



Chapter 1: What is Economics? Section 3

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ECONOMICS

PEARSON

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Objectives

1. **Interpret** a production possibilities curve.
2. **Explain** how production possibilities curves show efficiency, growth, and cost.
3. **Explain** why a country's production possibilities depend on its resources and technology.



Key Terms

- **production possibilities curve:** a graph that shows alternative ways to use an economy's productive resources
- **production possibilities frontier:** a line on a production possibilities curve that shows the maximum possible output an economy can produce
- **efficiency:** the use of resources in such a way as to maximize the output of goods and services



Key Terms, cont.

- **underutilization:** the use of fewer resources than an economy is capable of using
- **law of increasing costs:** an economic principle which states that as production shifts from making one good or service to another, more and more resources are needed to increase production of the second good or service



Introduction

- How does a nation decide what and how to produce?
 - To decide what and how to produce, economists use a tool known as a production possibilities curve.
 - This curve helps a nation's economists determine the alternative ways of using that nation's resources.



Production Possibilities

- Economists often use graphs to analyze the choices and trade-offs that people make.
- A production possibilities curve is a graph that shows alternative ways to use an economy's productive resources.
 - To draw a production possibilities curve, an economist begins by deciding which goods or services to examine.



Production Possibilities Curve

- The table below shows six different combinations of watermelons and shoes that Capeland could produce using all of its factor resources.

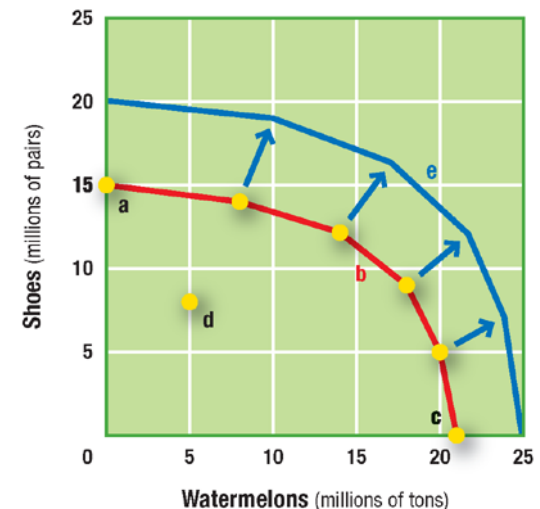
– How many watermelons can Capeland produce if they are making 9 million pairs of shoes?



Watermelons (millions of tons)	Shoes (millions of pairs)
0	15
8	14
14	12
18	9
20	5
21	0

KEY

- a. No watermelons, all possible shoes
- b. A production possibilities frontier
- c. No shoes, all possible watermelons



- d. A point of underutilization
- e. Future production possibilities frontier



Production Possibilities Frontier

- The line on a production possibilities curve that shows the maximum possible output an economy can produce is called the production possibilities frontier.
 - Each point on the production possibilities frontier reflects a trade-off. These trade-offs are necessary because factors of production are scarce.
 - Using land, labor, and capital to make one product means that fewer resources are left to make something else.



Efficiency

- A production possibilities frontier represents an economy working at its most efficient level.
- Sometimes an economy works inefficiently and it uses fewer resources than it is capable of using. This is known as underutilization.



- A production possibilities curve can also show growth.
 - When an economy grows, the curve shifts to the right.
 - However, when an economy's production capacity decreases, the economy slows and the curve shifts to the left.



- Production possibilities curves can be used to determine the opportunity costs involved in make an economic decision.
 - Cost increases as production shifts from making one item to another.
 - The law of increasing costs help explain the production possibilities curve.
 - As we move along the curve, we trade off more and more for less and less output.



