Unit 2 Economics

Microeconomics: Supply and Demand

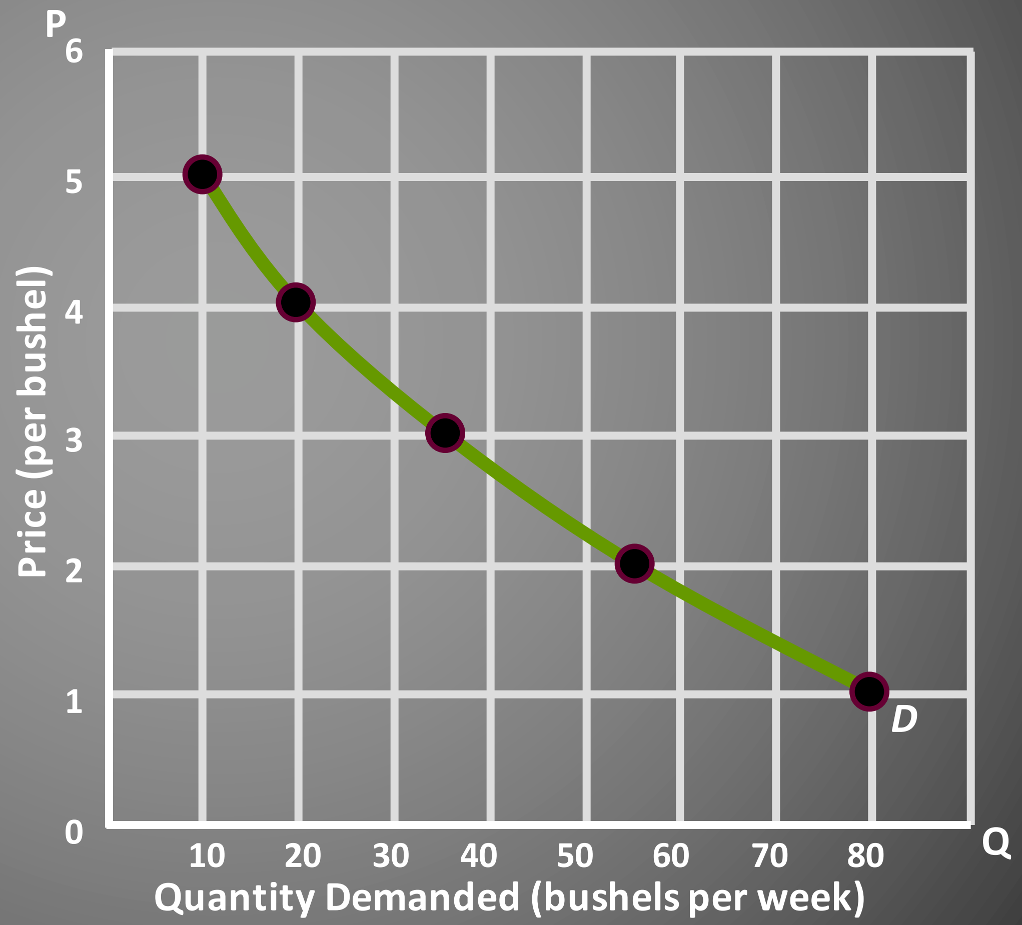
DEMAND

- **Definition** – the willingness and ability to purchase goods or services at various prices
- **Demand Schedule** – table/chart listing prices and quantities demanded
- **Demand Curve** – graph showing all the combinations of price and quantity demanded of a particular good or service
- **Law of Demand** – as prices fall, quantity demanded will rise, and as prices rise, quantity demanded will fall. Inverse relationship.
  - **A change in the price of a product results in a change in *QUANTITY DEMANDED!* (it does *NOT* shift Demand)**
- **Diminishing Marginal Utility** – successive units of a particular product yield less marginal utility (each additional product consumed brings less satisfaction)

Individual Demand

Individual Demand

P	Q_d
$5	10
4	20
3	35
2	55
1	80



Individual Demand

Determinants of Demand

(factors that cause a shift or change in Demand)

