

Macroeconomics, 5e (Hubbard)

Chapter 2 Trade-offs, Comparative Advantage, and the Market System

2.1 Production Possibilities Frontiers and Opportunity Costs

1) _____ exists because unlimited wants exceed the limited resources available to fulfill those wants.

- A) Scarcity
- B) Productive efficiency
- C) The command economy
- D) Economic growth

Answer: A

Diff: 2 Page Ref: 38/38

Topic: Scarcity

*: Recurring

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist

AACSB: Analytic thinking

2) To compete in the automobile market, Tesla must make many strategic decisions such as whether to introduce a new car model, how to sell and service its cars, and where to advertise. At Tesla's Fremont, California plant, managers must decide on the monthly production quantities of their S and X models. In making this decision, the managers

- A) face no trade-off because the Fremont plant only produces these two models of the many Tesla models produced worldwide.
- B) face a trade-off, because producing more of one model means producing less of the others.
- C) will choose to only produce the quantity of S and X models where marginal cost equals zero.
- D) will always decide on production quantities in which revenues are maximized.

Answer: B

Diff: 2 Page Ref: 37/37

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Chapter Opener: Managers at Tesla Motors Face Trade-Offs

3) The principle of _____ is that the economic cost of using a factor of production is the alternative use of that factor that is given up.

- A) marginal cost
- B) opportunity cost
- C) normative economics
- D) entrepreneurship

Answer: B

Diff: 2 Page Ref: 39/39

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

4) The production possibilities frontier shows

- A) the various products that can be produced now and in the future.
- B) the maximum attainable combinations of two products that may be produced in a particular time period with available resources.
- C) what an equitable distribution of products among citizens would be.
- D) what people want firms to produce in a particular time period.

Answer: B

Diff: 2 Page Ref: 38/38

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

5) _____ shows that if all resources are fully and efficiently utilized, more of one good can be produced only by producing less of another good.

- A) Comparative advantage
- B) Absolute advantage
- C) The mixed market system
- D) The production possibilities frontier model

Answer: D

Diff: 2 Page Ref: 38/38

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

6) The production possibilities frontier model assumes all of the following *except*

- A) labor, capital, land and natural resources are fixed in quantity.
- B) the economy produces only two products.
- C) any level of the two products that the economy produces is currently possible.
- D) the level of technology is fixed and unchanging.

Answer: C

Diff: 2 Page Ref: 38/38

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

7) The _____ production points on a production possibility curve are the points along and inside the production possibility frontier.

- A) attainable
- B) unattainable
- C) productively efficient
- D) allocatively efficient

Answer: A

Diff: 1 Page Ref: 38/38

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

8) The unattainable points in a production possibilities diagram are

- A) the points within the production possibilities frontier.
- B) the points along the production possibilities frontier.
- C) the points of the horizontal and vertical intercepts.
- D) the points outside the production possibilities frontier.

Answer: D

Diff: 1 Page Ref: 39/39

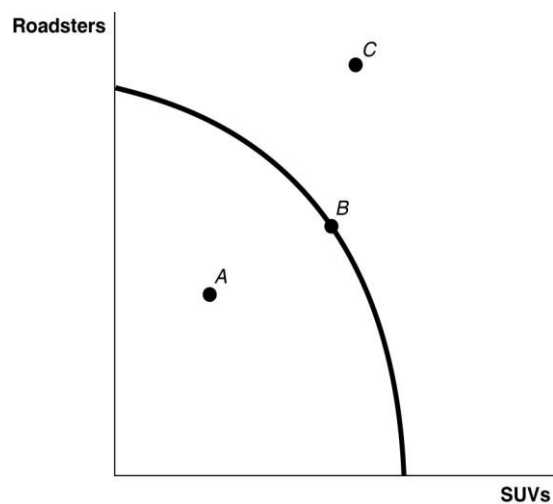
Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Figure 2-1



9) Refer to Figure 2-1. _____ is (are) inefficient in that not all resources are being used.

- A) Point A
- B) Point B
- C) Point C
- D) Points A and C

Answer: A

Diff: 1 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

10) *Refer to Figure 2-1.* _____ is (are) technically efficient.

- A) Point A
- B) Point B
- C) Point C
- D) Points B and C

Answer: B

Diff: 1 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

11) *Refer to Figure 2-1.* _____ is (are) unattainable with current resources.

- A) Point A
- B) Point B
- C) Point C
- D) Points A and C

Answer: C

Diff: 1 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

12) In a production possibilities frontier model, a point inside the frontier is

- A) allocatively efficient.
- B) productively efficient
- C) allocatively inefficient.
- D) productively inefficient.

