Topic 1: Introduction to Economics (Ch. 1 and 3)

Scarcity
- A condition that arises because needs and wants exceeds the ability of our scarce/limited resources to satisfy them
- Resources can include both money, time, land, labour / human resources, physical capital
- The choices we make between our wants and needs depend on the incentives that we face

Economics
- A social science that studies the choices that individuals, businesses, governments and entire societies make as they cope with scarcity, and the incentives that influence those choices and the arrangements that coordinate them
- Deals with the effectiveness and efficiency in managing our resources

Microeconomics - the study of the choices and interactions between individuals and businesses in a market and how their interactions are influenced by governments
Macroeconomics - the study of the aggregate effects on the national economy and the global economy of the choices that individuals, businesses and government make

Economic Ways of Thinking
1. Choice is a tradeoff
    - A tradeoff is an exchange (giving up on one thing to get something else)
    - Whatever choice you make, you could have chosen something else
2. Cost is what you must give up to get something

    Opportunity Cost - the best thing that you must give up to get something, the highest valued alternative forgone
    - Opportunity cost = explicit cost (what you actually pay) + implicit cost (what you are giving up)
    - Opportunity cost is the most likely alternative
3. Benefits is what you gain from something
    - Benefit is the gain or pleasure that something brings and is measured by what you are willing to give up
    - Costs are the price of enjoying your benefits
4. People make rational choices by comparing benefits and costs

    Rational Choice - a choice that uses the available resources to best achieve the objective of the person making the choice
5. Most choices are "how much" choices made at the margin

    Marginal Cost - the opportunity cost of a one-unit increase in an activity
    - What you have to give up to get one additional unit of something

    Marginal Benefit - what you gain when you get one more unit of something
    - Measured by what you are willing to give up to get one additional unit of it
    - Rational choice is when you take actions that lead to marginal benefits exceeding or equaling the marginal cost
6. Choices respond to incentives

    Incentive - a reward or a penalty that encourages or discourages an action (carrot/MB or stick/MC)

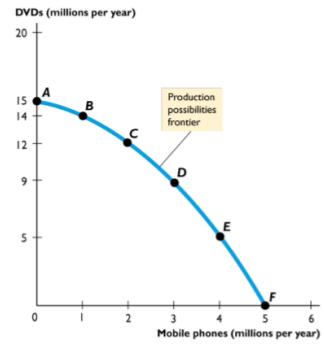
Production Possibilities Frontier
- The boundary between the combinations of goods and services that can be produced and the combinations that cannot be produced, given the available factors of production (e.g. labour and machinery) and the state of technology
- Valuable tool for illustrating the effects of scarcity and its consequences

- It is a way of showing production efficiency

Figure shows the *PPF* for mobile phones and DVDs.

Each point on the graph represents a column of the table.

The line through the points is the *PPF*.



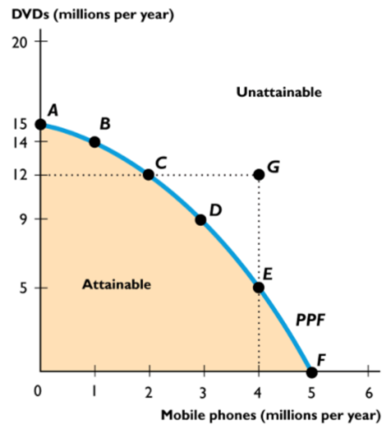
Mobile phones (millions)	0	1	2	3	4	5
DVDs (millions)	15	14	12	9	5	0
Possibility	*A*	*B*	*C*	*D*	*E*	*F*

- PPF puts three features of production possibilities into focus:
  - Attainable and unattainable combinations
  - Efficient and inefficient production
  - Tradeoffs and free lunches
    - Tradeoff is an exchange, giving up one thing to get something else
    - Free lunch is a gift, getting something without giving up something else

We can produce at any point inside the *PPF* or on the frontier.

We cannot produce at any point outside the *PPF* such as point *G*.

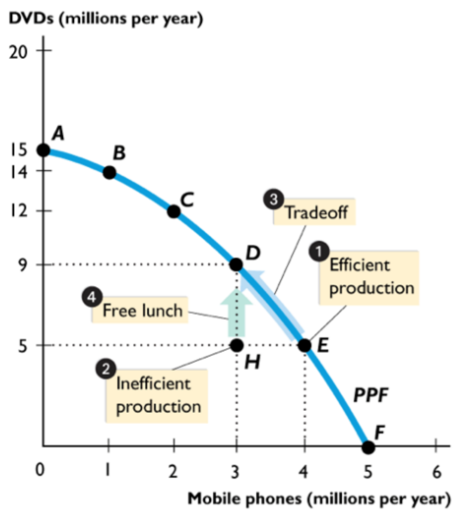
The *PPF* separates attainable combinations from unattainable combinations.



Production Efficiency - a situation in which we cannot produce more of one good or service without producing less of something else

3. When production is *on* the *PPF*, we face a tradeoff.
4. If production were *inside* the *PPF*, there *would be* a free lunch.

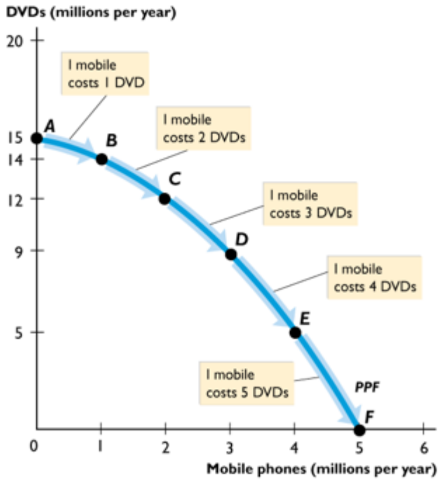
Moving from point *H* to point *D* does not involve a tradeoff.



Opportunity Costs

Movement along *PPF*	Decrease in quantity of DVDs	Increase in quantity of mobile phones	Decrease in DVDs divided by increase in mobile phones
A to ***B***	1 million	1 million	1 DVD per mobile
B to ***C***	2 million	1 million	2 DVDs per mobile
C to ***D***	3 million	1 million	3 DVDs per mobile
D to ***E***	4 million	1 million	4 DVDs per mobile
E to ***F***	5 million	1 million	5 DVDs per mobile

Along the *PPF* from *A* to *F*, the opportunity cost of a mobile phone increases as the quantity of mobile phones produced increases.



- Opportunity costs are a ratio
  - OC = (What you give up / What you gain)
- It is important to calculate OC when dealing with PPF with comparative advantage

Comparative Advantage and Absolute Advantage

Comparative Advantage - when a person can perform the activity at a lower opportunity cost than anyone else

- Involves comparing opportunity costs

Absolute Advantage - when a person is more productive than others

- Involves comparing productivities

$$OC = \frac{\text{What you give up}}{\text{What you get}}$$