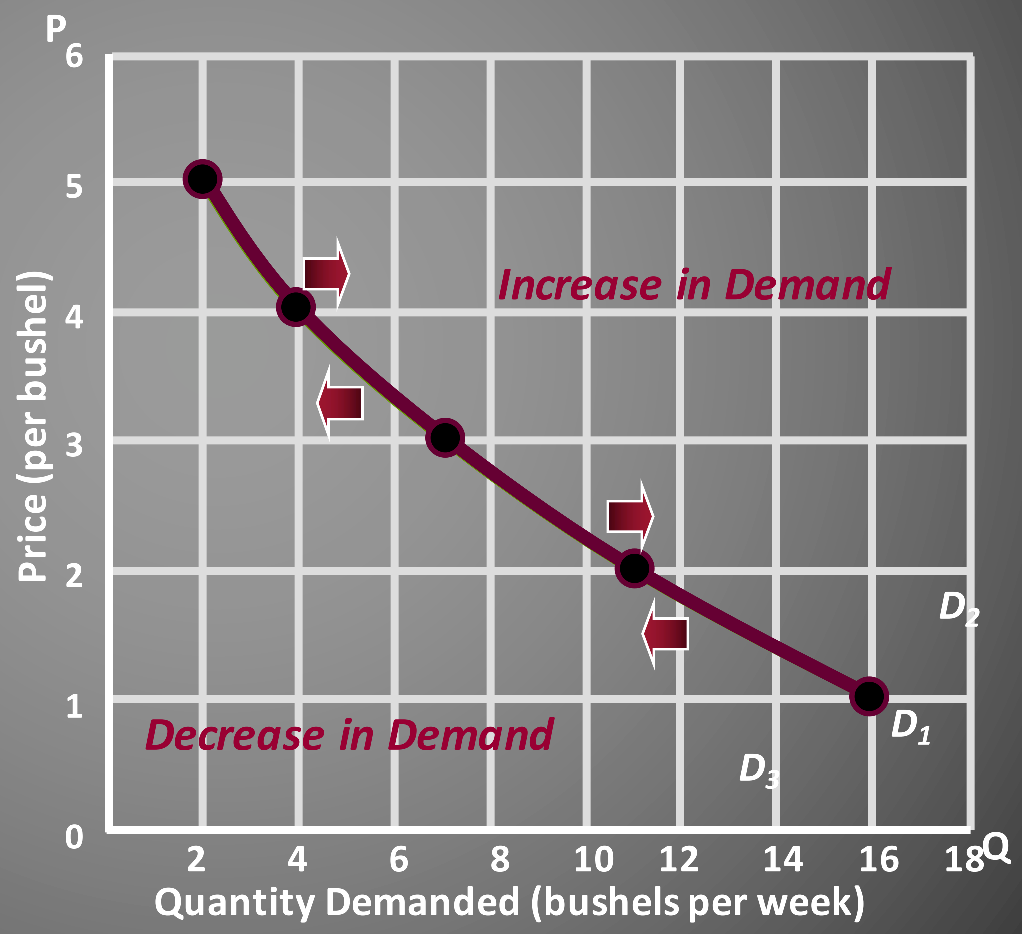
- Tastes and preferences
- Number of Buyers (Population)
- Income
  - Normal Goods
  - Inferior Goods
- Price of Related Goods
  - Substitute Good
  - Complementary Good
- Consumer Expectations

