

The Economic Way of Thinking

- Everything has a cost.
- People choose for good reasons.
- Incentives matter.
- People create economic systems to influence choices and incentives.
- People gain from voluntary trade.
- Economic thinking is marginal thinking.
- The value of a good or service is affected by people's choices.
- Economic actions create intended and unintended consequences.
- The test of a theory is its ability to predict correctly.

Do You Think Like an Economist?

Circle T for true or F for false in the statements that follow.

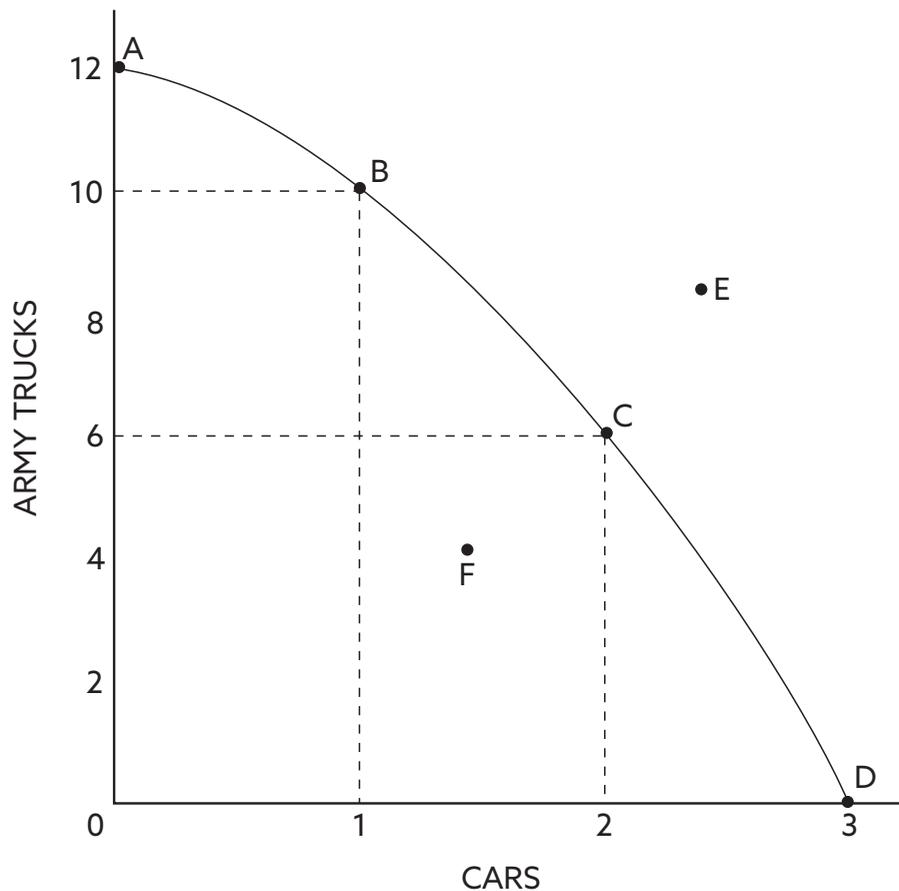
- T F 1. Because it is desirable, sunshine is scarce.
- T F 2. Because it is limited, polio is scarce.
- T F 3. Because water covers three-fourths of the earth's surface and is renewable, it cannot be considered scarce.
- T F 4. The main cost of going to college is tuition, room, and board.
- T F 5. If electric companies raise their rates, consumers will use the same amount of electricity anyway.
- T F 6. You get what you pay for.
- T F 7. If someone makes an economic gain, someone else loses.
- T F 8. If one nation produces everything better than another nation, there is no economic reason for these two nations to trade.
- T F 9. I'm quitting my job and taking one that has better pay. There are no secondary effects from this action.
- T F 10. A business owner's decision to show more care for consumers is a decision to accept lower levels of profits.

Scarcity and Opportunity Costs

Directions: For each of the following questions, identify the implicit cost or explicit cost.

1. At lunch, Devin has the choice of a hamburger, pizza, or salad. He really wants the pizza but decides to eat healthier and chooses the salad.
2. Diego owns an ice cream shop in a local tourist town. Last month he earned \$5,000 in profits. He chose to use the \$5,000 to purchase a new freezer.
3. Kay is a very talented swimmer. On some days she really wants to skip practice and spend time with her friends. When this happens, she thinks about her goal of swimming in the State Finals so she goes to practice.
4. Nafez owns a company that produces paper clips and staples. Due to increased demand for paper clips he decides to convert part of his staple assembly line to paper clips.
5. David has a job earning \$15 per hour. He decides to take four hours off of work to go hiking with his friends.
6. Valeria has a big test in economics tomorrow. She is trying to decide if she should study another 10 minutes or quit studying to watch her favorite television show. She decides to study another 10 minutes.
7. A local government is completing its budget. It needs money for school improvements, road improvements, and the fire department. It had planned on spending the money on school improvements and the fire department, but after meeting with taxpayers, it decided to put the money toward road improvements.

