ECON 120
Cheat Sheet Test 2

Introduction

Economics is the study of decisions in light of scarcity of the factors of production: labour, capital, land, etc.

For any decision, the the opportunity cost is what was the next best option

Generally, economies gain efficiency from specialization (of processes) and division (within processes) of labour

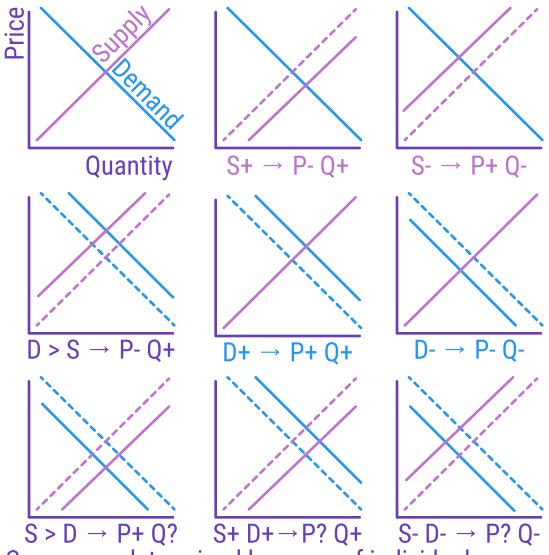
As entire nations begin specializing, the process of globalization interlinks the world's economy.

Economic systems exist as mixed market-command: no system is purely one or the other (also traditional economies on the side lol).

Theories are defined using normative (opinions) and positive statements.

All economic models assume things, like that people act rationally. They predict relations between exogenous, or independent, and endogenous, or dependent, variables

Supply and Demand

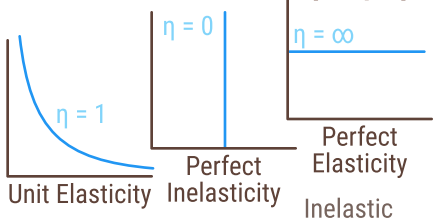


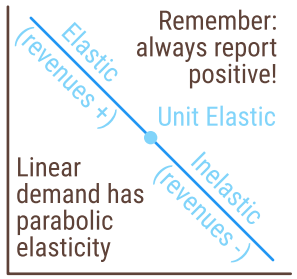
Curves are determined by sums of individual curves

Individual curves from indifference/budget curves

Elasticity ....of demand

$$\eta = \frac{(dQ/Q)}{(dP/P)}$$





Remember: always report positive!

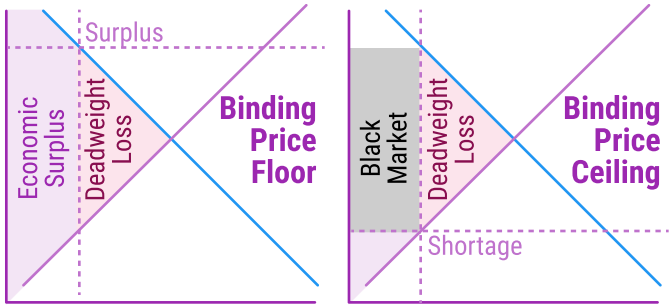
Inelastic means responsive to quantity.

Elastic means responsive to price.

Unit elastic is optimal.

Government Intervention

Floors bind above equilibrium, ceilings bind below

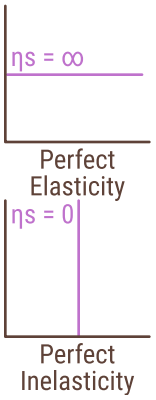


....of supply

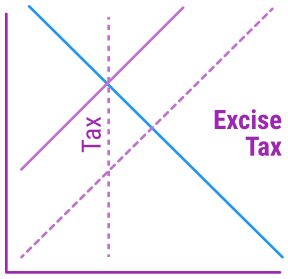
Be careful with short- and long- run distinction.

No unit elastic supply graph.

All supply and demand curves are sums over a market.



Deadweight loss is proportional to the difference in elasticity of supply and demand

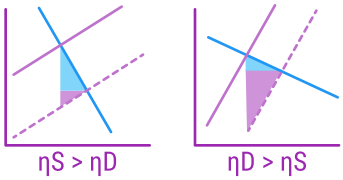


Excise Tax

Tax incidence on suppliers and consumers depends on the proportion of the tax price line above/below the equilibrium price line.

