Review Sheet

Reread chapter 1 (up to pg. 11) as it is a good review.
Economics- Study of how scarce resources are allocated among competing uses.
When making a decision we only consider the marginal cost of that decision not the sunk costs.
We will chose to do something as long as the marginal cost is less than the marginal benefit.
Opportunity Cost - measures the best alternative forgone when making choices.
Economic reality is not only controlled by economic forces but by social and political forces as well.

Macroeconomics-study of economic aggregates such as national production and the price level
Microeconomics: the study of the behavior of individual consumers and producers operating in the individual markets of the economy

Production Possibilities Frontier- Shows boundary between combination of goods an economy can produce and those it can not.
Shape of Curve
1. Negative slope- to produce more of one good an economy must produce less of the other good(if it is producing efficiently)
2. Curved shape- Opportunity cost of producing more of one good increases as you produce more of it because resources are specialized.

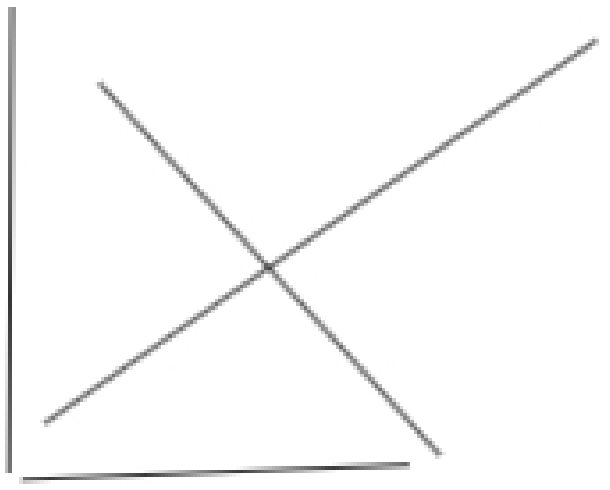
-PPF will shift out if there are changes in either technology or available resources.

Absolute advantage is when a country produces a good using the minimum quantity of inputs.
Comparative Advantage - the ability to be better suited to production of one good than to the production another good. This happens when they can produce a good at the lowest opportunity cost.
Due to comparative advantage counties will tend to specialize in the production of goods over which they have comparative advantage. All countries will benefit from trade. Countries will trade even if one country has absolute advantage in all goods.
Although the U.S. has benefited greatly from globalization due to increased markets for their products and cheaper prices for all goods, there have been some costs involved including losses in jobs and increased competition for domestic companies.

Role of Government- The government plays a role whenever there are market failures (ie the market does not provide the most efficient solution)
1. correcting for externalities.
2. reducing market power
3. proving public goods

The operations of the economy can be depicted by the circular flow diagram which represents the three sectors of the economy (households, firms and the government) that interact in the goods and factor markets.
Businesses can be sole proprietorships, partnership or corporations depending on the amount of control and/or liability they desire.
Households are both suppliers in the factor market and demanders in the goods market
The Government plays both the role of actor (by participating in the economy) and refereed (by setting rules and regulations)

Demand curve - shows the quantities of a good a consumer is willing and able to buy at alternative prices given tastes, incomes, related prices and number of buyers.
Law of demand- increase in price causes a decrease in quantity demand (movement along the curve)
Change in other factors (income, tastes, price of substitutes, price of complements,) causes a change in demand - a shift right or left of the demand curve
Supply Curve - a curve which shows the quantities of a good a seller is willing and able to sell at alternative prices at a given cost of production determined by input prices and technology and number of sellers.
Law of Supply- Increase in price causes increase in quantity supplied(movement along the supply curve)
Change in cost of production alters planned sales at all prices shifting curve to the right or left. Also a change in number of suppliers technology will also shift curve.
If there is an increase in supply the amount supplied at all prices is greater the supply curve shifts right.
Equilibrium- Equilibrium is when price is set where quantity demanded = quantity supplied.
Thus the market will provide the most efficient solution if it is left alone however this is not always the most equitable solution. A change in equilibrium will arise when there is a shift of either the demand or supply curve.



