**Price = The Interaction of Supply and Demand**

Economics – Chapters 4-6 (Sections 1) Outline and Applying the Principles

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**Chapter 4, Section 1: DEMAND**

I. **What Is Demand?**
   A. Markets are where people come together to buy and sell goods and services.
      1. __________________ is the buying side of a market.
      2. __________________ is the selling side of a market.
   B. ________ refers to the willingness and ability of buyers to purchase a good or service.
   C. __________________ is different from demand. Quantity demanded is the number of units of a good purchased at a specific price. Quantity demanded is always a ____________.

II. **What Does the Law of Demand “Say”?**
   A. The law of demand says that as the price of a good ________________, quantity demanded of the good ________________, and as price of a good decreases, quantity demanded of the good increases.
      
   B. Quantity ____________ refers to the number of units of a good purchased at a specific price.

III. **Why Do Price and Quantity Demanded Move in Opposite Directions?**
   A. Price and quantity demanded move in opposite directions because of the law of __________________ utility.
   B. The law of diminishing marginal utility states that as a person consumes additional units of a good, the utility gained from each additional unit of the good ________________.
      
      o Diminishing means decreasing
      o Marginal means additional
      o Utility means satisfaction

IV. **The Law of Demand in Numbers and Pictures**
   A. A demand ____________ is a numerical chart showing the law of demand.
   B. A demand curve is a (n) __________________ representation of the law of demand.

<table>
<thead>
<tr>
<th>Price (in dollars)</th>
<th>Quantity demanded (in units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$4</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

V. **The Law of Demand in Numbers and Pictures**
   A. A (n) __________________ demand curve represents an individual’s demand.
   B. A (n) __________________ demand curve is the sum of all individual demand curves added together.
Chapter 4, Section 1
Applying the Principles

The Law of Demand

1. The two conditions of demand are ______________________ and ____________________ to purchase.
2. The law of demand says that as the price of a good increases, the quantity demanded of the good ____________________.
3. The law of demand says that as the price of a good decreases, the quantity demanded of the good ____________________.
4. According to the law of demand, price and quantity demanded move in ____________________ directions.

Demand Schedules and Demand Curves

The law of demand can be represented in numbers using a demand __________________ or it can be represented as a graph showing a demand ________________. Question #5 illustrates the connections between a demand schedule and a demand curve.

5. Use the demand schedule to create a demand curve for Simon's consumption of music downloads on the grid shown. Label the curve D1.

<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity Demanded</th>
</tr>
</thead>
<tbody>
<tr>
<td>$7</td>
<td>1</td>
</tr>
<tr>
<td>$6</td>
<td>2</td>
</tr>
<tr>
<td>$5</td>
<td>3</td>
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<tr>
<td>$4</td>
<td>4</td>
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<tr>
<td>$3</td>
<td>5</td>
</tr>
<tr>
<td>$2</td>
<td>6</td>
</tr>
<tr>
<td>$1</td>
<td>7</td>
</tr>
</tbody>
</table>

Use the graph in question 5 to answer questions 6-9.

6. The demand curve shows that at a price of $7, Simon will buy ______ music download(s), and at a price of $1, he will buy _______ music download(s).

7. Simon's buying behavior demonstrates the law of ____________________.

8. Simon's change in buying behavior at different prices is a change in ____________________ ____________________.

9. Simon is not willing to pay $7 for every download because his utility (satisfaction) decreases as he downloads more and more music. Economists call this concept the law of ____________________ ____________________.

All people do not have the same demand for a good. Some people have a greater willingness and ability to purchase a good than other people do.

10. Use the demand schedule below to create a demand curve for Carla's consumption of music downloads. Draw the graph on the grid in question 5. Label the curve D2.

<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity Demanded</th>
</tr>
</thead>
<tbody>
<tr>
<td>$7</td>
<td>4</td>
</tr>
<tr>
<td>$6</td>
<td>5</td>
</tr>
<tr>
<td>$5</td>
<td>6</td>
</tr>
<tr>
<td>$4</td>
<td>7</td>
</tr>
<tr>
<td>$3</td>
<td>8</td>
</tr>
<tr>
<td>$2</td>
<td>9</td>
</tr>
<tr>
<td>$1</td>
<td>10</td>
</tr>
</tbody>
</table>
To answer questions 11-15, use the graph in question 5, which now shows both Simon's and Carla's demand curves.

