

Unit I: Basic Economic Concepts Problem Set #1

1. Complete each of the following tasks with short paragraphs:

- A. Define scarcity and explain how it is related to choices and trade-offs (____/3)
- B. Fully explain the difference between the following (USE EXAMPLES FOR EACH):
 - i. Trade offs and Opportunity Cost (____/3)
 - ii. Price and Cost (____/3)
 - iii. Normative and Positive Economics (____/3)
 - iv. Consumer Goods and Capital Goods (____/3)
 - v. Allocative and Productive Efficiency (____/3)
 - vi. Resource Markets and Product Markets (____/3)
 - vii. Free-Market and Centrally Planned Economies (____/3)

2. Draw a Production Possibilities Graph for the Ford Motor Co. using the following information: (____/5)

	A	B	C	D	E	F	G
Trucks	0	20	28	35	40	43	45
Cars	54	52	49	43	35	25	0

- A. What are the consequences of Ford producing at combination A? Combination G? In reality, are either combinations desirable? Why? Why not? (____/5)
- B. Plot the combination with 30 cars and 40 trucks and label it “Y.” Plot the combination with 40 cars and 50 trucks and label it “X.” Explain what is happening at these points? (____/5)
- C. Explain, with examples, how your graph shows 5 concepts: opportunity costs, efficiency, unemployment, the law of increasing opportunity costs, and economic growth. (____/11)

3. Use the PPF-A and PPF-B on the back of this paper to answer the following:

- A. On PPF-A, what is the opportunity cost from point a to b in terms of guns? What about moving from b to c? What generalizations can you make? (____/5)
- B. On PPF-B, what is the opportunity cost from point a to b in terms of guns? What is the PER UNIT OPPORTUNITY COST from moving from c to e? (____/5)
- C. Which PPF shows increasing opportunity costs? Use numerical examples to explain why? (____/5)
- D. Fully explain three specific situations that would shift PPF-B outward. Draw and label these changes on three separate graphs. (____/5)

4. Complete the handout entitled “ Microeconomics: Lesson 2, Activity 2” (____/10)

5. The following figures represent the amount that can be produced with a fixed amount of factor inputs.

	Bananas	Sugarcane
Jamaica	100	50
Puerto Rico	160	40

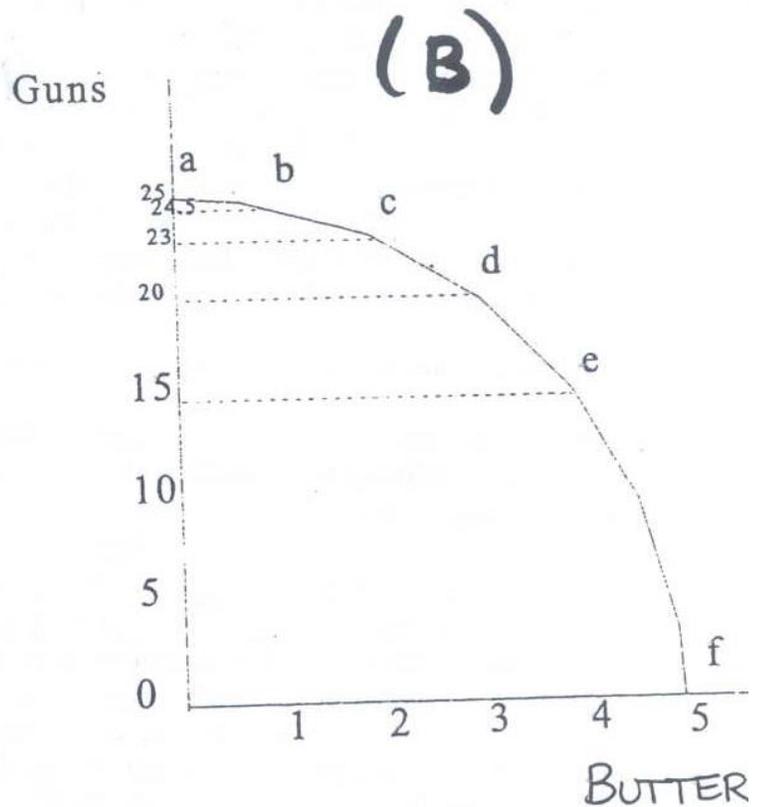
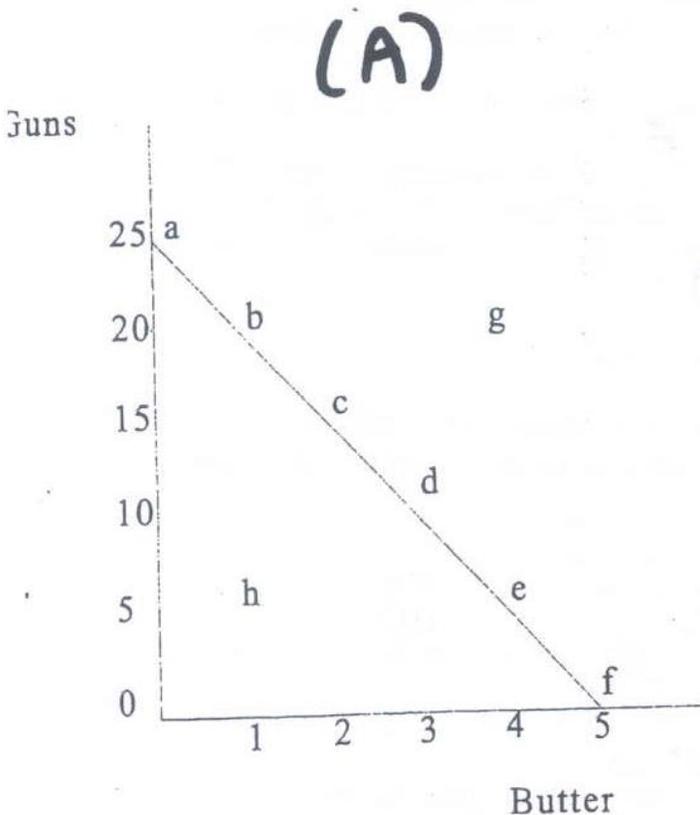
- A. Which country has the absolute advantage in bananas? Which country has the absolute advantage in sugarcane? Explain how you arrive at that answer? (____/5)
- B. What is Jamaica’s opportunity cost for producing one unit of bananas? What is Puerto Rico’s opportunity cost for producing one unit of sugarcane? (____/5)
- C. Which country has the comparative advantage in bananas? Which country has the comparative advantage in sugarcane? Explain how you arrive at that answer? (____/5)
- D. Should these countries trade? If so, how should they specialize and why? (____/5)

