

# **Unit 1: Basic Economic Concepts**

# REVIEW

1. Explain relationship between scarcity and choices
2. Differentiate between positive & normative
3. Differentiate between price and cost \
4. Differentiate between consumer and capital goods
5. Differentiate between command economies and free market economies
6. Give examples of each of the 4 Factors of Production
7. Define human capital
8. Define tradeoffs
9. Define opportunity cost
10. Name 10 different teachers at ERHS?

**WE HAVE A PROBLEM!!**

**The Economizing Problem...**

**Scarcity**

**Society has unlimited wants but limited resources**

# The Production Possibilities Curve (PPC)

## Using Economic Models...

**Step 1: Explain concept in words**

**Step 2: Use numbers as examples**

**Step 3: Generate graphs from numbers**

**Step 4: Make generalizations using graph**

# What is the Production Possibilities Curve?

- A production possibilities curve (or frontier) is a model that shows alternative ways that an economy can use its scarce resources
- This model graphically demonstrates scarcity, trade-offs, opportunity costs, and efficiency.

## 4 Key Assumptions

- Only two goods can be produced
- Full employment of resources
- Fixed Resources (*Ceteris Paribus*)
- Fixed Technology

# Production “Possibilities” Table

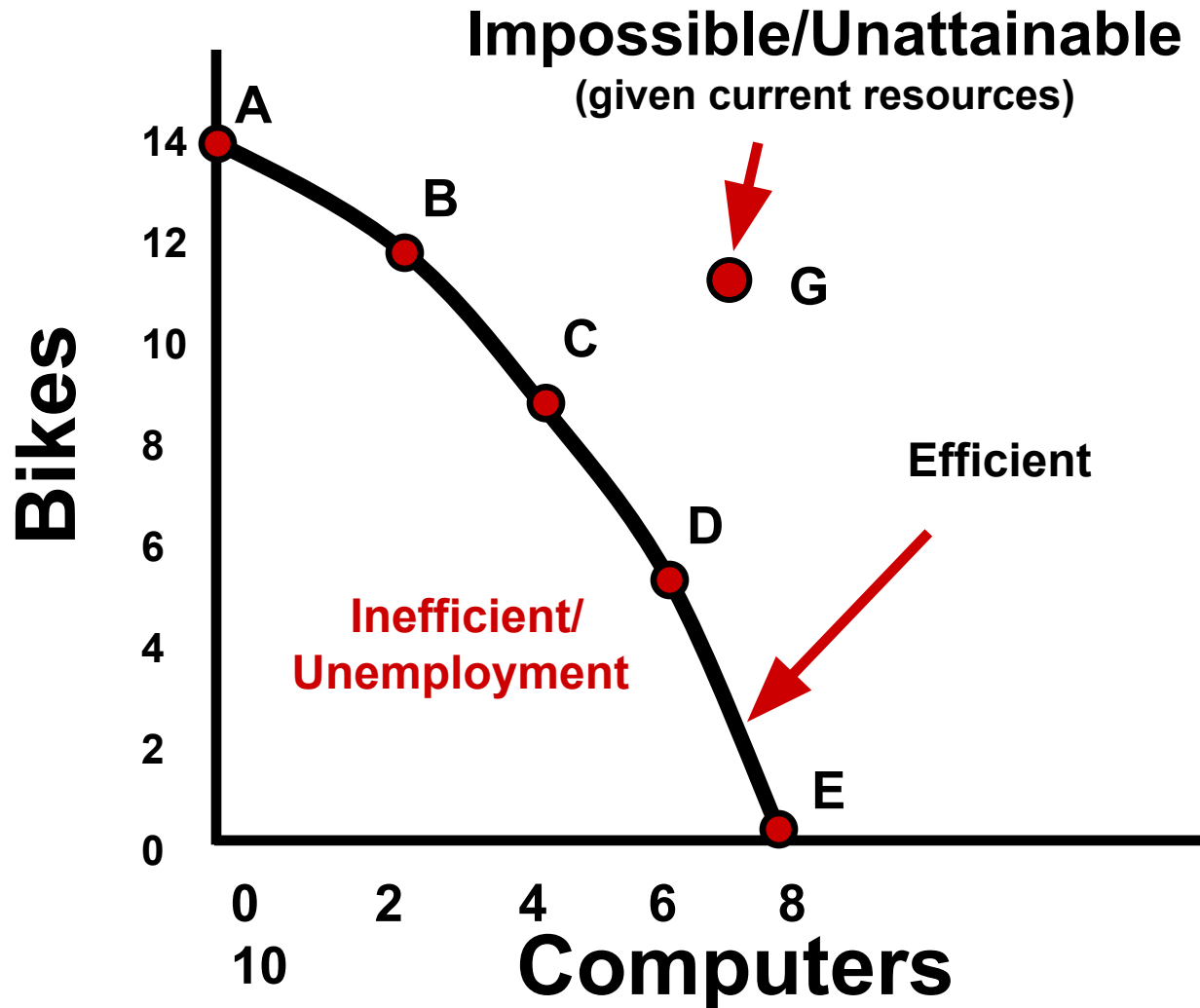
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>Bikes</b>	<b>14</b>	<b>12</b>	<b>9</b>	<b>5</b>	<b>0</b>
<b>Computers</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>8</b>

**Each point represents a specific combination of goods that can be produced given full employment of resources.**

**NOW GRAPH IT: Put bikes on y-axis and computers on x-axis**

# Production Possibilities

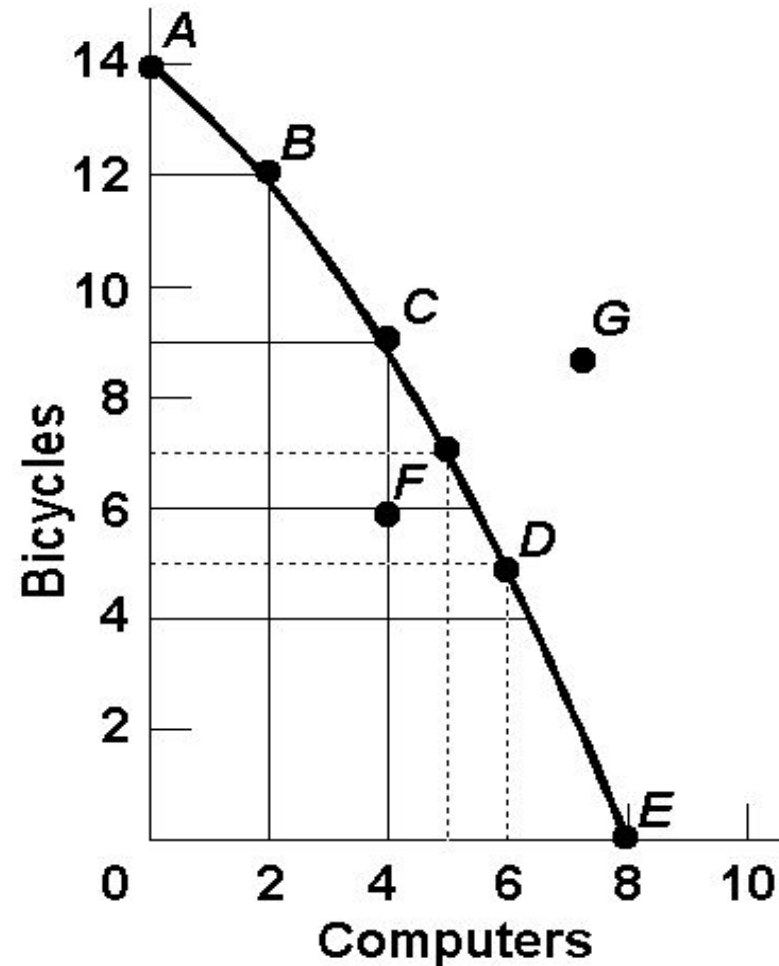
How does the PPG graphically demonstrate scarcity, trade-offs, opportunity costs, and efficiency?