Production Possibilities Curve



- 1 What trade-offs are involved?
- 2 Why is the PPC concave, or bowed out, from the origin?
- 3 What does a point inside the PPC illustrate?
- 4 What is a historical example of a point inside the PPC?
- 5 What is the significance of a point outside the PPC?
- 6 Under what conditions can a point outside the PPC be reached?
- 7 What would a country's PPC look like if it did not have a scarcity of resources?

Economics Systems

Main Economic Questions

- What to produce?
- How to produce it?
- Who consumes what is produced?

Three Types of Economic Systems

- Pure Market Economy
- Command Economy
- Traditional Economy

Most countries have a mixture of all three types of systems.

Absolute Advantage

- The ability to produce more of a good or service than some other producer, using the same amount of resources.

Comparative Advantage

- The ability to produce a good or service at a lower opportunity cost than another producer.

The Input Method

Input Method of Calculating Comparative Advantage

Uses data to calculate the amount of resources or INPUT that goes into producing a good.



PRODUCTIVITY DATA USING THE INPUT METHOD

	Time required to produce one radio	Time required to produce one bushel of wheat
Hakeem	20 minutes	5 minutes
Sita	30 minutes	15 minutes



OPPORTUNITY COST OF PRODUCING RADIOS AND WHEAT

	Opportunity cost of producing one radio	Opportunity cost of producing one bushel of wheat
Hakeem	1 radio = $\frac{20 \text{ minutes}}{5 \text{ minutes}} = 4 \text{ bushels}$	1 wheat = $\frac{5 \text{ minutes}}{20 \text{ minutes}} = \frac{1}{4} \text{ radio}$
Sita	1 radio = $\frac{30 \text{ minutes}}{15 \text{ minutes}} = 2 \text{ bushels}$	1 wheat = $\frac{15 \text{ minutes}}{30 \text{ minutes}} = \frac{1}{2} \text{ radio}$

The Output Method

Output Method of Calculating Comparative Advantage

Uses data to calculate the amount of the product or OUTPUT that can be produced with the same amount of resources.



PRODUCTIVITY DATA USING THE OUTPUT METHOD

	Radios produced per hour	Wheat produced per hour
Hakeem	$\frac{60 \text{ minutes}}{20 \text{ minutes}} = 3 \text{ radios}$	$\frac{60 \text{ minutes}}{5 \text{ minutes}} = 12 \text{ bushels}$
Sita	$\frac{60 \text{ minutes}}{30 \text{ minutes}} = 2 \text{ radios}$	$\frac{60 \text{ minutes}}{15 \text{ minutes}} = 4 \text{ bushels}$



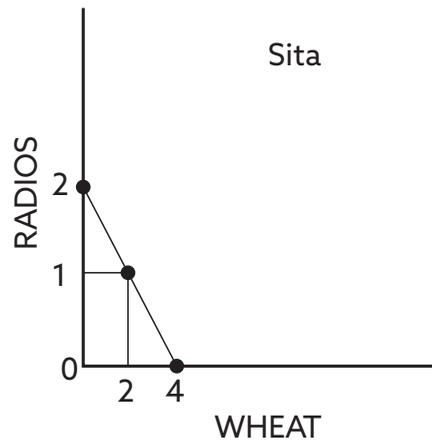
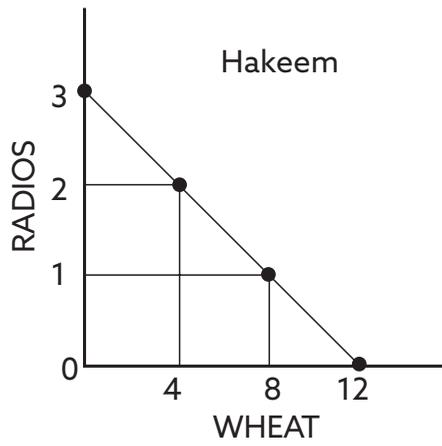
OPPORTUNITY COST OF PRODUCING RADIOS AND WHEAT

