

# Economics Unit 2 Summary

**SSEMI1: Describe how households and businesses are interdependent and interact through flows of goods, services, resources, and money.**

Within an economy, there are sectors that have specific roles to play in economic activity. These sectors depend upon each other to play each role effectively. The two main sectors are households and businesses (firms). Households need businesses to purchase resources from them in exchange for income and to make goods and services for the households to purchase. Businesses need households to sell their resources to firms so they will have the inputs required to make goods and services. Business need households to purchase the goods and service they produce so the business can take in revenue (price times the quantity sold) and return a profit to the entrepreneur(s) who own the business. Businesses use money to pay households for their resources and households use the money they earned as income to purchase goods and services.

**a. Illustrate a circular flow diagram that includes the product market, the resource (factor) market, households, and firms.**

The **Circular Flow Diagram** is a model economists use to show the characteristics of and relationships that exist between households and businesses in the economy.

**Households**, in the **Resource Market** (factor market), are the owners of the productive resources (factors of production) in the circular flow model. They sell their land, labor, capital, and entrepreneurship to businesses (firms) in the Resources Market in exchange for income payments.

**Households**, in the **Product Market**, are consumers of goods and services in the circular flow model. They buy goods and services from businesses. They spend the income they earned in the Resource Market to buy these goods and services. Consumer “expenditures” is a fancy word for spending.

**Businesses** (firms) in the **Resource Market** are the consumers of the productive resources (factors of production) in the circular flow model. They purchase the use of land, labor, capital, and entrepreneurship from households in the Resource Market (Factor Market) using the revenue they earned in the product market.

**Businesses** (firms) in the **Product Market** are producers of goods and services in the circular flow model. They sell goods and services to households. They earn revenue in exchange for their goods and services.

**b. Explain the real flow of goods, services, resources, and money between and among households and firms.**

In the circular flow diagram below, businesses and households are the sectors of the economy located across from each other on the diagram. The resource and product markets are also located opposite from each other on the diagram. In between the sectors and markets, there are flows of goods and services, resources, and money payments.

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Businesses need productive resources in order to produce goods and services. They go to the resource market to buy productive resources from households. Wages, interest, rent, and profit flow from businesses to the resource market, becoming the flow of income from the resource market to the households. Land, labor, capital, and entrepreneurship flow from households through the resource market to the businesses.

On the other side of the diagram, households use their income for spending or “expenditures” in the product market. Spending flows from households to the product market becoming the revenue that flows from the product market to the businesses. Goods and services flow in the opposite direction from businesses to households through the product market.

It is important to note that the arrows on the inside of the diagram all flow in the same direction, making a circle. This is true for the arrows on the outside too which flow in the opposite direction from those on the inside. On the example diagram shown, notice that the inside circle flows are goods, services, or resources and the outside circle flows are all money payments.

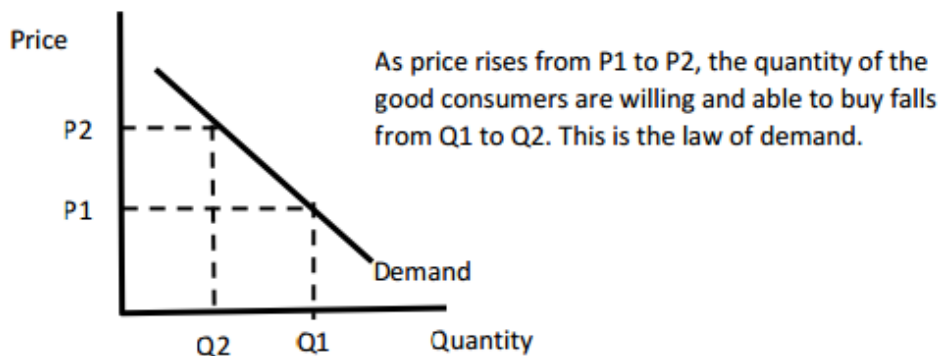
**SSEMI2 Explain how the law of demand, the law of supply, and prices work to determine production and distribution in a market economy.**

In a market economy, consumers decide what to produce, firms decide how to produce, and the price system decides who will get the items produced. Consumers of goods, services, and resources behave according to the law of demand. **Demand** is the quantity a consumer is willing and able to purchase at each price. The **law of demand** says that as the price of a good rises the quantity of the good consumers are willing and able to buy will decrease. **Supply** is the quantity a seller is willing and able to sell at each price. The **law of supply** says that as price rises the quantity a seller is willing and able to sell will increase. A market or equilibrium price is one where the quantity of a good that buyers are willing and able to buy matches the quantity of a good that producers are willing and able to sell. As the market/equilibrium price in the market changes, it sends signals to buyers and sellers about much they should be willing and able to buy and sell.

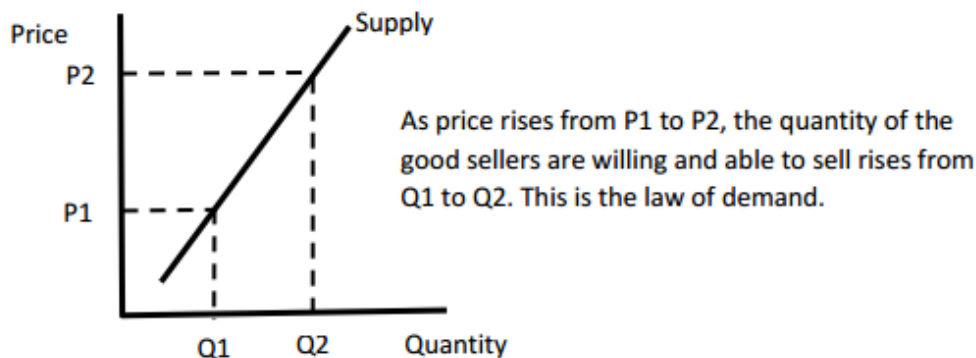
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## a. Define the law of supply and the law of demand.

The law of demand says that as the price of a good rises the quantity of the good consumers are willing and able to buy will decrease. The graph below illustrates this law.



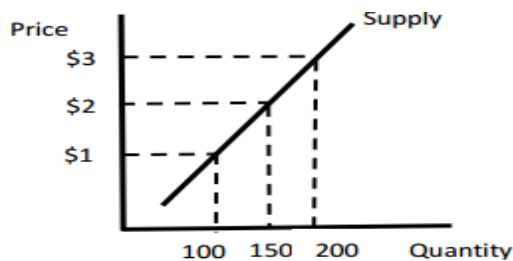
The **law of supply** says that as price rises the quantity a seller is willing and able to sell will increase. The graph below illustrates this law.



## b. Distinguish between supply and quantity supplied, and demand and quantity demanded.

The market **supply curve** refers to all the quantities of a good, service, or resource sellers are willing and able to sell at each price. The **quantity supplied** is the amount of a good, service, or resource sellers are willing and able to sell at one specific price. In the graph below, the quantity supplied at a price of \$1 is 100 units of the good. The market supply includes the quantities supplied at \$1, \$2, \$3, and all other prices found along the curve. The table in the example below is the **Supply Schedule** and provides the data you use to create a supply curve.