# Opportunity Cost

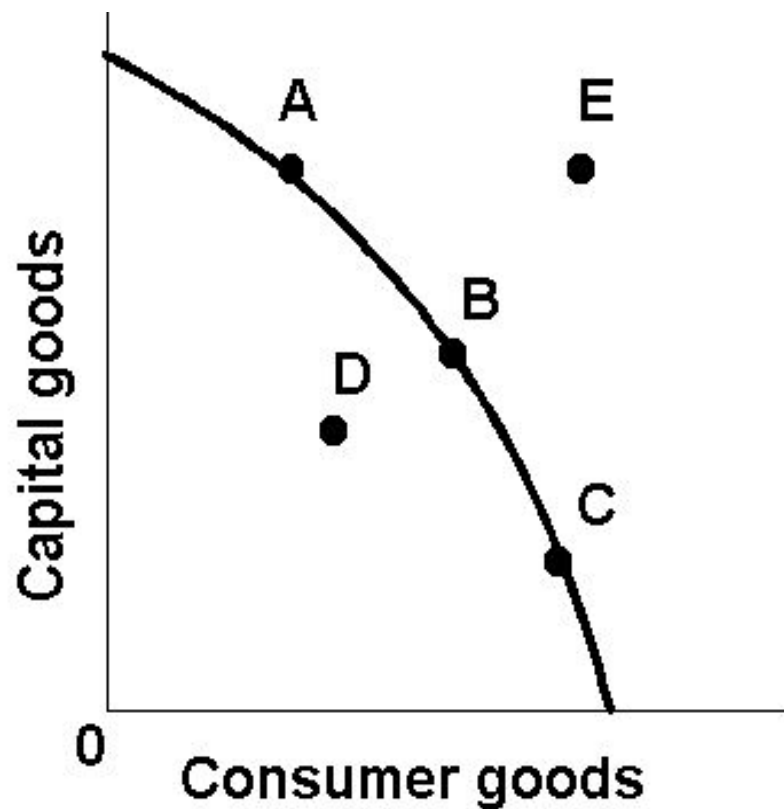
## Example:

1. The opportunity cost of moving from a to b is... **2 Bikes**
2. The opportunity cost of moving from b to d is... **7 Bikes**
3. The opportunity cost of moving from d to b is... **4 Computer**
4. The opportunity cost of moving from f to c is... **0 Computers**
5. What can you say about point G?  
**Unattainable**





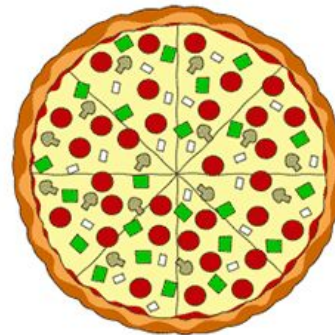
# The Production Possibilities Curve (or Frontier)



# Production Possibilities

	A	B	C	D	E
CALZONES	4	3	2	1	0
PIZZA	0	1	2	3	4

- List the Opportunity Cost of moving from a-b, b-c, c-d, and d-e.
- Constant Opportunity Cost- Resources are easily adaptable for producing either good.
- Result is a straight line PPC (not common)



# Production Possibilities

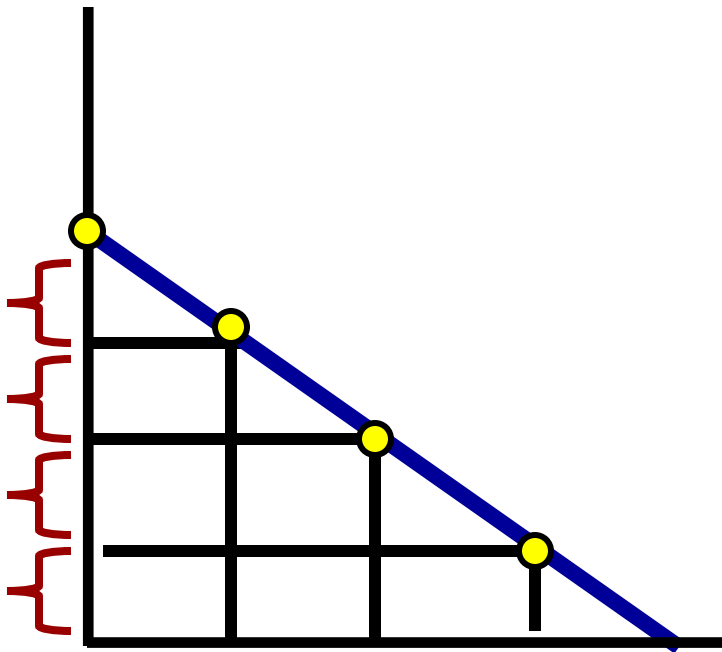
	A	B	C	D	E		
PIZZA			20	19	16	10	0
ROBOTS			0	1	2	3	4

- List the Opportunity Cost of moving from a-b, b-c, c-d, and d-e.
- Law of Increasing Opportunity Cost-
  - As you produce more of any good, the opportunity cost (forgone production of another good) will increase.
  - Why? Resources are NOT easily adaptable to producing both goods.
- Result is a bowed out (Concave) PPC

# Constant vs. Increasing Opportunity Cost

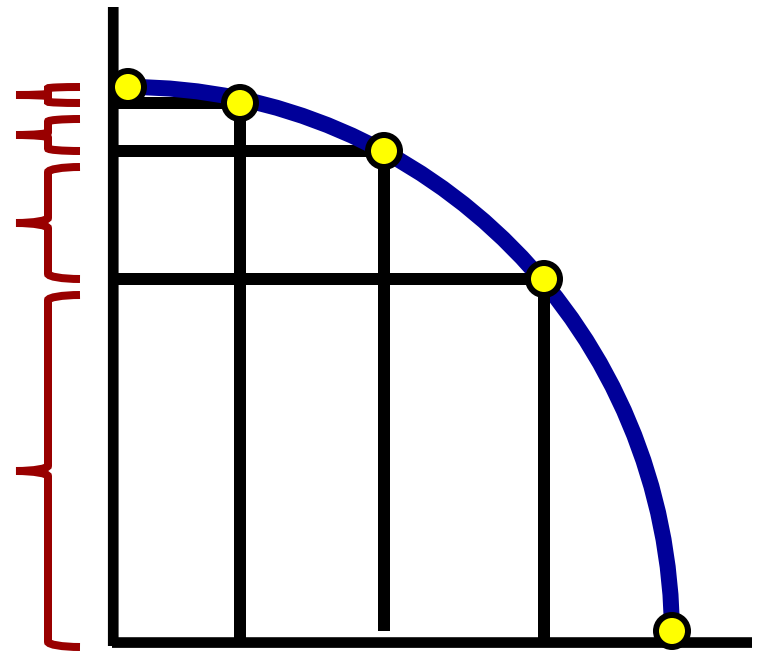
Identify which product would have a straight line PPC and which would be bowed out?

**Corn**



**Wheat**

**Cactus**



**Pineapples**

# **The Production Possibilities Curve and Efficiency**

# Two Types of Efficiency

## Productive Efficiency-

- Products are being produced in the least costly way.
- This is any point **ON** the Production Possibilities Curve