Law of Increasing Costs

STEP 1

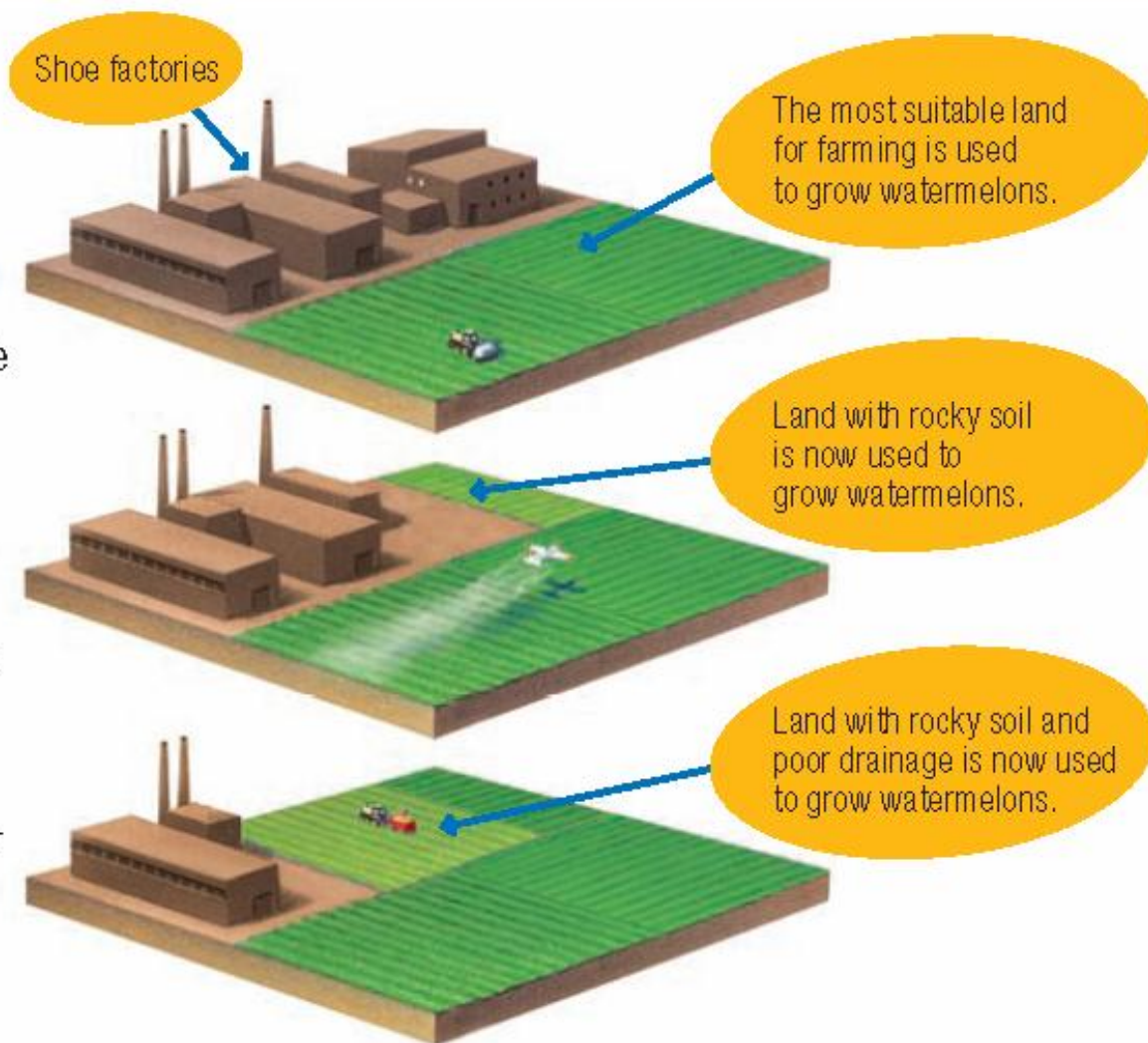
Initially, resources are used efficiently to make a balance of watermelons and shoes.

STEP 2

A decision is made to grow more watermelons. Less suitable resources are shifted to farm production. Farm production increases. Shoe production decreases.

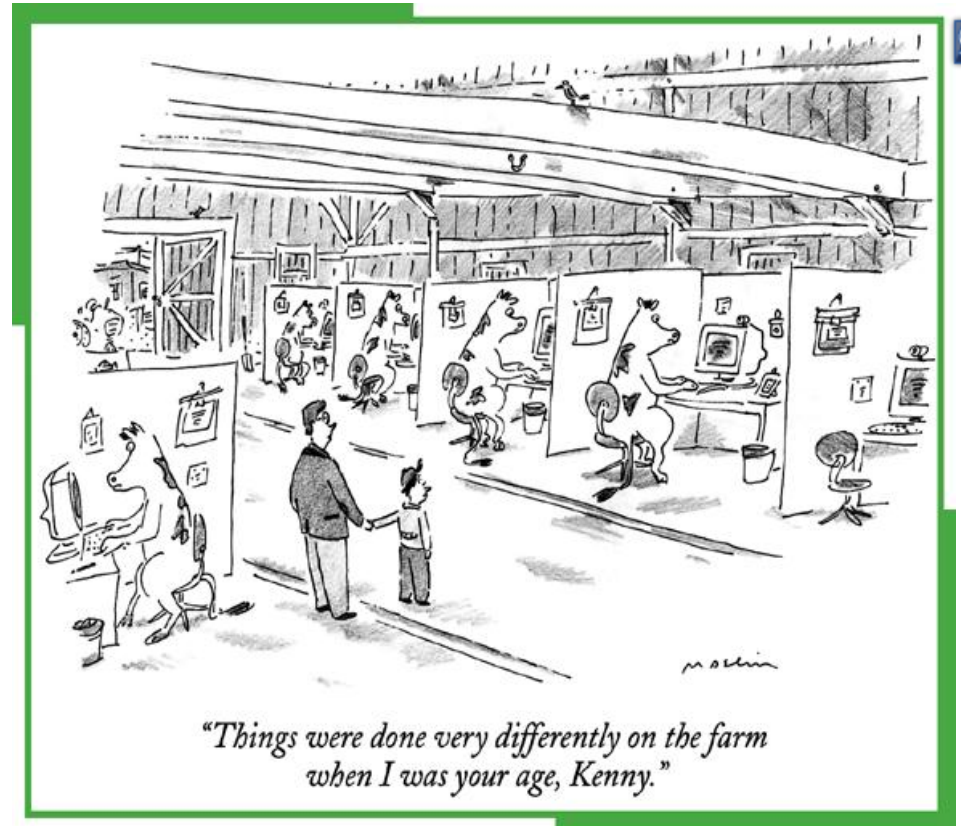
STEP 3

A decision is made to grow even more watermelons, and more resources are shifted to farm production. Because the added land is less productive, a greater amount of it must be cultivated. Farm output increases. Shoe output decreases by an even greater amount.



Technology and Education

- Technology can increase a nation's efficiency.
- Many governments spend money investing in new technology, education, and training for the workforce.



Review

- Now that you have learned about how a nation decides what and how to produce, go back and answer the Chapter Essential Question.
 - How can we make the best economic choices?

