

# Contents

---

Chapter 1	Introduction: What Is Economics?.....	1
Chapter 2	The Key Principles of Economics.....	30
Chapter 3	Demand, Supply, and Market Equilibrium.....	69
Chapter 4	Elasticity: A Measure of Responsiveness.....	117
Chapter 5	Production Technology and Cost .....	187
Chapter 6	Perfect Competition .....	244
Chapter 7	Monopoly and Price Discrimination .....	300
Chapter 8	Market Entry, Monopolistic Competition, and Oligopoly .....	349
Chapter 9	Imperfect Information, External Benefits, and External Costs .....	468
Chapter 10	The Labor Market, Income, and Poverty .....	575
Chapter 11	Measuring a Nation's Production and Income .....	630
Chapter 12	Unemployment and Inflation.....	667
Chapter 13	Why do Economies Grow? .....	704
Chapter 14	Aggregate Demand and Aggregate Supply .....	740
Chapter 15	Fiscal Policy .....	779
Chapter 16	Money and the Banking System .....	810
Chapter 17	Monetary Policy and Inflation.....	845
Chapter 18	International Trade and Finance.....	878

# Chapter 1

## Introduction: What Is Economics?

### 1.1 What Is Economics?

- 1) Economics is best defined as the study of
- A) financial decision-making.
  - B) how consumers make purchasing decisions.
  - C) choices made by people faced with scarcity.
  - D) inflation, unemployment, and economic growth.

Answer: C

Diff: 1

Topic: What Is Economics?

Skill: Definition

- 2) Economics is the study of
- A) how to invest in the stock market.
  - B) how society uses limited resources.
  - C) the role of money in markets.
  - D) how government officials decide which goods and services are produced.

Answer: B

Diff: 1

Topic: What Is Economics?

Skill: Conceptual

AACSB: Reflective Thinking

- 3) Scarcity can best be defined as a situation in which
- A) there are no buyers willing to purchase what sellers have produced.
  - B) there are not enough goods to satisfy all of the buyers' demand.
  - C) the resources we use to produce goods and services are limited.
  - D) there is more than enough money to satisfy consumers' wants.

Answer: C

Diff: 1

Topic: What Is Economics?

Skill: Definition

- 4) An arrangement that allows buyers and sellers to exchange things is called
- A) a contract.
  - B) a market.
  - C) money.
  - D) efficient.

Answer: B

Diff: 1

Topic: What Is Economics?

Skill: Definition

5) Because resources are limited

- A) only the very wealthy can get everything they want.
- B) firms will be forced out of business.
- C) the availability of goods will be limited but the availability of services will not.
- D) people must make choices.

Answer: D

Diff: 1

Topic: What Is Economics?

Skill: Conceptual

AACSB: Reflective Thinking

6) Tradeoff is

- A) allowing the government and other organizations to choose for us.
- B) sacrificing one thing for another.
- C) deciding who consumes the products produced in an economy.
- D) holding other variables fixed.

Answer: B

Diff: 1

Topic: What Is Economics?

Skill: Conceptual

AACSB: Reflective Thinking

7) Resources are all of the following EXCEPT

- A) unlimited and in abundance.
- B) the things we use to produce goods and services.
- C) limited in quantity and can be used in different ways.
- D) scarce and therefore require choices to be made.

Answer: A

Diff: 1

Topic: What Is Economics?

Skill: Conceptual

AACSB: Reflective Thinking

### Additional Application

Summary of the article:

Labor Shortage in China May Lead to Trade Shift

By David Barbosa

The New York Times

April 3, 2006

A changing Chinese economy has resulted in significant labor shortages. Factories continue to expand as China's economy grows, but the number of uneducated workers is declining and the population of young people is leveling off. Add to these an increased number of people remaining inland, and this leaves coastal regions which specialize in factory production and exports with a large number of job openings.

The labor shortages are resulting in wage increases, pushing up costs on Chinese-made products. This could make China less competitive in global markets. Anticipating a continuation of rising costs for Chinese manufacturing, international manufacturers are already looking at moving factories to countries with lower costs.

The increase in wages is also fueling a growing Chinese middle class. Minimum wages in big cities have grown roughly 25% over the past three years, and infrastructure, housing and retail projects have started to develop in more rural areas. The number of people going to college has also increased significantly. In 2005, over 14 million people enrolled in Chinese colleges and universities, an increase of more than 250% since 1999.

Labor shortages and the resulting cost and wage increases may prompt even more changes in China. Labor conditions and worker benefits have already started to improve, and increased manufacturing costs could cause a shift away from the production of lower-end products. Rising wages could create an increased demand for imports, and factories have started moving inland, where labor is more readily available.

- 8) This Application reinforces the basic definition of economics, which is the
- A) possible or feasible combinations of an economy's production options.
  - B) study of choices made by people when there is scarcity.
  - C) arrangement that allows buyers and sellers to exchange things.
  - D) forces that affect economic activity and predict the consequences of alternative actions.

Answer: B

Diff: 1

Topic: Additional Application, Labor Shortage in China May Lead to Trade Shift

Skill: Definition

- 9) What factor of production is the primary focus of this Application?
- A) natural resources
  - B) physical capital
  - C) labor
  - D) entrepreneurship

Answer: C

Diff: 1

Topic: Additional Application, Labor Shortage in China May Lead to Trade Shift

Skill: Conceptual

AACSB: Reflective Thinking

- 10) According to the Application, the number of people in China who are going to college has increased significantly. An increase in college enrollment leads to a more educated workforce and, in turn, higher wages. Obtaining an education in order to receive a higher wage is an example of which element of the economic way of thinking?

- A) thinking at the margin
- B) response to incentives
- C) isolation of variables
- D) using assumptions to simplify

Answer: B

Diff: 1

Topic: Additional Application, Labor Shortage in China May Lead to Trade Shift

Skill: Conceptual

AACSB: Reflective Thinking

- 11) One of the macroeconomic issues addressed in this Application is

- A) companies increasing worker benefits.
- B) the increase in college enrollment.
- C) the growth of the Chinese economy.
- D) the decisions by workers to remain inland.

Answer: C

Diff: 1

Topic: Additional Application, Labor Shortage in China May Lead to Trade Shift

Skill: Conceptual

AACSB: Reflective Thinking

- 12) Normative economics

- A) is the focus of most modern economic reasoning.
- B) answers the question "What ought to be?"
- C) predicts the consequences of alternative actions.
- D) answers the question "What is?"

Answer: B

Diff: 1

Topic: Positive versus Normative Analysis

Skill: Definition

- 13) Which of the following is an example of a normative question?

- A) How will an increase in the inheritance tax affect tax revenues?
- B) What fraction of an income tax cut will be spent on imported goods?
- C) Should Florida implement a state income tax to reduce its deficit?
- D) How will an increase in unemployment benefits affect the unemployment rate?

Answer: C

Diff: 1

Topic: Positive versus Normative Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 14) Which of the following is a question answered with positive economic analysis?
- A) Should the college reduce tuition for out-of-state residents?
  - B) Should the college charge higher tuition for part-time students?
  - C) If the college increased its eligibility requirements for enrollment, will class sizes decline?
  - D) Should the college eliminate its athletic program to cut its costs?

Answer: C

Diff: 2

Topic: Positive versus Normative Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 15) Which of the following is a question answered with normative economic reasoning?
- A) If the college offers free textbooks for students, will more students read their textbooks?
  - B) If the college provided less financial aid for out-of-state students, would more in-state students benefit?
  - C) If the college increased its enrollment requirements, would class size decline?
  - D) Should the college increase tuition to fund its athletic programs?

Answer: D

Diff: 2

Topic: Positive versus Normative Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 16) The 3 key economic questions include all of the following EXCEPT
- A) "what products do we produce?"
  - B) "how do we produce these products?"
  - C) "where should these products be produced?"
  - D) "who consumes the products?"

Answer: C

Diff: 1

Topic: The Three Key Economic Questions: What, How, and Who?

Skill: Conceptual

AACSB: Reflective Thinking

- 17) Deciding how a society's products are distributed among its citizens answers the economic question of
- A) who consumes the products produced.
  - B) what products will be produced.
  - C) where will the products be consumed.
  - D) how will the products be produced.

Answer: A

Diff: 1

Topic: The Three Key Economic Questions: What, How, and Who?

Skill: Conceptual

AACSB: Reflective Thinking

18) Deciding if a company will produce automobiles by robotics or manual labor answers the economic question of

- A) who consumes the products produced.
- B) what products will be produced.
- C) where will the products be consumed.
- D) how will the products be produced.

Answer: D

Diff: 1

Topic: The Three Key Economic Questions: What, How, and Who?

Skill: Conceptual

AACSB: Reflective Thinking

19) Deciding if a power company will generate electricity from wind power or coal answers the economic question of

- A) who consumes the products produced.
- B) what products will be produced.
- C) where will the products be consumed.
- D) how will the products be produced.

Answer: D

Diff: 1

Topic: The Three Key Economic Questions: What, How, and Who?

Skill: Conceptual

AACSB: Reflective Thinking

20) An economic model is a

- A) realistic version of an economic environment.
- B) detailed version of an economic issue.
- C) fictional representation of an entire economy.
- D) simplified representation of an economic environment.

Answer: D

Diff: 1

Topic: Economic Models

Skill: Definition

21) Economic models are used to

- A) explain every detail of an economic theory.
- B) explore decision making by individuals, firms and other organizations.
- C) build physical renditions of government construction projects.
- D) represent the complexities of economic environments.

Answer: B

Diff: 1

Topic: Economic Models

Skill: Conceptual

AACSB: Reflective Thinking

- 22) Talking about alternatives is the first step in a process that helps us make better choices about how we use our resources.

Answer: TRUE

Diff: 1

Topic: What Is Economics?

Skill: Conceptual

AACSB: Reflective Thinking

- 23) In the past few centuries, choices have led to a substantial decline in the standards of living around the globe.

Answer: FALSE

Diff: 1

Topic: What Is Economics?

Skill: Fact

- 24) Scarcity is a situation in which resources are unlimited in quantity and can be used in different ways.

Answer: FALSE

Diff: 1

Topic: What Is Economics?

Skill: Definition

- 25) Positive economics question, "What *ought* to be?" Normative economics predicts the consequences of alternative actions, answering the questions, "What *is*?" or "What *will be*?"

Answer: FALSE

Diff: 1

Topic: Positive versus Normative Analysis

Skill: Definition

- 26) Normative economics question, "What *ought* to be?" Positive economics predicts the consequences of alternative actions, answering the questions, "What *is*?" or "What *will be*?"

Answer: TRUE

Diff: 1

Topic: Positive versus Normative Analysis

Skill: Definition

- 27) Most modern economic analysis is normative in nature, but involves questions with positive aspects.

Answer: FALSE

Diff: 1

Topic: Positive versus Normative Analysis

Skill: Fact

- 28) Economists will always reach the same conclusion in their positive analyses.

Answer: FALSE

Diff: 1

Topic: Positive versus Normative Analysis

Skill: Conceptual

AACSB: Reflective Thinking



29) One of the key economic questions is "where should products be produced?"

Answer: FALSE

Diff: 1

Topic: *The Three Key Economic Questions: What, How, and Who?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

30) One of the key economic questions is "who consumes the products?"

Answer: TRUE

Diff: 1

Topic: *The Three Key Economic Questions: What, How, and Who?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

31) An economic model is a detailed version of an economic environment.