11. Carla's demand curve (D₂) is to the ______________ (right or left) of Simon's demand curve (D₁).

12. For each of the listed prices, Carla is willing and able to buy ______________ (more or less) music downloads than Simon is willing and able to buy.

13. At each of the possible quantities, Carla is willing and able to pay a ______________ (higher or lower) price than Simon is willing and able to pay.

14. The demand curves you created on the grid in question 5 are ______________ (individual or market) demand curves.

15. Suppose Simon and Carla are the only buyers of music downloads. How would you create a market demand curve from the demand curves you drew on the grid in question 5?

______________________________________________________________________________________________________________________________________________________________

16. Fill in the **market** demand schedule for Simon and Carla's music downloads in the space below and then graph the market demand curve. First you will need to add together the quantity they demand at each price.

<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity Demanded</th>
</tr>
</thead>
<tbody>
<tr>
<td>$7</td>
<td></td>
</tr>
<tr>
<td>$6</td>
<td></td>
</tr>
<tr>
<td>$5</td>
<td></td>
</tr>
<tr>
<td>$4</td>
<td></td>
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<tr>
<td>$3</td>
<td></td>
</tr>
<tr>
<td>$2</td>
<td></td>
</tr>
<tr>
<td>$1</td>
<td></td>
</tr>
</tbody>
</table>

**Demand Schedule for Music Downloads**

![Demand Curve Graph](chart.png)

**Review Questions**

17. Yesterday the price of a good was $10, and the quantity demanded was 100 units. Today the price of the good is $12, and the quantity demanded is 87 units. Did quantity demanded fall because the price increased, or did the price rise because quantity demanded fell?

18. What does the law of diminishing marginal utility have to do with demand?

19. Assume that the law of demand applies to criminal activity. What might community leaders do to reduce the number of crimes committed in the community?
Chapter 5, Section 1: **SUPPLY**

I. What Is Supply?
   A. Supply refers to the willingness and ________________ of sellers to produce and offer to sell as a good.

II. What Does the Law of Supply Say?
   A. The law of supply says that as the price of a good ________________, the quantity supplied of the good ________________, and as price of a good decreases, the quantity supplied of the good decreases.
   B. Price and quantity supplied move in the same direction, or have a(n) ________________ relationship.
   C. Quantity ________________ refers to the number of units of a good produced and offered for sale at a specific price.

III. The Law of Supply in Numbers and Pictures
   A. A supply ________________ is a numerical chart showing the law of supply.
   B. A supply ________________ is a graphical representation of the law of supply.

IV. A Vertical Supply Curve
   A. The law of supply does not hold for goods that can no longer be produced. The supply curve for this type of good is ________________.
   B. What two examples did the book use to explain this concept?
      1. ________________
      2. ________________
   C. The ________________ does not hold when there is no time to produce more of a good. The supply curve for this type of good is vertical.

V. A Firm’s Supply Curve and a Market Supply Curve
   A. A(n) ________________ supply curve is the supply curve for a particular firm.
   B. A(n) ________________ supply curve is the sum of all firm’s supply curves.

Applying the Principles
Supply (Chapter 5, Section 1)

20. The two conditions of supply are ________________ and ________________ to produce and sell.
21. The law of supply says that as the price of a good increases, the quantity supplied of the good ________________.
22. The law of supply says that as the price of a good decreases, the quantity supplied of the good ________________.
23. According to the law of supply, price and quantity supplied move in the ________________ direction.

Supply Schedules and Supply Curves: Like Demand, the law of supply can be represented in numbers using a supply schedule or it can be represented as a graph showing a supply curve.

Answer question 8 to illustrate the connection between a supply schedule and a supply curve.

24. Simon, an enthusiastic consumer of music downloads, has taken a keen interest in the industry. He has started his own company, Simon, Inc., which manufactures premium mp3 players. Use the supply schedule below to create a supply curve for Simon's company on the grid shown. Label the curve S1.