Individual Demand

Demand Can Increase or Decrease

Individual Demand

P	Q_d
$5	10
4	20
3	35
2	55
1	80

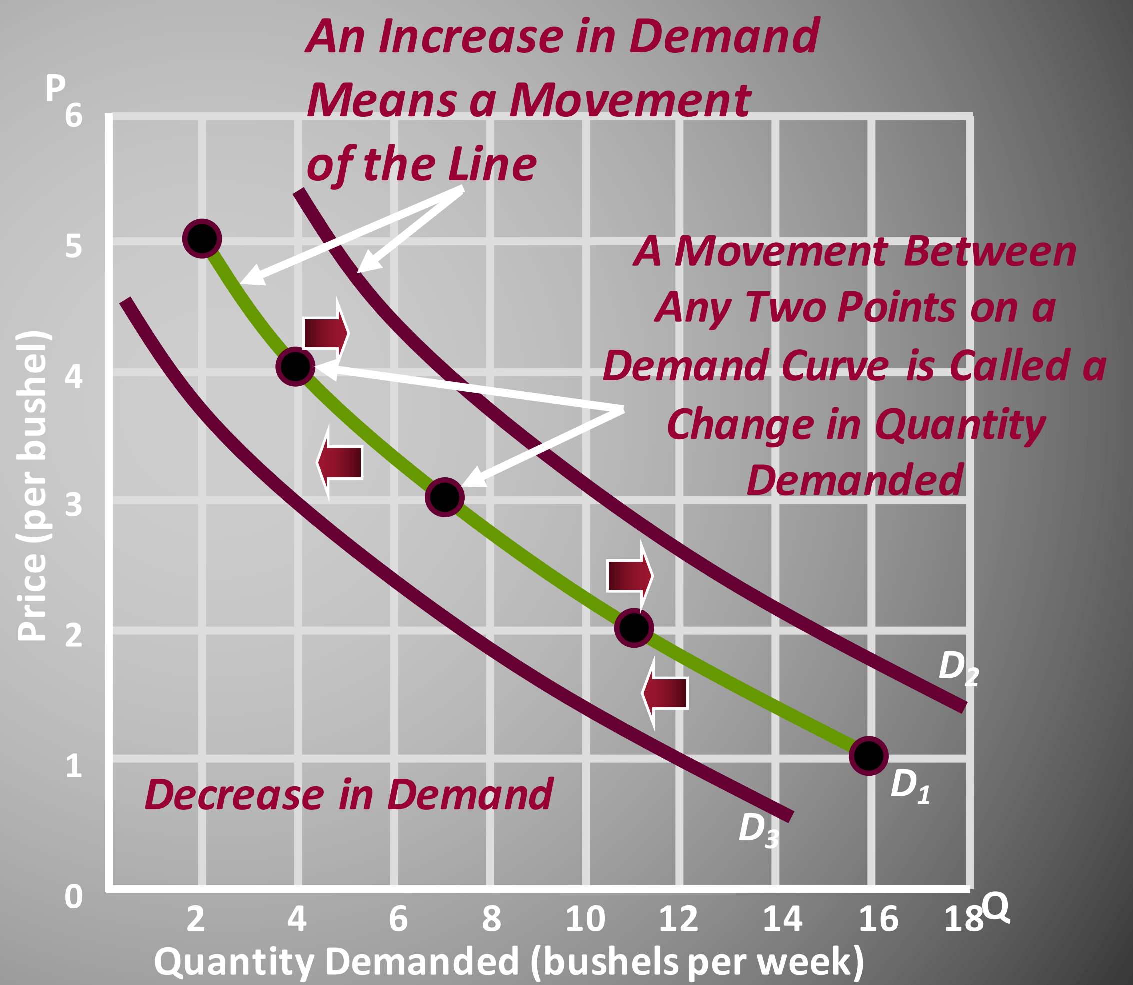


Individual Demand

Demand Can Increase or Decrease

Individual Demand

P	Q_d
$5	10
4	20
3	35
2	55
1	80



Elasticity of Demand

- Concept measuring ***responsiveness*** to price changes

- Relatively **Elastic** (small change in Price results in a large change in Q Demanded)