Answer: FALSE

Diff: 1

Topic: *The Three Key Economic Questions: What, How, and Who?*

Skill: *Definition*

32) Economic models explore decision making by individuals, firms and other organizations.

Answer: TRUE

Diff: 1

Topic: *The Three Key Economic Questions: What, How, and Who?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

33) Would an economist consider clean air a scarce resource? Explain.

Answer: Yes, because the air had alternative uses. We can choose to use it to either breathe or to undertake activities that pollute it. The more we want to breathe clean air the more we must limit the production of pollutants. The more we pollute the air the less we can breathe clean air.

Diff: 2

Topic: *What Is Economics?*

Skill: *Analytical*

AACSB: *Analytic Skills*

34) List and briefly describe the five factors of production.

Answer: Natural resources — those resources provided by nature. Labor — the physical and mental effort used by people to produce goods and services. Physical capital — the infrastructure, equipment, machines and structures used to produce goods and services. Human capital — the knowledge and skills obtained by workers through education and experience. Entrepreneurship — the organizing and coordination of the other four factors of production needed to produce and sell products.

Diff: 2

Topic: *What Is Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 35) Give an example of something that is scarce in your life and explain the choices you've made because of scarcity.

Answer: Responses are numerous and will vary by students.

Diff: 1

Topic: What Is Economics?

Skill: Analytical

AACSB: Analytic Skills

- 36) Positive economic analysis answers what question?

Answer: Positive economic analysis answers the question "what is" or "what will be."

Diff: 1

Topic: Positive versus Normative Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 37) Normative economic analysis answers what question?

Answer: Normative economic analysis answers the question "what ought to be."

Diff: 1

Topic: Positive versus Normative Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 38) Richard runs a pizza delivery restaurant. List the three basic types of decisions studied in economics and give an example from Richard's restaurant.

Answer: How to produce? With what resources will the pizzas be produced? What to produce? What sorts of pizza do people order? Who consumes the products? Which people decided to come to the restaurant on a given day?

Diff: 2

Topic: The Three Key Economic Questions: What, How, and Who?

Skill: Analytical

AACSB: Analytic Skills

## 1.2 Economic Analysis and Modern Problems

- 1) According to the Texas Transportation Institute, the typical U.S. commuter wastes approximately how much time per year due to traffic congestion?

- A) 14 hours
- B) 22 hours
- C) 47 hours
- D) 96 hours

Answer: C

Diff: 1

Topic: Economic View of Traffic Congestion

Skill: Fact

- 2) In the final two decades of the twentieth century, average per capita global income
- A) increased by approximately 35 percent.
  - B) remained relatively unchanged.
  - C) decreased by approximately 6 percent.
  - D) increased by more than 75 percent.

Answer: A

Diff: 1

Topic: *Economic View of Poverty in Africa*

Skill: *Fact*

- 3) In the final two decades of the twentieth century, per capita income in sub-Saharan Africa
- A) increased by approximately 35 percent.
  - B) remained relatively unchanged.
  - C) decreased by approximately 6 percent.
  - D) increased by more than 75 percent.

Answer: C

Diff: 1

Topic: *Economic View of Poverty in Africa*

Skill: *Fact*

- 4) Prior to the financial crisis and recession which began in 2007, credit for mortgages was \_\_\_\_\_, creating a \_\_\_\_\_.
- A) virtually unavailable; housing bubble
  - B) only available to borrowers with high credit scores; shortage of affordable housing
  - C) easily obtained; housing boom
  - D) unavailable to low-income borrowers; large demand for rental properties

Answer: C

Diff: 1

Topic: *Economic View of the Current World Recession*

Skill: *Fact*

- 5) The financial crisis and recession which began in 2007
- A) impacted only high-income countries.
  - B) was only severe in the United States.
  - C) had a global impact.
  - D) impacted only low-income countries.

Answer: C

Diff: 1

Topic: *Economic View of the Current World Recession*

Skill: *Fact*

- 6) Congestion taxes tend to cause an increase in traffic volume during rush hours.

Answer: FALSE

Diff: 1

Topic: *Economic View of Traffic Congestion*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 7) In the 1980s and 1990s, average per capita income increased by a greater percentage in sub-Saharan Africa than it did in the rest of the world.

Answer: FALSE

Diff: 1

Topic: Economic View of Poverty in Africa

Skill: Fact

### 1.3 The Economic Way of Thinking

- 1) Who is associated with the following summary of the economic way of thinking: *"The theory of economics does not furnish a body of settled conclusions immediately acceptable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking which helps its processer draw correct conclusions."*

- A) John Maynard Keynes
- B) Alfred Marshall
- C) Adam Smith
- D) President Harry Truman

Answer: A

Diff: 1

Topic: The Economic Way of Thinking

Skill: Fact

- 2) To make things simpler and focus attention on what really matters, economists would

- A) use assumptions.
- B) ignore all variables.
- C) think at the margin.
- D) respond to incentives.

Answer: A

Diff: 1

Topic: Use Assumptions to Simplify

Skill: Conceptual

AACSB: Reflective Thinking

- 3) A variable measures

- A) something that always has the same value.
- B) something that can take on different values.
- C) factors that occur with high degrees of uncertainty.
- D) the degree to which something varies over time.

Answer: B

Diff: 1

Topic: Isolate Variables – Ceteris Paribus

Skill: Definition

- 4) The Latin phrase *ceteris paribus* means that when a relationship between two variables is being studied,
- A) both are treated as unpredictable.
  - B) neither of those two variables is allowed to change.
  - C) all other variables are held fixed.
  - D) we recognize that some factors are unknown.

Answer: C

Diff: 1

Topic: Isolate Variables – *Ceteris Paribus*

Skill: Definition

- 5) To think at the margin means to consider
- A) how nothing remains constant over time.
  - B) how a small change in one variable affects another variable.
  - C) how people behave in their own self-interest.
  - D) how people will decide what to purchase.

Answer: B

Diff: 1

Topic: Think at the Margin

Skill: Conceptual

AACSB: Reflective Thinking

- 6) Jerome has a "C" average in his philosophy course and a "B" average in his economics course. He decides to study an extra hour for his philosophy exam. This is an example of
- A) thinking at the margin.
  - B) using assumptions to simplify.
  - C) *ceteris paribus*.
  - D) *caveat emptor*.

Answer: A

Diff: 1

Topic: Think at the Margin

Skill: Conceptual

AACSB: Reflective Thinking

- 7) A small change in a variable is
- A) an average change.
  - B) a *ceteris paribus* change.
  - C) an efficient change.
  - D) a marginal change.

Answer: D

Diff: 1

Topic: Think at the Margin

Skill: Definition

8) Adam Smith

- A) is considered the founder of economics.
- B) introduced the concept of *ceteris paribus* to the discussion of supply and demand.
- C) is responsible for refining the model of supply and demand.
- D) is the author of this text.

Answer: A

Diff: 1

Topic: Rational People Respond to Incentives

Skill: Conceptual

AACSB: Reflective Thinking

9) When economists assume that people are rational and respond to incentives, they mean

- A) people act with kindness.
- B) people are altruistic.
- C) people act in their own self-interest.
- D) people are selfish.

Answer: C

Diff: 1

Topic: Rational People Respond to Incentives

Skill: Conceptual

AACSB: Reflective Thinking

10) When deciding to implement a congestion tax, economists and the government would use the elements of the economic way of thinking to determine

- A) if the tax would be allocated equitably.
- B) what tax amount should be charged.
- C) who should be exempt from the tax.
- D) how much revenue will the tax generate.

Answer: B

Diff: 1

Topic: Example: London Addresses its Congestion Problem

Skill: Conceptual

AACSB: Reflective Thinking

11) After the implementation of the congestion tax in London, traffic volume was reduced and travel time for cars and buses was cut in half. This is an example of

- A) responding to incentives.
- B) the role of pricing in allocating resources.
- C) *caveat emptor*.
- D) comparative advantage.

Answer: A

Diff: 1

Topic: Example: London Addresses its Congestion Problem

Skill: Conceptual

AACSB: Reflective Thinking

12) When determining an appropriate congestion tax economists would use which of the following elements of the economic way of thinking?

- A) thinking at the margin
- B) isolating variables
- C) making assumptions
- D) all of the above

Answer: D

Diff: 2

Topic: Example: London Addresses its Congestion Problem

Skill: Conceptual

AACSB: Reflective Thinking

**Recall the Application about the experiment in which Chinese factory workers were divided into groups and offered bonuses for their production output to answer the following question(s).**

13) According to the Application, workers who were told they would lose their bonuses if their output fell short of the production target were more productive than those workers who were offered a bonus if they met the production target. This is an example of which element of the economic way of thinking?

- A) responding to incentives
- B) thinking at the margin
- C) isolating variables
- D) using assumptions to simplify

Answer: A

Diff: 1

Topic: Application 1, Responding to Production Rewards

Skill: Conceptual

AACSB: Reflective Thinking

14) The results of the experiment discussed in this Application show the differences in productivity from the threat of having a bonus taken away for not meeting a production target and the promise of receiving a bonus for meeting a production target. These results describe the economic concept of

- A) using assumptions to simplify.
- B) *ceteris paribus*.
- C) marginal thinking.
- D) rational self interest.

Answer: D

Diff: 1

Topic: Application 1, Responding to Production Rewards

Skill: Conceptual

AACSB: Reflective Thinking

- 15) According to the Application, the results of the experiment suggests that the fear of a loss provides \_\_\_\_\_ the prospect of a gain.
- A) a lesser incentive than
  - B) an equal incentive to
  - C) a greater incentive than
  - D) a negative incentive compared to

Answer: C

Diff: 2

Topic: Application 1, Responding to Production Rewards

Skill: Conceptual

AACSB: Reflective Thinking

**Recall the Application about unwanted commercial e-mail, or spam, to answer the following question(s).**

- 16) According to the Application, the economic approach to spam is to
- A) establish a price for commercial e-mail.
  - B) ignore the spam issue because it has no economic implications.
  - C) have it legislated on the local level since it is a microeconomic issue.
  - D) ban all e-mail from international servers.

Answer: A

Diff: 2

Topic: Application 2, The Economic Solution To Spam

Skill: Conceptual

AACSB: Reflective Thinking

- 17) According to the Application, the amount of e-mail spam would significantly decrease if
- A) the cost of sending spam exceeded its profitability.
  - B) states passed laws making spam illegal.
  - C) e-mail filters were developed to separate spam from legitimate e-mail.
  - D) more people responded to spam e-mails.

Answer: A

Diff: 2

Topic: Application 2, The Economic Solution To Spam

Skill: Conceptual

AACSB: Reflective Thinking

- 18) According to the Application, one idea to reduce the volume of e-mail spam is to charge the sender for each commercial e-mail sent.

Answer: FALSE

Diff: 1

Topic: Application 2, The Economic Solution To Spam

Skill: Fact

- 19) Using assumptions to make things simpler and focus attention on what really matters is like using a road map to plan a trip.

Answer: TRUE

Diff: 1

Topic: Use Assumptions to Simplify

Skill: Conceptual

AACSB: Reflective Thinking



20) *Ceteris paribus* means "Let the buyer beware."

Answer: FALSE

Diff: 1

Topic: Isolate Variables – *Ceteris Paribus*

Skill: Definition

21) *Ceteris paribus* is the same as rise / run.

Answer: FALSE

Diff: 1

Topic: Isolate Variables – *Ceteris Paribus*

Skill: Definition

22) A small, one-unit change in value is called a marginal change.

Answer: TRUE

Diff: 1

Topic: Think at the Margin

Skill: Definition

23) A key assumption of most economic analysis is that people act rationally, meaning they respond to incentives.