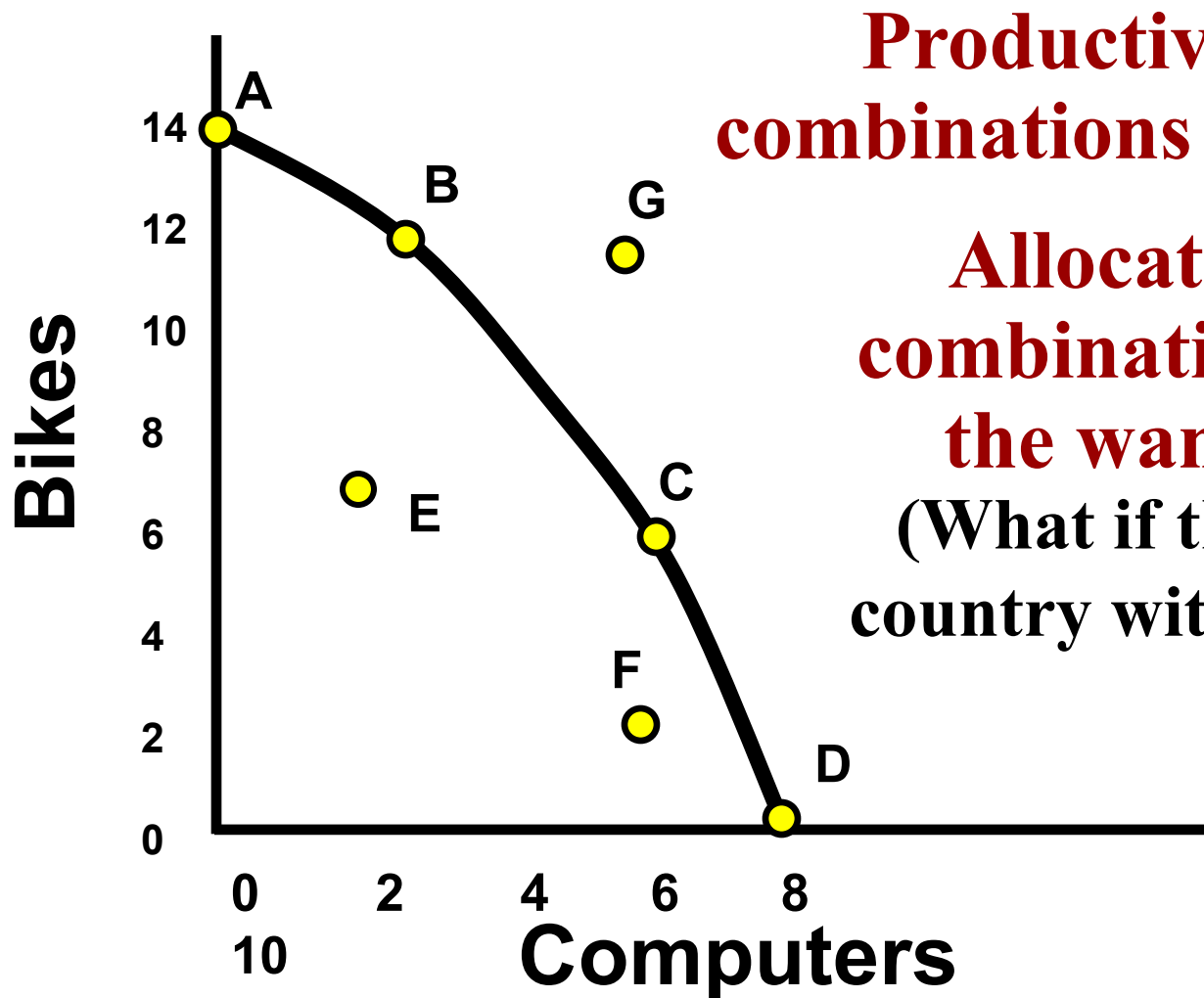
## Allocative Efficiency-

- The products being produced are the ones most desired by society.
- This *optimal* point on the PPC depends on the desires of society.

# Productive and Allocative Efficiency

Which points are productively efficient?

Which are allocatively efficient?



**Productively Efficient combinations are A through D**

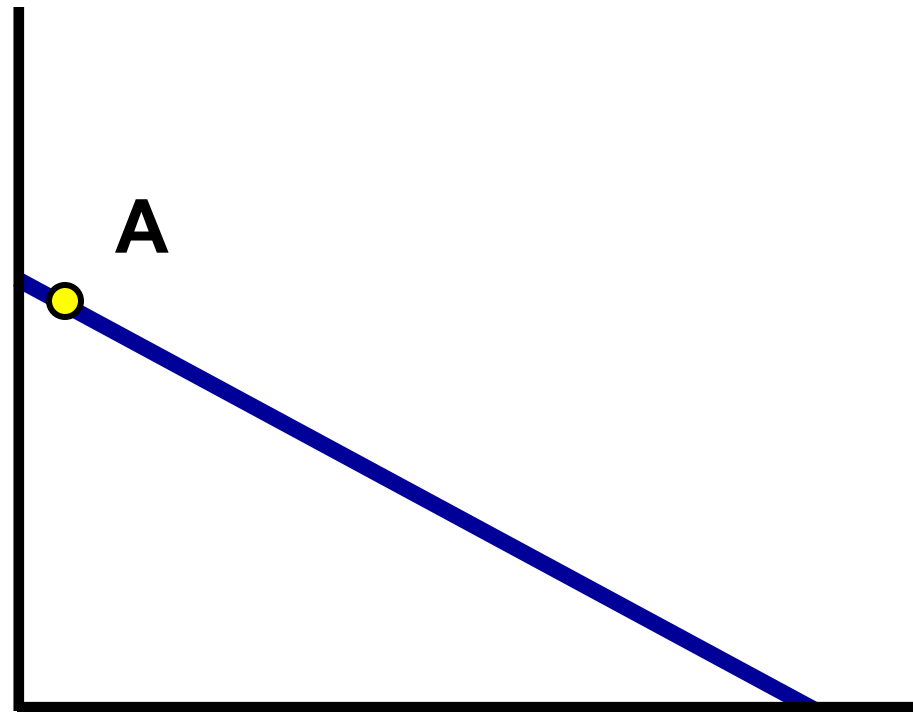
**Allocative Efficient combinations depend on the wants of society**  
(What if this represents a country with no electricity?)

# Why two types of efficiency?

Is combination “A” efficient?

**Yes and No. It is productively efficient but it is not the combination society wants**

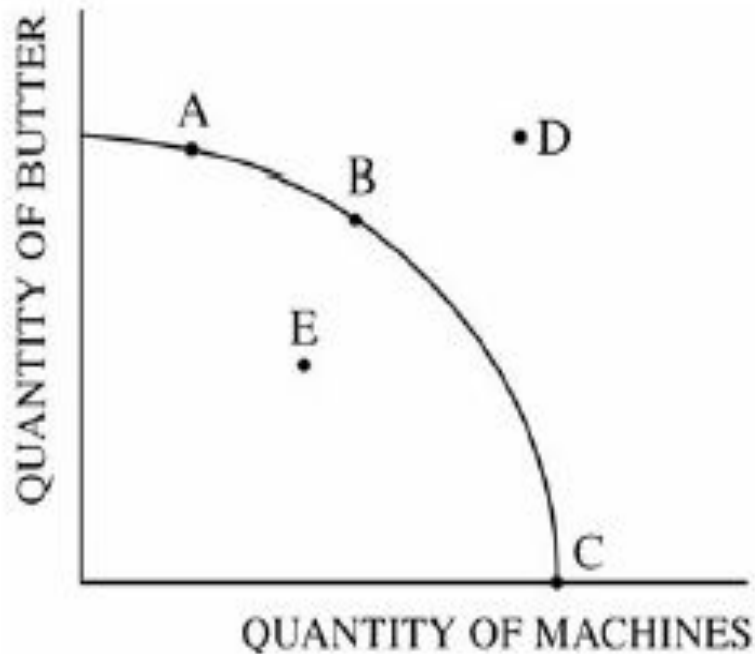
Size 20 running shoes



Size 10 running shoes



17. If resources were perfectly substitutable in all activities, which of the following would be true?
- (A) Output of all goods could be increased at zero opportunity cost.
  - (B) The production possibilities curve would be a straight line.
  - (C) Specialization and mutually beneficial trade would be impossible.
  - (D) No country or individual would have a comparative advantage in any activity.
  - (E) Scarcity of resources would be eliminated.



1. The diagram above shows the production possibilities curve for Country Y. Which of the following statements is true?
  - (A) If Country Y is producing at point C, it is using all its resources efficiently.
  - (B) The opportunity cost of producing more machines is constant.
  - (C) Producing at point C is the most preferable, because butter is a nondurable good.
  - (D) Country Y cannot produce at point E.
  - (E) The economy is not producing at its potential, since it is not producing at point D.

# **Shifting the Production Possibilities Curve**

# Production Possibilities

## 4 Key Assumptions Revisited

- Only two goods can be produced
- Full employment of resources
- **Fixed Resources (4 Factors)**
- **Fixed Technology**