MICRO UNIT I

(8-14%)

Basic Economic Concepts

The study of microeconomics requires students to understand that, in any economy, the existence of limited resources along with unlimited wants results in the need to make choices. An effective AP course, therefore, begins by introducing the concepts of opportunity costs and trade-offs, and illustrates these concepts by using the production possibilities curve or other analytical examples. The course can then proceed to a consideration of how different types of economies determine which goods and services to produce, how to produce them, and to whom to distribute them. It is important that students understand why and how specialization and exchange increase the total output of goods and services. Students need to be able to differentiate between absolute and comparative advantage, to identify comparative advantage from differences in output levels and opportunity costs, and to determine the basis under which mutually advantageous trade can take place between countries. Specific examples from actual economic situations can be used to illustrate and reinforce the principles involved. The importance of property rights, the role of incentives in the functioning of free markets, and the principle of marginal analysis should be highlighted.



Scarcity, Opportunity Cost and Production Possibilities Curves

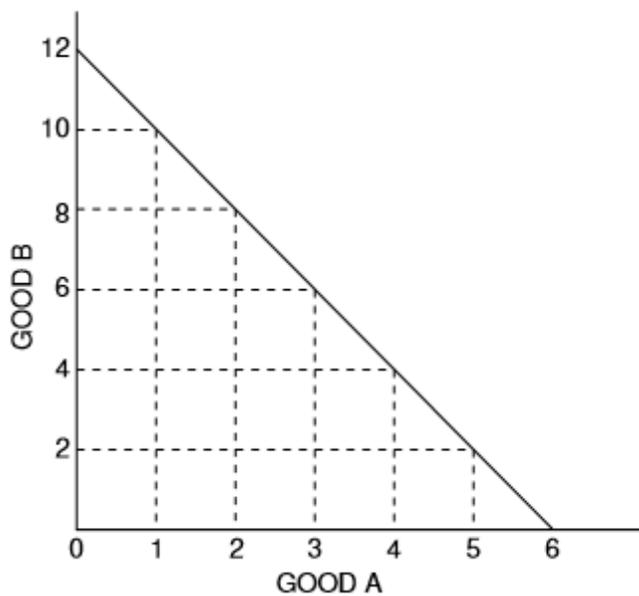
Scarcity necessitates choice. Consuming or producing more of one thing means consuming or producing less of something else. The opportunity cost of using scarce resources for one thing instead of something else is often represented in graphical form as a *production possibilities curve*.