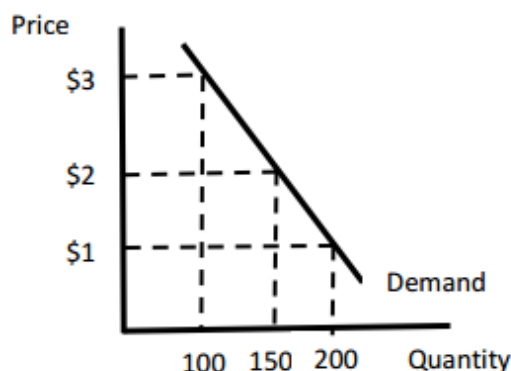
Price	Quantity Supplied
\$1	100
\$2	150
\$3	200



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The market **demand curve** refers to all the quantities of a good, service, or resource buyers are willing and able to buy at each price. The **quantity demanded** is the amount of a good, service, or resource buyers are willing and able to buy at one specific price. In the graph below, the quantity demanded at a price of \$1 is 200 units of the good. The market demand includes the quantities demanded at \$1, \$2, \$3, and all other prices found along the curve. The table in the example below is the **Demand Schedule** and provides the data you use to create a demand curve.

Price	Quantity Demanded
\$1	200
\$2	150
\$3	100



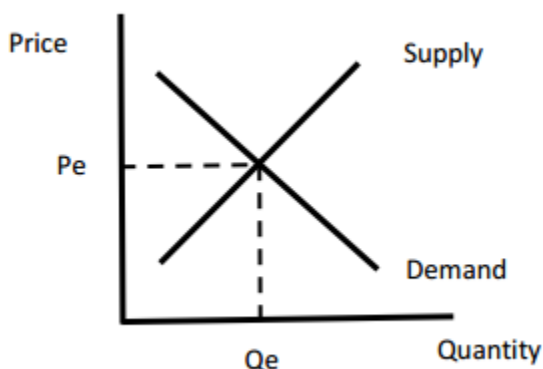
**c. Describe the role of buyers and sellers in determining market clearing price (i.e. equilibrium).**

The **market clearing** or **equilibrium price** is the point of intersection between the market demand curve and market supply curve. This is also the point at which the quantity demanded by consumers is equal to the quantity supplied by producers. Buyers help determine this price by buying a smaller quantity of a good when they view the price charged by sellers as too high. Sellers respond by lowering the price. When buyers perceive a price as lower than equilibrium price, they will buy all of the available items as quickly as possible. Sellers will notice they are having trouble keeping the item in stock or lack the capacity to provide as many services as consumers want. Sellers will raise the price of the product. Through these interactions between buyers and sellers, price will work its way toward equilibrium.

**d. Illustrate on a graph how supply and demand determine equilibrium price and quantity.**

To illustrate how supply and demand determine equilibrium price and quantity, start with a market graph. Draw a horizontal x-axis line and label it "Quantity". On the left end of your x-axis, draw a vertical line upward to create a y-axis and label it "Price". Create the demand curve by drawing a downward sloping 45-degree line from the top of the y-axis diagonally toward the right side of the x-axis. Label this curve "Demand". Create the supply curve by drawing an upward sloping 45-degree line from the bottom of the y-axis diagonally upward away from the origin of your graph. Label this curve "Supply". Find the place at which the demand curve crosses the supply curve. Draw a dotted horizontal line from the point of intersection to the left until it hits the y-axis. Label this y-axis value as "Pe". Return to the intersection of the supply and demand curve. Draw a dotted vertical line downward to the x-axis and label this x-axis value as "Qe". "Pe" is the equilibrium price in the market. "Qe" is the equilibrium quantity in the market as well as the quantity at which the quantity demanded is equal to the quantity supplied. The graph below illustrates the equilibrium in the market.

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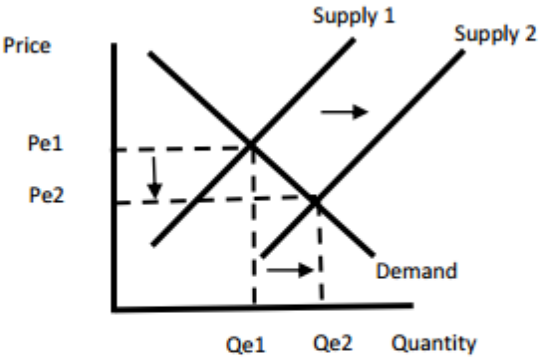
$P_e$  is the equilibrium price in the market.  $Q_e$  is the equilibrium quantity in the market. At a price of  $P_e$ , the quantity supplied in the market is equal to the quantity demanded.

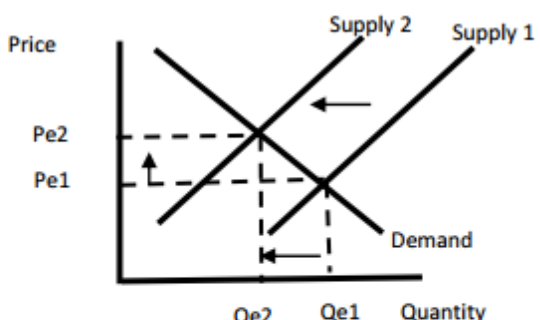
- e. Identify the determinants (shifTERS) of supply (e.g., changes in costs of productive resources, government regulations, number of sellers, producer expectations, technology, and education) and illustrate the effects on a supply and demand graph.

The **determinants** of supply describe the types of changes in a market that will cause the entire supply curve to move to the right or to the left. In other words, all sellers of a good, service, or productive resource will be willing and able to supply more or less of their product at all prices in the market. The shift will cause a change in the equilibrium price and equilibrium quantity in the market. The table below shows the effects of these changes on a supply and demand graph.

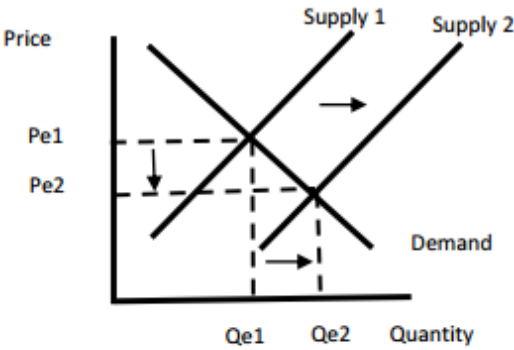
Change in the costs of productive resources	Effects of a Change in Supply on a Supply and Demand Graph
<p><b>Decrease in costs</b> - If the resources needed to produce a product become more less expensive, sellers will produce more and supply will increase and shift to the right.</p> <p>Example: If the cost of electricity used to power an automotive factories falls, the supply of cars in the market increases.</p> <p><b>Increase in Supply</b>  <b>Equilibrium Price Decreases</b>  <b>Equilibrium Quantity increases</b></p>	
<p><b>Increase in costs</b> – If the resources needed to produce a product become more expensive, sellers can produce less and supply will decrease and shift to the right.</p> <p>Example: If the price of peanuts rises, then the cost of making peanut butter will increase causing the supply of peanut butter to decrease.</p> <p><b>Decrease in Supply</b>  <b>Equilibrium Price Increase</b>  <b>Equilibrium Quantity Decreases</b></p>	