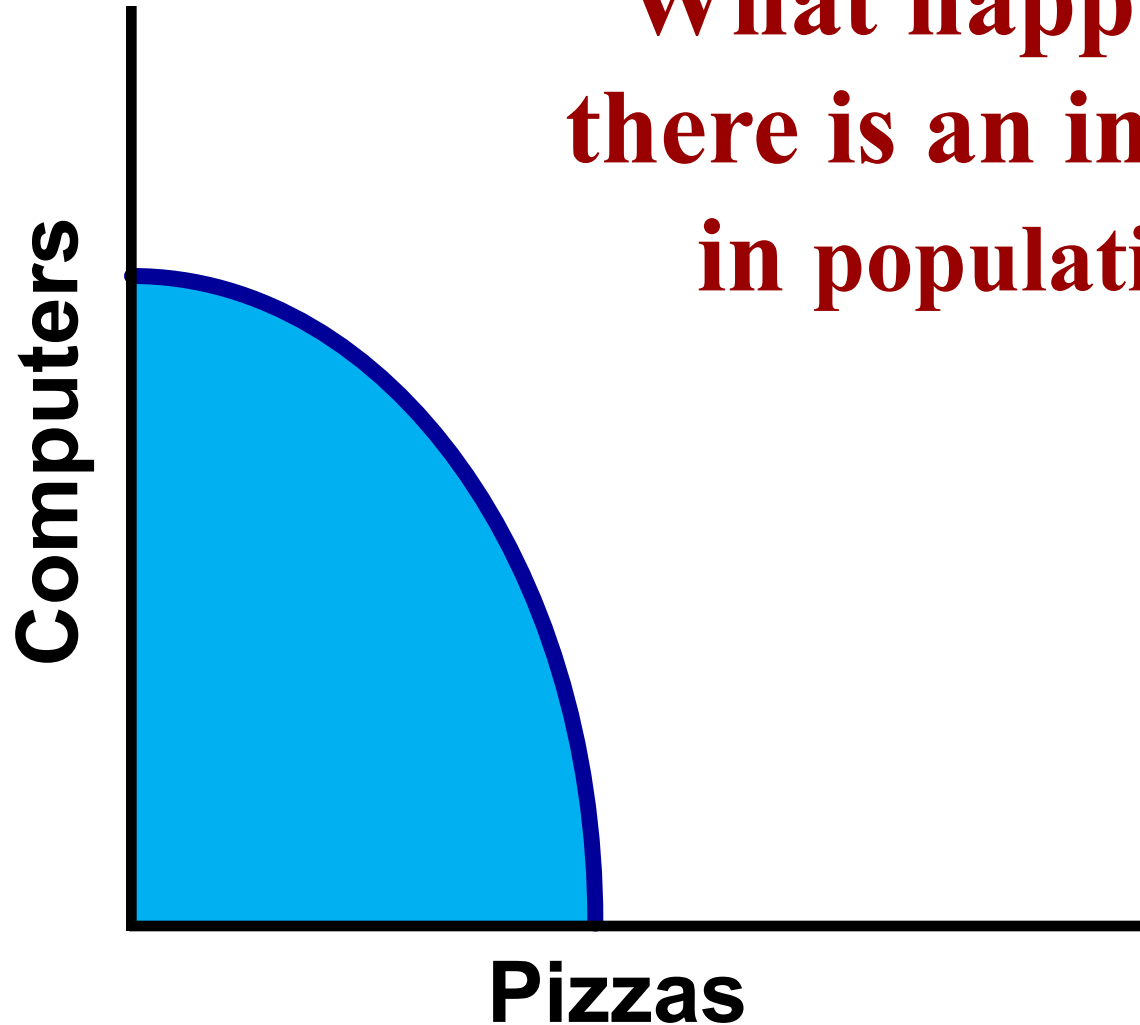
**What if there is a change?**

## 3 Shifters of the PPC

1. Change in resource quantity or quality
2. Change in Technology
3. Change in Trade

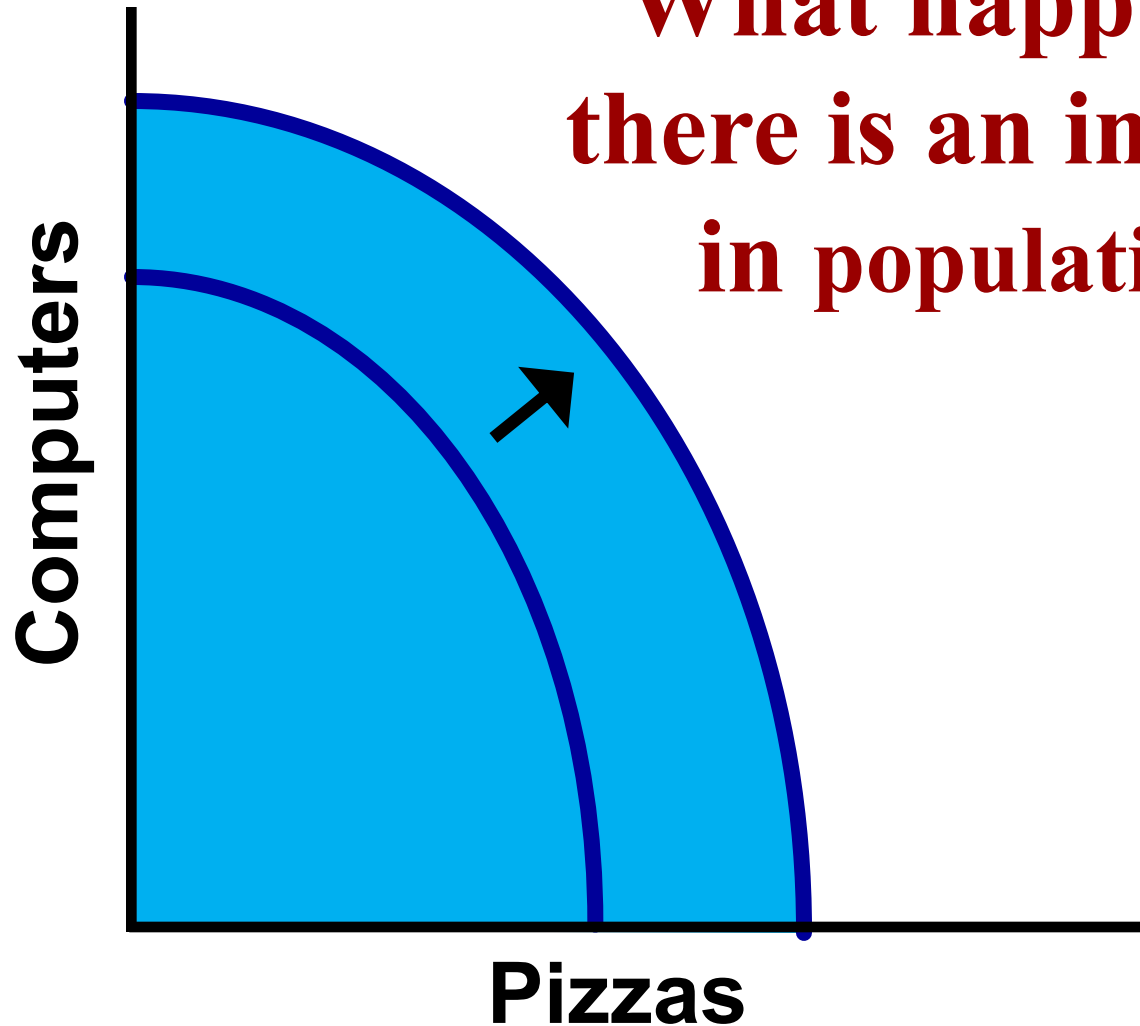
# Production Possibilities

**What happens if  
there is an increase  
in population?**



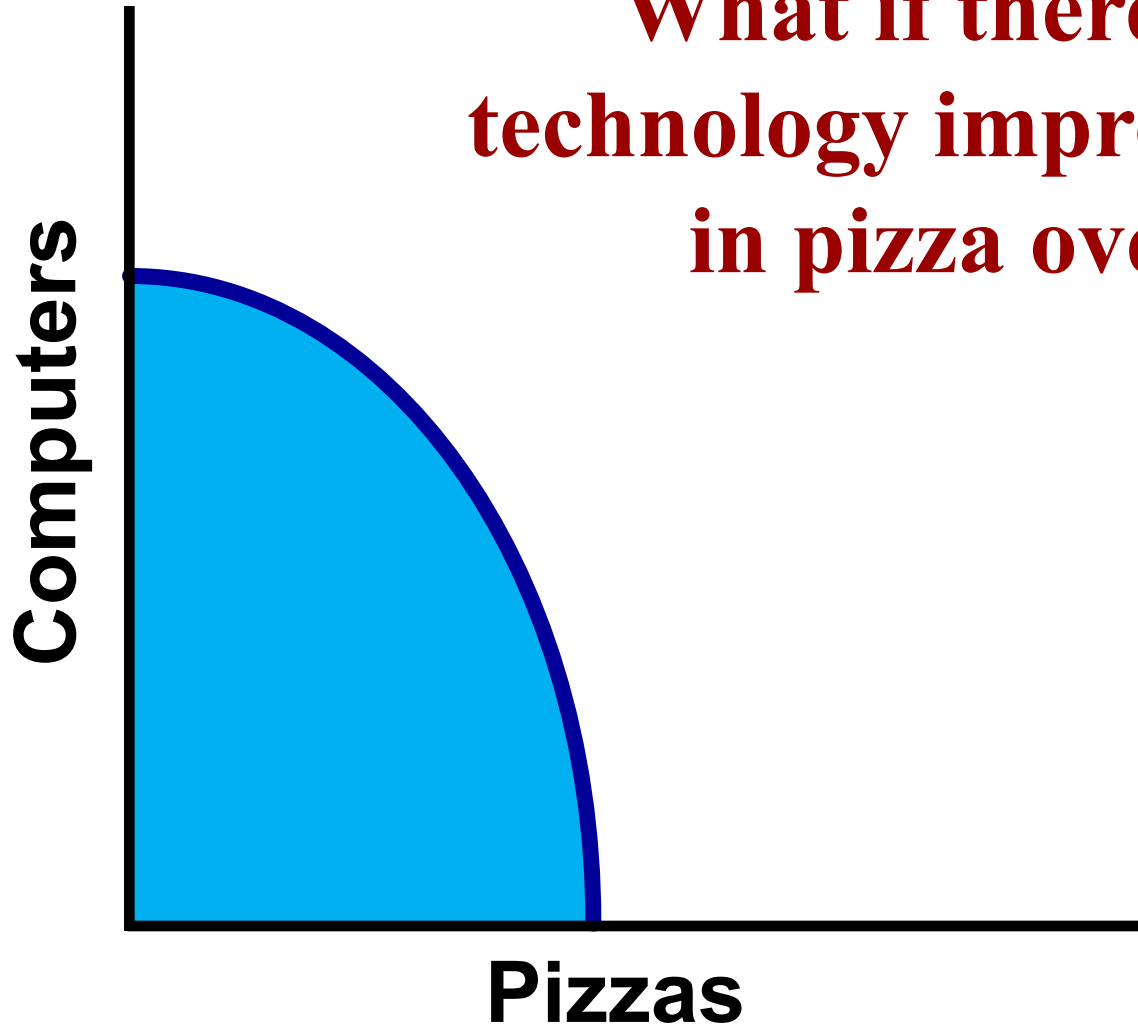
# Production Possibilities

**What happens if  
there is an increase  
in population?**