The less elastic curve absorbs more tax burden.

Just draw triangles for calculation.

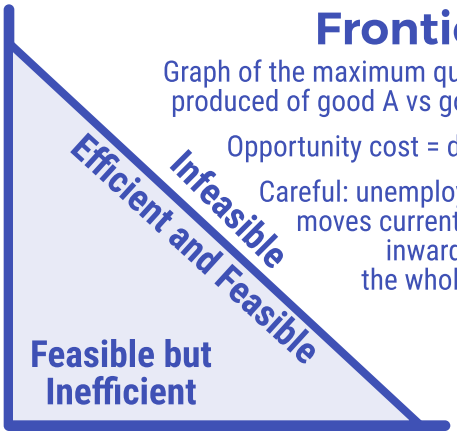


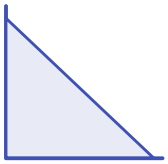
Production Possibility Frontiers

Graph of the maximum quantity produced of good A vs good B

Opportunity cost = dA/dB

Careful: unemployment moves current point inwards, not the whole PPF

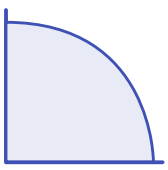




Linear PPF

Perfectly efficient resource re-allocation.

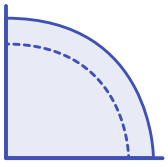
Constant opportunity cost equal to line's slope.



Bowed Out PPF

Inefficient resource allocation.

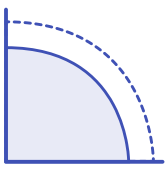
Opportunity cost increases with production.



PPF Expands

Possibilities expanded.

Technological advancement, population increase.



PPF Contracts

Possibilities contracted.

Resource loss, population decrease.

PPFs bowed inwards, where opportunity cost decreases with production, aren't realistic, but would have something to do with economies of scale.

Demand Cross-Elasticity

Given cross-elasticity of X and Y, calculate the same way but have good X's demand over good Y's price

Complements are goods that are used together.

Substitutes are good sthat can replace each other.

Income-Demand Elasticity

Calculate the same but instead of price use income

Inferior goods are those people buy less when rich

Necessities are staples that everyone needs

This cheat sheet is brought to you by Pain and Agony. Support DD Club for more!

(*°▽°*)

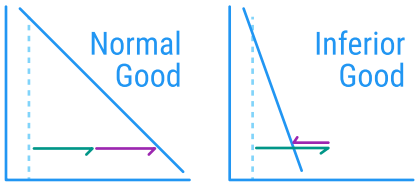
Optimization $\frac{MUx}{Px} = \frac{MUy}{Py}$

Consider the amount of "helpfulness" gained from any specific thing. For supplier, this is units of **product**. For consumer, units of **utility**.

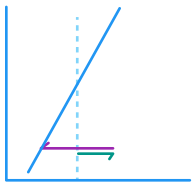
Utility ≠ value, otherwise water would be more expensive than diamonds. *Marginal utility* is more accurate: the change in total value from 0 diamonds to 1 is greater than change from 100 litres of water to 101. Thus, optimize the **marginal product/utility per dollar**.

Consumer Behaviour

Two effects when price goes down:
substitution (always up)
income (depends on elasticity)

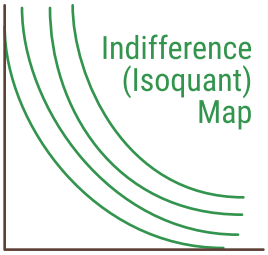


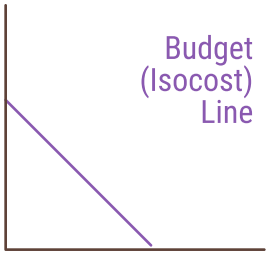
Inferior demand curve *can* slope up.



Giffen goods are super essentials. **Conspicuous consumption** goods are super luxury goods.

Making a Supply/Demand Curve

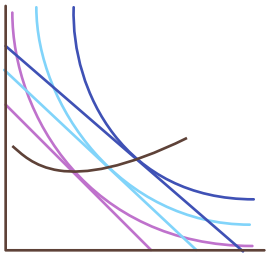




Imagine a curve of all points with equal benefit (utility or product) from two inputs: **indifference** or **isoquant** curves.