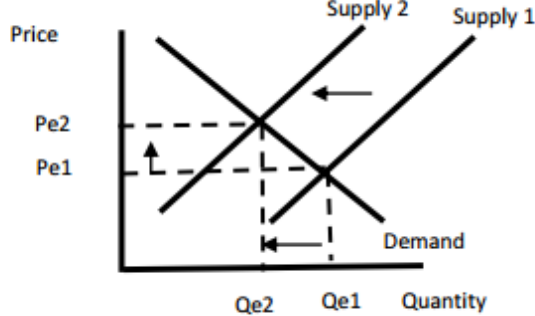
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Change in Government Regulations	Effects of a Change in Supply on a Supply and Demand Graph
<p><b>Decrease in Regulations</b> - If the government decreases the regulations on sellers in a market, sellers will produce more of the product and supply will shift to the right.</p> <p>Example: When the U.S. stopped controlling the fares and routes for air travel in 1978, airlines made decisions based on market factors, increasing the supply of flights and the price of air travel fell.</p> <p><b>Increase in Supply</b>  <b>Equilibrium Price Decreases</b>  <b>Equilibrium Quantity increases</b></p>	 <p>The graph shows a downward-sloping Demand curve and two upward-sloping supply curves, Supply 1 and Supply 2. Supply 2 is to the right of Supply 1, with an arrow indicating the shift. The initial equilibrium is at the intersection of Supply 1 and Demand, with price <math>P_{e1}</math> and quantity <math>Q_{e1}</math>. The new equilibrium is at the intersection of Supply 2 and Demand, with a lower price <math>P_{e2}</math> and a higher quantity <math>Q_{e2}</math>. Arrows indicate the shift in both price and quantity.</p>

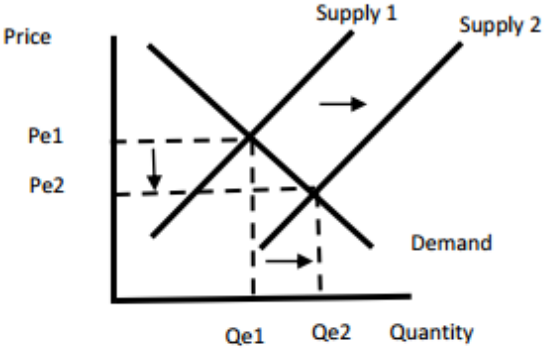
<p><b>Increase in Regulations</b> - If the government increases the regulations on sellers in a market, sellers will produce less of the product and supply will shift to the left.</p> <p>Example: If the government requires factories to reduce pollution, complying will initially increase costs of production in the market and reduce supply.</p> <p><b>Decrease in Supply</b>  <b>Equilibrium Price Increase</b>  <b>Equilibrium Quantity Decreases</b></p>	 <p>The graph shows a downward-sloping Demand curve and two upward-sloping supply curves, Supply 1 and Supply 2. Supply 2 is to the left of Supply 1, with an arrow indicating the shift. The initial equilibrium is at the intersection of Supply 1 and Demand, with price <math>P_{e1}</math> and quantity <math>Q_{e1}</math>. The new equilibrium is at the intersection of Supply 2 and Demand, with a higher price <math>P_{e2}</math> and a lower quantity <math>Q_{e2}</math>. Arrows indicate the shift in both price and quantity.</p>
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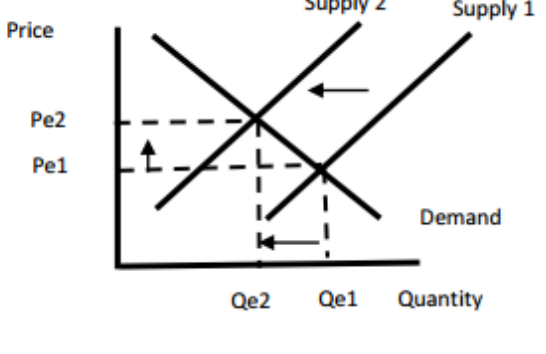
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Change in Number of Sellers	Effects of a Change in Supply on a Supply and Demand Graph
<p><b>Increase in the Number of Sellers</b> - If the number of sellers in the market increases, there will be more producers of the product, supply will increase and shift to the right.</p> <p>Example: The demand for pecans from people in China has increased which has increased the market price for pecans. This increased market price has attracted more farmers into the pecan market. As trees become productive, the supply of pecans will increase.</p> <p><b>Increase in Supply</b></p> <p><b>Equilibrium Price Decreases</b></p> <p><b>Equilibrium Quantity increases</b></p>	 <p>The graph shows a downward-sloping Demand curve and two upward-sloping supply curves, Supply 1 and Supply 2. Supply 2 is to the right of Supply 1, indicated by a rightward-pointing arrow. The initial equilibrium is at the intersection of Supply 1 and Demand, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. The new equilibrium is at the intersection of Supply 2 and Demand, with a lower price <math>Pe_2</math> and a higher quantity <math>Qe_2</math>. Dashed lines connect the equilibrium points to the axes. A downward arrow on the price axis and a rightward arrow on the quantity axis indicate the direction of change.</p>

<p><b>Decrease in the Number of Sellers</b> - If the number of sellers in the market decreases, there will be fewer producers of the product, supply will decrease and shift to the left.</p> <p>Example: As the demand for DVDs decreased due to consumer preference for streaming movies, the market price for DVDs fell. This lower market price caused sellers to leave the DVD market and supply decreased.</p> <p><b>Decrease in Supply</b></p> <p><b>Equilibrium Price Increase</b></p> <p><b>Equilibrium Quantity Decreases</b></p>	 <p>The graph shows a downward-sloping Demand curve and two upward-sloping supply curves, Supply 1 and Supply 2. Supply 2 is to the left of Supply 1, indicated by a leftward-pointing arrow. The initial equilibrium is at the intersection of Supply 1 and Demand, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. The new equilibrium is at the intersection of Supply 2 and Demand, with a higher price <math>Pe_2</math> and a lower quantity <math>Qe_2</math>. Dashed lines connect the equilibrium points to the axes. An upward arrow on the price axis and a leftward arrow on the quantity axis indicate the direction of change.</p>
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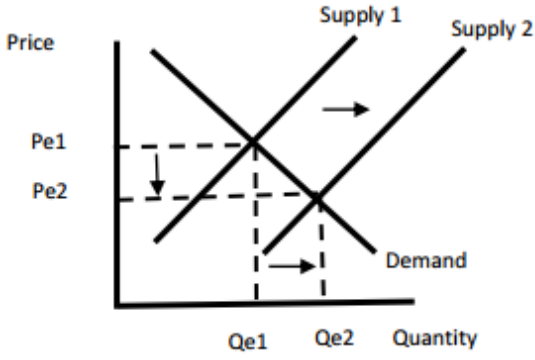
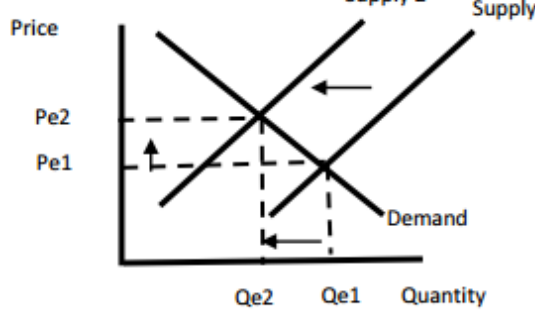
# Economics Unit 2 Summary