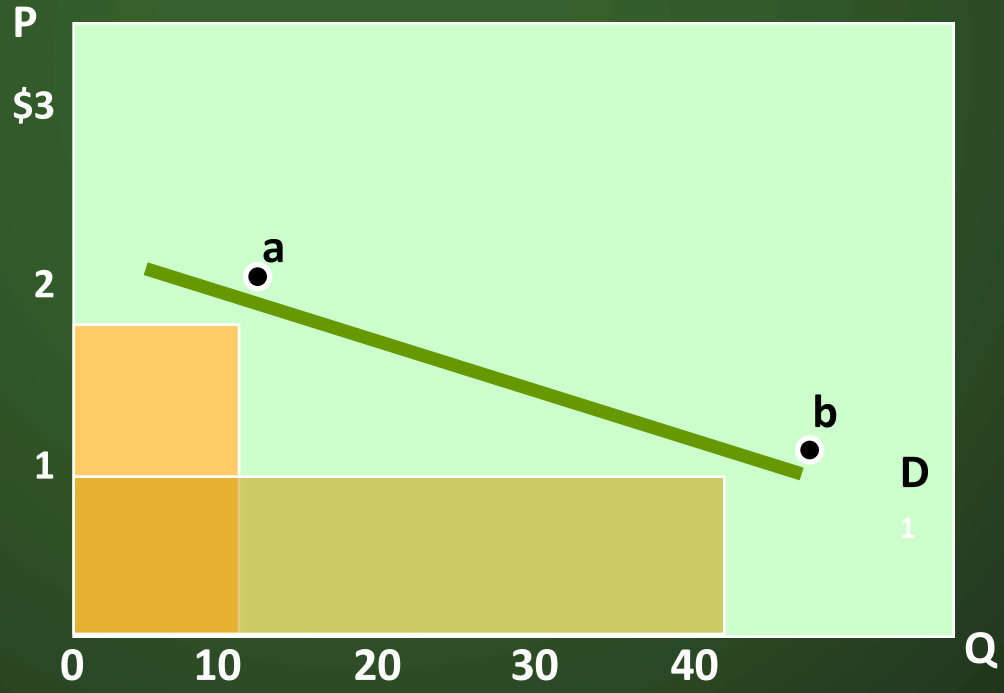
- Relatively **Inelastic** (large change in Price results in a small change in Q Demanded)

Determinants of Elasticity

- **Substitutability** (more substitutes = more elastic)
- **Proportion of Income** (larger the portion of income = more elastic)
- **Luxuries** (more elastic) versus Necessities (less elastic/inelastic)
- **Time** (more time = more elastic)

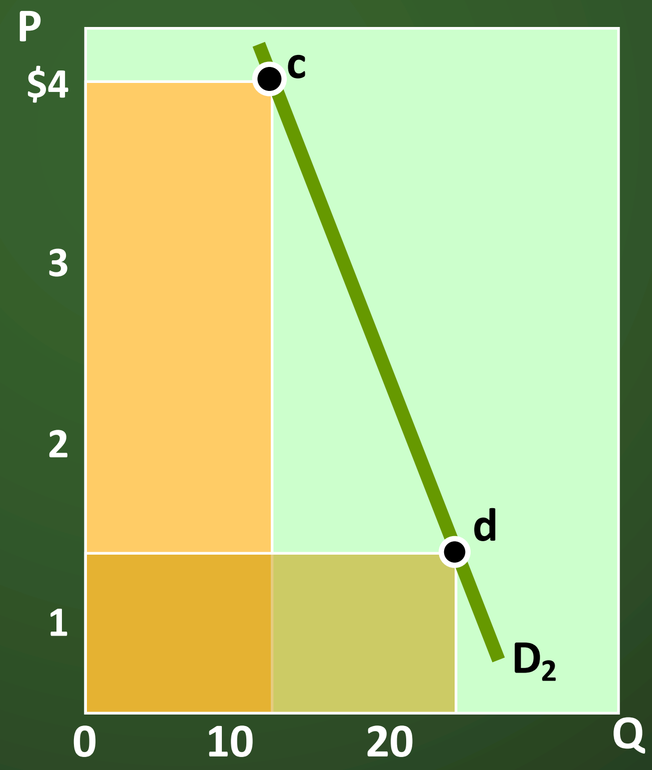
Relatively Elastic Demand

- **Total Revenue (TR)**
  TR = *P* x *Q*
  Elastic Demand *(lower prices = higher total revenue, higher prices = lower total revenue, Inverse relationship)*