If P> Pe - surplus
If p<pe- shortage

Price and Quantity will change if either supply or demand change. If both demand and supply change at the same time, the results are often ambiguous(ie if supply and demand both increase quantity will increase but the change in price is ambiguous)

Policies that affect operation of markets

Price controls- If price is set above equilibrium price such as minimum wage(price floor) this will lead to surplus.
If price must be below equilibrium price (price ceiling) such as with rent control this leads to shortages. This will also reduce in reduce quality of the product as well. The more elastic is supply and demand the greater the effect of these price controls.
Excise Taxes affect the market but shifting the supply curve and resulting in a higher price for the consumer and a lower price received by the producer. Thus the burden of the tax is generally shared. However the burden is greater consumers the more inelastic demand is relative to supply.

Elasticity

Elasticity of Demand

Price elasticity of demand- measures the responsiveness of the quantity demanded to the price of the goods

Ep= %change in demand/%change in price =(change in Q/Qmidpoint)/(change in Price/Pmidpoint)

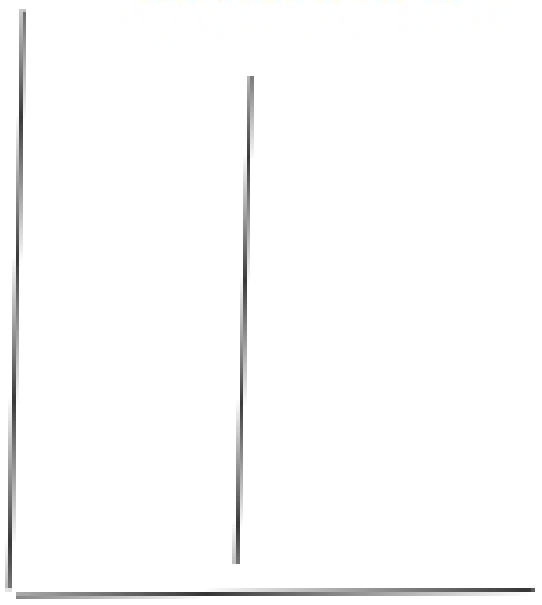
If demand is elastic (ie >1) this means that demand is sensitive to changes in the price - for example cars, restaurants. A price increase will lead to a decrease in revenues.

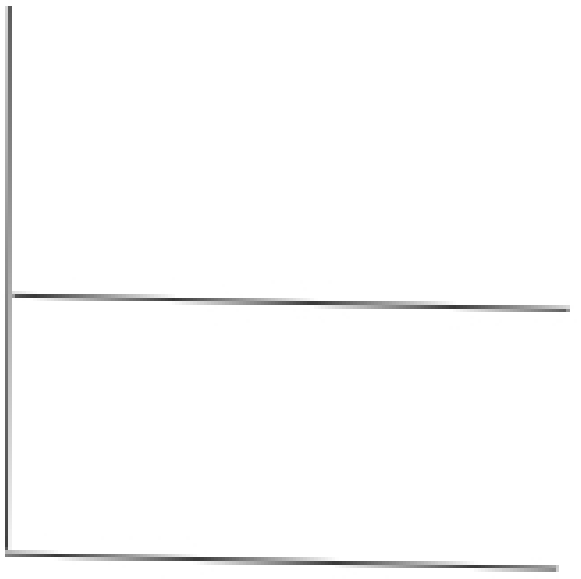
If demand is unit elastic(=1) demand is neither sensitive nor not sensitive to change int its price A price increase doesn't change revenues.

If demand is inelastic(ie<1) Demand for the good is not very sensitive to price changes - is necessities, addictive goods- IF price rises revenues will increase.

The more elastic is demand the flatter the demand curve is-

Have two extremes





perfectly inelastic
ex. Demand for insulin

perfectly elastic
perfectly competitive market

Elasticity depends on three factors

1. substitutability- the more readily other goods can be substituted the larger is the elasticity of demand
2. proportion of income spent -the higher the proportion of income spent the larger is elasticity
3. Time frame for demand- the more time has elapsed the larger is the elasticity of demand(since it takes time to gather information about substitute goods and change tastes) thus the short run demand curve (which shows change in demand right after price change) is more inelastic(and thus steeper) than the long-run demand curve(which shows change in demand after a longer period of time)

Income elasticity-measures how the demand for a product responds to changes in income.