Answer: TRUE

Diff: 1

Topic: Rational People Respond to Incentives

Skill: Conceptual

AACSB: Reflective Thinking

24) A key assumption of most economic analysis is that people are altruistic, meaning that they act in their own self-interest.

Answer: FALSE

Diff: 1

Topic: Rational People Respond to Incentives

Skill: Conceptual

AACSB: Reflective Thinking

25) Economists assume that individuals make informed decisions and act in their own self-interest.

Answer: TRUE

Diff: 1

Topic: Rational People Respond to Incentives

Skill: Conceptual

AACSB: Reflective Thinking

26) The congestion tax implemented in London reduced traffic volume and cut travel time for cars and buses in half.

Answer: TRUE

Diff: 1

Topic: Example: London Addresses its Congestion Problem

Skill: Fact

- 27) To determine an appropriate congestion tax, an economist had to assume that people responded to incentives.

Answer: TRUE

Diff: 1

Topic: Example: London Addresses its Congestion Problem

Skill: Conceptual

AACSB: Reflective Thinking

- 28) What is meant by the term "marginal change"?

Answer: A marginal change is a small, one unit change in value.

Diff: 1

Topic: Think at the Margin

Skill: Definition

## 1.4 Preview of Coming Attractions: Macroeconomics

- 1) Macroeconomics is best described as the study of

- A) very large issues.
- B) the choices made by individual households, firms, and governments.
- C) the nation's economy as a whole.
- D) the relationship between inflation and wage inequality.

Answer: C

Diff: 1

Topic: Preview of Coming Attractions: Macroeconomics

Skill: Definition

- 2) Which of the following is a macroeconomic question?

- A) Should we have a constitutional amendment requiring the government to implement a national consumption tax to replace the current income tax?
- B) Why did a leading computer manufacturer establish call centers in India?
- C) Why does a pharmaceutical manufacturer try to lower its production costs?
- D) Should the government put a tax on alcohol in an attempt to assist in the funding of support groups like Alcoholics Anonymous?

Answer: A

Diff: 2

Topic: Preview of Coming Attractions: Macroeconomics

Skill: Conceptual

AACSB: Reflective Thinking

- 3) Which of the following is NOT a macroeconomic question?

- A) Should we have a constitutional amendment requiring the federal government to balance the budget each year?
- B) Should restaurants be required to list the number of calories for each product on their menus?
- C) How does a fiscal stimulus package affect gross domestic product?
- D) Should Congress enact tougher immigration laws to reduce unemployment?

Answer: B

Diff: 2

Topic: Preview of Coming Attractions: Macroeconomics

Skill: Conceptual

AACSB: Reflective Thinking

- 4) We can use macroeconomic analysis to
- A) learn how to balance a checkbook.
  - B) study the choices made by households.
  - C) understand marginal changes in the macroeconomy.
  - D) understand why economies grow.

Answer: D

Diff: 2

Topic: Using Macroeconomics to Understand Why Economies Grow

Skill: Conceptual

AACSB: Reflective Thinking

- 5) Macroeconomics involves the study of the decision-making of individual firms or individuals.

Answer: FALSE

Diff: 1

Topic: Preview of Coming Attractions: Macroeconomics

Skill: Conceptual

AACSB: Reflective Thinking

- 6) Macroeconomics helps explain economic fluctuations, why the economy shrinks and expands and why some of the economy's resources are idle.

Answer: TRUE

Diff: 1

Topic: Using Macroeconomics to Understand Economic Fluctuations

Skill: Conceptual

AACSB: Reflective Thinking

- 7) Describe the field of economics known as macroeconomics.

Answer: Macroeconomics is the study of the nation's economy as a whole. Macroeconomics focuses on the issues of inflation, unemployment and economic growth.

Diff: 1

Topic: Preview of Coming Attractions: Macroeconomics

Skill: Definition

- 8) Explain three ways we can use macroeconomic analysis.

**Answer:** Macroeconomics explains why some resources increase over time and how an increase in these resources translates into a higher standard of living. In the fastest-growing countries, citizens save a large fraction of the money they earn. Firms can then borrow the funds saved to purchase machinery and equipment that make their workers more productive. The fastest growing countries also have well-educated workforces, allowing firms to quickly adopt new technologies that increase worker productivity. All economies, including ones that experience a general trend of growth, are subject to economic fluctuations including periods when the economy shrinks. During an economic downturn, some of the economy's resources are idle. Many workers are unemployed, and many factories and stores are closed. By contrast, sometimes the economy grows too rapidly, causing inflation. Macroeconomics helps us understand why these fluctuations occur—why the economy sometimes cools and sometimes overheats—and what we can do to moderate the fluctuations. A third reason for studying macroeconomics is to make informed business decisions. A manager who intends to borrow money for a new factory or store could use her knowledge of macroeconomics to predict the effects of current public policies on interest rates and then decide whether to borrow the money now or later.

*Diff: 2*

*Topic: Preview of Coming Attractions: Macroeconomics*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

## 1.5 Preview of Coming Attractions: Microeconomics

- 1) The study of the choices made by individual households, firms, and government is called
- A) macroeconomics.
  - B) microeconomics.
  - C) managerial economics.
  - D) market economics.

**Answer:** B

*Diff: 1*

*Topic: Preview of Coming Attractions: Microeconomics*

*Skill: Definition*

- 2) Microeconomics is best described as the study of
- A) the choices made by individual households, firms, and governments.
  - B) inflation, unemployment, gross national product, and the nation's economy as a whole.
  - C) how markets interact in the aggregate economy.
  - D) marginal changes in the economy.

**Answer:** A

*Diff: 1*

*Topic: Preview of Coming Attractions: Microeconomics*

*Skill: Definition*

3) Which of the following is a microeconomic question?

- A) Should companies pay for employees' health insurance?
- B) Why do some countries have higher economic growth rates than other countries?
- C) Should Congress and the president take action to reduce the unemployment rate?
- D) Should the Fed attempt to influence the interest rate to control potential inflation?

Answer: A

Diff: 1

Topic: Using Microeconomics to Evaluate Public Policies

Skill: Conceptual

AACSB: Reflective Thinking

4) Which of the following is a microeconomic question?

- A) Should the government decrease unemployment benefits to reduce the unemployment rate?
- B) Why do some countries have higher inflation rates than other countries?
- C) Should the government subsidize corn farmers to encourage the production of ethanol?
- D) Should congress decrease taxes to help stimulate the economy?

Answer: C

Diff: 2

Topic: Using Microeconomics to Evaluate Public Policies

Skill: Conceptual

AACSB: Reflective Thinking

5) Microeconomics helps explain economic fluctuations, why the economy shrinks and expands and why some of the economy's resources are idle.

Answer: FALSE

Diff: 1

Topic: Preview of Coming Attractions: Microeconomics

Skill: Conceptual

AACSB: Reflective Thinking

6) Microeconomics is the study of aggregate behavior in the economy.

Answer: FALSE

Diff: 1

Topic: Preview of Coming Attractions: Microeconomics

Skill: Definition

7) One example of a microeconomic question is, "How will prices in the clothing industry change if the government bans imports from China?"

Answer: TRUE

Diff: 1

Topic: Preview of Coming Attractions: Microeconomics

Skill: Conceptual

AACSB: Reflective Thinking

8) One example of a microeconomic question is, "Should unemployment benefits be increased?"

Answer: FALSE

Diff: 1

Topic: Preview of Coming Attractions: Microeconomics

Skill: Conceptual

AACSB: Reflective Thinking

- 9) Describe the field of economics known as microeconomics.

Answer: Microeconomics is the study of the choices made by households, firms and government and how these choices affect the markets for goods and services.

Diff: 1

Topic: Preview of Coming Attractions: Microeconomics

Skill: Definition

- 10) Explain three ways we can use microeconomic analysis.

Answer: 1. To understand markets and predict changes: One reason for studying microeconomics is to better understand how markets work. Once you know how markets operate, you can use economic analysis to predict how various events affect product prices and quantities.

2. To make personal and managerial decisions: On the personal level, we use economic analysis to decide how to spend our time, what career to pursue, and how to spend and save the money we earn. As workers, we use economic analysis to decide how to produce goods and services, how much to produce, and how much to charge for them.

3. To evaluate public policies: While societies use markets to make the most of decisions concerning production and consumption, the government has several important roles in a market-based society. We can use economic analysis to determine how well the government performs its roles in the market economy. We can also explore the trade-offs associated with various public policies.

Diff: 2

Topic: Preview of Coming Attractions: Microeconomics

Skill: Conceptual

AACSB: Reflective Thinking

## 1.6 Appendix A: Using Graphs and Percentages

- 1) There is a positive relationship between two variables if
- A) they move in opposite directions.
  - B) they move in the same direction.
  - C) one variable changes and the other does not.
  - D) neither variable moves.

Answer: B

Diff: 1

Topic: Graphing Two Variables

Skill: Definition

- 2) There is a negative relationship between two variables if
- A) they move in opposite directions.
  - B) they move in the same direction.
  - C) one variable changes and the other does not.
  - D) neither variable moves.

Answer: A

Diff: 1

Topic: Graphing Two Variables

Skill: Definition

3) The slope of a curve measures

- A) the change in one variable in response to the change in the other variable.
- B) the length of the curve.
- C) only the change in the horizontal variable.
- D) only the change in the vertical variable.

Answer: A

Diff: 1

Topic: Computing the Slope

Skill: Conceptual

AACSB: Reflective Thinking

4) Slope is calculated as the

- A) change in the vertical variable divided by the change in the horizontal variable.
- B) change in the horizontal variable divided by the change in the vertical variable.
- C) the vertical axis divided by the horizontal axis.
- D) change in the vertical variable.

Answer: A

Diff: 1

Topic: Computing the Slope

Skill: Conceptual

AACSB: Reflective Thinking

5) The slope of a straight line

- A) is constant.
- B) is negative.
- C) is zero.
- D) changes along the curve.

Answer: A

Diff: 1

Topic: Computing the Slope

Skill: Conceptual

AACSB: Reflective Thinking

6) If the variable on the vertical axis increases by 20 and the variable on the horizontal axis increases by 5, the slope of the line is

- A) 0.25.
- B) 4.
- C) 15.
- D) 100.

Answer: B

Diff: 1

Topic: Computing the Slope

Skill: Analytical

AACSB: Analytic Skills

- 7) If the variable on the vertical axis increases by 24 and the variable on the horizontal axis decreases by 3, the slope of the line is

A) -24.  
B) -8.  
C) 3.  
D) 72.

Answer: B

Diff: 1

Topic: Computing the Slope

Skill: Analytical

AACSB: Analytic Skills

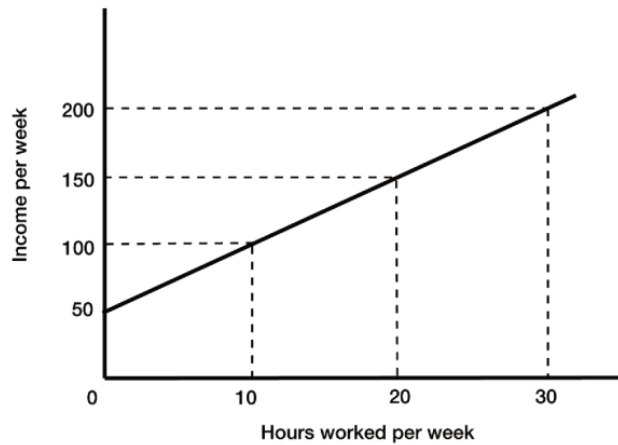


Figure 1A.1

- 8) Refer to Figure 1A.1. If the hours worked per week is 20, the income per week is

A) 50.  
B) 100.  
C) 150.  
D) 200.