	Opportunity cost of producing one radio	Opportunity cost of producing one bushel of wheat
Hakeem	3 radios = 1 hour = 12 bushels 1 radio = $12/3 = 4$ bushels	12 bushels = 1 hour = 3 radios 1 bushel = $3/12 = 1/4$ radio
Sita	2 radios = 1 hour = 4 bushels 1 radio = $4/2 = 2$ bushels	4 bushels = 1 hour = 2 radios 1 bushel = $2/4 = 1/2$ radio

UNIT 1 VISUAL 1-5.4



PRODUCTION POSSIBILITIES CURVES FOR HAKEEM AND SITA



Determining Comparative Advantage (output method)

	Output per hour	
	Soybeans	Pounds of beef
Argentina	20	5
Brazil	30	15

- 1 Which country has an absolute advantage in producing soybeans?
- 2 Which country has an absolute advantage in producing beef?
- 3 Which country has a comparative advantage in producing soybeans?
- 4 Which country has a comparative advantage in producing beef?
- 5 Which country should specialize in soybean production?
- 6 Which country should specialize in beef production?

Determining Comparative Advantage (input method)

	Time required for one unit	
	One bushel of soybeans	One pound of beef
Argentina	3 minutes	12 minutes
Brazil	2 minutes	4 minutes

- 1 Which country has an absolute advantage in producing soybeans?
- 2 Which country has an absolute advantage in producing beef?
- 3 Which country has a comparative advantage in producing soybeans?
- 4 Which country has a comparative advantage in producing beef?
- 5 Which country should specialize in soybean production?
- 6 Which country should specialize in beef production?

Anything Worth Doing Is Not Necessarily Worth Doing Well

Bartlett's Familiar Quotations contains wisdom from writers separated by more than a millennium. Explain these bits of wisdom from an economic perspective.

Always take the short cut; and that is the rational one. Therefore say and do everything according to soundest reason.

Meditations iv.51
Marcus Aurelius
A.D. 120 to 181

Whatever is worth doing at all is worth doing well.

Philip Dormer Stanhope
Earl of Chesterfield
1694 to 1773

Life is a chess match. Every decision that you make has a consequence to it.

P.K. Subban
Canadian Pro-Hockey Player
born 1989

Marginal Analysis and Consumer Choice

The total utility of a quantity of goods and services to a consumer can be represented by the maximum amount of money he or she is willing to give in exchange for that quantity. The marginal utility of a good or service to a consumer (measured in monetary terms) is the maximum amount of money he or she is willing to pay for one more unit of the good or service. With these definitions, we can now state a simple idea about consumer tastes: the more of a good a consumer has, the less will be the marginal utility of an additional unit. This is the law of diminishing marginal utility.

Part A: Total Utility and Marginal Utility

Table 1-7.1 presents data on Dolores’s evaluation of different quantities of video games and different quantities of jeans.

1. Use the data to compute the marginal utility of each video game and each pair of jeans. The total utility numbers in the figure represent the total satisfaction, in dollars, Dolores receives from a given quantity of video games or jeans. The marginal utility numbers represent the amount of dollars Dolores is willing to pay for an additional video game or pair of jeans.



Table 1-7.1

MARGINAL UTILITY OF VIDEO GAMES AND JEANS

Number of video games	Total utility	Marginal utility	Number of Jeans	Total utility	Marginal utility
0	\$0		0	\$0	
1	\$60	\$60	1	\$20	\$20
2	\$100	\$40	2	\$36	
3	\$130		3	\$51	
4	\$150		4	\$65	
5	\$165		5	\$78	
6	\$175		6	\$90	