**SUPPLY SCHEDULE FOR SIMON, INC.**

<table>
<thead>
<tr>
<th>Price ($)</th>
<th>Quantity Supplied (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100</td>
<td>200</td>
</tr>
<tr>
<td>$200</td>
<td>300</td>
</tr>
<tr>
<td>$300</td>
<td>400</td>
</tr>
<tr>
<td>$400</td>
<td>500</td>
</tr>
<tr>
<td>$500</td>
<td>600</td>
</tr>
<tr>
<td>$600</td>
<td>700</td>
</tr>
<tr>
<td>$700</td>
<td>800</td>
</tr>
</tbody>
</table>

Supply Curve Derived from Supply Schedule
Use the graph you created in question 8 to answer questions 25-27.

25. The supply curve shows that at a price of $300, Simon, Inc., will offer to sell _______ premium mp3 players, and at a price of $600, the company will offer to sell ______ premium mp3 players.

26. The company’s selling behavior demonstrates the law of ______________________________.

27. The change in production of Simon, Inc., at different prices is a change in ______________________________.

All producers do not supply the same amount of a good. Some are willing and able to supply greater quantities than others are.

Use the information in question 12 to compare the supply curves of two different companies for the same good.

28. Use the supply schedule below to create a supply curve for premium mp3 players for Carla, Inc. Draw the graph on the grid in question 24. Label the curve S2.

<table>
<thead>
<tr>
<th>Price ($)</th>
<th>Quantity supplied (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100</td>
<td>400</td>
</tr>
<tr>
<td>$200</td>
<td>500</td>
</tr>
<tr>
<td>$300</td>
<td>600</td>
</tr>
<tr>
<td>$400</td>
<td>700</td>
</tr>
<tr>
<td>$500</td>
<td>800</td>
</tr>
<tr>
<td>$600</td>
<td>900</td>
</tr>
<tr>
<td>$700</td>
<td>1,000</td>
</tr>
</tbody>
</table>

To answer questions, use the graph in question 24, which now shows the supply curves for both Simon, Inc., and Carla, Inc.

29. The supply curve for Carla, Inc., (S2) is to the ______________________ of the supply curve for Simon, Inc., (S1).

30. For each of the listed prices, Carla, Inc., is willing and able to produce _____________________ premium mp3 players than Simon, Inc., is willing and able to produce.

31. At each of the possible quantities, Carla, Inc., is willing to accept a ______________________ price than Simon, Inc., is willing to accept.

32. The supply curves you created on the grid in question 24 are ______________________ supply curves.

33. Suppose Simon, Inc., and Carla, Inc., are the only suppliers of premium mp3 players. How would you create a market supply curve from the supply curves you drew on the grid in question 24?

Vertical Supply Curves

As shown in the figure to the right, a supply curve is vertical when the quantity supplied cannot increase regardless of the price. For instance, the number of tickets available for a Super Bowl is finite because the stadium has a fixed number of seats. A vertical supply curve illustrates that at any price, the quantity supplied remains the same.

34. List four other goods that would have vertical supply curves.

________________________________________  _______________________________________

________________________________________  _______________________________________
**Review Questions**

35. Three months ago the price of a good was $4, and the quantity supplied was 200 units. Today the price is $6, and the quantity supplied is 400 units. Did the quantity supplied rise because the price increased, or did the price rise because the quantity supplied increased (Which is the cause and which is the effect)?

36. Suppose three McDonald’s restaurants operate in your town, and each pays its employees $6 per hour. If McDonald’s started paying $9 per hour to its employees, would more, fewer or the same number of people want to work for McDonald’s, according to the law of supply? Explain your answer in economic terms.

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**Chapter 6, Section 1: PRICE: Supply and Demand Together**

**Moving to Equilibrium**

- Supply and demand work together to determine price. For example, they work together to determine the price of corn at an auction (see example on the presentation).
- A ____________ occurs when the quantity supplied of a good is greater than the quantity demanded. Surpluses occur only at prices ____________ the equilibrium price.
  - Prices fall when a surplus occurs, because suppliers hope to sell their ____________, or the excess stock of goods that they have on hand.
- A ____________ occurs when the quantity demanded of a good is greater than the quantity supplied. Shortages occur only at prices ____________ equilibrium price. A shortage is the opposite of a surplus.
  - Prices ____________ when there is a shortage. Buyers will offer to pay a higher price to get sellers to sell to them rather than to other buyers.