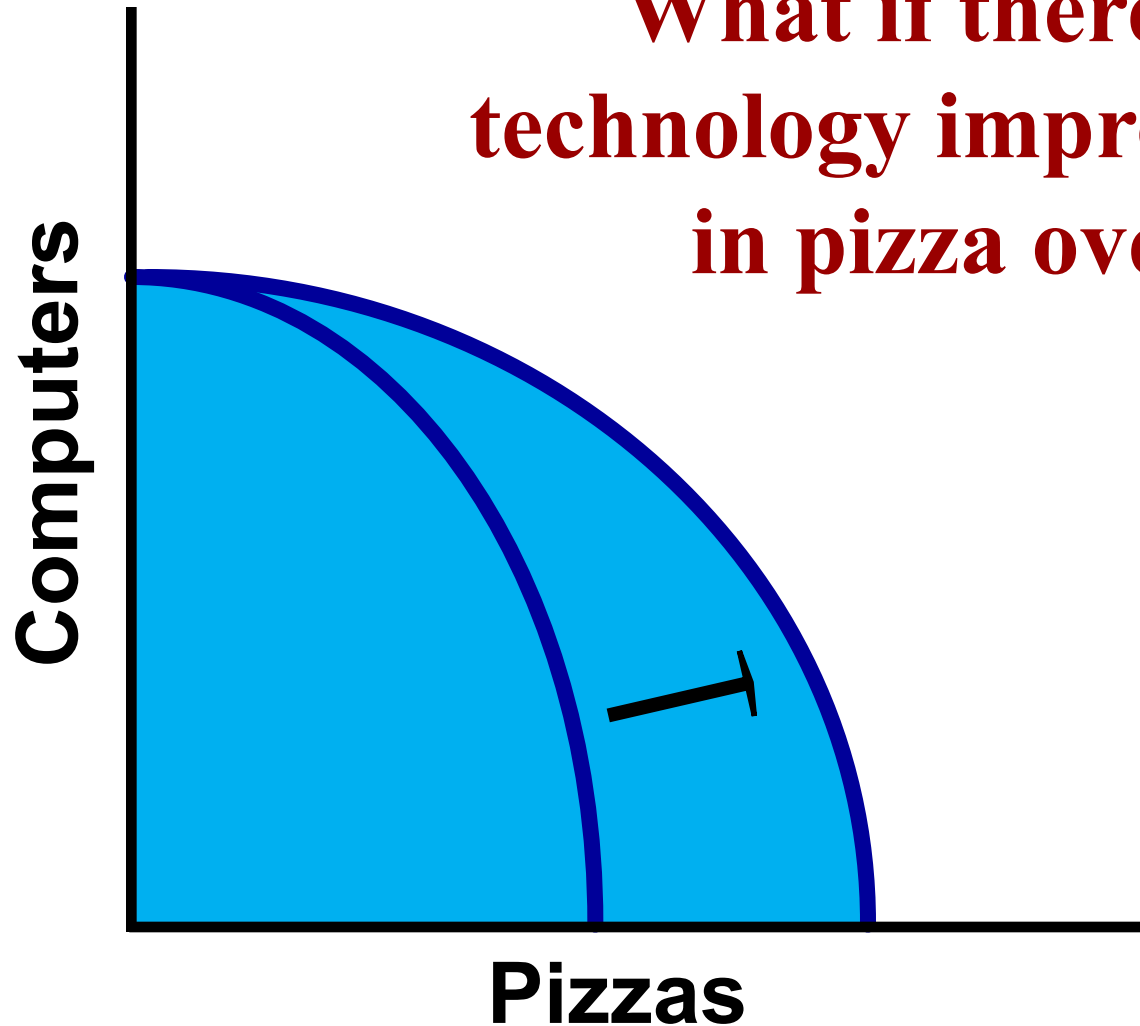
# Production Possibilities

**What if there is a  
technology improvement  
in pizza ovens**



# Production Possibilities

**What if there is a  
technology improvement  
in pizza ovens**

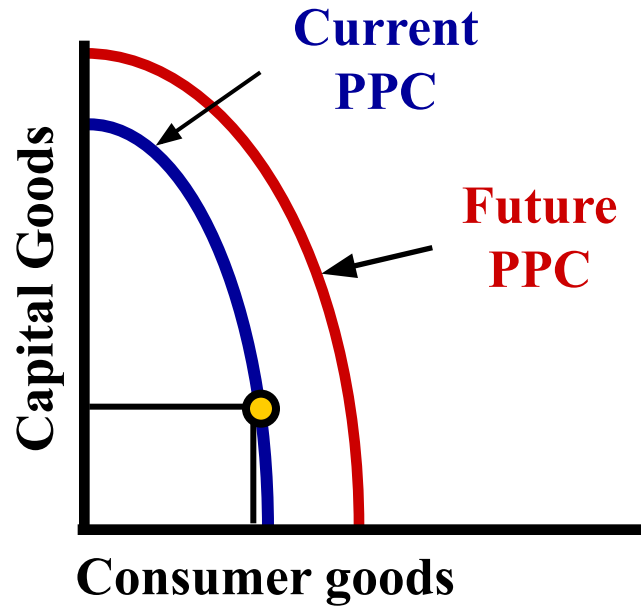




# Capital Goods and Future Growth

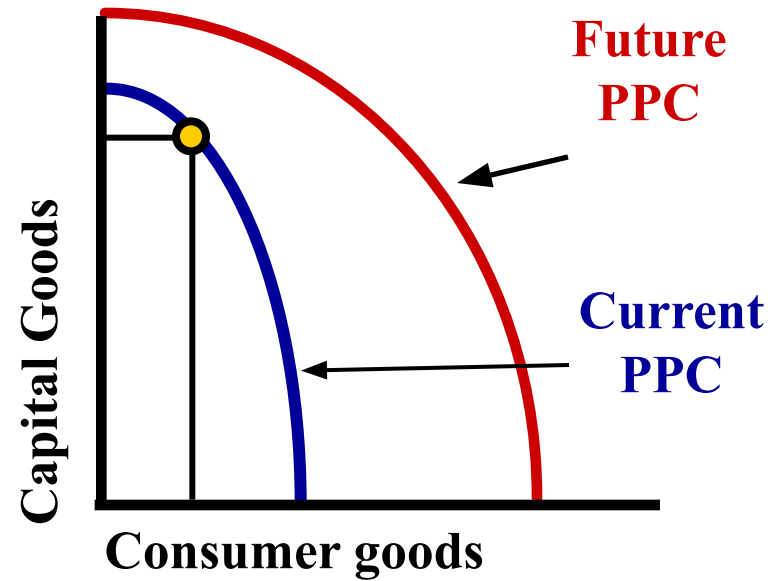
Countries that produce more capital goods will have more growth in the future.