Answer: D

Diff: 1 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

13) Carmelita can perform either a combination of 35 manicures and 70 pedicures or a combination of 50 manicures and 45 pedicures. If she now performs 35 manicures and 70 pedicures, what is the opportunity cost of performing an additional 15 manicures?

- A) 5 pedicures
- B) 20 pedicures
- C) 25 pedicures
- D) 45 pedicures

Answer: C

Diff: 2 Page Ref: 39/39

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 14) If the production possibilities frontier is linear, then
- A) opportunity costs are decreasing as more of one good is produced.
 - B) it is easy to efficiently produce output.
 - C) opportunity costs are increasing as more of one good is produced.
 - D) opportunity costs are constant as more of one good is produced.

Answer: D

Diff: 2 Page Ref: 39/39

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Figure 2-2

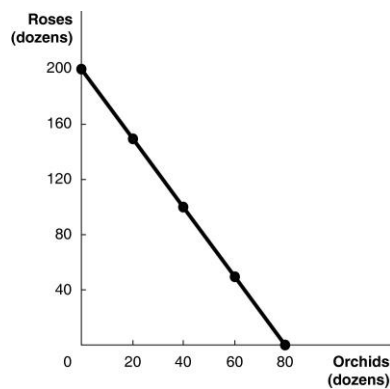


Figure 2-2 above shows the production possibilities frontier for Vidalia, a nation that produces two goods, roses and orchids.

- 15) *Refer to Figure 2-2.* What is the opportunity cost of one dozen orchids?
- A) 0.4 dozen roses
 - B) 2.5 dozen roses
 - C) 7.25 dozen roses
 - D) 16 dozen roses

Answer: B

Diff: 2 Page Ref: 40-41/40-41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Special Feature: Solved Problem: Drawing a Production Possibilities Frontier for Tesla Motors

16) *Refer to Figure 2-2.* What is the opportunity cost of one dozen roses?

- A) 0.4 dozen orchids
- B) 2.5 dozen orchids
- C) 7.25 dozen orchids
- D) 16 dozen orchids

Answer: A

Diff: 2 Page Ref: 40-41/40-41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Special Feature: Solved Problem: Drawing a Production Possibilities Frontier for Tesla Motors

17) *Refer to Figure 2-2.* Suppose Vidalia is currently producing 20 dozen orchids per period. How many roses is it also producing, assuming that resources are fully utilized?

- A) 30 dozen roses
- B) 50 dozen roses
- C) 100 dozen roses
- D) 150 dozen roses

Answer: D

Diff: 2 Page Ref: 40-41/40-41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Special Feature: Solved Problem: Drawing a Production Possibilities Frontier for Tesla Motors

18) *Refer to Figure 2-2.* If Vidalia chooses to produce 40 dozen orchids, how many roses can it produce to maximize production?

- A) 30 dozen roses
- B) 50 dozen roses
- C) 100 dozen roses
- D) 150 dozen roses

Answer: C

Diff: 2 Page Ref: 40-41/40-41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Special Feature: Solved Problem: Drawing a Production Possibilities Frontier for Tesla Motors

19) *Refer to Figure 2-2.* If Vidalia chooses to produce 60 dozen orchids, how many roses can it produce to maximize production?

- A) 30 dozen roses
- B) 50 dozen roses
- C) 100 dozen roses
- D) 150 dozen roses

Answer: D

Diff: 2 Page Ref: 40-41/40-41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Special Feature: Solved Problem: Drawing a Production Possibilities Frontier for Tesla Motors

20) *Refer to Figure 2-2.* If Vidalia chooses to produce 50 dozen roses, how many orchids can it produce to maximize production?

- A) 20 dozen orchids
- B) 40 dozen orchids
- C) 60 dozen orchids
- D) 80 dozen orchids

Answer: C

Diff: 2 Page Ref: 40-41/40-41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Special Feature: Solved Problem: Drawing a Production Possibilities Frontier for Tesla Motors

21) *Refer to Figure 2-2.* If Vidalia chooses to produce 80 dozen roses, how many orchids can it produce to maximize production?

- A) 24 dozen orchids
- B) 48 dozen orchids
- C) 60 dozen orchids
- D) 74 dozen orchids

Answer: B

Diff: 2 Page Ref: 40-41/40-41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Special Feature: Solved Problem: Drawing a Production Possibilities Frontier for Tesla Motors

22) *Refer to Figure 2-2.* The linear production possibilities frontier in the figure indicates that

- A) Vidalia has a comparative advantage in the production of orchids.
- B) Vidalia has a comparative disadvantage in the production of roses.
- C) the tradeoff between roses and orchids is constant.
- D) it is progressively more expensive to produce orchids.