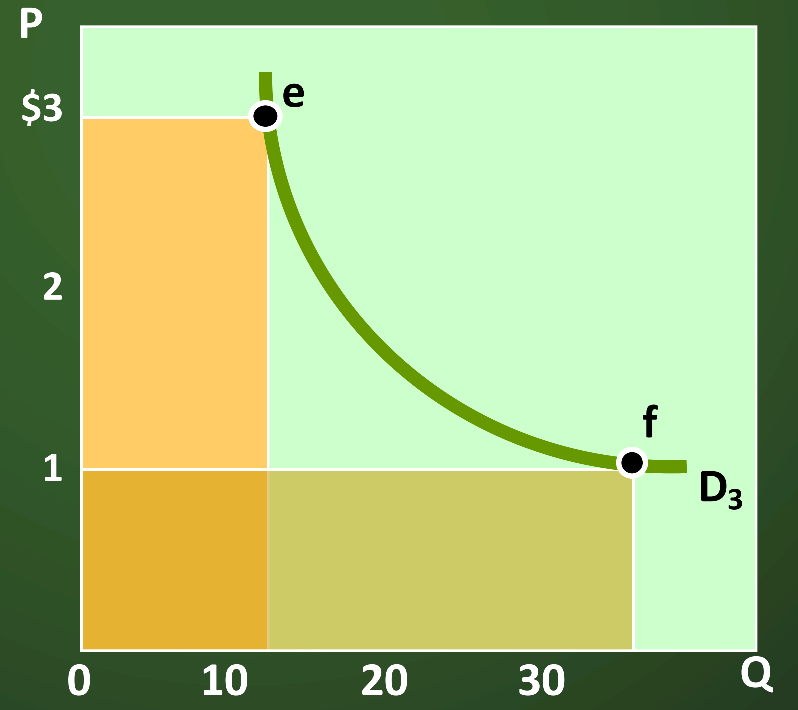
Relatively Inelastic Demand

- **Total Revenue (TR)**
  TR = *P* x *Q*
  Inelastic Demand *(lower prices = lower total revenue, higher prices = higher total revenue, direct relationship)*



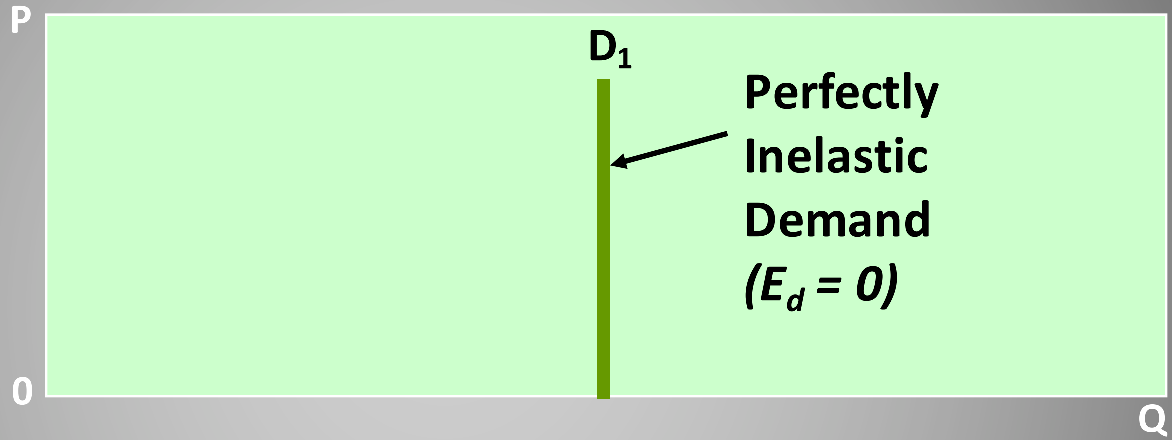
Unit Elasticity

- **Total Revenue** (TR)
  TR = *P* x *Q*
  Unit-Elastic *(changes in price do not change total revenue)*

