

Chapter 4: The Market Forces of Supply and Demand

- What factors affect buyers' demand for goods?
- What factors affect sellers' supply of goods?
- How do supply and demand determine the price of a good and the quantity sold?
- How do changes in the factors that affect demand or supply affect the market price and quantity of a good?
- How do markets allocate resources?

market: a group of buyers and sellers of a particular good or service

- buyers of the good determine the _____
- sellers of the good determine the _____

competitive market:

In a **perfectly competitive** market:

- Identical product
- Buyers and sellers are so numerous that no single buyer or seller can influence the market price (_____)

DEMAND (Consumer Side)

The demand curve describes the relationship between price and quantity demanded.

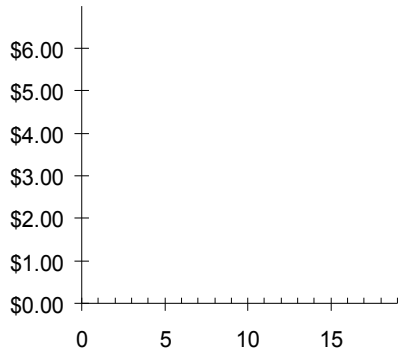
quantity demanded: the amount of a good that buyers are willing and able to purchase

Law of Demand: Ceteris Paribus (all things equal), when the price of a good rises, the quantity demanded of a good falls

Example: Demand Schedule:

Helen's Demand Schedule for lattes.

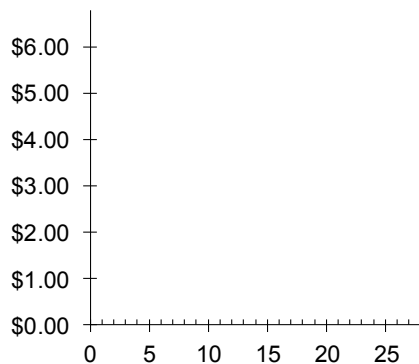
Price (\$)	Quantity Demanded
\$0	16
\$1	14
\$2	12
\$3	10
\$4	8
\$5	6
\$6	4



- The quantity demanded in the market is the sum of the quantities demanded by all buyers at each price.
- Suppose Helen and Ken are the only two buyers in the Latte market. (Q^d = quantity demanded)

Price	Helen's	Ken's	Market
\$0	16	8	
1	14	7	
2	12	6	
3	10	5	
4	8	4	
5	6	3	
6	4	2	

The Market Demand Curve for Lattes



Market Demand vs. Individual Demand

- Market Demand is the sum of all of the individual demands for a particular good or service.
- Individual demand curves are summed horizontally – quantities demanded are added up for each level of price.
- Market Demand curve shows how the total quantity demanded of a good varies with the price of the good, ceteris paribus.

Change in Demand

The demand curve shows how much consumers want to buy at any price, holding constant the many other factors that influence buying decisions.

If these factors change, DEMAND changes.

Increase in Demand is represented by:

Decrease in Demand is represented by:

(PYNTE)

- Price of Related Goods
 - **substitutes:**

 - **complements:**

- Income (Y): the relationship between income and demand depends on what type of good it is
 - **normal good:**

 - **inferior good:**

- Number of Buyers
- Tastes
- Expectations

Draw a demand curve for music downloads. What happens to it in each of the following scenarios? Why?

SUPPLY (Producers Side)

The supply curve describes the relationship between price and quantity supplied.

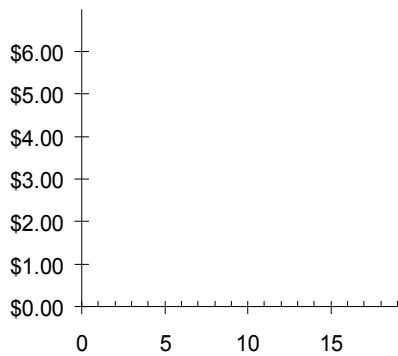
quantity supplied:

Law of Supply: Ceteris Paribus (all things equal), when the price of a good rises, the quantity supplied of a good increases, and when the price falls, the quantity supplied of a good falls.

Example: Supply Schedule:

Boulder Starbucks' supply of lattes.

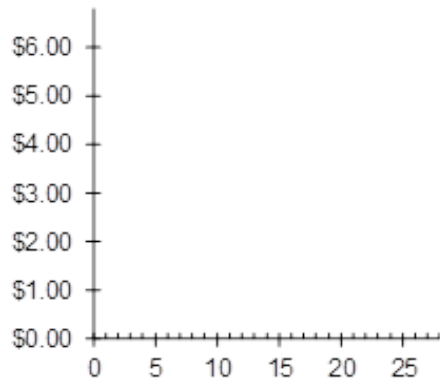
Price (\$)	Quantity Supplied
\$0	0
\$1	3
\$2	6
\$3	9
\$4	12
\$5	15
\$6	18



Market Supply vs. Individual Supply

- Market Supply is the sum of all of the individual supply for a particular good or service.

Price	Starbucks	Jitters	Market Quantity Supplied
\$0	0	0	
\$1	3	2	
\$2	6	4	
\$3	9	6	
\$4	12	8	
\$5	15	10	
\$6	18	12	



Change in Supply

The supply curve shows how much producers want to supply at any price, holding constant the many other factors that influence production decisions.

If these factors change, SUPPLY changes.

Increase in Supply is represented by a shift of the supply curve to the right.

Decrease in Supply is represented by a shift of the supply curve to the left.

(PENT)

- Price of Inputs – when price of inputs increase, production is less profitable, supply less
- Expectations
- Number of Sellers
- Technology

Draw a supply curve for tax return preparation software. What happens to it in each of the following scenarios?

SUPPLY AND DEMAND

Supply and demand together determine the quantity of a good sold/bought and the market price

equilibrium: a situation in which the market price has reached the level at which quantity supplied equals the quantity demanded

- equilibrium price, equilibrium quantity.

What if P is not at equilibrium, quantity supplied does not equal quantity demanded?

1. $P > P^*$ $Q_s > Q_d$

Surplus: a situation in which the quantity supplied is greater than the quantity demanded

2. $P < P^*$ $Q_s < Q_d$

Shortage: a situation in which the quantity supplied is less than the quantity demanded

- Three Steps to Analyzing Changes in Equilibrium
 1. Decide whether the “event” shifts D or S
 2. Determine the direction of shift
 3. Use S&D diagram to see how the shift changes the equilibrium price and quantity

EXAMPLES!!!

The Market for Hybrid Cars

Shift in Both Demand and Supply

	No Change in Supply	An Increase in Supply	A Decrease in Supply
No Change in Demand	<i>P same Q same</i>	<i>P falls Q rises</i>	<i>P rises Q falls</i>
An Increase in Demand	<i>P rises Q rises</i>	<i>P ambiguous Q rises</i>	<i>P rises Q ambiguous</i>
A Decrease in Demand	<i>P falls Q falls</i>	<i>P falls Q ambiguous</i>	<i>P ambiguous Q falls</i>

- **Suggested problems: Problems and Applications- 1, 3, 15**