- A market is considered to be in __________________ when the quantity of a good that buyers are willing and able to buy is ____________ to the quantity that sellers are willing and able to produce and offer for sale. When a market reaches equilibrium, quantity demanded equals quantity supplied.
  - The equilibrium ________________ is the amount of a good that is bought and sold in a market that is in equilibrium.
  - The equilibrium ________________ is the price at which a good is bought and sold in a market that is in equilibrium.

**Does It Matter if Price Is at Its Equilibrium Level?**

- When price is at its equilibrium level, there are no ________________ or ________________ of any goods or services. All buyers and sellers are happy with the market.
Price Is a Signal

- Price serves as a signal that directs the allocation of _______________ toward producing the product with the _______________ demand.

What Are Price Controls?

- Sometimes the _______________ prevents markets from reaching an equilibrium price. It may do so by setting a price ceiling or a price floor.
- A price ____________________ is a price that is set _______________ than the equilibrium price. Buyers and sellers cannot legally buy and sell a good for more than this price. A government may set a price ceiling if it wants to make a good _______________ for consumers to buy.
- The government can also set a price _______________, which is a price that is set _______________ the equilibrium price. Buyers and sellers cannot legally buy and sell a good for less than this price. A government may set a price floor to _______________ a certain group of producers.

Price Controls and the Amount of Exchange

- Price ceilings and price floors have the unintended result of reducing the amount of _______________ in the economy.

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CHAPTER 6, SECTION 1

Applying the Principles

In a market, supply and demand work together to determine the price of a good. Write your answers to questions 1-6 in the blanks provided to be sure you understand the different market conditions and how they affect price.

37. What market condition exists when quantity supplied is greater than quantity demanded? _______________

38. What happens to price when the market condition in question 37 exists? _______________

39. What market condition exists when quantity demanded is greater than quantity supplied? _______________

40. What happens to price when the market condition in question 39 exists? _______________

41. What market condition exists when quantity demanded is equal to quantity supplied? _______________

42. Do markets tend to move toward shortage, surplus or equilibrium? _______________
Suppose that in the market for gadgets, the quantities demanded and supplied at various prices are as shown in the following table, and answer question 43.

**SUPPLY AND DEMAND IN THE GADGET MARKET**

<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity Demanded</th>
<th>Quantity Supplied</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.10</td>
<td>450</td>
<td>50</td>
</tr>
<tr>
<td>$0.20</td>
<td>400</td>
<td>100</td>
</tr>
<tr>
<td>$0.30</td>
<td>350</td>
<td>150</td>
</tr>
<tr>
<td>$0.40</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>$0.50</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>$0.60</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>$0.70</td>
<td>150</td>
<td>350</td>
</tr>
<tr>
<td>$0.80</td>
<td>100</td>
<td>400</td>
</tr>
</tbody>
</table>

43. Use the information in the table to draw the supply and demand curves for the gadget market on the following grid. Label the vertical axis "Price" and label the horizontal axis "Quantity." Use the prices and quantities demanded in the table to plot the demand curve. Label it $D_l$. Use the prices and quantities supplied in the table to plot the supply curve. Label it $S_l$.

**Use the graph you created in question 43 to answer questions 44-51.**

44. The equilibrium price in the gadget market is $__________.

45. At the equilibrium price, sellers want to sell _______ gadgets and buyers want to buy _______ gadgets.

46. If the price of gadgets rises to $0.70, sellers will want to sell ______ gadgets and buyers will want to buy ______ gadgets.

47. A price rise to $0.70 will result in a ____________ (surplus or shortage) of _______ gadgets.

48. If the market condition in question 48 exists, prices will ____________ (rise or fall) and price will settle at $__________.

49. If the price of gadgets falls to $0.30, sellers will want to sell ________ gadgets and buyers will want to buy ________ gadgets.

50. A price fall to $0.30 will result in a _______________ (surplus or shortage) of ______________ gadgets.

51. If the market condition in question 50 exists, prices will ______________ (rise or fall) and price will settle at $__________.

Price is a way for buyers and sellers to communicate with each other. It signals a change in the market for a good. Fill in each blank in questions 52-55 with the correct word.

52. When a market experiences a shortage, price will ________________ (increase or decrease).

53. When a shortage occurs, supply and demand work together to influence price and move the market toward ________________.

54. When a market experiences a surplus, prices will ________________ (increase or decrease).

55. When a surplus occurs, supply and demand work together to influence price and move the market toward ________________.