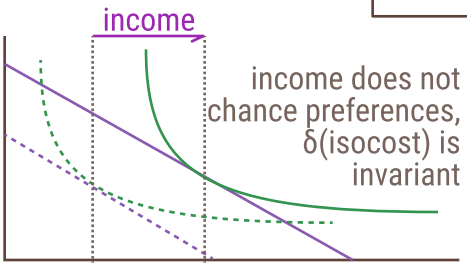
Draw the PPF-style line for fixed cost. This is the **budget** or **isocost** line.

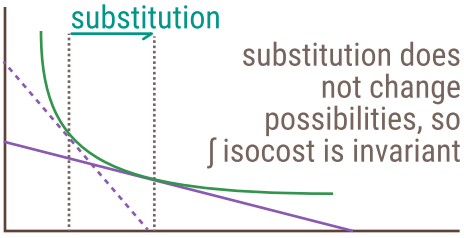
The optimal isoquant is tangent to the budget line. As the **budget line changes**, different isoquants give different optimal points, creating the **demand and long-run supply curves**.



Income effect changes quantity by switching the **isoquant** line as real income increases.

Substitution effect is the change of the the **isocost** line sliding down isoquant.





This gives the supply/demand curve of one individual in the market. Don't forget that the actual curve is a sum of everyone in the market.

Accounting and Economic Costs

Distinguish **accounting profit** from **econoimc profit** by taking into account **economic (implicit) costs** – opportunity costs incurred from not doing things.

Specifically: cost of people's time, cost of money's time (interest/risk)

Supplier Behaviour

Define time scales based on how many things are variable — in the **short run** only some factors are variable. In the **long run**, all factors are variable. In the **very long run**, the method of prooduction itself is variable.

Short Run

A supplier's costs can be variable or fixed, so: **TC** = **TFC** + **TVC**

It's best to express these as quantity derivatives: **ATC** = **AFC** + **AVC**

These are minimized when they cross the **marginal cost** curve (ΔTC/ΔQ).

If AP > MP, then AP goes down towards MP.

If AP < MP, then AP goes up toward MP.

Long Run

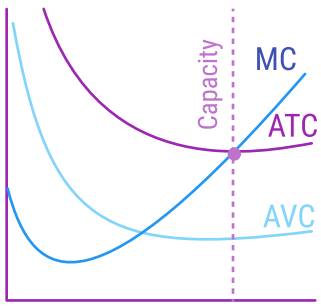
In the long run, you can jump between SR-ATCs.

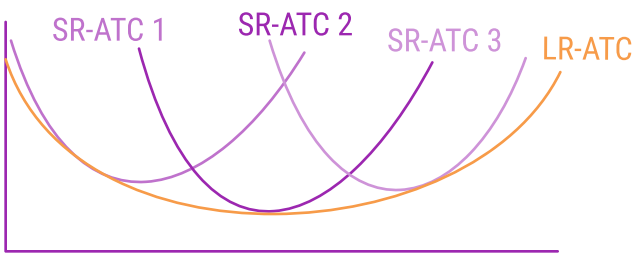
All possible short-run cost curves' respective minimum points create a **long-run average total cost curve**.

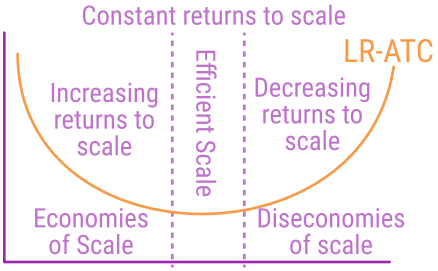
The minimized point is where the marginal products per dollar are equal.

As the LR-ATC decreases, the marginal cost (i.e. lowest SR-ATC point) decreases, that is, returns to scale increase.

Decreasing LR-ATC makes an economy of scale, increasing LR-ATC is a diseconomy of scale. When LR-ATC is flat, the scale is called efficient.







Very Long Run

In the very long run, you can change the LR-ATC's shape. Technological advancements can move the curve downwards, reducing costs for every possible production combination.