Part A

Use Figures 2.1 and 2.2 to answer these questions. Write the correct answer on the answer blanks, or underline the correct answer in parentheses.



Figure 2.1
Production Possibilities Curve 1

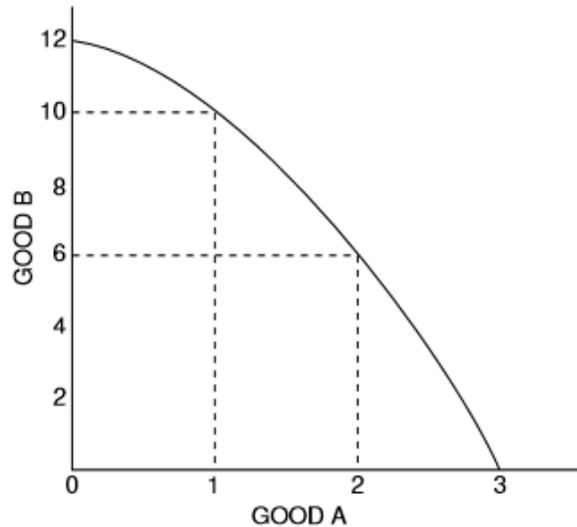


1. If the economy represented by Figure 2.1 is presently producing 12 units of Good B and zero units of Good A:
 - (A) The opportunity cost of increasing production of Good A from zero units to one unit is the loss of _____ unit(s) of Good B.
 - (B) The opportunity cost of increasing production of Good A from one unit to two units is the loss of _____ unit(s) of Good B.
 - (C) The opportunity cost of increasing production of Good A from two units to three units is the loss of _____ unit(s) of Good B.
 - (D) This is an example of (*constant / increasing / decreasing / zero*) opportunity cost per unit for Good A.

Adapted from Phillip Saunders, *Introduction to Microeconomics: Student Workbook*, 18th ed. (Bloomington, Ind., 1998). Copyright ©1998 Phillip Saunders. All rights reserved.



Figure 2.2
Production Possibilities Curve 2

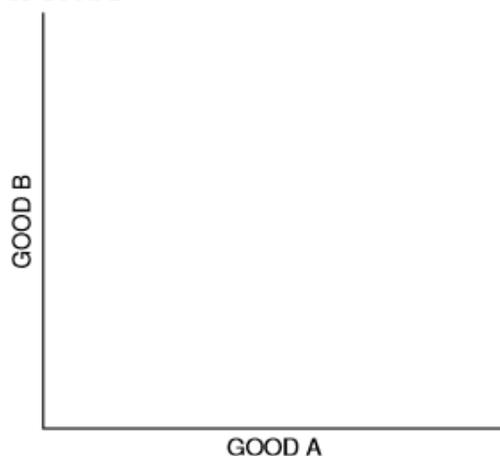


2. If the economy represented in Figure 2.2 is presently producing 12 units of Good B and zero units of Good A:
- (A) The opportunity cost of increasing production of Good A from zero units to one unit is the loss of _____ unit(s) of Good B.
 - (B) The opportunity cost of increasing production of Good A from one unit to two units is the loss of _____ unit(s) of Good B.
 - (C) The opportunity cost of increasing production of Good A from two units to three units is the loss of _____ unit(s) of Good B.
 - (D) This is an example of (*constant / increasing / decreasing / zero*) opportunity cost per unit for Good A.

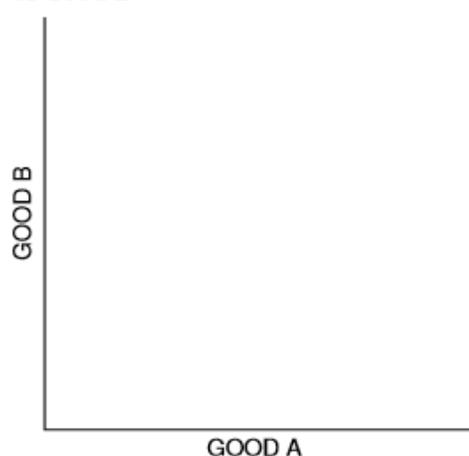
Part B

Use the axes in Figures 2.3, 2.4 and 2.5 to draw the type of curve that illustrates the label above each axis.