**Panama – Favors  
Consumer Goods**



**Panama**

**Mexico – Favors  
Capital Goods**



**Mexico**

# PPC Practice

**Draw a PPC showing changes for each of the following:**

## **Pizza and Computers (3)**

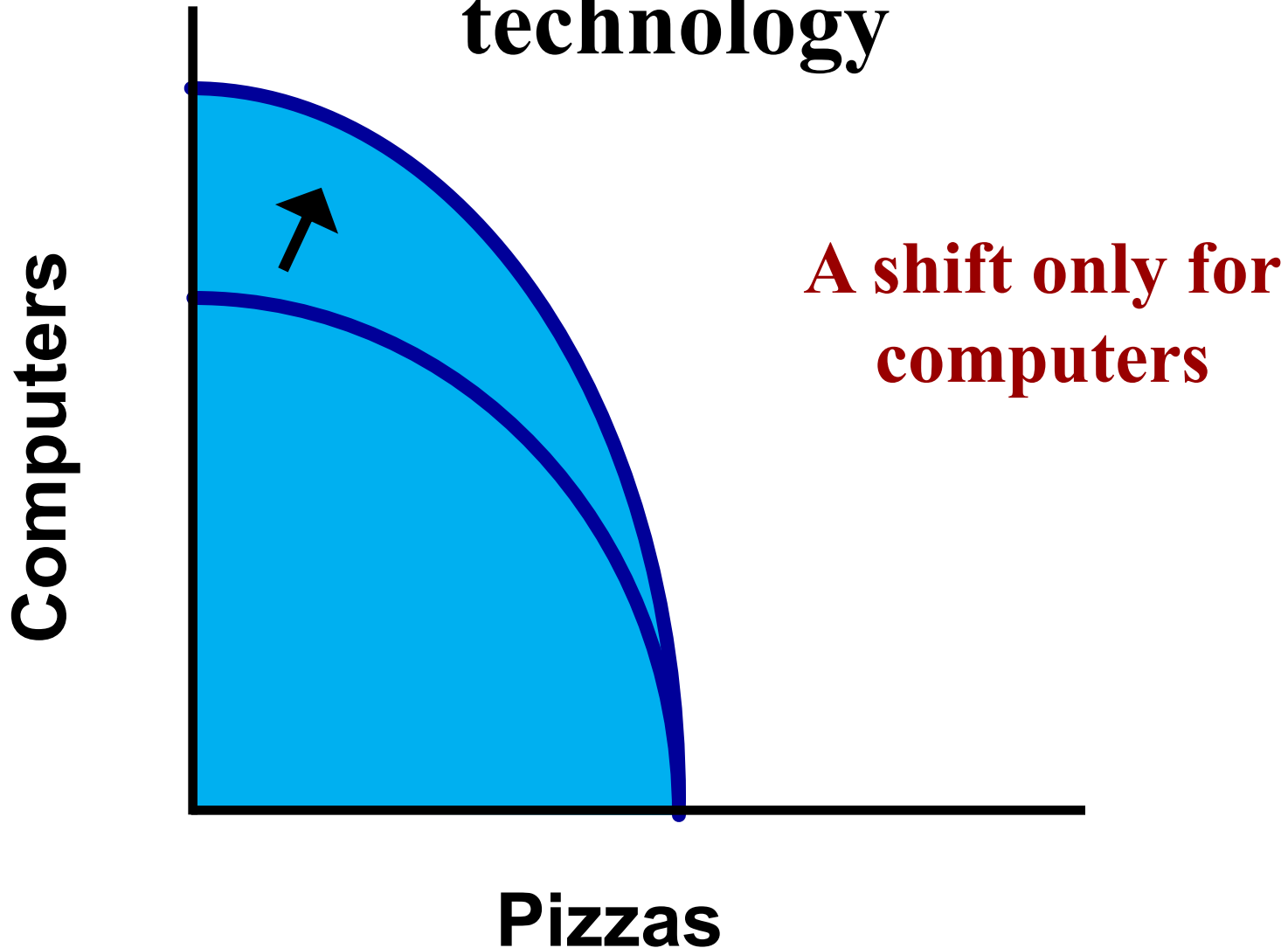
- 1. New computer making technology**
- 2. Decrease in the demand for pizza**
- 3. Mad cow disease kills 85% of cows**

## **Consumer goods and Capital Goods (4)**

- 4. Destruction of power plants leads to severe electricity shortage**
- 5. Faster computer hardware**
- 6. Many workers unemployed**
- 7. Significant increases in education**