Answer: C

Diff: 2 Page Ref: 40-41/40-41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Special Feature: Solved Problem: Drawing a Production Possibilities Frontier for Tesla Motors

23) A production possibilities frontier with a _____ shape indicates increasing opportunity costs as more and more of one good is produced.

- A) linear
- B) bowed inward
- C) bowed outward
- D) perfectly horizontal

Answer: C

Diff: 2 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 24) Increasing opportunity cost along a bowed out production possibilities frontier occurs because
- A) of inefficient production.
 - B) of ineffective management by entrepreneurs.
 - C) some factors of production are not equally suited to producing both goods or services.
 - D) of the scarcity of factors of production.

Answer: C

Diff: 2 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 25) The slope of a production possibilities frontier measures the _____ of producing one more unit of a good.

- A) marginal revenue
- B) total revenue
- C) marginal cost
- D) opportunity cost

Answer: D

Diff: 1 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 26) Increasing marginal opportunity cost implies that

- A) the more resources already devoted to any activity, the payoff from allocating yet more resources to that activity increases by progressively smaller amounts.
- B) the more resources already devoted to any activity, the benefits from allocating yet more resources to that activity decreases by progressively larger amounts.
- C) that rising opportunity costs makes it inefficient to produce beyond a certain quantity.
- D) the law of scarcity.

Answer: A

Diff: 2 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

27) If opportunity costs are _____, the production possibilities frontier would be graphed as a negatively sloped straight line.

- A) decreasing
- B) increasing
- C) negative
- D) constant

Answer: D

Diff: 1 Page Ref: 39/39

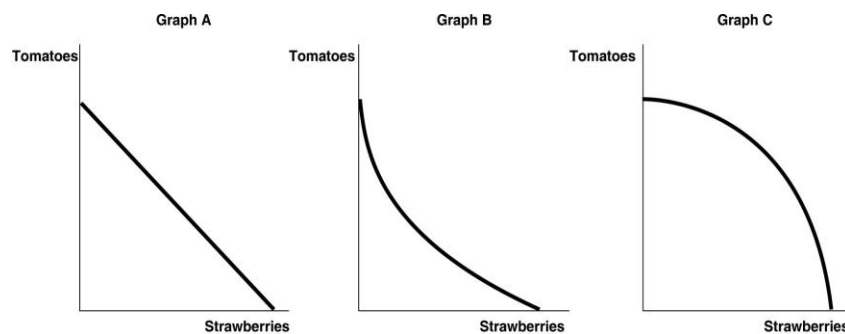
Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Figure 2-3



28) Refer to Figure 2-3. Carlos Vanya grows tomatoes and strawberries on his land. His land is equally suited for growing either fruit. Which of the graphs in Figure 2-3 represents his production possibilities frontier?

- A) Graph A
- B) Graph B
- C) Graph C
- D) either Graph A or Graph B
- E) either Graph B or Graph C

Answer: A

Diff: 2 Page Ref: 39/39

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

29) *Refer to Figure 2-3.* Carlos Vanya grows tomatoes and strawberries on his land. A portion of his land is more suitable for growing tomatoes and the other portion is better suited for strawberry cultivation. Which of the graphs in Figure 2-3 represent his production possibilities frontier?

- A) Graph A
- B) Graph B
- C) Graph C
- D) either Graph A or Graph B
- E) either Graph B or Graph C

Answer: C

Diff: 2 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Table 2-1

Production Choices for Dina's Diner

Choice	Quantity of Sliders Produced	Quantity of Hot Wings Produced
A	80	0
B	60	25
C	40	50
D	20	75
E	0	100

30) *Refer to Table 2-1.* Assume Dina's Diner only produces sliders and hot wings. A combination of 40 sliders and 50 hot wings would appear

- A) along Dina's production possibilities frontier.
- B) inside Dina's production possibilities frontier.
- C) outside Dina's production possibilities frontier.
- D) at the vertical intercept of Dina's production possibilities frontier.

Answer: A

Diff: 2 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

31) *Refer to Table 2-1.* Assume Dina's Diner only produces sliders and hot wings. A combination of 60 sliders and 25 hot wings would appear

- A) along Dina's production possibilities frontier.
- B) inside Dina's production possibilities frontier.
- C) outside Dina's production possibilities frontier.
- D) at the vertical intercept of Dina's production possibilities frontier.