Answer: C

Diff: 1

Topic: Graphing Two Variables, graphing

Skill: Analytical

AACSB: Analytic Skills

- 9) Refer to Figure 1A.1. If the hours worked per week is 30, the income per week is

A) 50.  
B) 100.  
C) 150.  
D) 200.

Answer: D

Diff: 1

Topic: Graphing Two Variables, graphing

Skill: Analytical

AACSB: Analytic Skills



10) Refer to Figure 1A.1. The slope of the line between the points where income equals 50 and income equals 200 is

- A) 0.2.
- B) 5.
- C) 10.
- D) 50.

Answer: B

Diff: 1

Topic: Computing the Slope, graphing

Skill: Analytical

AACSB: Analytic Skills

11) Refer to Figure 1A.1. The slope of the line between the points where hours worked per week are 20 and hours worked per week are 30 is

- A) 0.2.
- B) 5.
- C) 10.
- D) 50.

Answer: B

Diff: 1

Topic: Computing the Slope, graphing

Skill: Analytical

AACSB: Analytic Skills

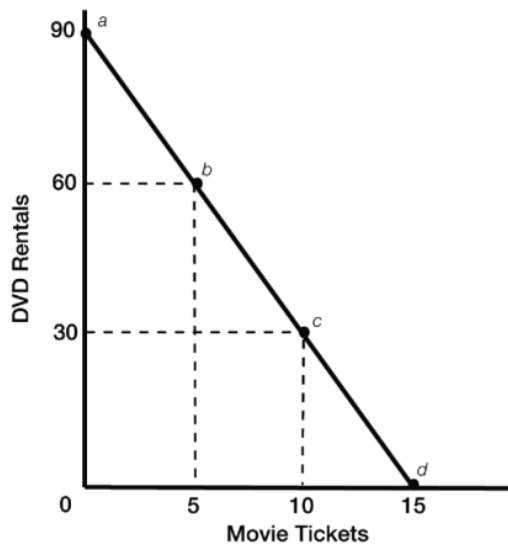


Figure 1A.2

- 12) Refer to Figure 1A.2. If this consumer rents zero DVDs, how many movie tickets will she purchase?

A) 0  
B) 5  
C) 10  
D) 15

Answer: D

Diff: 1

Topic: Graphing Negative Relationships, graphing

Skill: Analytical

AACSB: Analytic Skills

- 13) Refer to Figure 1A.2. If this consumer rents 60 DVDs, how many movie tickets will she purchase?

A) 0  
B) 5  
C) 10  
D) 15

Answer: B

Diff: 1

Topic: Graphing Negative Relationships, graphing

Skill: Analytical

AACSB: Analytic Skills

14) Refer to Figure 1A.2. The slope of the curve

- A) is negative.
- B) is positive.
- C) is zero.
- D) changes along the curve.

Answer: A

Diff: 1

Topic: Computing the Slope, graphing

Skill: Analytical

AACSB: Analytic Skills

15) Refer to Figure 1A.2. The slope between points  $a$  and  $c$  is

- A) -5.
- B) -6.
- C) 10.
- D) 30.

Answer: B

Diff: 1

Topic: Computing the Slope, graphing

Skill: Analytical

AACSB: Analytic Skills

16) The slope of a nonlinear curve

- A) is constant.
- B) is negative.
- C) is zero.
- D) changes along the curve.

Answer: D

Diff: 1

Topic: Graphing Nonlinear Relationships

Skill: Conceptual

AACSB: Reflective Thinking

17) If the price of monthly satellite TV service increases from \$40 to \$50, the percentage change is

- A) 5 percent.
- B) 20 percent.
- C) 25 percent.
- D) 45 percent.

Answer: C

Diff: 2

Topic: Computing Percentage Changes

Skill: Analytical

AACSB: Analytic Skills

- 18) If the price of a 8GB memory card decreases from \$25 to \$20, the percentage change is
- A) -20 percent.
  - B) -33 percent.
  - C) -50 percent.
  - D) -60 percent.

Answer: A

Diff: 2

Topic: Computing Percentage Changes

Skill: Analytical

AACSB: Analytic Skills

**Recall the Application about the government of Mexico City repainting highway lane lines to transform a 4-lane highway into a 6-lane highway to answer the following question(s).**

- 19) When the government converted the highway from 4 lanes into 6 lanes, they claimed the capacity had increased by 50 percent. When the government switched the highway back from 6 lanes to 4 lanes, they claimed the capacity had been decreased by 33 percent. had the government used the midpoint method, the percentage increase would have been \_\_\_\_\_ percent and the percentage decrease would have been \_\_\_\_\_ percent.
- A) 33; 50
  - B) 33; 33
  - C) 40; 40
  - D) 50; 50

Answer: C

Diff: 2

Topic: Application 3, The Perils of Percentages

Skill: Analytical

AACSB: Analytic Skills

- 20) When computing percentage changes, using the simple approach results in increases and decreases which are
- A) identical.
  - B) symmetric.
  - C) not symmetric.
  - D) more accurate than using the midpoint method.

Answer: C

Diff: 1

Topic: Application 3, The Perils of Percentages

Skill: Conceptual

AACSB: Reflective Thinking

- 21) If you work 4 extra hours, and the slope of the curve showing the relationship between your income and work hours is 8, your income will increase by

A) \$2.  
B) \$4.  
C) \$12.  
D) \$32.

Answer: D

Diff: 2

Topic: Using Equations to Compute Missing Values

Skill: Analytical

AACSB: Analytic Skills

- 22) To increase income by \$120 when the slope of the curve showing the relationship between your income and work hours is 8, how many extra hours will you need to work?

A) 8  
B) 15  
C) 112  
D) 960

Answer: B

Diff: 2

Topic: Using Equations to Compute Missing Values

Skill: Analytical

AACSB: Analytic Skills

- 23) The origin of a graph is the intersection of the two axes, where the value of both variables is zero.

Answer: TRUE

Diff: 1

Topic: Graphing Two Variables

Skill: Definition

- 24) Positive relationships are also referred to as inverse relationships.

Answer: FALSE

Diff: 1

Topic: Graphing Two Variables

Skill: Definition

- 25) Negative relationships are also referred to as inverse relationships.

Answer: TRUE

Diff: 1

Topic: Graphing Two Variables

Skill: Definition

- 26) Slope is calculated as rise / run.

Answer: TRUE

Diff: 1

Topic: Computing the Slope

Skill: Analytical

AACSB: Analytic Skills

- 27) Slope is calculated as a change in the variable on the horizontal axis divided by a change in the variable on the vertical axis.

Answer: FALSE

*Diff: 1*

*Topic: Computing the Slope*

*Skill: Analytical*

*AACSB: Analytic Skills*

# Chapter 2

## The Key Principles of Economics

### 2.1 The Principle of Opportunity Cost

- 1) The opportunity cost of something is
- A) the cost of the labor used to produce it.
  - B) what you sacrifice to get it.
  - C) the price charged for it.
  - D) the search cost required to find it.

Answer: B

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Definition

- 2) The principle of opportunity cost
- A) is more relevant for firms than for individuals.
  - B) only refers to monetary payments.
  - C) is only relevant in economics.
  - D) is applicable to all decision-making.

Answer: D

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 3) The principle that the cost of something is equal to what is sacrificed to get it is known as the
- A) marginal principle.
  - B) principle of opportunity cost.
  - C) principle of diminishing returns.
  - D) reality principle.

Answer: B

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Definition

- 4) The saying that "There's no such thing as a free lunch" refers to the
- A) marginal principle.
  - B) spillover principle.
  - C) principle of opportunity cost.
  - D) reality principle.

Answer: C

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 5) Jacinda quit her job as a blackjack dealer where she made \$42,000 per year to start her own florist business. Her business expenses are \$14,000 per year on rent, \$21,000 per year on supplies, and \$9,000 per year on part time help. As for her personal expenses, her apartment costs her \$12,000 per year and her personal bills are an extra \$6,000 per year. What is Jacinda's opportunity cost of running the business?
- A) \$104,000
  - B) \$86,000
  - C) \$62,000
  - D) \$44,000

Answer: B

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Analytic Skills

- 6) An unemployed individual decides to spend the day fishing. The opportunity cost of fishing is equal to
- A) the cost of bait and any other monetary expenses.
  - B) zero, because the person doesn't have a job.
  - C) the cost of bait, any other monetary expenses, and the value of the individual's wages while he was working.
  - D) the cost of bait, any other monetary expenses, and the value of the best alternative use of the individual's time.

Answer: D

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Analytic Skills

- 7) Suppose that you own a house. What is the opportunity cost of living in the house?
- A) There is no opportunity cost because you own the house.
  - B) There is no opportunity cost unless you could set up a business in the house.
  - C) The opportunity cost is the rent you could have received from a tenant if you didn't live there.
  - D) The opportunity cost is the cost of your monthly mortgage payment plus bills.

Answer: C

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking



- 8) Steven lives in a big city where there is a shortage of parking. He has a parking spot in his driveway where he parks his car. Which of the following statements is most correct?
- A) Steven has a lower opportunity cost of owning a car than his neighbor, who must rent a parking spot.
  - B) The opportunity cost of using the spot is zero, because Steven owns the house.
  - C) The opportunity cost of using the parking spot is the price he could charge someone else for using the spot.
  - D) The opportunity cost depends on how much Steven's mortgage payment is.

Answer: C

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Analytic Skills

- 9) You rent a DVD of Iron Man II. The rental is for seven days and you watch the movie on the first day. You tell a friend about the film and your friend asks to come over and watch the movie with you before it is due back. What is your opportunity cost if you decide to watch the movie a second time instead of going to a football game?
- A) the entire cost of the movie rental, since you have already watched the movie
  - B) one half the rental cost, because you have already watched the movie one time
  - C) The answer depends on how much you liked the movie in the first place.
  - D) the football game you forego by watching the movie again

Answer: D

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 10) Angelina, age seven, decides to dress up like Princess Fiona for Halloween. What is her opportunity cost of this decision?
- A) the cost of the costume
  - B) the fact that she can't dress up like Dora the Explorer, her second choice
  - C) zero, because seven-year-olds don't have opportunity costs
  - D) the cost of the Lady Gaga costume which she did not want

Answer: B

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 11) Spending money on a new car instead of a used car when you are on a fixed budget is an example of
- A) the incursion of an opportunity cost.
  - B) isolating variables.
  - C) a bad thing to do because you run out of money.
  - D) living on the edge.

Answer: A

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 12) Suppose that your tuition to attend college is \$24,000 per year and you spend \$8,000 per year on room and board. If you were working full time, you could earn \$30,000 per year. What is your opportunity cost of attending college for one year?

A) \$32,000  
B) \$38,000  
C) \$54,000  
D) \$62,000

Answer: C

Diff: 1

Topic: The Cost of College

Skill: Analytical

AACSB: Analytic Skills

- 13) Suppose that your tuition to attend college is \$14,000 per year and you spend \$5,000 per year on room and board. If you were working full time, you could earn \$26,000 per year. What is your opportunity cost of attending college?