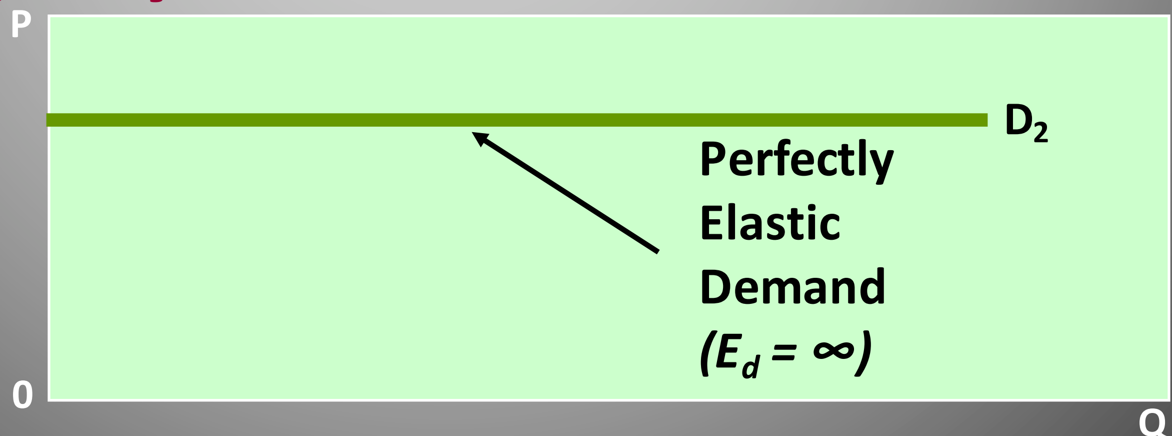


Price Elasticity of Demand
Extreme Cases

Perfectly Inelastic Demand



Perfectly Elastic Demand



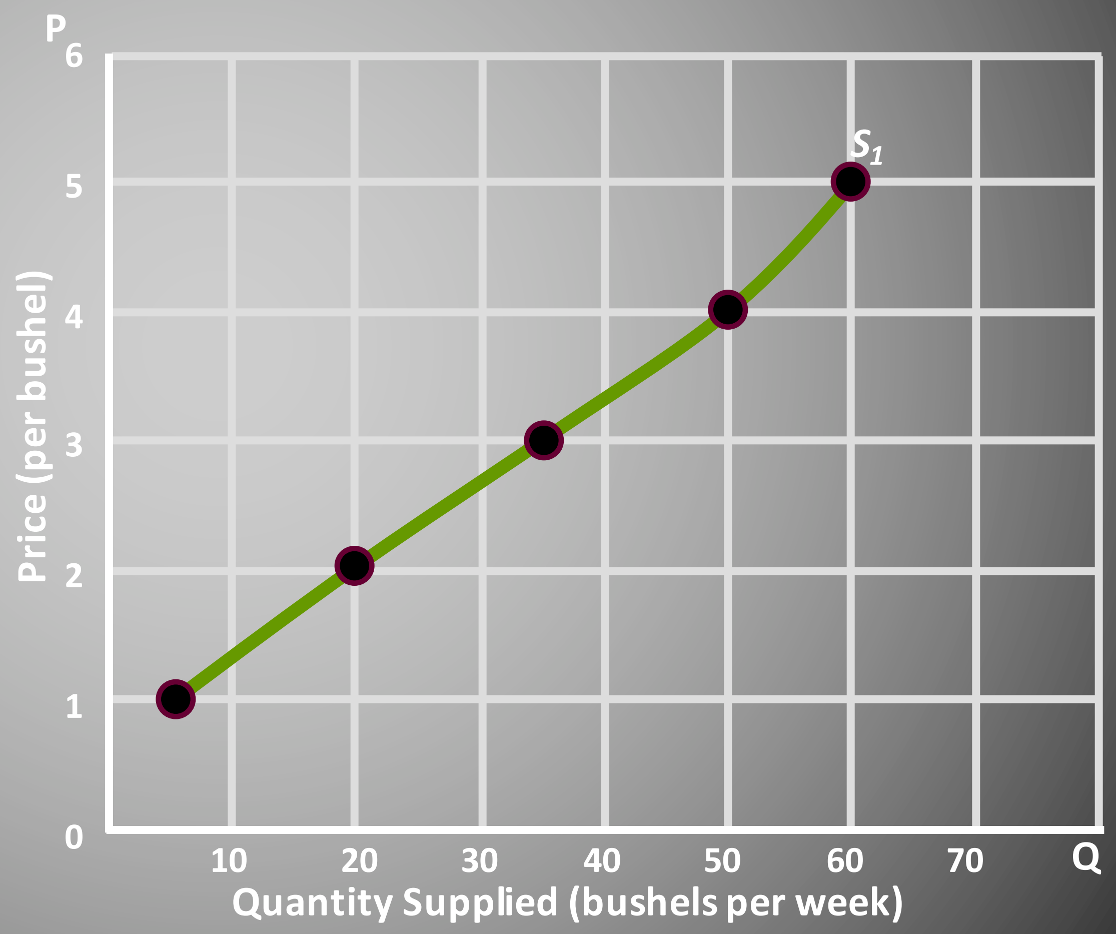
Supply

- <u>**Definition**</u> – amount of a product or service that producers are willing and able to make at various prices
- <u>**Supply Schedule**</u> – table/chart listing the quantities that will be produced at each price
- <u>**Supply Curve**</u> – a graph showing the various combinations of prices and quantities supplied
- <u>**Law of Supply**</u> – as prices rise, quantities supplied rise, as prices fall, quantities supplied fall (direct relationship)
    - A change in the price of a product results in a change in the ***QUANTITY SUPPLIED***! (it does ***NOT*** shift Supply)

