

Production Possibilities Frontier

Also called PPC

- **Production Possibilities Frontier (PPF):**
 - visual model of _____, _____ and _____ (productive, allocative)
 - shows the combinations of _____ goods an economy *can possibly produce*,
 - *given* available resources and technology

1

1

Our Example...(Assumptions!)

One Country:

One Resource:

Two goods:

50,000 labor hrs

2

2

PPF Example...assume:

- 1 computer takes 100 hrs labor **50,000** labor hrs
- 1 ton of wheat takes 10 hrs labor

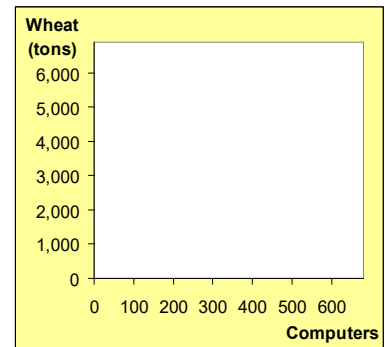
	Employment of labor hours		Production (PPF)	
	Computers	Wheat	Computers	Wheat
A	50,000	0		0
B	40,000	10,000	400	
C	25,000	25,000		
D	10,000	40,000		
E	0	50,000	0	

3

3

PPF Example

- Graph the PPF.



4

4

The PPF: What We Know So Far

- Points on the PPF (like **A – E**)
 - _____
 - _____ - all resources fully utilized
- Points under the PPF (like **F**)
 - _____
 - _____ - some resources underutilized
- Points above the PPF (like **G**)
 - _____

5

5

The PPF and Opportunity Cost

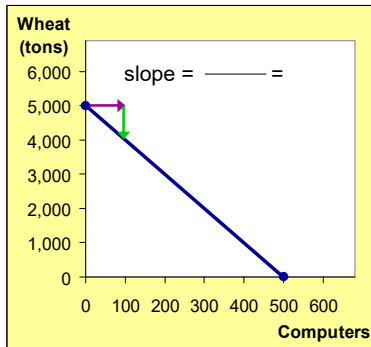
- Recall....**opportunity cost**...
- Moving along a PPF involves _____ (e.g. labor) from one good to the other. (OS *budget constraint*)
- Society faces a _____:

Getting more of one good requires _____ some of the other.
- Slope of the PPF = _____ of one good in terms of the other.

6

6

The PPF and Opportunity Cost



Calculate...

Here, the opportunity cost of _____ computer is _____ tons of wheat.

7

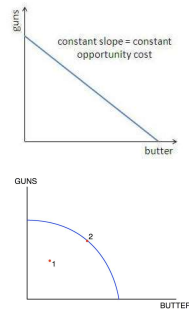
7

The Shape of the PPF

- The PPF theoretically could be a straight line, but in reality it's bow-shaped

Depends on the opportunity cost as resources are shifted:

- If opp. cost is _____, PPF is a _____ (budget line)
- If opp. cost of a good rises as the economy produces more of it, PPF is _____.



8

8

Increasing Opportunity Cost

In most cases, land, labor, and capital _____ be shifted from producing one good to another.

9

9

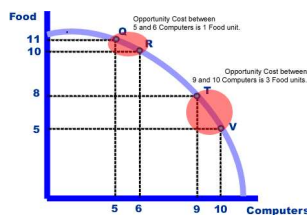
Bow-Shaped...Resource Specialization ...Diminishing Returns

- PPF: _____
- _____
- different workers have different skills
- different types of land suited for different uses
- capital specialization

10

10

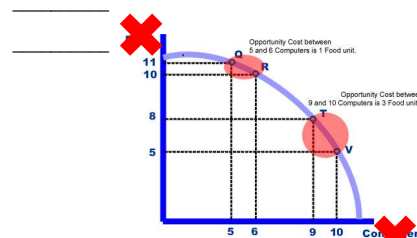
Increasing Opportunity Costs Law of Diminishing Returns



11

11

Generalizing the Model



Where does an economy want to produce?

12

12

Efficiency

- **Productive efficiency** – _____
(technical efficiency)
- **Allocative efficiency** – _____

clq
13

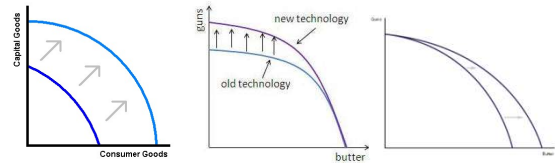
13

Economic Growth and the PPF

Relax Assumptions:

- _____
- Improve _____

Economic Growth
shifts the PPF



14

14