an equilibrium price of ________ per Greebe and an equilibrium quantity of ________ 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*).

Compared with the consumer and producer surpluses in Question 4, consumer surplus has (*increased / decreased*), and producer surplus has (*increased / decreased*).

6. 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 as shown in Table 1-8.3:

Table 1-8.3
New Demand for Greebes

Price (per Greebe)	Quantity demanded (millions of Greebes)
$0.15	200
$0.20	150
$0.25	100
$0.30	50

Plot the new demand schedule on the axes in Figure 1-8.1 and label it D_1. Label the new equilibrium E_2. Under these conditions, with the supply schedule at S_1, competitive market forces would establish an equilibrium price of ________ per Greebe and an equilibrium quantity of ________ million Greebes. Compared with the equilibrium price in Question 5, because of this change in (*price / underlying conditions*), the (*demand / quantity demanded*) changed. The equilibrium price (*increased / decreased*), and the equilibrium quantity (*increased / decreased*).

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