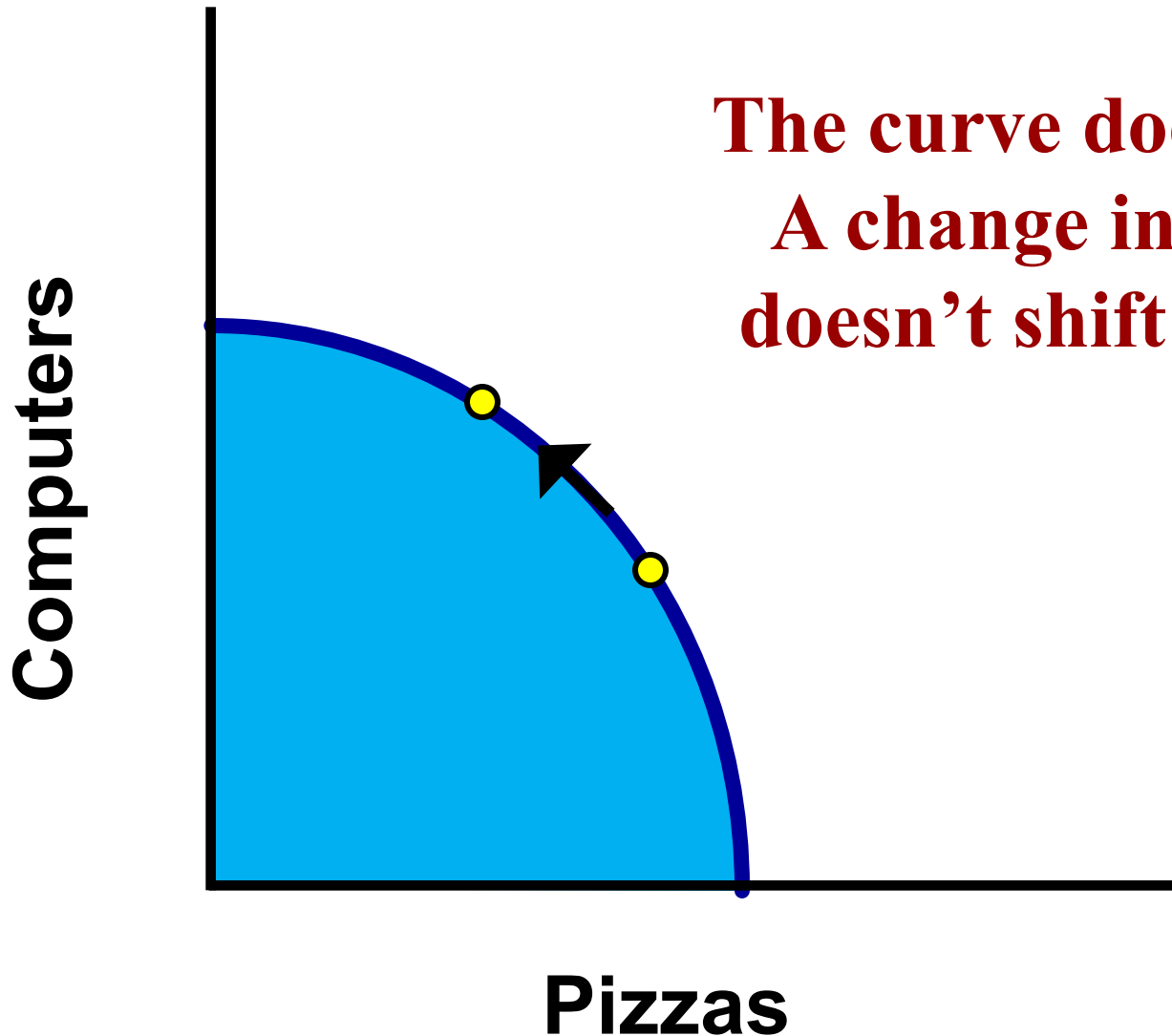
# Question #1

**New computer making  
technology**



# Question #2

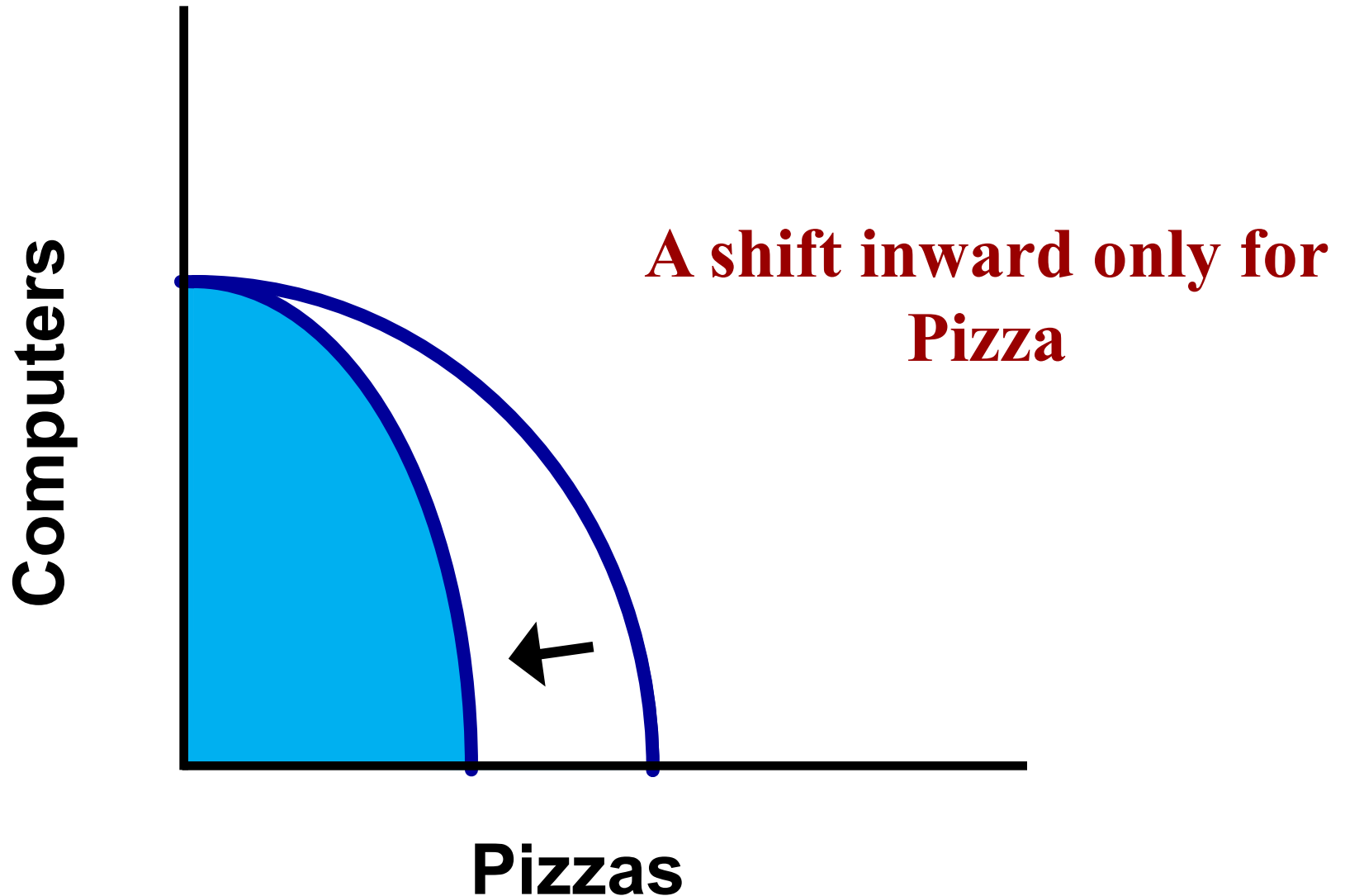
Decrease in the demand for pizza



**The curve doesn't shift!**  
**A change in demand**  
**doesn't shift the curve**

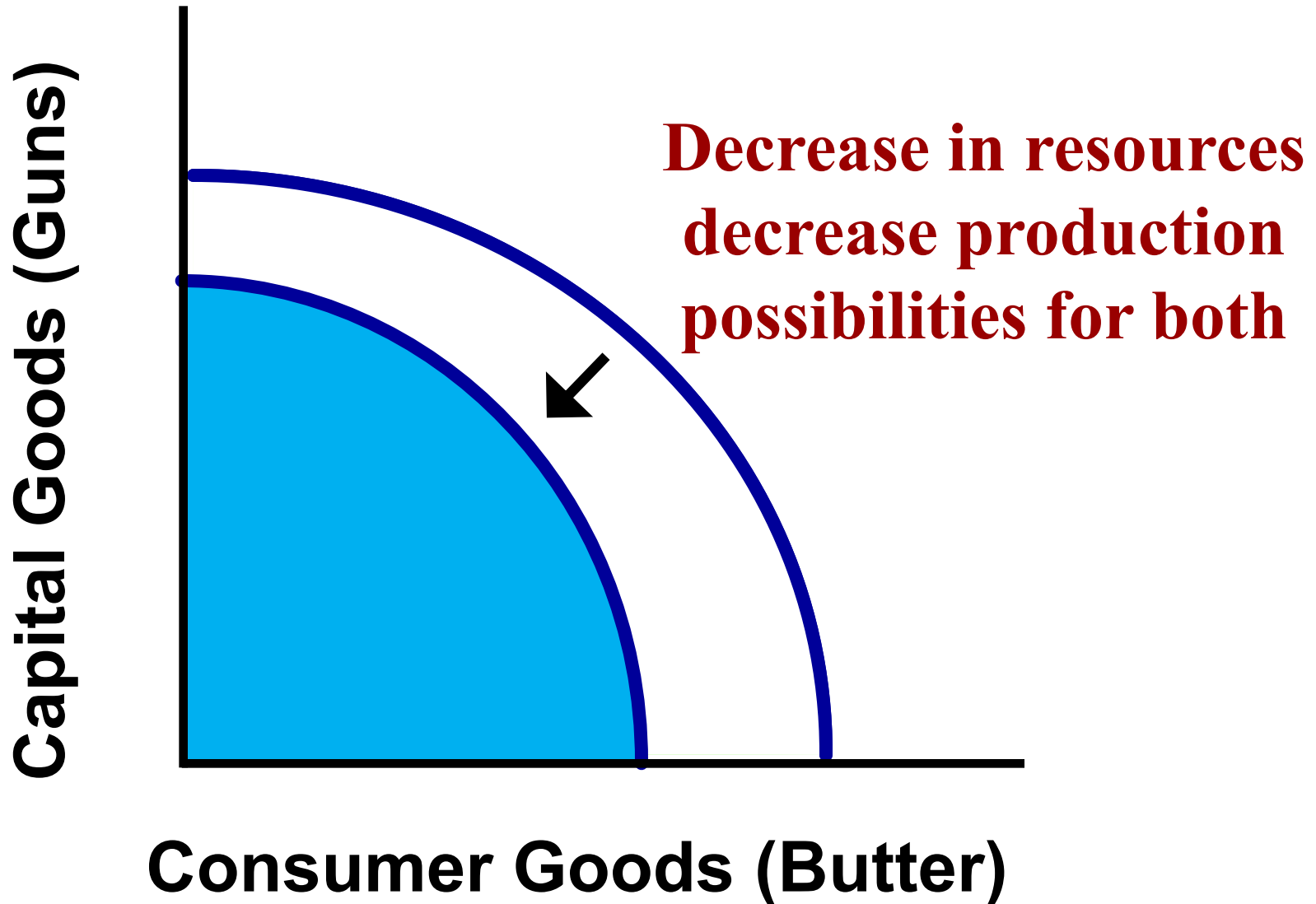
# Question #3

**Mad cow disease kills 85% of cows**



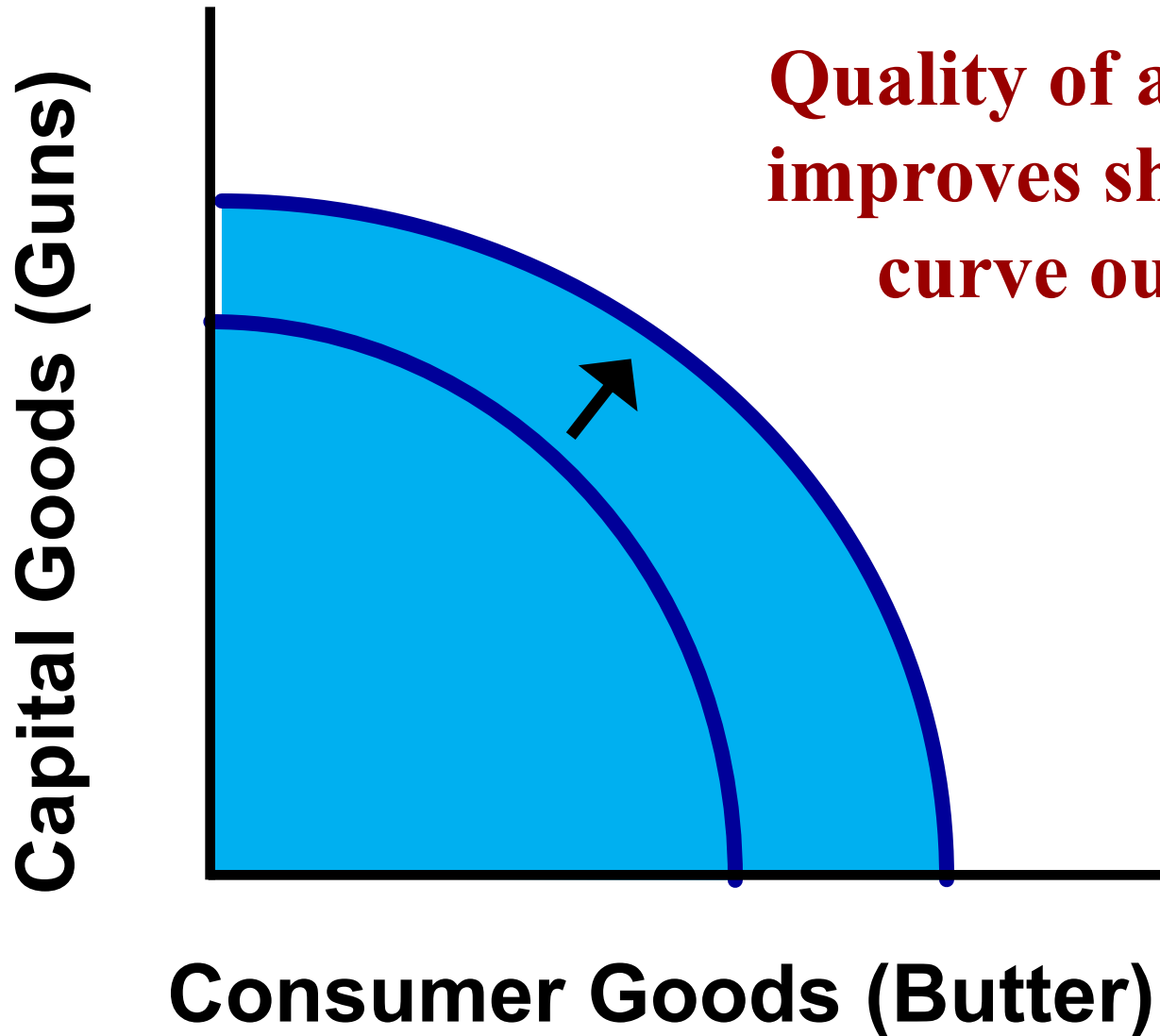
# Question #4

## Destruction of power plants



# Question #5

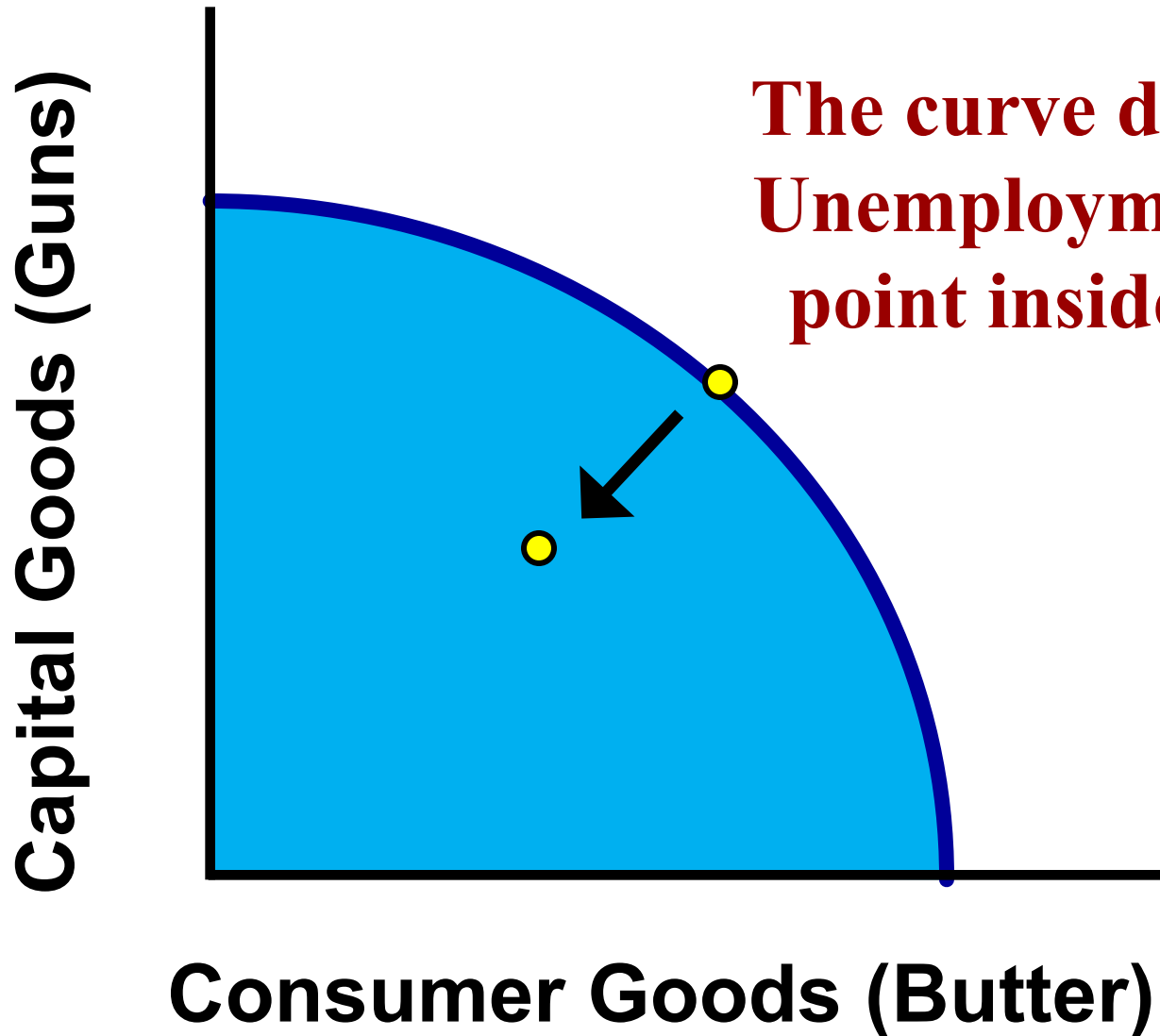