Answer: A

Diff: 2 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

32) *Refer to Table 2-1.* Assume Dina's Diner only produces sliders and hot wings. A combination of 40 sliders and 25 hot wings would appear

- A) along Dina's production possibilities frontier.
- B) inside Dina's production possibilities frontier.
- C) outside Dina's production possibilities frontier.
- D) at the vertical intercept of Dina's production possibilities frontier.

Answer: B

Diff: 2 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

33) *Refer to Table 2-1.* Assume Dina's Diner only produces sliders and hot wings. A combination of 20 sliders and 60 hot wings would appear

- A) along Dina's production possibilities frontier.
- B) inside Dina's production possibilities frontier.
- C) outside Dina's production possibilities frontier.
- D) at the vertical intercept of Dina's production possibilities frontier.

Answer: B

Diff: 2 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

34) *Refer to Table 2-1.* Assume Dina's Diner only produces sliders and hot wings. A combination of 60 sliders and 50 hot wings would appear

- A) along Dina's production possibilities frontier.
- B) inside Dina's production possibilities frontier.
- C) outside Dina's production possibilities frontier.
- D) at the vertical intercept of Dina's production possibilities frontier.

Answer: C

Diff: 2 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

35) *Refer to Table 2-1.* Assume Dina's Diner only produces sliders and hot wings. A combination of 50 sliders and 50 hot wings would appear

- A) along Dina's production possibilities frontier.
- B) inside Dina's production possibilities frontier.
- C) outside Dina's production possibilities frontier.
- D) at the vertical intercept of Dina's production possibilities frontier.

Answer: C

Diff: 2 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

36) *Refer to Table 2-1.* Dina faces _____ opportunity costs in the production of sliders and hot wings.

- A) increasing
- B) decreasing
- C) constant
- D) negative

Answer: C

Diff: 2 Page Ref: 39/39

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

37) An outward shift of a nation's production possibilities frontier can occur due to

- A) a reduction in unemployment.
- B) a natural disaster like a hurricane or bad earthquake.
- C) a change in the amounts of one good desired.
- D) an increase in the labor force.

Answer: D

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

38) _____ a nation's production possibilities frontier represents economic growth.

- A) An outward shift of
- B) An inward shift of
- C) Moving up along
- D) Moving down along

Answer: A

Diff: 1 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

39) Economic growth is represented on a production possibilities frontier model by the production possibility frontier

- A) shifting outward.
- B) shifting inward.
- C) becoming steeper.
- D) becoming flatter.

Answer: A

Diff: 1 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

40) Without technological advancement, how can a nation achieve economic growth?

- A) by producing more high-value goods and fewer low-value goods
- B) through an increase in supplies of factors of production
- C) by producing more low-value goods and fewer high-value goods
- D) by decreasing the size of the labor force

Answer: B

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-17: Explain the effects of the factors of production, factor demand, and factor supply and labor in factor markets

AACSB: Analytic thinking

41) Which of the following would shift a nation's production possibilities frontier inward?

- A) discovering a cheap way to convert sunshine into electricity
- B) producing more capital equipment
- C) an increase in the unemployment rate
- D) a law requiring workers to retire at age 50

Answer: D

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Figure 2-4

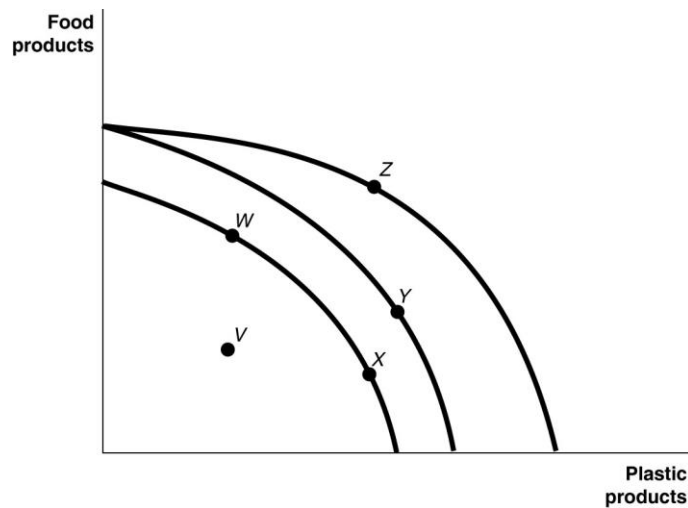


Figure 2-4 shows various points on three different production possibilities frontiers for a nation.

42) Refer to Figure 2-4. A movement from _____ could occur because of an influx of immigrant labor.

- A) X to W
- B) X to Y
- C) W to V
- D) W to X

Answer: B

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

43) Refer to Figure 2-4. A movement from _____ is the result of advancements in plastic production technology.