A) \$19,000  
B) \$31,000  
C) \$40,000  
D) \$45,000

Answer: C

Diff: 1

Topic: The Cost of College

Skill: Analytical

AACSB: Analytic Skills

- 14) The opportunity cost of going to college

A) is zero if your parents pay your tuition.  
B) is equal to the cost of tuition, room and board, and other expenses.  
C) includes wages you lose by going to school instead of working.  
D) is the same for all students at a particular school who pay full tuition.

Answer: C

Diff: 1

Topic: The Cost of College

Skill: Conceptual

AACSB: Reflective Thinking

- 15) You have an hour between your economics and math classes. What is the opportunity cost of that time if you use it to complete your math homework instead of your economics homework?

A) the economics homework you could have completed  
B) the math homework you chose to complete  
C) the cost of your calculator and math textbook  
D) zero, because it doesn't cost any money to do your math homework

Answer: A

Diff: 2

Topic: The Cost of College

Skill: Conceptual

AACSB: Reflective Thinking

- 16) The sacrifices made by societies in order to engage in military spending represent
- A) the nominal costs of military spending.
  - B) the real costs of military spending.
  - C) the opportunity costs of military spending.
  - D) the excessive costs of military spending.

Answer: C

Diff: 1

Topic: The Cost of Military Spending

Skill: Conceptual

AACSB: Reflective Thinking

- 17) The trade-offs made by the U.S. government to fund the war in Iraq
- A) prove that the government is spending too much on the war.
  - B) show that the government is justified in its war spending.
  - C) exceed the benefits derived from the war.
  - D) represent what was potentially sacrificed to engage in the war.

Answer: D

Diff: 1

Topic: The Cost of Military Spending

Skill: Conceptual

AACSB: Reflective Thinking

- 18) According to the possible trade-off example between warships and drinking water in the text, the policy question that should be considered in Malaysia is
- A) do the opportunity costs of the warships exceed their nominal costs?
  - B) do the nominal costs of the warships exceed their real costs?
  - C) do the benefits of the warships exceed their opportunity costs?
  - D) do the real costs of the warships exceed their nominal costs?

Answer: C

Diff: 1

Topic: The Cost of Military Spending

Skill: Conceptual

AACSB: Reflective Thinking

Bath	Groom
0	6
7	5
13	4
18	3
22	2
25	1
27	0

Table 2.1

- 19) Kaitlyn and Larissa have formed a dog bathing and grooming business. The number of dogs they can bathe or groom in any given day is depicted in Table 2.1. The opportunity cost of grooming the first dog in a day is bathing \_\_\_\_\_ dog(s).

A) 1  
B) 2  
C) 24  
D) 25

Answer: B

Diff: 1

Topic: Opportunity Cost and the Production Possibilities Curve

Skill: Analytical

AACSB: Analytic Skills

- 20) Kaitlyn and Larissa have formed a dog bathing and grooming business. The number of dogs they can bathe or groom in any given day is depicted in Table 2.1. The opportunity cost of grooming the third dog in a day is bathing \_\_\_\_\_ dog(s).

A) 3  
B) 4  
C) 5  
D) 18

Answer: B

Diff: 1

Topic: Opportunity Cost and the Production Possibilities Curve

Skill: Analytical

AACSB: Analytic Skills

- 21) Kaitlyn and Larissa have formed a dog bathing and grooming business. The number of dogs they can bathe or groom in any given day is depicted in Table 2.1. The opportunity cost of grooming the sixth dog in a day is bathing \_\_\_\_\_ dog(s).

A) 0  
B) 5  
C) 6  
D) 7

Answer: D

Diff: 1

Topic: Opportunity Cost and the Production Possibilities Curve

Skill: Analytical

AACSB: Analytic Skills

- 22) Kaitlyn and Larissa have formed a dog bathing and grooming business. The number of dogs they can bathe or groom in any given day is depicted in Table 2.1. As they groom more dogs, the opportunity cost of grooming additional dogs
- A) falls.
  - B) rises.
  - C) remains constant.
  - D) depends on the prices being charged.

Answer: B

Diff: 2

Topic: Opportunity Cost and the Production Possibilities Curve

Skill: Analytical

AACSB: Analytic Skills

- 23) Kaitlyn and Larissa have formed a dog bathing and grooming business. The number of dogs they can bathe or groom in any given day is depicted in Table 2.1. As they groom more dogs, the opportunity cost of bathing additional dogs
- A) falls.
  - B) rises.
  - C) remains constant.
  - D) depends on the prices being charged.

Answer: A

Diff: 2

Topic: Opportunity Cost and the Production Possibilities Curve

Skill: Analytical

AACSB: Analytic Skills

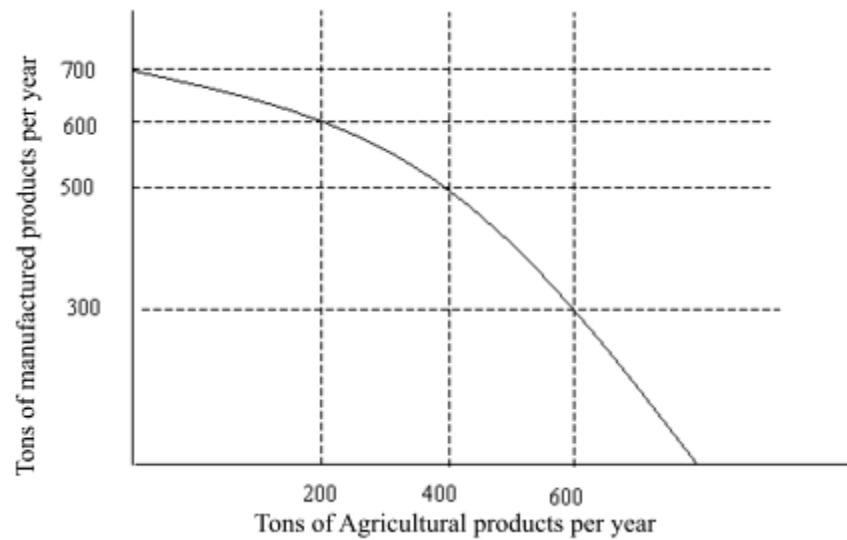


Figure 2.1

- 24) Referring to Figure 2.1, if you increase the production of farm goods, what other area is affected?

A) the price of produce  
 B) the production of manufactured goods  
 C) how much people can purchase  
 D) the wages earned by farm workers

Answer: B

Diff: 1

Topic: Opportunity Cost and the Production Possibilities Curve, graphing

Skill: Analytical

AACSB: Analytic Skills

- 25) The production possibilities curve in Figure 2.1 illustrates the notion of

A) increased factory goods production.  
 B) increased farm produce production.  
 C) diminishing resources.  
 D) opportunity cost.

Answer: D

Diff: 1

Topic: Opportunity Cost and the Production Possibilities Curve, graphing

Skill: Analytical

AACSB: Analytic Skills

26) Refer to Figure 2.1. If you are producing 600 tons of agricultural products per year, what is the maximum amount of manufactured products you can produce per year?

- A) 300 tons
- B) 500 tons
- C) 600 tons
- D) 700 tons

Answer: A

Diff: 1

Topic: Opportunity Cost and the Production Possibilities Curve, graphing

Skill: Analytical

AACSB: Analytic Skills

27) Refer to Figure 2.1. If you choose to produce only agricultural products, what is the maximum quantity you can produce per year?

- A) 200 tons
- B) 400 tons
- C) 600 tons
- D) > 600 tons

Answer: D

Diff: 1

Topic: Opportunity Cost and the Production Possibilities Curve, graphing

Skill: Analytical

AACSB: Analytic Skills

28) Refer to Figure 2.1. What is the opportunity cost of increasing production of manufactured products from 500 tons to 600 tons per year?

- A) 200 tons of agricultural products per year
- B) 400 tons of agricultural products per year
- C) 500 tons of agricultural products per year
- D) 600 tons of agricultural products per year

Answer: A

Diff: 2

Topic: Opportunity Cost and the Production Possibilities Curve, graphing

Skill: Analytical

AACSB: Analytic Skills

29) If an economy is fully utilizing its resources, it can produce more of one product only if it

- A) doubles manufacturing of the product.
- B) produces less of another product.
- C) adds more people to the labor force.
- D) reduces the prices of the most expensive products.

Answer: B

Diff: 1

Topic: Opportunity Cost and the Production Possibilities Curve

Skill: Analytical

AACSB: Analytic Skills

- 30) If you remove resources from factory production, the quantity of factory goods will
- A) increase.
  - B) decrease.
  - C) remain the same but their price will decrease.
  - D) be diverted to other production.

Answer: B

Diff: 1

Topic: Opportunity Cost and the Production Possibilities Curve

Skill: Analytical

AACSB: Analytic Skills

### Additional Application

Summary of the article:

Consumer spending stalls, threatens recovery

msnbc.com news services

August 3, 2010

Reflecting what is being referred to as the "new normal", consumer spending is down, home sales have declined, and personal savings has risen since the start of the recession in 2007, and the continuation of this trend is threatening the economic recovery in the United States. In June 2010, factory orders fell for the second consecutive month, home sales fell by nearly 19 percent compared to June 2009, and personal spending and income remained relatively flat. The personal savings rate, however, has continued to increase, reaching a level of 6.4 percent of after-tax income in June 2010, which is more than three times higher than the average savings rate prior to the start of the recession in 2007. The increase in savings is coming at the expense of consumer spending, and economists worry that households' financial problems could cause a further decline in spending for the second half of 2010.

- 31) The relationship between consumer spending and saving discussed in the Application addresses the economic principle of
- A) opportunity cost.
  - B) diminishing returns.
  - C) thinking at the margin.
  - D) real versus nominal.

Answer: A

Diff: 1

Topic: Additional Application, Consumer spending stalls, threatens recovery

Skill: Conceptual

AACSB: Reflective Thinking



- 32) All else equal, if income continues to remain flat, the only way for consumer spending to increase is for personal savings to
- A) increase.
  - B) decrease.
  - C) remain unchanged.
  - D) remain flat.

Answer: B

Diff: 1

Topic: Additional Application, Consumer spending stalls, threatens recovery

Skill: Conceptual

AACSB: Reflective Thinking

- 33) According to the Application, a tradeoff exists between
- A) consumer spending and home sales.
  - B) home sales in 2009 and home sales in 2010.
  - C) consumer spending and personal savings.
  - D) income levels and the savings rate.

Answer: C

Diff: 1

Topic: Additional Application, Consumer spending stalls, threatens recovery

Skill: Conceptual

AACSB: Reflective Thinking

**Recall the Application about the time and invested funds that are involved in starting a decorative bottle-cap pin business to answer the following question(s).**

- 34) The time and invested funds involved in starting a decorative bottle-cap pin business address the economic concept of
- A) the marginal principle.
  - B) opportunity cost.
  - C) the real-nominal principle.
  - D) the principle of diminishing returns.

Answer: B

Diff: 1

Topic: Application 1, Don't Forget the Costs of Time and Invested Funds

Skill: Conceptual

AACSB: Reflective Thinking

- 35) The current income Betty would sacrifice to start her own decorative bottle-cap pin business reflects the
- A) opportunity cost of invested funds.
  - B) opportunity cost of her starting a business.
  - C) cost of doing business.
  - D) present value of her initial investment.

Answer: B

Diff: 1

Topic: Application 1, Don't Forget the Costs of Time and Invested Funds

Skill: Conceptual

AACSB: Reflective Thinking

- 36) If you have \$10,000 to start a decorative bottle-cap pin business, the interest rate is 4 percent, your annual cost of raw materials are \$3,000, and the earnings you sacrifice from working at another job are \$32,000, your yearly cost of doing business would be

A) \$13,000.  
B) \$13,400.  
C) \$35,400.  
D) \$45,000.