## Faster computer hardware



**Quality of a resource improves shifting the curve outward**

# Question #6

**Many workers unemployed**

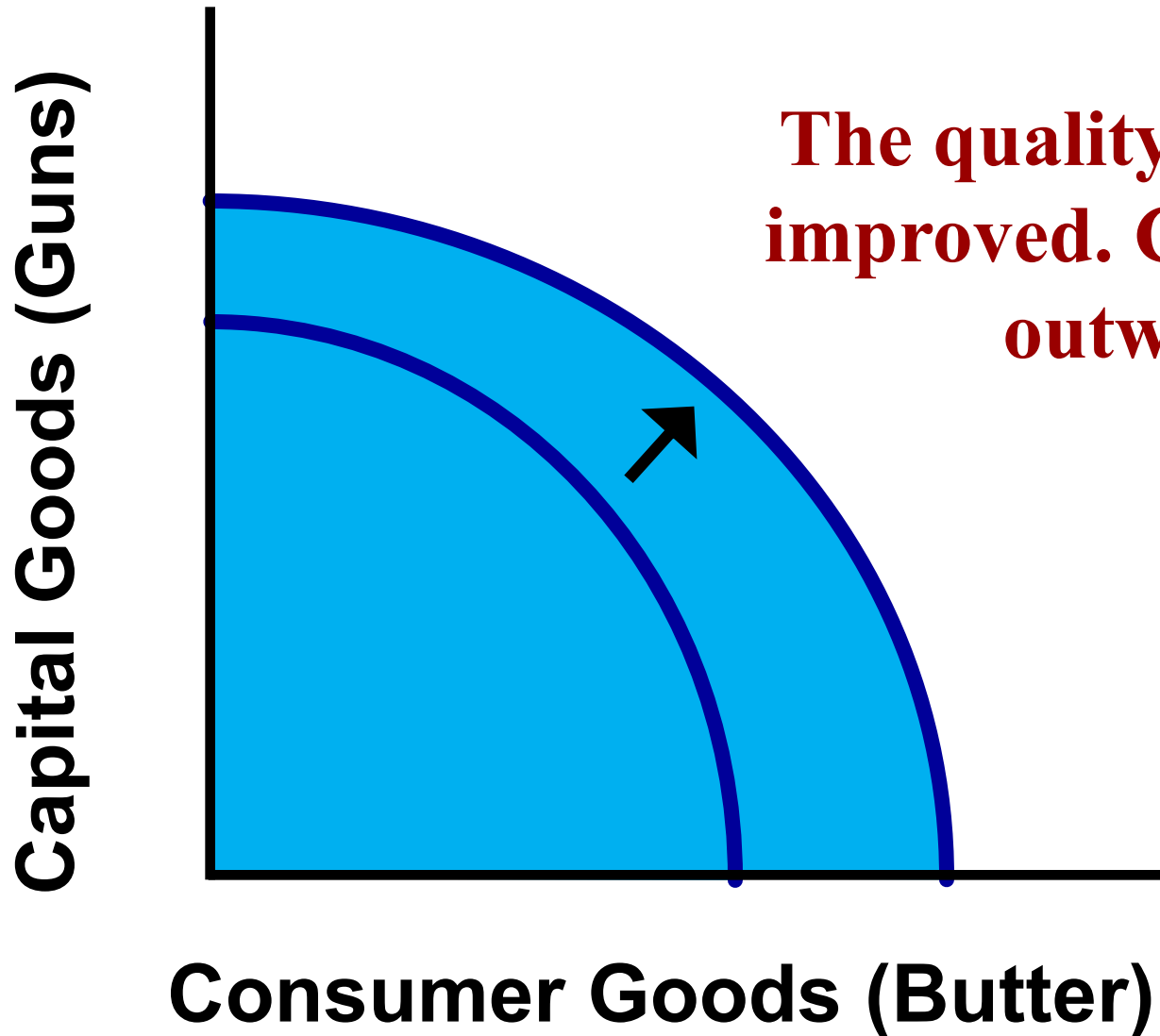


**The curve doesn't shift!  
Unemployment is just a  
point inside the curve**



# Question #7

**Significant increases in education**



**The quality of labor is improved. Curve shifts outward.**

# Extra graph to manipulate or add to powerpoint or questions

