Production Possibilities Curve
Production Possibilities 1.3

- Trade offs and opportunity costs can be illustrated using a **Production Possibilities Curve**.

- **PPC**—shows all the possible combinations of **2** goods or services.

- Given 2 assumptions: 1. Fixed resources 2. Maximum efficiency.
Video

- Scarcity
- Opportunity Cost
- Efficiency
- Economic Growth
Opportunity Cost

- Opportunity cost of any choice
  - What we forego (give up) when we make that choice
  - All production carries an opportunity cost

- To produce more of one thing
  - Must shift resources away from producing something else
Production Possibilities Graph shows alternative ways that an economy can use its resources.

Cost - production possibilities graph shows the cost of producing more of one item.
Production Possibilities Frontier

- Production Possibilities Frontier is the line that shows the maximum possible output for that economy.
  - Curve showing all combinations of two goods that can be produced with resources and technology available
  - Society’s choices are limited to points on or inside the PPF
SHIFTING PRODUCTION POSSIBILITIES CURVE
- **Efficiency** - using resources in such a way as to maximize the production of goods and services
  - economy producing output levels on the production possibilities frontier is operating efficiently

- **Growth** - if more resources become available, or if technology improves, an economy can increase its level of output and grow.
  - when this happens, the entire production possibilities curve “shifts to the right.”
SHIFTING PRODUCTION POSSIBILITIES CURVE

Production of Economy Cars (in millions)

Production of Luxury Cars (in millions)

Cost

Growth

Efficiency

Production Possibilities Curve
Law of Increasing Opportunity Cost:

- The more of something we produce - the greater the opportunity cost of producing even more of it.
SHIFTING PRODUCTION POSSIBILITIES CURVE

Law of Increasing Opportunity Cost

Cost

Production Possibilities Curve

Growth

Efficiency

Production of Luxury Cars (in millions)

Daily Cars (in millions)
Future Production Possibilities

- **Real World**—Technology and the factors of production do **NOT** remain constant. Production curve shifts when technology/new resources become available.

- The curve “shifts to the right” to show new production possibilities.
The diagram illustrates the concept of shifting production possibilities curves, which are related to the Law of Increasing Opportunity Cost. The curve shows the trade-offs between production of luxury cars and economy cars, indicating that as production of luxury cars increases, the cost of producing economy cars decreases. The future production possibilities curve suggests potential growth and efficiency improvements.
If this economy is presently producing 12 units of Good B and 0 units of Good A...

1. the opportunity cost of increasing production of Good A from 0 units to 1 unit is the loss of ______ unit(s) of Good B.

2. the opportunity cost of increasing production of Good A from 1 unit to 2 units is the loss of ______ unit(s) of Good B.

3. the opportunity cost of increasing production of Good A from 2 units to 3 units is the loss of ______ unit(s) of Good B.