Answer: C

Diff: 2

Topic: Application 1, Don't Forget the Costs of Time and Invested Funds

Skill: Analytical

AACSB: Analytic Skills

- 37) A principle is a self-evident truth that most people readily understand and accept.

Answer: TRUE

Diff: 1

Topic: The Key Principles of Economics

Skill: Definition

- 38) Opportunity cost is the difference between the nominal and real cost of some action.

Answer: FALSE

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Definition

- 39) The opportunity cost of something is the gain you receive as a result of your sacrifice.

Answer: FALSE

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Definition

- 40) The opportunity cost of something is the nominal price paid for the product.

Answer: FALSE

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Definition

- 41) Tradeoffs involve an exchange of one thing for another because resources are limited and can be used in different ways.

Answer: TRUE

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Definition

- 42) The notion of opportunity cost allows the measurement of tradeoffs.

Answer: TRUE

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Definition

- 43) In order to get his bachelor's degree, Timothy gave up an offer for a full time job as a bartender. Therefore, Timothy incurred an opportunity cost.

Answer: TRUE

Diff: 1

Topic: The Cost of College

Skill: Conceptual

AACSB: Reflective Thinking

- 44) The opportunity cost of going to a particular college is not the same for everyone.

Answer: TRUE

Diff: 1

Topic: The Cost of College

Skill: Conceptual

AACSB: Reflective Thinking

- 45) The cost of a bachelor's degree in philosophy equals the tuition plus the cost of room and board.

Answer: FALSE

Diff: 1

Topic: The Cost of College

Skill: Conceptual

AACSB: Reflective Thinking

- 46) What is an opportunity cost?

Answer: An opportunity cost is what you sacrifice to get something.

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Definition

- 47) Suppose that you lend \$5,000 to a friend who pays you back \$5,400 the next year. Suppose that prices that year rose by six percent and the real rate of return in the stock market was five percent. Your friend says that he or she was being more than fair by giving you more than the rate of inflation as a return. What do you think?

Answer: The opportunity cost of that money was not just the six percent inflation, but also the real rate of return that would have been enjoyed had the money been put in the stock market. For you to have been indifferent between loaning your money versus keeping it, your friend should have reimbursed you by \$5,550, or a 11% return. This is another example of considering all the costs, both the loss in purchasing power of the money due to inflation and the implicit cost of the return that could have been earned if the money was invested in the stock market.

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Analytic Skills

- 48) What is the opportunity cost of investing \$10,000 of your own money in a business you wish to start?

Answer: The opportunity cost of your \$10,000 is the money you lose because you cannot invest the money elsewhere.

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 49) What do economists mean when they say that there is no such thing as a free lunch?

Answer: Everything has a cost, even when you do not pay money for it. Suppose that somebody bought you lunch. Resources from the economy were used to make that lunch, even though those resources may not belong to you. Consequently, the economy gave up anything else it could have made with the resources it used to make the lunch. The opportunity cost of that lunch is the lost opportunity to use those resources in some other way.

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 50) What is the opportunity cost of your college degree?

Answer: A quick answer would be to say that the cost is the tuition, room and board, and books expenditures that are borne during the college years. But such a statement would be incorrect. First, it understates one aspect of costs: one is giving up income while a student. But it also overstates the costs in another dimension: people would eat and sleep somewhere regardless of their attendance in college. So one should not consider room and board to be part of the cost of college attendance.

Diff: 1

Topic: The Cost of College

Skill: Analytical

AACSB: Analytic Skills

## 2.2 The Marginal Principle

- 1) The extra benefit resulting from a small increase in an activity is called the
- A) opportunity cost.
  - B) marginal benefit.
  - C) marginal cost.
  - D) diminishing returns of the activity.

Answer: B

Diff: 1

Topic: The Marginal Principle

Skill: Definition

- 2) The additional cost resulting from a small increase in some activity is called the
- A) opportunity cost.
  - B) marginal benefit.
  - C) marginal cost.
  - D) diminishing returns of the activity.

Answer: C

*Diff: 1*

*Topic: The Marginal Principle*

*Skill: Definition*

- 3) The principle that individuals and firms pick the activity level where the incremental benefit of that activity equals the incremental cost of that activity is known as the
- A) marginal principle.
  - B) principle of opportunity cost.
  - C) principle of diminishing returns.
  - D) spillover principle.

Answer: A

*Diff: 1*

*Topic: The Marginal Principle*

*Skill: Definition*

- 4) The marginal principle implies that an individual should produce or consume where
- A) marginal benefit exceeds marginal cost.
  - B) marginal benefit is less than marginal cost.
  - C) marginal benefit equals marginal cost.
  - D) total benefit equals total cost.

Answer: C

*Diff: 1*

*Topic: The Marginal Principle*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

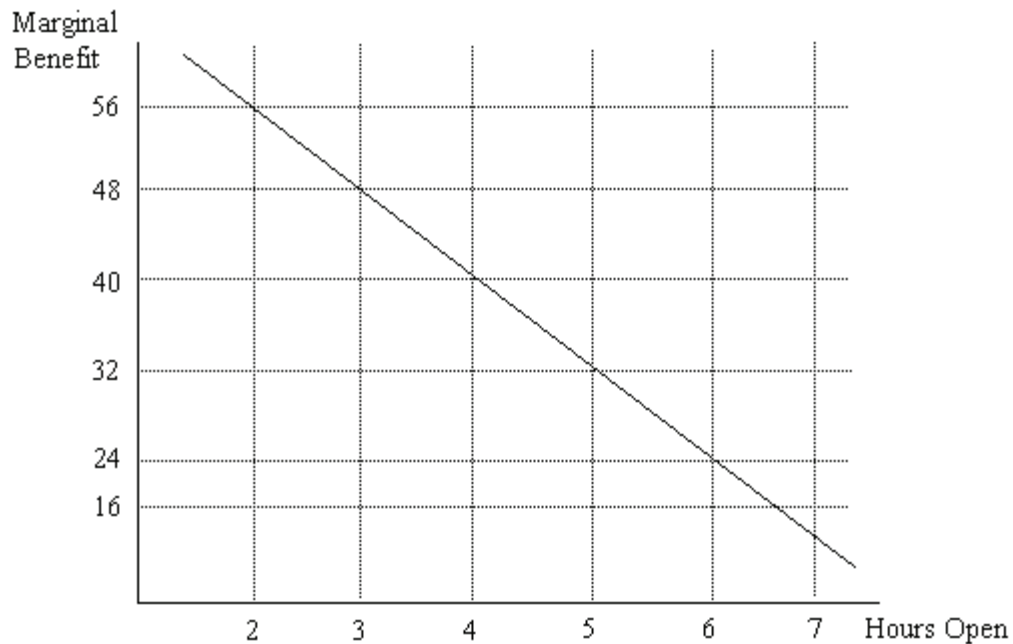


Figure 2.2

- 5) Joe runs a business and needs to decide how many hours to stay open. Figure 2.2 illustrates his marginal benefit of staying open for each additional hour. Suppose that Joe's marginal cost of staying open per hour is \$24. How many hours should Joe stay open?

A) 3 hours  
 B) 4 hours  
 C) 5 hours  
 D) 6 hours

Answer: D

Diff: 1

Topic: The Marginal Principle, graphing

Skill: Analytical

AACSB: Analytic Skills

- 6) Joe runs a business and needs to decide how many hours to stay open. Figure 2.2 illustrates his marginal benefit of staying open for each additional hour. Suppose that Joe's marginal cost of staying open per hour is \$32. How many hours should Joe stay open?

A) 4 hours  
 B) 5 hours  
 C) 6 hours  
 D) 7 hours

Answer: B

Diff: 1

Topic: The Marginal Principle, graphing

Skill: Analytical

AACSB: Analytic Skills

- 7) Joe runs a business and needs to decide how many hours to stay open. Figure 2.2 illustrates his marginal benefit of staying open for each additional hour. Suppose that we observe Joe staying open 5 hours per day. If he is following the marginal principle, what must his marginal cost per hour be?

A) \$16  
B) \$24  
C) \$32  
D) \$40

Answer: C

Diff: 1

Topic: The Marginal Principle, graphing

Skill: Analytical

AACSB: Analytic Skills

- 8) Joe runs a business and needs to decide how many hours to stay open. Figure 2.2 illustrates his marginal benefit of staying open for each additional hour. Suppose that we observe Joe staying open 3 hours per day. If he is following the marginal principle, what must his marginal cost per hour be?

A) \$24  
B) \$32  
C) \$40  
D) \$48

Answer: D

Diff: 1

Topic: The Marginal Principle, graphing

Skill: Analytical

AACSB: Analytic Skills

- 9) Joe runs a business and needs to decide how many hours to stay open. Figure 2.2 illustrates his marginal benefit of staying open for each additional hour. Suppose that we observe Joe staying open 6 hours per day. If he is following the marginal principle, what must his marginal cost per hour be?

A) \$16  
B) \$24  
C) \$32  
D) \$48

Answer: B

Diff: 1

Topic: The Marginal Principle, graphing

Skill: Analytical

AACSB: Analytic Skills

Hours of Operation	Marginal Cost
1	6
2	12
3	18
4	24
5	30
6	36
7	42

Table 2.2

- 10) Krystal runs a nail salon and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Krystal's marginal benefit of staying open per hour is \$30. If she is following the marginal principle, how many hours should Krystal stay open?

A) 4 hours  
 B) 5 hours  
 C) 6 hours  
 D) 7 hours

Answer: B

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

- 11) Krystal runs a nail salon and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Krystal's marginal benefit of staying open per hour is \$18. If she is following the marginal principle, how many hours should Krystal stay open?

A) 3 hours  
 B) 4 hours  
 C) 6 hours  
 D) 7 hours

Answer: A

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills



- 12) Krystal runs a nail salon and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that we observe Krystal staying open 4 hours per day. If she is following the marginal principle, what must her marginal benefit be?

A) \$12  
B) \$18  
C) \$24  
D) \$30

Answer: C

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

- 13) Krystal runs a nail salon and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that we observe Krystal staying open 2 hours per day. If she is following the marginal principle, what must her marginal benefit be?

A) \$6  
B) \$12  
C) \$15  
D) \$18

Answer: B

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

- 14) Krystal runs a nail salon and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that we observe Krystal staying open 5 hours and her marginal benefit of staying open per hour is \$18. If she is following the marginal principle, Krystal should

A) stay open 2 more hours.  
B) stay open 3 more hours.  
C) stay open 2 fewer hours.  
D) stay open 3 fewer hours.

Answer: C

Diff: 2

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

- 15) Krystal runs a nail salon and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that we observe Krystal staying open 5 hours and her marginal benefit of staying open per hour is \$36. If she is following the marginal principle, Krystal should
- A) stay open 1 more hour.
  - B) stay open 2 more hours.
  - C) stay open 1 fewer hour.
  - D) stay open 2 fewer hours.

Answer: A

Diff: 2

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

- 16) Considering how a change in one variable affects the value of another variable is called
- A) the Peter Principle.
  - B) the marginal principle.
  - C) the principle of supply and demand.
  - D) functional decision making.

Answer: B

Diff: 1

Topic: The Marginal Principle

Skill: Definition

- 17) When referring to "marginal" changes, the economic focus is on
- A) changes which affect only a few people or products.
  - B) large changes on the low end.
  - C) graduated changes on the high end.
  - D) small or incremental changes.