Change in Producer Expectations	Effects of a Change in Supply on a Supply and Demand Graph
<p><b>Producers expect the price of their product to fall in the future</b> - If producers expect the price of their product to fall in the future, they will supply more in the present while the market price is higher. This will cause supply to increase and shift to the right.</p> <p>Example: If airlines expect prices for airline tickets to fall in September when families are less likely to travel due the school calendar, they will supply more during the summer months when they can charge higher fares.</p> <p><b>Increase in Supply</b>  <b>Equilibrium Price Decreases</b>  <b>Equilibrium Quantity increases</b></p>	 <p>The graph shows a downward-sloping Demand curve and two upward-sloping Supply curves. Supply 1 is the initial supply curve, and Supply 2 is the new supply curve shifted to the right. The initial equilibrium is at the intersection of Supply 1 and Demand, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. The new equilibrium is at the intersection of Supply 2 and Demand, with a lower price <math>Pe_2</math> and a higher quantity <math>Qe_2</math>. Arrows indicate the rightward shift of the supply curve and the resulting changes in price and quantity.</p>

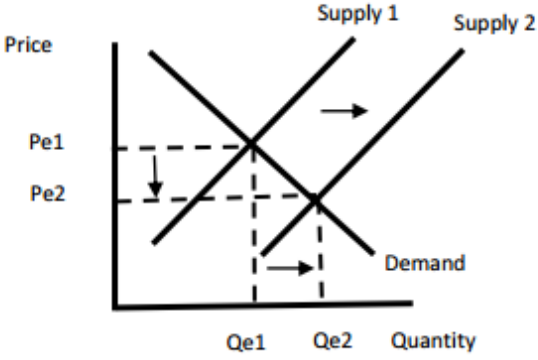
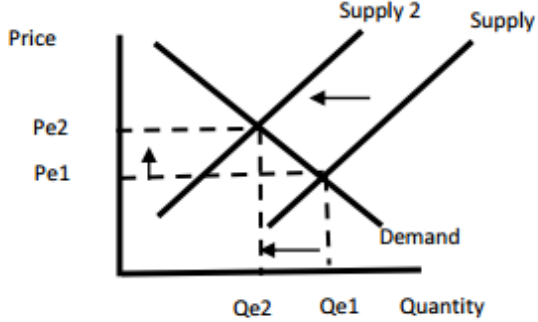
<p><b>Producers expect the price of their product to rise in the future</b> - If producers expect the price of their product to rise in the future, they will supply less in the present and wait for the price to rise. This will cause supply to decrease and shift to the left.</p> <p>Example: If producers expect consumers to be willing to pay a higher price for candy during holidays like Halloween, they will supply less now and put their efforts into producing for the period preceding the holiday when the price is higher.</p> <p><b>Decrease in Supply</b>  <b>Equilibrium Price Increase</b>  <b>Equilibrium Quantity Decreases</b></p>	 <p>The graph shows a downward-sloping Demand curve and two upward-sloping Supply curves. Supply 1 is the initial supply curve, and Supply 2 is the new supply curve shifted to the left. The initial equilibrium is at the intersection of Supply 1 and Demand, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. The new equilibrium is at the intersection of Supply 2 and Demand, with a higher price <math>Pe_2</math> and a lower quantity <math>Qe_2</math>. Arrows indicate the leftward shift of the supply curve and the resulting changes in price and quantity.</p>
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Change in Technology	Effects of a Change in Supply on a Supply and Demand Graph
<p><b>Production Technology used to produce a product improves</b> - If producers implement new, more efficient technology in the production process, supply will increase and shift to the right.</p> <p>Examples: When auto manufacturer were able to implement robotics on the production line, automobiles were produced more quickly and at a smaller cost per unit. This allowed the industry to supply more cars.</p> <p><b>Increase in Supply</b>  <b>Equilibrium Price Decreases</b>  <b>Equilibrium Quantity increases</b></p>	 <p>The graph shows a downward-sloping Demand curve and two upward-sloping supply curves, Supply 1 and Supply 2. Supply 2 is to the right of Supply 1, indicating an increase in supply. The initial equilibrium is at the intersection of Supply 1 and Demand, with price <math>Pe1</math> and quantity <math>Qe1</math>. The new equilibrium is at the intersection of Supply 2 and Demand, with a lower price <math>Pe2</math> and a higher quantity <math>Qe2</math>. Arrows indicate the rightward shift of the supply curve and the resulting changes in price and quantity.</p>
<p><b>Production Technology, used to produce a product, declines</b> – This scenario is unusual. This could occur if a natural or cyber disaster destroyed access to production technology for a large number of the market's producers at one time or if a defect in production technology affects many producers all at one time. If producers lose the benefits of production technology, supply decreases and shifts to the left.</p> <p>Example: If a cyberattack interfered with the GPS on which farmers rely to monitor and service their fields for a significant amount of time.</p> <p><b>Decrease in Supply</b>  <b>Equilibrium Price Increase</b>  <b>Equilibrium Quantity Decreases</b></p>	 <p>The graph shows a downward-sloping Demand curve and two upward-sloping supply curves, Supply 1 and Supply 2. Supply 2 is to the left of Supply 1, indicating a decrease in supply. The initial equilibrium is at the intersection of Supply 1 and Demand, with price <math>Pe1</math> and quantity <math>Qe1</math>. The new equilibrium is at the intersection of Supply 2 and Demand, with a higher price <math>Pe2</math> and a lower quantity <math>Qe2</math>. Arrows indicate the leftward shift of the supply curve and the resulting changes in price and quantity.</p>