Individual Supply

Individual Supply

P	Q_s
$5	60
4	50
3	35
2	20
1	5



Individual Supply

Determinants of Supply

(factors that cause a shift or a change in Supply)

- Resource Prices (inputs)
- Productivity
- Technology
- Taxes and Subsidies
- Government Regulation
- Producer Expectations
- Number of Sellers

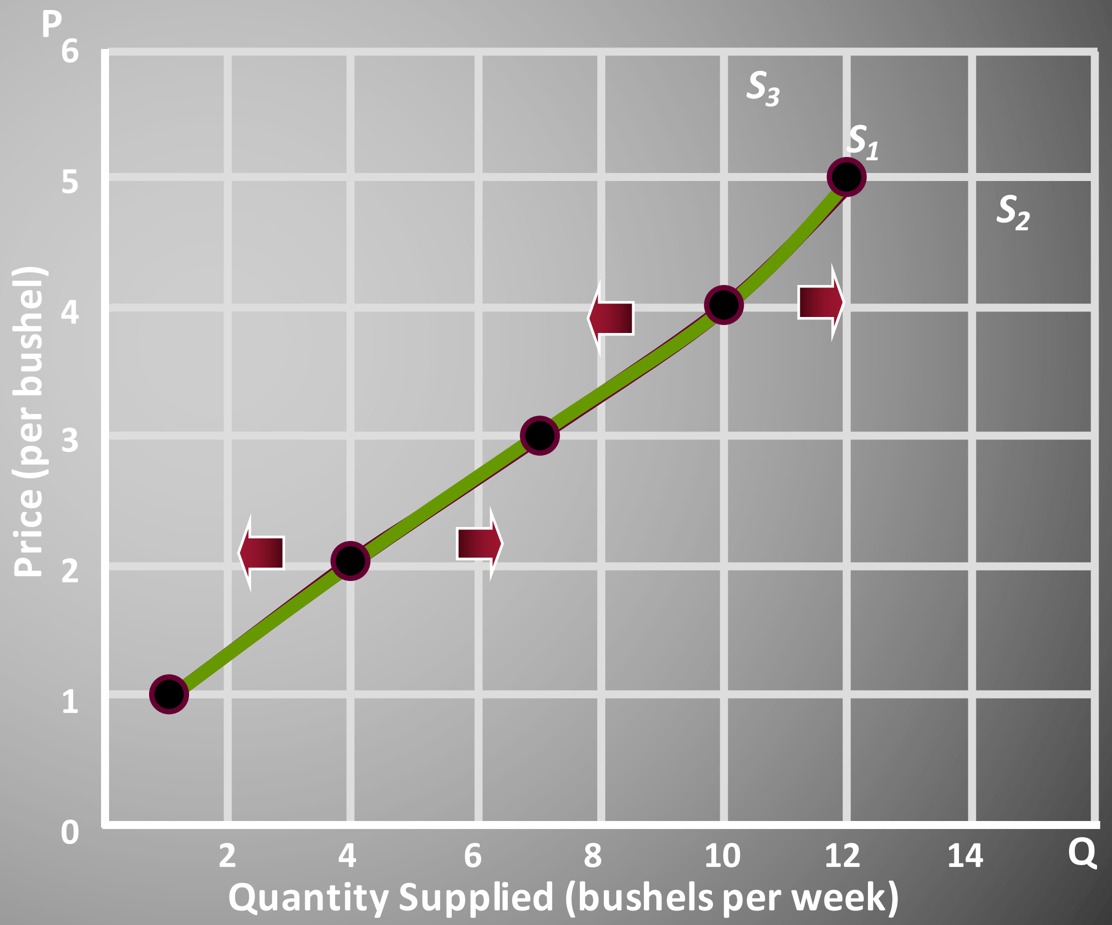
- If it becomes cheaper, easier, or faster to make products, then supply will increase
- If it becomes more difficult, more expensive, or slower to make products then Supply will decrease