Answer: D

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

- 18) When deciding whether to engage in an activity or how much to do, people should follow
- A) the principle of microeconomics.
  - B) the principle of macroeconomics.
  - C) the marginal principle.
  - D) the law of supply and demand.

Answer: C

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

**Recall the Application about why people walk up stairs but not escalators to answer the following question(s).**

- 19) Weighing the benefits and costs of walking up an escalator versus standing still on an escalator addresses the economic concept known as
- A) the principle of opportunity cost.
  - B) the marginal principle.
  - C) the principle of voluntary exchange.
  - D) the principle of diminishing returns.

Answer: B

*Diff: 1*

*Topic: Application 2, Why Not Walk Up an Escalator?*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

- 20) Walking up an escalator as opposed to standing still on an escalator makes sense if the \_\_\_\_\_ of walking is less than the \_\_\_\_\_ of walking.
- A) marginal benefit; marginal cost
  - B) marginal cost; marginal benefit
  - C) marginal benefit; opportunity cost
  - D) marginal cost; opportunity cost

Answer: B

*Diff: 1*

*Topic: Application 2, Why Not Walk Up an Escalator?*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

- 21) The use of seat belts and other automobile safety features making bicycling more hazardous can be explained by the economic concept known as
- A) the principle of opportunity cost.
  - B) the marginal principle.
  - C) the principle of voluntary exchange.
  - D) the principle of diminishing returns.

Answer: B

*Diff: 1*

*Topic: Driving Speed and Safety*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

- 22) Saving time by driving faster is an example of a \_\_\_\_\_ of driving faster. Increasing the severity of injuries from a potential accident due to driving faster is a(n) \_\_\_\_\_ of driving faster.
- A) nominal cost; real cost
  - B) marginal cost; nominal cost
  - C) marginal benefit; marginal cost
  - D) normative benefit; opportunity cost

Answer: C

*Diff: 1*

*Topic: Driving Speed and Safety*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

- 23) When applying the marginal principle, you should pick the level at which the activity's marginal benefit equals its marginal cost.

Answer: TRUE

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

- 24) When applying the marginal principle, you should pick the level at which the activity's marginal benefit is less than its marginal cost.

Answer: FALSE

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

- 25) Basically, the marginal principle teaches us to evaluate the factors involved in taking an action or if doing something is worth the effort.

Answer: TRUE

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

- 26) When Lonnie produces 1 pair of cowboy boots his costs total \$300. When he produces 2 pairs of cowboy boots his total costs are \$500. This means that Lonnie's marginal cost of producing the second pair of cowboy boots is \$200.

Answer: TRUE

Diff: 2

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

- 27) Economists argue that individuals should continue to consume until total benefit equals total cost.

Answer: FALSE

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

- 28) If a company's total costs per day increase from \$200 to \$400 by adding another worker, but its additional benefits are \$300, it is sensible to add that additional worker.

Answer: TRUE

Diff: 2

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

29) What is a marginal cost?

Answer: A marginal cost is the additional cost resulting from a small increase in the production of a good.

*Diff: 1*

*Topic: The Marginal Principle*

*Skill: Definition*

30) What is a marginal benefit?

Answer: A marginal benefit is the additional benefit resulting from a small increase in the production of a good.

*Diff: 1*

*Topic: The Marginal Principle*

*Skill: Definition*

31) When a firm hired its tenth worker, its factory output increased by four units per month. Would you expect the firm's output to increase by eight more units per month if the firm hired two more workers?

Answer: No. The principle of diminishing marginal returns suggests that after some point of increasing returns, each incremental worker should have a progressively lower level of marginal productivity.

*Diff: 2*

*Topic: Marginal Principle*

*Skill: Analytical*

*AACSB: Analytic Skills*

32) Consider a firm that is trying to determine how many hours to remain open in a day. How would the firm make this decision?

Answer: The firm would continue to stay open as long as the incremental, or marginal, benefit of staying open (say, the increased revenues) each extra hour exceeds (or at least equals) the incremental, or marginal, costs (e.g., electricity, wages, etc.) incurred from staying open that hour.

*Diff: 2*

*Topic: Marginal Principle*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

33) Different people eat different amounts of food when they go to buffet restaurants, even though they all pay the same price. Explain how this relates to the marginal principle.

Answer: The marginal monetary cost of eating more is zero, so people will eat until they would not enjoy eating other bite. There is an implicit cost of eating more once you are full (extra weight gain and physical discomfort). Therefore, people will eat until marginal benefit equals marginal cost, and this will occur at different amounts of food for different people.

*Diff: 2*

*Topic: The Marginal Principle*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

- 34) Use the marginal principle to explain why government mandated safety features in automobiles during the 1960s and 1970s resulted in an increase in collisions between automobiles and bicycles.

Answer: The mandated safety features decreased the marginal cost of speed: People who wear seat belts suffer less severe injuries in a collision, so every additional unit of speed is less costly to the driver. Drivers felt more secure because they were better insulated from harm in the event of a collision, and so they drove faster. As a result, the number of collisions between cars and bicycles increased, meaning that safer environment for drivers led to a more hazardous environment for bicyclists.

Diff: 2

Topic: Driving Speed and Safety

Skill: Conceptual

AACSB: Reflective Thinking

### 2.3 The Principle of Voluntary Exchange

- 1) When people act in their own self interest, it is described as the
- A) principle of supply and demand.
  - B) principle of voluntary exchange.
  - C) laws of each state.
  - D) principle of scarcity.

Answer: B

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Definition

- 2) The principle of voluntary exchange is based on the idea of
- A) making assumptions.
  - B) isolating variables.
  - C) thinking at the margin.
  - D) rational self-interest.

Answer: D

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

**Recall the Application about Jasper Johns and house painting to answer the following question(s). In this Application, it is assumed that Johns can earn \$5,000 per day by painting works of art, and therefore should hire a housepainter who charges \$150 per day, and takes 10 days, to paint his house.**

- 3) This Application addresses the economic concept of
- A) the marginal principle.
  - B) diminishing returns.
  - C) specialization and exchange.
  - D) real versus nominal costs.

Answer: C

Diff: 1

Topic: Application 3, Jasper Johns and Housepainting

Skill: Conceptual

AACSB: Reflective Thinking

- 4) At what point should Jasper Johns consider painting his own house?
- A) if the housepainter charges \$500 per day and takes 20 days to paint the house
  - B) if the housepainter charged \$2,500 per day, since that is excessive for painting a house
  - C) if his earnings dropped to \$1,000 per day
  - D) if the housepainter charged more for 10 days worth of work than Johns could earn each day

Answer: D

Diff: 1

Topic: Application 3, Jasper Johns and Housepainting

Skill: Analytical

AACSB: Analytic Skills

- 5) Based on the Application, Jasper Johns' daily earnings are 33.33 times more than the housepainter's daily earnings. If Jasper Johns' earnings per day were only twice as much as the housepainter's earnings, what should he do?
- A) He should still hire the housepainter to paint his house.
  - B) He should paint his house himself.
  - C) He should hire a less productive housepainter.
  - D) He should remain indifferent as to who paints the house, for the difference in daily earnings would now be much less significant.

Answer: B

Diff: 1

Topic: Application 3, Jasper Johns and Housepainting

Skill: Conceptual

AACSB: Reflective Thinking

- 6) When you have a job and your employer compensates you for your time with money, resulting in both of you being better off, it is an example of a voluntary exchange.

Answer: TRUE

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

- 7) The principle of voluntary exchange is the concept that a voluntary exchange between two people makes both people better off.

Answer: TRUE

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Definition

- 8) A "market" is an arrangement that allows people to exchange things.

Answer: TRUE

Diff: 1

Topic: Exchange and Markets

Skill: Definition

## 2.4 The Principle of Diminishing Returns

- 1) The principle of diminishing returns implies that as one input increases while the other inputs are held fixed, output
- A) increases at an increasing rate.
  - B) increases at a decreasing rate.
  - C) decreases at a decreasing rate.
  - D) decreases at an increasing rate.

Answer: B

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Definition

- 2) The principle that "as one input increases while the other inputs are held fixed, output increases at a decreasing rate" is known as the
- A) marginal principle.
  - B) principle of opportunity cost.
  - C) principle of diminishing returns.
  - D) spillover principle.

Answer: C

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Definition

- 3) According to the principle of diminishing returns, if all factors of production but one are held constant and if that one factor is doubled, then eventually output will most likely
- A) double too.
  - B) less than double.
  - C) more than double.
  - D) remain unchanged.

Answer: B

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

- 4) A firm produces its product using both capital and labor. When it does not change its capital usage, but doubles its labor input, its output increases by less than 50 percent. Which of the following is the most likely explanation of this finding?
- A) the principle of opportunity cost
  - B) the principle of diminishing returns
  - C) the marginal principle
  - D) the spillover principle

Answer: B

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking



- 5) According to the principle of diminishing returns, if the number of workers is increased beyond the point of diminishing returns, then the additional worker
- A) increases total output by the same amount as previous workers.
  - B) increases total output by more than the amount of previous workers.
  - C) increases total output by less than the amount of previous workers.
  - D) decreases total output.

Answer: C

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

Units of Capital	Number of Workers	Output/Day
5	0	0
5	1	40
5	2	90
5	3	150
5	4	200
5	5	235

Table 2.3

- 6) Refer to Table 2.3. What can be observed about the given resources?
- A) Capital and labor are both fixed.
  - B) Capital is variable.
  - C) Capital is fixed.
  - D) Labor is fixed.

Answer: C

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

- 7) Refer to Table 2.3. Increasing the number of workers from 2 to 3 will increase output per day by
- A) 60 units.
  - B) 90 units.
  - C) 150 units.
  - D) 240 units.

Answer: A

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

- 8) Refer to Table 2.3. The principle of diminishing returns first occurs when how many workers are hired?

A) 2  
B) 3  
C) 4  
D) 5

Answer: C

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

Acres of Land	Tanks of Fertilizer	Truckloads of Potatoes
20	0	28
20	1	70
20	2	105
20	3	135
20	4	152
20	5	141

**Table 2.4**

- 9) Refer to Table 2.4. What can be observed about the given resources?

A) Land is variable but fertilizer is fixed.  
B) Land and fertilizer are both fixed.  
C) Land and fertilizer are both variable.  
D) Land is fixed but fertilizer is variable.

Answer: D

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

- 10) Refer to Table 2.4. Increasing the tanks of fertilizer from 3 to 4 will increase the truckloads of potatoes by

A) 152.  
B) 35.  
C) 17.  
D) 11.

Answer: C

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

11) Refer to Table 2.4. Increasing the tanks of fertilizer from 4 to 5 will

- A) increase truckloads of potatoes.
- B) decrease truckloads of potatoes.
- C) have no effect on truckloads of potatoes.
- D) require more acres of land.

Answer: B

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

12) Refer to Table 2.4. The principle of diminishing returns sets in with the addition of the \_\_\_\_\_ tank of fertilizer.

- A) second
- B) third
- C) fourth
- D) fifth

Answer: B

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

13) Diminishing returns occurs because

- A) not enough people have jobs.
- B) one of the inputs to the production process is fixed.
- C) consumers don't buy enough of the products produced.
- D) two people have not satisfied their self-interests.

Answer: B

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Definition

Recall the Application about the use of fertilizer and its impact on crop yields to answer the following question(s). The table is taken from this Application.