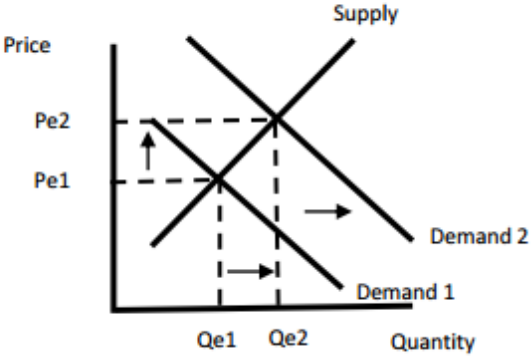
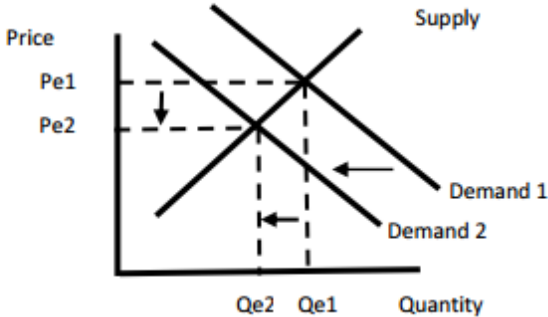
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Change in Education	Effects of a Change in Supply on a Supply and Demand Graph
<p><b>Education of the workers in a market improves</b> - If many workers in a market improve their education, knowledge, and skills related to the production process, their labor productivity will increase. As a result supply will increase and shift to the right.</p> <p>Example: Workers train on a new software package that will increase productivity in the market and allow supply to increase.</p> <p><b>Increase in Supply</b>  <b>Equilibrium Price Decreases</b>  <b>Equilibrium Quantity increases</b></p>	 <p>The graph shows a downward-sloping Demand curve and two upward-sloping supply curves, Supply 1 and Supply 2. Supply 2 is to the right of Supply 1, as indicated by a rightward-pointing arrow. The initial equilibrium is at the intersection of Supply 1 and Demand, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. The new equilibrium is at the intersection of Supply 2 and Demand, with a lower price <math>Pe_2</math> and a higher quantity <math>Qe_2</math>. Dashed lines connect the equilibrium points to the axes. A downward arrow on the price axis and a rightward arrow on the quantity axis indicate the direction of change.</p>
<p><b>Education of the workers in a market declines</b> - If the education, knowledge, and skills of many workers in a market declines, their labor productivity will decrease. As a result supply will decrease and shift to the left.</p> <p>Example: An economic boom allows skilled workers to move from fast food jobs into white collar office administration jobs. Fast food producers are forced to hire less skilled workers and supply of fast food decreases.</p> <p><b>Decrease in Supply</b>  <b>Equilibrium Price Increase</b>  <b>Equilibrium Quantity Decreases</b></p>	 <p>The graph shows a downward-sloping Demand curve and two upward-sloping supply curves, Supply 1 and Supply 2. Supply 2 is to the left of Supply 1, as indicated by a leftward-pointing arrow. The initial equilibrium is at the intersection of Supply 1 and Demand, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. The new equilibrium is at the intersection of Supply 2 and Demand, with a higher price <math>Pe_2</math> and a lower quantity <math>Qe_2</math>. Dashed lines connect the equilibrium points to the axes. An upward arrow on the price axis and a leftward arrow on the quantity axis indicate the direction of change.</p>

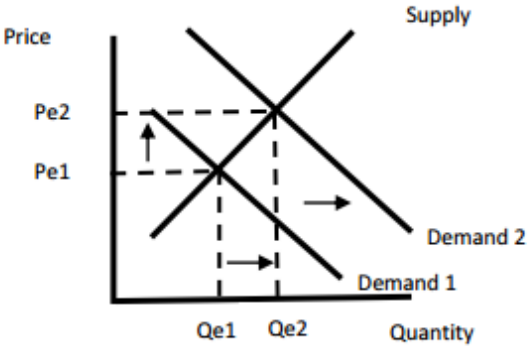
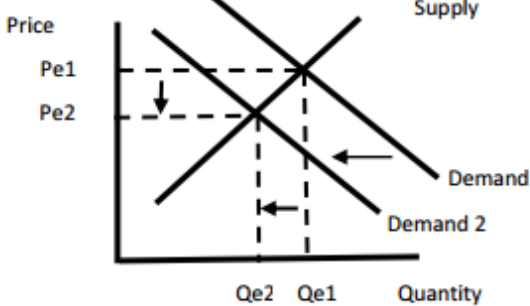
f. Identify the determinants (shifters) of demand (e.g., changes in related goods, income, consumer expectations, preferences/tastes, and number of consumers) and illustrate the effects on a supply and demand graph.

The **determinants of demand** describe the types of changes in a market that will cause the entire demand curve to move to the right or to the left. In other words, all consumers of a good, service, or productive resource will be willing and able to purchase more or less of a product at all prices in the market. The shift will cause a change in the equilibrium price and equilibrium quantity in the market. The table below shows the effects of these changes on a supply and demand graph.

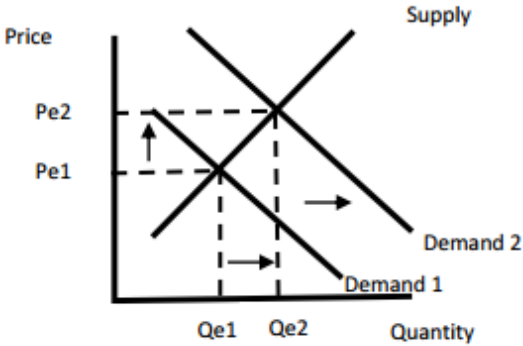
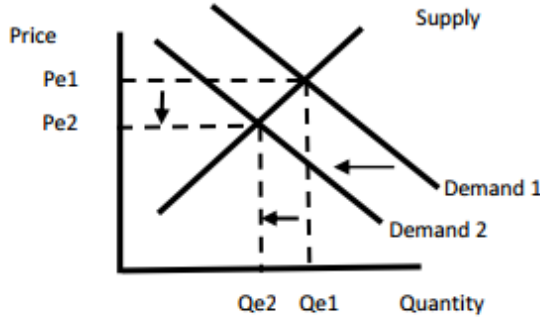
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Change in Price of Related Goods	Effects of a Change in Demand on a Supply and Demand Graph
<p><b>Decrease in the Price of a Complementary Good</b> - If the price of a good, service, or resource that is consumed with the product in this market falls, then the demand for the product in this market will rise and shift to the right.</p> <p>Example: When the price of cream cheese falls, the demand for bagels will increase.</p> <p><b>Increase in Demand</b></p> <p><b>Equilibrium Price Increases</b></p> <p><b>Equilibrium Quantity increases</b></p>	 <p>The graph shows a supply curve and two demand curves, Demand 1 and Demand 2. Demand 2 is shifted to the right of Demand 1. The equilibrium price increases from <math>Pe_1</math> to <math>Pe_2</math>, and the equilibrium quantity increases from <math>Qe_1</math> to <math>Qe_2</math>.</p>
<p><b>Decrease in the Price of a Complementary Good</b> - If the price of a good, service, or resource that is consumed with the product in this market rises, then the demand for the product in this market will fall and shift to the left.</p> <p>Example: When the price of peanut butter increases, the demand for jelly will decrease.</p> <p><b>Decrease in Demand</b></p> <p><b>Equilibrium Price Decreases</b></p> <p><b>Equilibrium Quantity Decreases</b></p>	 <p>The graph shows a supply curve and two demand curves, Demand 1 and Demand 2. Demand 2 is shifted to the left of Demand 1. The equilibrium price decreases from <math>Pe_1</math> to <math>Pe_2</math>, and the equilibrium quantity decreases from <math>Qe_1</math> to <math>Qe_2</math>.</p>

