**The Law of Supply:**

* When prices go up, quantity supplied goes \_\_\_\_\_\_\_\_\_\_\_\_
* When prices go \_\_\_\_\_\_\_\_\_\_\_\_\_\_, quantity supplied goes down

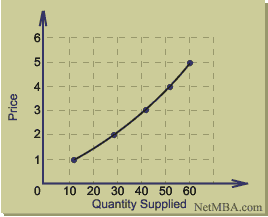
**Why Does it Work That Way?**

* Every company has a certain amount of resources
* Companies will use the resources they have to produce the most profitable goods and services
* If the price goes up and people still buy it, businesses make more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!

**Supply Schedule:**

* Works just like a demand schedule, with a column for price and a column for quantity supplied

**Supply Curve:**

* Graphs the supply schedule
* The line is opposite the demand curve!

**Supply and Elasticity:**

* Supply is \_\_\_\_\_\_\_\_\_\_\_\_ when a small price change leads to a big change in quantity supplied
* Supply is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ when a big price change still has little effect on quantity supplied

**Elasticity in the Short Run:**

* Some business cannot respond to price changes quickly
  + Producers of goods (farmers, factories, etc.)
* Other business respond very quickly to price changes
  + Service industry can hire more workers to produce more immediately

**Elasticity in the Long Run:**

* When businesses have a long time to respond to price changes, supply is even more elastic
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the most important factor in determining elasticity of supply

**Costs of Production:**

**Labor and Output:**

* How do companies decide how many people to hire?
* Marginal Product of Labor – the change in production output from hiring one more worker

**Marginal Product of Labor:**

* Increasing Marginal Returns – when adding workers increases production
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Diminishing Marginal Returns – when adding workers still increases production, but at a slower rate
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Negative Marginal Returns – when adding more workers decreases production
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Production Costs:**

* Production costs are any expenses that go into making a product
* Electricity, Worker’s Wages, Worker’s Benefits, Rent, Gas, Raw Materials, etc.
* Fixed Cost – does not change, no matter how little or much is produced
* For example: machinery repairs, rent, salaried employees
* Variable Costs – costs that rise or fall based on how much is produced
* For example: Raw Materials, Hourly Workers, Gas, Electricity

**Calculating Total Cost:**

* Total Cost = Fixed Cost + Variable Cost
* TC = FC + VC
* **Calculating Average Total Cost:**Average Total Cost = Total Cost /Total Output
* ATC = TC / Qs

**Production Costs:**

* Marginal Cost – the additional total cost of producing one more unit
  + So if producing one Sweet Onion Chicken Teriyaki costs $1.50, and producing two costs $2.50, marginal cost is $1.00.
* At first, the more you produce, the cheaper it is per item to produce them
* Later on, increasing production will actually *\_\_\_\_\_\_\_\_\_*the company’s profits
* **That’s Right!**
  + Because eventually, diminishing and negative marginal returns set in when you have too \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ workers!

**Setting Output:**

* Businesses, thus, base their hiring decisions on maximizing profit – they study \_\_\_\_\_\_\_\_\_\_\_\_ cost

**Marginal Revenue and Marginal Cost:**

* Marginal Revenue is the additional income from selling one more product
  + Typically, MR = Price
* The best formula for a business to use is for their marginal revenue to = their marginal cost

**Responding to Price Changes:**

* When the price goes up for a good, how do businesses respond?
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**When to Shutdown:**

* If marginal revenue = marginal cost and you are still losing money…
* You are in big trouble!
* Profit is already \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and you are still behind!

**5 Factors that Shift Supply:**

* 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – costs that go into producing your good
  + The business would naturally produce less if the product is less profitable
  + Higher input costs shift supply left, lower input costs shift it right
* 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - can decrease input costs
  + Email has virtually eliminated many long distance phone bills and mail delivery charges for some businesses
  + Better technology shifts supply to the right
* 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + New businesses entering the market shifts supply to the right
  + Businesses closing down and leaving the market shift supply to the left
* 4\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Can encourage or discourage production of certain goods
  + If the government wants to shift supply left, it uses:
    - Excise Taxes – a tax on the production or sale of a good
    - If the government wants to shift supply left, it uses:
      * Regulations – government intervention that affects the price, quantity, or quality of a good
    - If the government wants to push the supply curve to the right, it uses:
      * Subsidies- pays the producer a set amount per good
      * Deregulation – gets rid of existing gov. regulations
* 5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + If producers expect prices to go up in the future, they store their goods now until they can sell them for the higher price
    - Shifts current supply left
  + If producers expect prices to go down in the future, they flood the market now to get rid of them before the price drops
    - Shifts current supply right