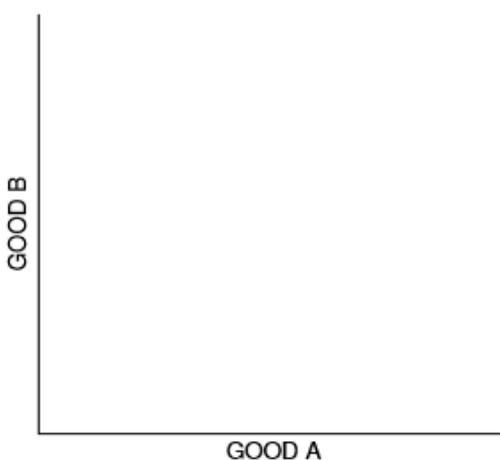
* Figure 2.3
Production Possibilities Curve 3
 Increasing opportunity cost per unit of Good B



* Figure 2.4
Production Possibilities Curve 4
 Zero opportunity cost per unit of Good B



* Figure 2.5
Production Possibilities Curve 5
 Constant opportunity cost per unit of Good B



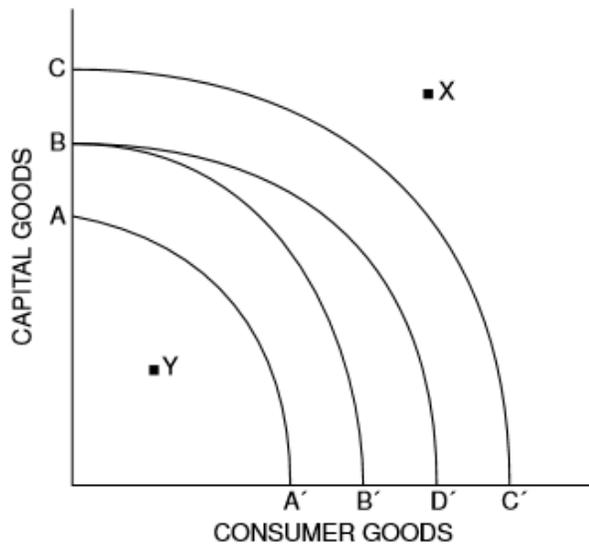
Part C

Use Figure 2.6 to answer the next five questions. Each question starts with Curve BB' as a country's production possibilities curve.



Figure 2.6

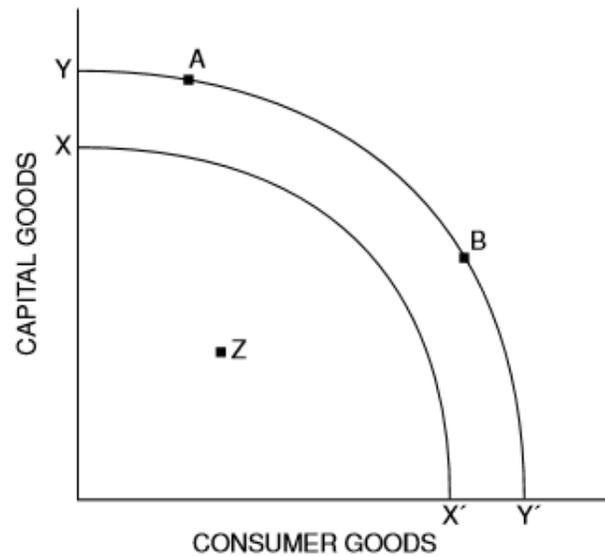
Production Possibilities Curve: Capital Goods and Consumer Goods



3. Suppose there is a major technological breakthrough in the consumer-goods industry, and the new technology is widely adopted. Which curve in the diagram would represent the new production possibilities curve? (Indicate the curve you choose with two letters.) _____
4. Suppose a new government comes into power and forbids the use of automated machinery and modern production techniques in all industries. Which curve in the diagram would represent the new production possibilities curve? (Indicate the curve you choose with two letters.) _____
5. Suppose massive new sources of oil and coal are found within the economy, and there are major technological innovations in both industries. Which curve in the diagram would represent the new production possibilities curve? (Indicate the curve you choose with two letters.) _____
6. If BB' represents a country's current production possibilities curve, what can you say about a point like X? (Write a brief statement.)
7. If BB' represents a country's current production possibilities curve, what can you say about a point like Y? (Write a brief statement.)

Part D

Use Figure 2.7 to answer the next three questions.

**Figure 2.7****Production Possibilities Curve: Capital Goods and Consumer Goods**

8. What change could cause the production possibilities curve to shift from the original curve (XX') to the new curve (YY')?
9. Under what conditions might an economy be operating at Point Z?
10. Why might a government implement policy to move the economy from Point B to Point A?