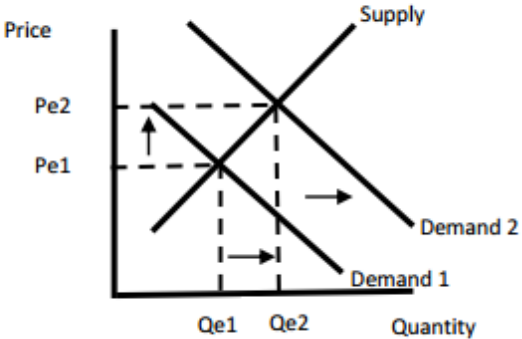
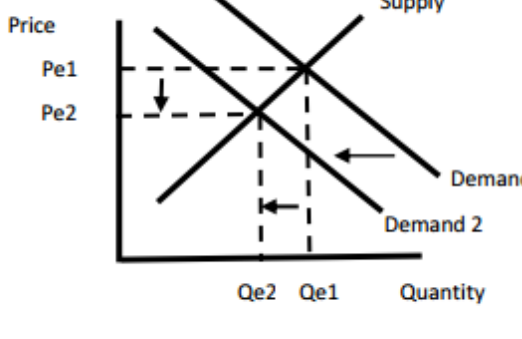
# Economics Unit 2 Summary

Change in Price of Related Goods	Effects of a Change in Demand on a Supply and Demand Graph
<p><b>Increase in the Price of a Substitute Good</b> - If the price of a good, service, or resource that is consumed in place of the product in this market rises, then the demand for the product in this market will rise and shift to the right.</p> <p>Example: When the price of black bean veggie burgers rises, the demand for tofu veggie burgers will increase.</p> <p><b>Increase in Demand</b></p> <p><b>Equilibrium Price Increases</b></p> <p><b>Equilibrium Quantity increases</b></p>	 <p>The graph shows a supply curve (upward sloping) and two demand curves (downward sloping). The initial equilibrium is at the intersection of Supply and Demand 1, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. A shift to Demand 2 moves the equilibrium to a higher price <math>Pe_2</math> and a higher quantity <math>Qe_2</math>. Arrows indicate the rightward shift of the demand curve and the resulting changes in price and quantity.</p>
<p><b>Decrease in the Price of a Substitute Good</b> - If the price of a good, service, or resource that is consumed in place of the product in this market decreases, then the demand for the product in this market will fall and shift to the left.</p> <p>Example: When the price of coffee falls, the demand for tea will decrease.</p> <p><b>Decrease in Demand</b></p> <p><b>Equilibrium Price Decreases</b></p> <p><b>Equilibrium Quantity Decreases</b></p>	 <p>The graph shows a supply curve (upward sloping) and two demand curves (downward sloping). The initial equilibrium is at the intersection of Supply and Demand 1, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. A shift to Demand 2 moves the equilibrium to a lower price <math>Pe_2</math> and a lower quantity <math>Qe_2</math>. Arrows indicate the leftward shift of the demand curve and the resulting changes in price and quantity.</p>

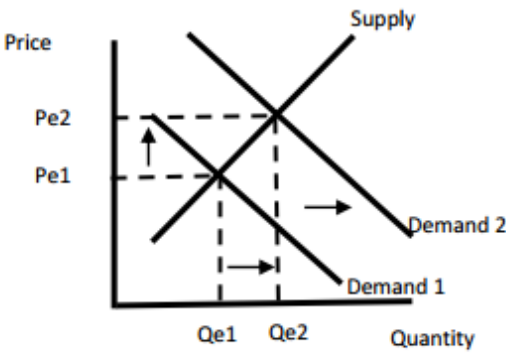
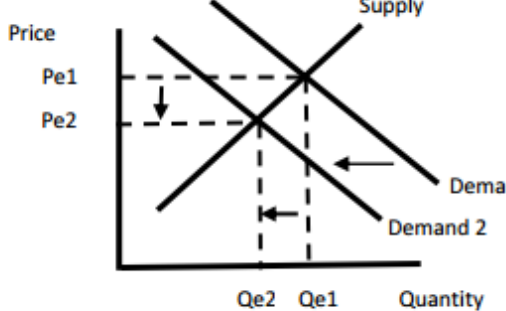
# Economics Unit 2 Summary

Change Consumer Income	Effects of a Change in Demand on a Supply and Demand Graph
<p><b>Increase in Consumer Income</b> – If consumers in a market for a normal good have an increase in income, then the demand for the product in this market will rise and shift to the right.</p> <p>Example: If the government decides to lower income tax rates, consumers will have more disposable income to spend on goods and services and demand will increase.</p> <p><b>Increase in Demand</b></p> <p><b>Equilibrium Price Increases</b></p> <p><b>Equilibrium Quantity increases</b></p>	 <p>The graph shows a supply curve (upward sloping) and two demand curves (downward sloping). The initial equilibrium is at the intersection of Supply and Demand 1, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. A shift to Demand 2 moves the equilibrium to a higher price <math>Pe_2</math> and a higher quantity <math>Qe_2</math>. Arrows indicate the rightward shift of the demand curve and the resulting changes in price and quantity.</p>
<p><b>Decrease in Consumer Income</b> - If the income of consumers in the market for a normal good falls, then the demand for the product in this market will fall and shift to the left.</p> <p>Example: During an economic recession, workers may take pay cuts or lose their from a job loss. If a worker's income falls, he or she will have less to spend on goods and services. The demand for the product will decrease.</p> <p><b>Decrease in Demand</b></p> <p><b>Equilibrium Price Decreases</b></p> <p><b>Equilibrium Quantity Decreases</b></p>	 <p>The graph shows a supply curve (upward sloping) and two demand curves (downward sloping). The initial equilibrium is at the intersection of Supply and Demand 1, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. A shift to Demand 2 moves the equilibrium to a lower price <math>Pe_2</math> and a lower quantity <math>Qe_2</math>. Arrows indicate the leftward shift of the demand curve and the resulting changes in price and quantity.</p>

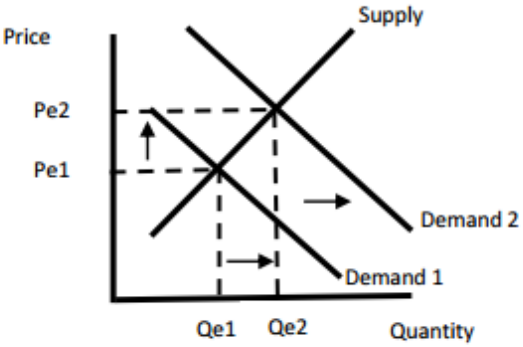
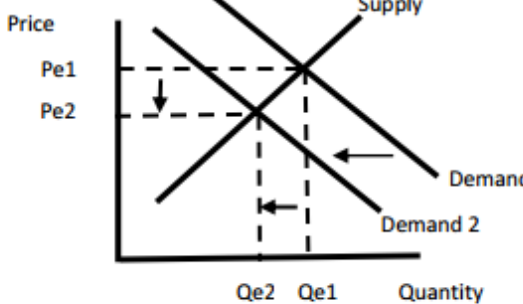
# Economics Unit 2 Summary