% change in demand

EY=% change in income

Normal goods have positive income elasticities(since as income increases demand for these goods increases) while inferior goods have negative income elasticities

If ey>1 good is a luxury good(demand rises faster than income)ex. sports cars

if ey<1 good is a necessity food, addictive goods.

The cross price elasticity of demand- shows how the demand for a good reacts to a change in the price of another goods

EX=%Change in Qd

% change in price of other good

-the cross elasticity of demand for complementary goods is negative and is postive for substitute goods.

Elasticity of supply - measures the responsiveness of the quantity supplied of a good to a change in its price.

Es= % change in Qs

% change in price of good

Size of elasticity depends on:

1. technological conditions- the easier it is to produce more goods the more elastic is supply.
2. The time elapsed since the price change: The more time has passed the greater the elasticity of supply since fixed inputs can be increased . The more elastic is supply the flatter the supply curve:

extremes

The more elastic are both demand and supply the less price will change as a result of a change in demand or supply.

Consumer Surplus is the difference between the value placed on a good by the consumer and the price the consumer actually pays for the item

Producer surplus is the difference between the price and the price firms are willing to accept (supply curve)

A sales tax shifts the supply curve up by the amount of the tax

This causes a loss to society measured by the DWL (which is the reduction in both CS and PS)

In general the tax is divided between both the supplier and demander.

The buyer pays a higher price and the seller receives a lower price.

In general the more elastic is the demand and the more inelastic is the supply the less the buyer pays.

Price Ceilings and Floors also cause a DWL to society as a result of the reduction in Output to society.

The effect of price floors and price ceilings is smaller in the short run but as demand and supply become more elastic over time the effects will increase.

Externalities -exist when the behavior of an individual or firm has an affect on third parties. These can be both negative or positive. If the externality is negative firms don't bear the cost that society faces and thus will over produce the good. If the externality is positive consumers won't consider the extra benefits that society will have and thus too little of the good is consumed.

-The government can reduce the inefficiencies of externalities by internalizing the cost of the externality. For positive externalities this can be done with subsidies and with negative externalities it can be done with regulation, pigouvian taxes or marketable permits.

Public Goods and Common resources

Public goods must be provided by the government because they are both non-excludable (it's not possible to charge a price) and non-rivalrous(everyone can enjoy the good)- similar to a positive externality

Common Resources need to be protected by the government since they are non-excludable but rivalrous (people will use it up) – similar to negative externality

Individual Behavior-

- Individuals make choices to maximize their "happiness" subject to their constraints.
- Their constraints are made up of their income and the price of the goods. The budget line is PxX+PyY= M
- The Y intercept is the quantity of Y that can be bought if all income is spent on Y (M/PY)
- The X intercept is the quantity of X that can be bought if all income is spent on X (M/PX)
- The slope of the Budget line is the price of X relative to the price of Y or Px/Py. This tells us the amount of Y that must be given up for one more X.

- Preferences are shown by utility curves. Most indifference curves are negatively sloped and bowed in. They also can never cross and utility increases as the curves move out and to the right. (however you should know the exceptions to these rules)
- The slope of the utility curve is the MRS – Marginal Rate of Substitution. This the rate at which you are will to exchange y for one more X. Normally the MRS will fall as more X is consumed. (this explains why the curves are normally convex)
- The maximum bundle is where the person is at the highest level of satisfaction given their budget (the utility curve is just tangent to the budget line) so the MRS=Px/PY.
- A change in the price of a good will rotate the budget line out and change the optimal bundle.
  A change in income will shift the budget line in or out and change the quantity of both goods consumed depending on whether they are normal or inferior goods.

Firm- organization that hires factors of production and organizes them to produce and sell goods and services.

In general a good is produced through the coordination of a firm but markets also coordinate activities.

Objective of a firm is to maximize profits.

Profits = Revenues - Costs