Individual Supply

Supply Can Increase or Decrease

Individual Supply

P	Q_s
$5	60
4	50
3	35
2	20
1	5



Market Equilibrium

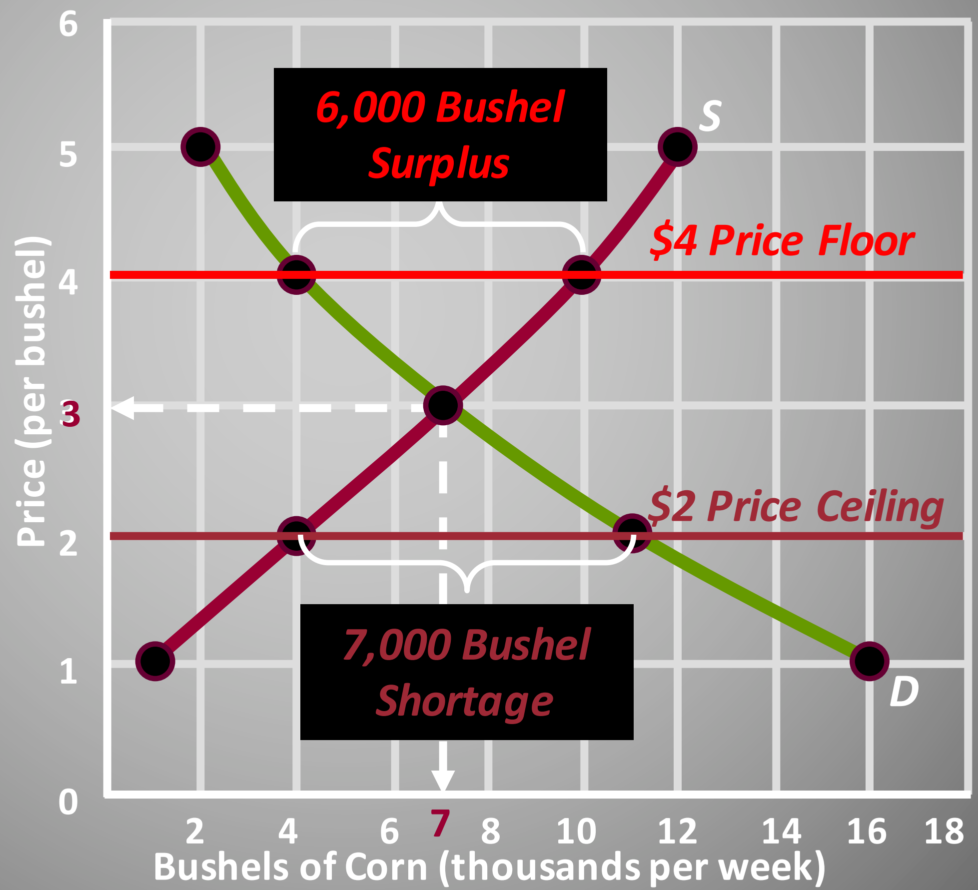
- **Equilibrium Price** – price where quantity demanded = quantity supplied
- **Equilibrium Quantity** – quantity where quantity demand =quantity supplied at the equilibrium price
- **Surplus** – when quantity supplied > quantity demanded (occurs at prices above equilibrium)
- **Shortage** – when quantity demanded > quantity supplied (occurs at prices below equilibrium)
- **Rationing Function of Prices** – the ability of the competitive forces in the market to bring the market to equilibrium

Market Equilibrium

200 Buyers & 200 Sellers

Market Demand 200 Buyers

P	Q_d
$5	2,000
4	4,000
3	7,000
2	11,000
1	16,000



Market Supply 200 Sellers

P	Q_s
$5	12,000
4	10,000
3	7,000
2	4,000
1	1,000

Government-Set Prices

- Price Ceilings on Gasoline
- Rationing Problem
- Black Markets
- Rent Controls
- Price Floors on Wheat
- Optimal Allocation of Resources