Change Consumer Expectations	Effects of a Change in Demand on a Supply and Demand Graph
<p><b>Consumers expect the price of a product to rise in the future</b> - If consumers expect the price of a product to rise in the future, they will demand more in the present before the price rises. This will cause demand to increase and shift to the right.</p> <p>Example: If consumers expect producers to charge higher prices for candy during holidays like Halloween, some consumers will purchase candy early before prices rise for the holiday.</p> <p><b>Increase in Demand</b>  <b>Equilibrium Price Increase</b>  <b>Equilibrium Quantity Increases</b></p>	 <p>The graph shows a supply curve and two demand curves, Demand 1 and Demand 2. Demand 2 is shifted to the right of Demand 1. The supply curve is upward sloping. The initial equilibrium is at the intersection of Supply and Demand 1, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. The new equilibrium is at the intersection of Supply and Demand 2, with a higher price <math>Pe_2</math> and a higher quantity <math>Qe_2</math>. Arrows indicate the rightward shift of the demand curve and the upward and rightward movement of the equilibrium point.</p>
<p><b>Consumers expect the price of a product to fall in the future</b> - If consumers expect the price of a product to fall in the future, they will demand less in the present while the market price is higher. This will cause demand to decrease and shift to the left.</p> <p>Example: If consumers expect prices for airline tickets to fall in September when families are less likely to travel due the school calendar, consumers who can travel any time will demand fewer tickets during the summer months when prices are high.</p> <p><b>Decrease in Demand</b>  <b>Equilibrium Price Decreases</b>  <b>Equilibrium Quantity Decreases</b></p>	 <p>The graph shows a supply curve and two demand curves, Demand 1 and Demand 2. Demand 2 is shifted to the left of Demand 1. The supply curve is upward sloping. The initial equilibrium is at the intersection of Supply and Demand 1, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. The new equilibrium is at the intersection of Supply and Demand 2, with a lower price <math>Pe_2</math> and a lower quantity <math>Qe_2</math>. Arrows indicate the leftward shift of the demand curve and the downward and leftward movement of the equilibrium point.</p>

# Economics Unit 2 Summary

Change Consumer Tastes/Preferences	Effects of a Change in Demand on a Supply and Demand Graph
<p><b>Increase in Consumer Taste for a Product</b> – If consumers in a market for a good or service have an increase in their taste for that product, then the demand for the product in this market will rise and shift to the right.</p> <p>Example: If researchers publish a study concluding that eating a grapefruit every day causes people to lose weight, there will be an increase in taste for grapefruit and demand will increase.</p> <p><b>Increase in Demand</b></p> <p><b>Equilibrium Price Increases</b></p> <p><b>Equilibrium Quantity increases</b></p>	 <p>The graph shows a supply curve (upward sloping) and two demand curves (downward sloping). The initial equilibrium is at the intersection of Supply and Demand 1, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. A shift to Demand 2 moves the equilibrium to a higher price <math>Pe_2</math> and a higher quantity <math>Qe_2</math>. Arrows indicate the rightward shift of the demand curve and the resulting changes in price and quantity.</p>
<p><b>Decrease in Consumer Taste for a Product</b> – If consumers in a market for a good or service have a decrease taste for a product, then the demand for the product in this market will rise and shift to the right.</p> <p>Example: A series of airplane crashes will decrease consumer taste for air travel and demand will decrease.</p> <p><b>Decrease in Demand</b></p> <p><b>Equilibrium Price Decreases</b></p> <p><b>Equilibrium Quantity Decreases</b></p>	 <p>The graph shows a supply curve (upward sloping) and two demand curves (downward sloping). The initial equilibrium is at the intersection of Supply and Demand 1, with price <math>Pe_1</math> and quantity <math>Qe_1</math>. A shift to Demand 2 moves the equilibrium to a lower price <math>Pe_2</math> and a lower quantity <math>Qe_2</math>. Arrows indicate the leftward shift of the demand curve and the resulting changes in price and quantity.</p>

# Economics Unit 2 Summary

Change in Number of Consumers in the Market	Effects of a Change in Demand on a Supply and Demand Graph
<p><b>Increase in Consumers in the Market</b>                      – If more consumers enter the market for a product, then the demand for the product in this market will rise and shift to the right.</p> <p>Example: As the number of Americans connected to the internet has risen, the number of consumers in the market for online retail has increased and demand has increased.</p> <p><b>Increase in Demand</b></p> <p><b>Equilibrium Price Increases</b></p> <p><b>Equilibrium Quantity increases</b></p>	 <p>The graph shows a supply curve and two demand curves, Demand 1 and Demand 2. Demand 2 is shifted to the right of Demand 1. The supply curve is upward sloping. The equilibrium price increases from <math>Pe_1</math> to <math>Pe_2</math>, and the equilibrium quantity increases from <math>Qe_1</math> to <math>Qe_2</math>.</p>
<p><b>Decrease in Consumers in the Market</b>                      – If consumers leave the market for a product, then the demand for the product in this market will fall and shift to the left.</p> <p>Example: As ride and room sharing apps have expanded, the number of consumers in the traditional taxi and hotel markets has decreased, decreasing demand for these services.</p> <p><b>Decrease in Demand</b></p> <p><b>Equilibrium Price Decreases</b></p> <p><b>Equilibrium Quantity Decreases</b></p>	 <p>The graph shows a supply curve and two demand curves, Demand 1 and Demand 2. Demand 2 is shifted to the left of Demand 1. The supply curve is upward sloping. The equilibrium price decreases from <math>Pe_1</math> to <math>Pe_2</math>, and the equilibrium quantity decreases from <math>Qe_1</math> to <math>Qe_2</math>.</p>

**g. Explain and illustrate on a graph how prices set too high (e.g., price floors) create surpluses, and prices set too low (e.g., price ceilings) create shortages.**

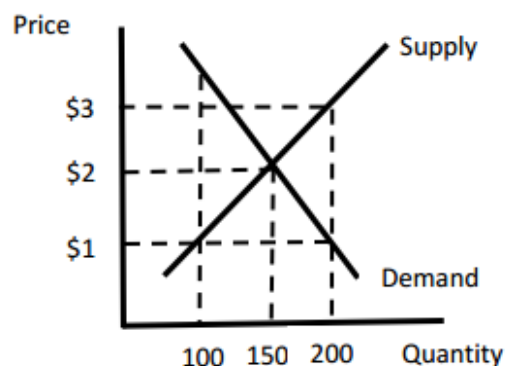
In some limited circumstances, governments or producers will choose to set a market price rather than allow the forces of supply and demand to determine the market price. A price set above equilibrium price is a **Price Floor**. A price set below equilibrium price is a **Price Ceiling**. Since these set prices are above or below equilibrium, the quantity supplied will not equal the quantity demanded in the market. Since price floors are above equilibrium, there will be a larger quantity supplied than there is a quantity demanded. When quantity supplied is greater than the quantity demanded, there is a surplus of the product in the market. Since price ceilings are below equilibrium, there will be a larger quantity demanded than there is a quantity supplied. When quantity supplied is less than the quantity demanded, there is a shortage of the product in the market. In the example below, the demand and



## Economics Unit 2 Summary

supply schedule table shows that equilibrium price is \$2.00. This price is the one at which the quantity demanded is equal to the quantity supplied. If price is legally set at \$1.00, this is a price ceiling. Under this condition, the quantity demanded is greater than the quantity supplied and there is a 100-unit shortage in the market. If price is legally set at \$3.00, this is a price floor. Under this condition, the quantity demanded is less than the quantity supplied and there is a 100-unit surplus in the market.