Fertilizer and Corn Yield	
Bags of Fertilizer	Bushels of Corn
0	85
1	120
2	135
3	144
4	147

- 14) Based on the data in the table, this Application addresses the economic concept of
- A) the marginal principle.
  - B) the principle of voluntary exchange.
  - C) the principle of diminishing returns.
  - D) the real-nominal principle.

Answer: C

Diff: 1

Topic: Application 4, Fertilizer and Crop Yields

Skill: Conceptual

AACSB: Reflective Thinking

- 15) Refer to the table above. After applying the second bag of fertilizer, the farmer experienced
- A) increasing returns.
  - B) diminishing returns.
  - C) constant returns.
  - D) negative returns.

Answer: B

Diff: 1

Topic: Application 4, Fertilizer and Crop Yields

Skill: Analytical

AACSB: Analytic Skills

- 16) Refer to the table above. The farmer increased his total production of corn by 9 bushels per acre after applying
- A) the first bag of fertilizer.
  - B) the second bag of fertilizer.
  - C) the third bag of fertilizer.
  - D) the fourth bag of fertilizer.

Answer: C

Diff: 2

Topic: Application 4, Fertilizer and Crop Yields

Skill: Analytical

AACSB: Analytic Skills

- 17) Refer to the table above. The farmer began to experience diminishing returns after applying how many bags of fertilizer?

A) 1  
B) 2  
C) 3  
D) 4

Answer: A

Diff: 2

Topic: Application 4, Fertilizer and Crop Yields

Skill: Analytical

AACSB: Analytic Skills

- 18) According to the principle of diminishing returns, an additional worker decreases total output.

Answer: FALSE

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

- 19) Explain the concept of diminishing returns.

Answer: The principle of diminishing returns shows that in the short run, beyond some point, output will increase at a decreasing rate. For example, producing more output in an existing production facility by increasing the number of workers sharing the facility will bring into effect the principle of diminishing returns, as output will eventually increase but at a decreasing rate.

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

- 20) You are running a small yard maintenance business for the summer. What do you expect to happen to the number of yards you can maintain in a day as you add workers if you don't purchase more capital equipment (like mowers and leaf blowers)?

Answer: It is likely that as you add workers, you will get incrementally less output out of each additional worker. Holding constant your materials, such as trucks, lawnmowers, etc., you'll almost surely be able to maintain more yards per day. But as you hire more workers, there might be waits for use of the tools, or for transportation to the next job. This is the prediction of the principle of diminishing returns.

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

## 2.5 The Real–Nominal Principle

- 1) The real–nominal principle states that
- A) people respond more to explicit, or real, costs than to implicit costs.
  - B) people respond more to implicit costs than to explicit costs.
  - C) what matters to people is the face value of money or income.
  - D) what matters to people is the purchasing power of money or income.

Answer: D

Diff: 1

Topic: The Real–Nominal Principle

Skill: Definition

- 2) The principle that states that what matters to people is the real value or purchasing power of money is the
- A) marginal principle.
  - B) principle of diminishing returns.
  - C) spillover principle.
  - D) real–nominal principle.

Answer: D

Diff: 1

Topic: The Real–Nominal Principle

Skill: Definition

- 3) The face value of money or income is called its \_\_\_\_\_ value.
- A) real
  - B) marginal
  - C) nominal
  - D) external

Answer: C

Diff: 1

Topic: The Real–Nominal Principle

Skill: Definition

- 4) The value of money or income in terms of the quantity of goods the money can buy is called its
- A) real value.
  - B) marginal value.
  - C) nominal value.
  - D) implicit value.

Answer: A

Diff: 1

Topic: The Real–Nominal Principle

Skill: Definition

- 5) The real value of money
- A) is another word for the face value.
  - B) reflects the purchasing power of the sum of money.
  - C) matters less to people than its nominal value.
  - D) is the same as its nominal value.

Answer: B

Diff: 1

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

- 6) If real salaries increase but nominal salaries do not, this means that
- A) the purchasing power of money has decreased.
  - B) prices have not changed.
  - C) prices have risen.
  - D) prices have fallen.

Answer: D

Diff: 2

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

- 7) If real salaries decrease but nominal salaries do not, this means that
- A) the purchasing power of money has increased.
  - B) prices have not changed.
  - C) prices have risen.
  - D) prices have fallen.

Answer: C

Diff: 2

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Analytic Skills

- 8) A Major League Baseball player signs a contract that pays \$27 million over 5 years. The \$27 million is the contract's \_\_\_\_\_ value.
- A) real
  - B) implicit
  - C) external
  - D) nominal

Answer: D

Diff: 1

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

- 9) Suppose your bank pays you 4 percent interest per year on your savings account, so that \$1,000 grows to \$1,040 over a one-year period. If prices increase by 1 percent per year over that time, approximately how much do you gain by keeping \$100 in the bank for a year?

A) \$0  
B) \$10  
C) \$30  
D) \$50

Answer: C

Diff: 2

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Analytic Skills

- 10) Suppose your bank pays you 5 percent interest per year on your savings account. If prices increase by 5 percent per year over that time, approximately how much do you gain by keeping \$100 in the bank for a year?

A) \$0  
B) \$1  
C) \$3  
D) \$6

Answer: A

Diff: 2

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Analytic Skills

- 11) Suppose that you lend \$1,000 to a friend and he or she pays you back one year later. What is the opportunity cost of lending the money?

A) There is no cost.  
B) The real interest rate that would have been earned on the money.  
C) The nominal interest rate that would have been earned on the money.  
D) The implicit cost of the money.

Answer: B

Diff: 3

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

- 12) You borrow money to buy a house in 2007 at a fixed interest rate of 6.5 percent. By 2010, the inflation rate has steadily fallen to 2.5 percent from the recent high of 4.0 percent in 2007. Considering *only* your mortgage, is inflation good news or bad news for you?

A) bad news, because inflation hurts everyone  
B) bad news, because it makes the real value of your mortgage payments increase  
C) good news, because it makes the real value of your mortgage payments decrease  
D) bad news, because it makes the nominal value of your mortgage payments increase

Answer: B

Diff: 2

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Analytic Skills



- 13) What is the nominal value of money?
- A) what can be purchased with the money
  - B) discounts taken by multiple purchases
  - C) savings by shopping on specific days of the week
  - D) its actual face value

Answer: D

Diff: 1

Topic: The Real-Nominal Principle

Skill: Definition

- 14) What is the real value of money?
- A) its face value
  - B) its compounded earnings in banks
  - C) the quantity of goods it can buy
  - D) the ability of shop at market prices

Answer: C

Diff: 1

Topic: The Real-Nominal Principle

Skill: Definition

**Recall the Application about the value of the minimum wage between 1974 and 2007 and the impact inflation has on the real minimum wage to answer the following question(s). The following table is from the Application.**

	1974	2007
Minimum wage per hour	\$ 2.00	\$ 5.85
Weekly income from minimum wage	\$80.00	\$234.00
Cost of a standard basket of goods	\$47.00	\$202.00
Number of baskets per week	1.70	1.16

- 15) In comparing the minimum wages between 1974 and 2007, this Application addresses the economic concept of
- A) the marginal principle.
  - B) the principle of voluntary exchange.
  - C) the principle of diminishing returns.
  - D) the real-nominal principle.

Answer: D

Diff: 1

Topic: Application 5, The Declining Real Minimum Wage

Skill: Conceptual

AACSB: Reflective Thinking

16) Refer to the table above. The nominal value of the minimum wage in 2007 was

- A) \$1.07 per hour.
- B) \$2.00 per hour.
- C) \$3.15 per hour.
- D) \$5.85 per hour.

Answer: D

Diff: 1

Topic: Application 5, The Declining Real Minimum Wage

Skill: Fact

17) Refer to the table above. What happened to the real value of the minimum wage between 1974 and 2007?

- A) It remained the same.
- B) It increased.
- C) It decreased.
- D) It could not be determined from the given information.

Answer: C

Diff: 2

Topic: Application 5, The Declining Real Minimum Wage

Skill: Analytical

AACSB: Analytic Skills

18) Refer to the table above. By what percentage did the federal minimum wage increase from 1974 to 2007?

- A) 65.81 percent
- B) 192.5 percent
- C) 222.3 percent
- D) 292.5 percent

Answer: B

Diff: 2

Topic: Application 5, The Declining Real Minimum Wage

Skill: Analytical

AACSB: Analytic Skills

**Recall the Application about the impact inflation has on your potential future salary and the repayment of student loans to answer the following question(s).**

19) In considering the costs involved for student loans that must be repaid in ten years, this

Application is addressing the economic concept of

- A) the marginal principle.
- B) the principle of voluntary exchange.
- C) the principle of diminishing returns.
- D) the real-nominal principle.

Answer: D

Diff: 1

Topic: Application 6, Repaying Student Loans

Skill: Conceptual

AACSB: Reflective Thinking

20) According to this Application, more time would be required to pay off a student loan if all prices

- A) remained stable.
- B) increased by 20 percent.
- C) decreased by 10 percent.
- D) increased by 40 percent.

Answer: C

Diff: 1

Topic: Application 6, Repaying Student Loans

Skill: Analytical

AACSB: Analytic Skills

21) According to this Application, if you earn a salary of \$80,000 in the first year and all prices decrease by half in the next 5 years, what will your nominal annual salary be in 5 years?

- A) \$8,000
- B) \$10,000
- C) \$20,000
- D) \$40,000

Answer: D

Diff: 2

Topic: Application 6, Repaying Student Loans

Skill: Analytical

AACSB: Analytic Skills

22) According to this Application, if you earn a salary of \$40,000 in the first year and all prices triple in the next 10 years, what will your nominal annual salary be in 10 years?

- A) \$20,000
- B) \$60,000
- C) \$120,000
- D) \$180,000

Answer: C

Diff: 2

Topic: Application 6, Repaying Student Loans

Skill: Analytical

AACSB: Analytic Skills

23) When product prices increase slower than nominal wages increase, the real value of wages decreases.

Answer: FALSE

Diff: 2

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

24) If product prices decrease more than nominal wages decrease, the real value of wages will increase.

Answer: TRUE

Diff: 2

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

25) What matters to people is the face value of money or income.

Answer: FALSE

Diff: 1

Topic: The Real–Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

26) What matters to people is the real value of money or income.

Answer: TRUE

Diff: 1

Topic: The Real–Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

27) The government uses the buying power of wages rather than face value or nominal value in reporting changes in "real wages" in the economy.

Answer: TRUE

Diff: 1

Topic: The Real–Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

28) The government uses the buying power of wages in reporting changes in "nominal wages" in the economy.

Answer: FALSE

Diff: 1

Topic: The Real–Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

29) Is it possible for nominal wages to decrease while real wages increase?

Answer: Yes, though unlikely. This would imply that prices have fallen, and that the decrease is sufficiently negative to offset any losses in nominal wages.

Diff: 2

Topic: The Real–Nominal Principle

Skill: Analytical

AACSB: Analytic Skills

30) Explain the real–nominal principle.

Answer: The real–nominal principle explains that what matters to people is the real value of money or income —its purchasing power—and not the face value of money or income.

Diff: 1

Topic: The Real–Nominal Principle

Skill: Definition

31) How would an increase in prices in retail stores change the real value of the money you earn as wages?

Answer: The real value would decrease.

Diff: 1

Topic: *The Real-Nominal Principle*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

32) If your salary increases at a lower rate than prices are increasing, what would happen to your buying power?

Answer: Your money would have less buying power.

Diff: 1

Topic: *The Real-Nominal Principle*

Skill: *Conceptual*

AACSB: *Reflective Thinking*