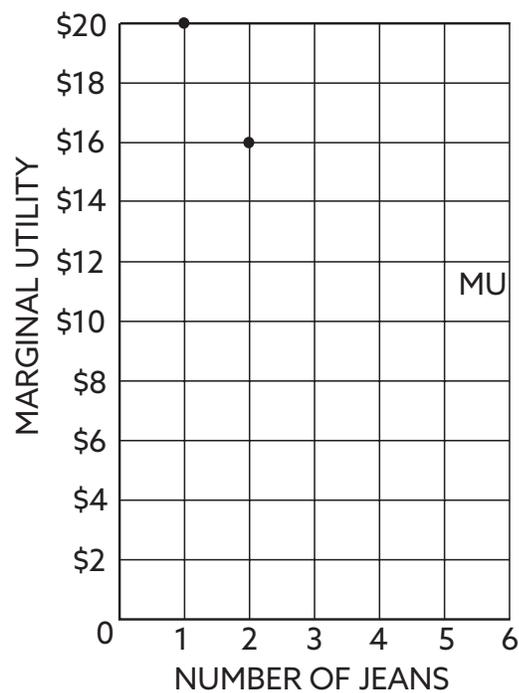
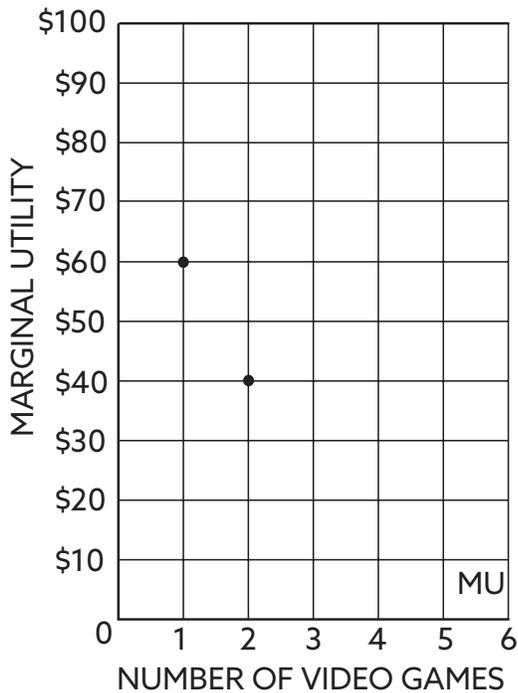
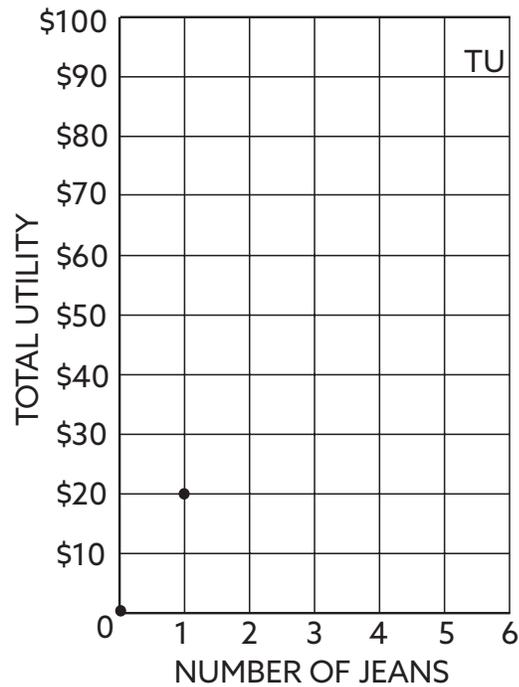
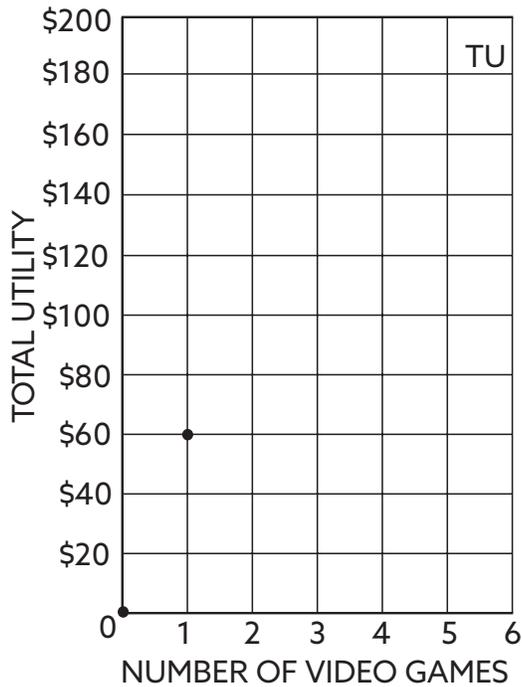
UNIT 1 ACTIVITY 1-7.1 (continued)

2. Using Figure 1-7.1, plot Dolores's total utility and marginal utility for video games and jeans. Each graph has two points to get you started.



Figure 1-7.1

TOTAL AND MARGINAL UTILITY OF VIDEO GAMES AND JEANS



$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y}$$

4. Use the information in Table 1-7.2 to analyze Callie's choice between gasoline and food.

Callie has an income of \$55, the price of a unit of gasoline is \$5, and the price of a unit of food is \$10. Complete the table.



Table 1-7.2

CALLIE BUYS GASOLINE AND FOOD

Gasoline (G)	MU _G	MU _G /P _G	Food (F)	MU _F	MU _F /P _F
1 unit	+\$60		1 unit	+\$120	
2 units	+\$30		2 units	+\$80	+8.0
3 units	+\$15	+3.0	3 units	+\$60	
4 units	+\$5		4 units	+\$30	+3.0
5 units	+\$3	+0.6	5 units	+\$10	
6 units	+\$1		6 units	+\$5	+0.5