Price	Quantity Demanded	Quantity Supplied	Condition in the Market
\$1	200	100	100-unit Shortage
\$2	150	150	Equilibrium
\$3	100	200	100-unit Surplus



**SSEMI3: Explain the organization and role of business and analyze the four types of market structures in the U.S. economy.**

In the U.S. economy, businesses have a variety of forms under which they establish themselves. The form of business organization a firm uses affects who owns the business, the liability the business owners have for debts of the business, the life of the business, its decision-making process and the type of taxation it experiences. The role of businesses in the U.S. economy includes producing goods and services for consumers, buying productive resources from households, paying income to households in exchange for their resources, borrowing money in the financial markets, making charitable contributions to community organizations, and paying taxes to local, state, and/or federal governments.

The four types of market structures are economic models describing the nature of competition among firms in an industry and include **perfect (pure) competition**, **monopolistic competition**, **oligopoly**, and **monopoly**. When analyzing the markets in which firms compete, economists consider the following factors: the number of sellers in the market, the conditions restricting new firms from entering the market (barriers to entry), the amount of control individual firms have over the price of their product, and the likelihood of individual firms allocating funds to marketing their product.

- a. **Compare and contrast three forms of business organization—sole proprietorship, partnership, and corporation with regards to number of owners, liability, lifespan, decision making, and taxation.**

**Sole proprietorships** are firms legally owned by only one person. **Partnerships** are firms legally owned by two or more people. **Corporations** are firms legally owned by stockholders who have purchased “shares” of the company in the hope that the value of their shares will increase over time and pay dividends. Dividends are money payments distributing some of a firm’s profit to shareholders on a quarterly basis. While sole proprietorship, partnerships, and corporations are the three main ways to organize a business in the U.S., students should understand that there are many variations of these forms in real life with complex rules. The following chart provides a comparison of the three basic types

# Economics Unit 2 Summary

of business organization. **Liability** refers to responsibility for paying the debts of the business. Unlimited liability means that if a business is unable to meet its financial obligations, the owner(s) of the business are personally responsible to pay those debts. This means the owner(s) could be required to liquidate personal assets such as their home to pay the debts of the company. Limited liability is when responsibility for the debts of the business are restricted to the ownership stake (shares of stock) the business owner owns. The personal assets of the shareholder are not in jeopardy. **Lifespan** of the business refers to what happens to the business when an owner leaves or dies. Limited life means the business closing or reorganizing a business under the new owner(s) when the previous owner(s) leave the business. Unlimited life means the business passes to new owners through the sale of shares without ending the business. **Decision making** refers to the entity responsible for the day-to-day operating decisions of the business. The way a business is organized affects **taxation** on the profits of the business. Sole proprietorships and partnerships face a single tax on their business profits as income. The amount of income they earn from their business will determine the income tax rate charged. Corporations must also pay corporate income tax on profits. The profit income distributed to shareholders in the form dividends is also taxed. This is double taxation.

Type of Business Organization	How many owners are there?	What type of liability do owners have?	What is the lifespan of the business?	Who makes the operating decisions?	What type of taxation do owners have?
<b>Sole Proprietorship</b>	One	Unlimited	Limited	Owner	Single
<b>Partnership</b>	Two or more	Unlimited	Limited	Owners	Single
<b>Corporation</b>	Determined by who owns shares of the corporation's stock	Limited	Unlimited	Board of Directors elected by shareholders; Professional Managers and Employees	Double

Although not expressly required by this element, you may want to categorize these characteristics of the types of business organization into advantages and disadvantages. The following chart accomplishes this task and includes some other key comparisons.

Sole Proprietorship	Partnership	Corporation
<b>Advantages</b>		
<ul style="list-style-type: none"> <li>• Keep all profits</li> <li>• Make all decisions</li> <li>• Easy to start</li> </ul>	<ul style="list-style-type: none"> <li>• Easy to start</li> <li>• Can benefit from specialization</li> <li>• More access to start-up money than sole proprietorships</li> </ul>	<ul style="list-style-type: none"> <li>• Access to large amounts of funds for expansion</li> <li>• Can grow large and offer opportunity for advancement</li> <li>• Limited Liability</li> <li>• Unlimited Life</li> </ul>
<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>• Unlimited Liability</li> <li>• Limited Life</li> <li>• Difficult to attract top talent</li> <li>• Limited access to funds</li> </ul>	<ul style="list-style-type: none"> <li>• Unlimited Liability</li> <li>• Limited Life</li> <li>• Potential for Conflict</li> <li>• Division of profits</li> </ul>	<ul style="list-style-type: none"> <li>• Double Taxation</li> <li>• Can lose control of company</li> <li>• Greater government oversight and legal issues</li> </ul>

# Economics Unit 2 Summary

**b. Identify the basic characteristics of monopoly, oligopoly, monopolistic competition, and pure (perfect) competition with regards to number of sellers, barriers to entry, price control, and product differentiation.**

**Pure (Perfect) Competition** is a market structure characterized by a large number of buyer and sellers of an identical product. (Example: commodities like crude oil)

**Monopolistic Competition** refers to a market structure characterized by a large number of buyers and sellers of products that are similar to one another but can be differentiated by brand, quality, etc. (Example: restaurants and retail clothing sellers)

An **oligopoly** is a market structure characterized by only a few sellers of a product who dominate the market. (Example: breakfast cereals and natural gas)

A **Monopoly** is a market structure characterized by only one seller of a product dominating the market. (Example: electrical power companies and cable television companies)

The following characteristics are usually important when distinguishing between the four market structures:

- **Number of Sellers:** Are there many, few, or one seller(s) of the product? The more sellers there are the more competitive the market is.
- **Barriers to Entry:** Are there any obstacles that prevent other firms from entering the market for the good? If barriers are weak or absent from the market, the market will be more competitive.
- **Price Control:** Can the individual firms in the market for a product exercise any control over the price they charge? The weaker the control over price, the more competitive the market.
- **Product Differentiation:** Is there any difference between the products sold by the sellers in the market for the good? If the products sold by the firms in the market are identical, there is no reason for sellers to engage in non-price competition which refers to methods other than price used to attract customers.

The chart below identifies the characteristics associated with each of the four market structures.

Type of Market Structure	Number of Sellers	Barriers to Entry	Price Control	Product Differentiation
<b>Pure (Perfect) Competition</b>	Many	Low or No Barriers	None – price taker - must take the market price	None – products are identical
<b>Monopolistic Competition</b>	Many	Low or No Barriers	Some	Yes - firms must engage in non-price competition to distinguish their products from those of competitors
<b>Oligopoly</b>	Few	High Barriers	Yes –price leadership – when one firm increases or decreases price, the others will follow to maintain market share	Varies – Oligopoly markets may sell identical or differentiated products – those with differentiated products will use non-price competition
<b>Monopoly</b>	One	High Barriers	Strong Control over Price	Not Applicable – there is only one seller's product