

**Law of increasing cost:** as more of a product is produced, per unit costs of production will increase. **Inefficient:** inside frontier. **Efficient:** points on the frontier. **Specialization:** allows us to concentrate our resources in those areas where we have the comparative advantage. **Comparative advantage:** occurs when you can produce a good or service for a lower opportunity cost than anyone else (one country can produce a product for a lower cost). **Economic growth:** we can produce more goods and services than before. **Absolute advantage:** one country can produce more of a product than another can. **Absolute prices:** represent value of a good or service in dollars. **Relative prices:** represent the value of a good or service in terms of another good or service. **Law of demand:** as the price of a product rises, the quantity of that product that consumers are willing and able to buy with fall. **The substitution effect:** when a price goes up, we will substitute a lower cost for it. **The income effect:** as price of a product goes down, the buying power of your money goes up. **Normal goods:** increase in demand when income rises. **Inferior goods:** experience a decrease in demand when income rises. **Substitutes:** goods that perform the same task. As the price of one rises, the demand for the other falls. **Complements:** goods that are used together. As the price of one rises, the demand for the other falls. **The profit motive:** are you willing, involves incentives. **Law of increasing cost:** are you able. **Equilibrium:** the point at which the desires of the producers match the desires of consumers. **Disequilibrium:** when the market is out of balance demand goes up, the price and quantity will be rising. **Inelastic response:** consumer changed their purchases by an amount that was relatively less than the change in price. (less than 1). **Unitary elastic response:** consumer changed their purchases by a relatively equal amount to the change in price (equal to 1). **Elastic response:** is greater than 1. **Luxuries:** are elastic, elasticity number has to be greater than 1 has to be positive. **Necessities:** are inelastic. **Allocative efficiency:** occurs when the net benefits of all economic activities are maximized. **Marginal benefit:** the benefit associated with doing an additional amount of something. **Marginal cost:** the cost associated with doing an additional amount of something. **Demand curve=benefits, supply curve=costs. Voluntary exchange:** both sides are better off. **Consumer surplus:** the difference between what a consumer is willing to pay for a product and what they did pay. **Net benefit:** the sum of the consumer and producer surplus is the net benefit and that is maximized at the point where the demand and supply curve intersect. **Government regulations:** ensure competition. **Public goods:** non rival, non excludable. **Free rider:** exists because it is difficult to exclude anyone from consuming a public good. **Free rider solution:** government can use its taxing power. **Externalities:** third party costs and third party benefits because they have an impact on people who are neither consumers nor producers in the market. **Tragedy of the commons:** when resources are community owned, resources are used more. **Utility:** the satisfaction or benefit a consumer derives from using a product. **Total utility:** the entire benefit or satisfaction generated by consuming a given amount of a product. **Marginal utility:** the additional benefit or satisfaction derived from consuming an additional amount of the product. **Law of diminishing marginal utility:** as a consumer uses more of a product the total utility derive from that product will increase at a decreasing rate. **Constraint:** you only have so much need for a product. **Maximize utility:** how can the consumer get the greatest possible benefit within the limits of money. **Economic profits:** total rev minus total cost. **Accounting profit:** total rev minus explicit costs. **Production function:** shows the maximum amount of a good that can be produced with various combinations of inputs. **Total product:** the total amount of a good produced with a given amount of inputs. **Marginal product:** if I add 1 more worker, how much more I can produce. **Average product:** on average how much output am I getting for a worker. **Diseconomies of scale:** upward scale. **Perfect comp:** many buyers/sellers, homogeneous products, no barriers. **A price taking firm demand curve k:** Horizontal. **Marginal cost:** the cost of producing an additional unit of a product. **Marginal Rev:** the rev generated by selling an additional unit of a product. **Natural monopoly:** company must be very large. **Technical efficiency:** the firm is operating at the lowest possible cost.

$TR = P \times Q$   $AR = TR/Q$   $MR = \Delta TR / \Delta Q$   $ATC = TC/Q$   $MC = \text{increase in } TC / \text{widgets}$   $TC = FC + VC$   $\text{Fixed} = TC$  at 0 output.  $AVC = ATC - AFC$   $ATC = TC / \text{widgets}$