- A) V to X
- B) W to X
- C) Z to W
- D) Y to Z

Answer: D

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

- 44) *Refer to Figure 2-4.* Consider the following events:
- an increase in the unemployment rate
 - a decrease in a nation's money supply
 - a war that kills a significant portion of a nation's population

Which of the events listed above could cause a movement from Z to X ?

- a, b and c
- a and b only
- a and c only
- a only
- c only

Answer: E

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

- 45) *Refer to Figure 2-4.* Consider the following movements:

- from point V to point W
- from point W to point Y
- from point Y to point Z

Which of the movements listed above represents advancements in technology with respect to both plastic production and food production?

- a, b, and c
- b and c only
- b only
- c only

Answer: C

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

46) *Refer to Figure 2-4.* Consider the following events:

- a. a decrease in the unemployment rate
- b. general technological advancement
- c. an increase in consumer wealth

Which of the events listed above could cause a movement from V to X ?

- A) a only
- B) a and b only
- C) b and c only
- D) a, b, and c

Answer: A

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

47) *Refer to Figure 2-4.* Consider the following events:

- a. a reduction in the patent protection period to no more than 2 years
- b. a war that destroys a substantial portion of a nation's capital stock
- c. the lack of secure and enforceable property rights system

Which of the events listed above could cause a movement from W to V ?

- A) a only
- B) a and b only
- C) a and c only
- D) b and c only
- E) a, b, and c

Answer: C

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

48) *Refer to Figure 2-4.* A movement from _____ could occur because of additional government restrictions toward allowing immigrant labor.

- A) X to W
- B) Y to X
- C) V to W
- D) W to X

Answer: B

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

49) *Refer to Figure 2-4.* A movement from _____ is the result of additional government restrictions on the pollution that results from plastic production.

- A) X to V
- B) X to W
- C) Z to W
- D) Z to Y

Answer: D

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

50) *Refer to Figure 2-4.* Consider the following events:

- a. a decrease in the unemployment rate
- b. an increase in technology with respect to both food and plastic production
- c. a war that kills a significant portion of a nation's population

Which of the events listed above could cause a movement from W to Y?

- A) a, b and c
- B) a and b only
- C) a and c only
- D) b only
- E) c only

Answer: D

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

51) *Refer to Figure 2-4.* Consider the following movements:

- a. from point V to point W
- b. from point W to point Y
- c. from point Y to point Z

Which of the movements listed above represents advancements in technology with respect to only plastic production?

- A) a, b, and c
- B) b and c only
- C) b only
- D) c only

Answer: D

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

52) *Refer to Figure 2-4.* Consider the following events:

- a. an increase in the unemployment rate
- b. general technological advancement
- c. an increase in consumer wealth

Which of the events listed above could cause a movement from *Z* to *V*?

- A) a only
- B) a and b only
- C) b and c only
- D) a, b, and c

Answer: A

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

53) *Refer to Figure 2-4.* Consider the following events:

- a. an increase in the patent protection period to 75 years
- b. a hurricane that destroys a substantial portion of a nation's capital stock
- c. the implementation of a secure and enforceable property rights system

Which of the events listed above could cause a movement from *W* to *Z*?

- A) a only
- B) a and b only
- C) a and c only
- D) b and c only
- E) a, b, and c

Answer: C

Diff: 2 Page Ref: 42/42

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

54) The recession of 2007-2009 would most likely be represented in a production possibilities frontier graph by

- A) a point inside the frontier.
- B) a point outside the frontier.
- C) a point on the frontier.
- D) an intercept on either the vertical or the horizontal axis.

Answer: A

Diff: 2 Page Ref: 43/43

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

55) Suppose there is some unemployment in the economy and society decides that it wants more of one good. Which of the following statements is true?

- A) It is not possible to achieve this unless technology advances.
- B) It can increase output without giving up another good by employing more resources.
- C) It will have to increase resource supplies.
- D) It will have to give up production and consumption of some other good.

Answer: B

Diff: 2 Page Ref: 43/43

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

56) If society decides it wants more of one good and _____, then it has to give up some of another good and incur some opportunity costs.

- A) technology advances
- B) resources are underutilized
- C) all resources are fully utilized
- D) new resources are discovered

Answer: C

Diff: 2 Page Ref: 43/43

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

57) According to the production possibility model, if more resources are allocated to the production of physical and human capital, then all of the following are likely to happen *except*

- A) fewer goods will be produced for consumption today.
- B) the production possibilities frontier will be shift outward in the future.
- C) future economic growth is enhanced.
- D) the country's total production will fall.

Answer: D

Diff: 2 Page Ref: 43/43

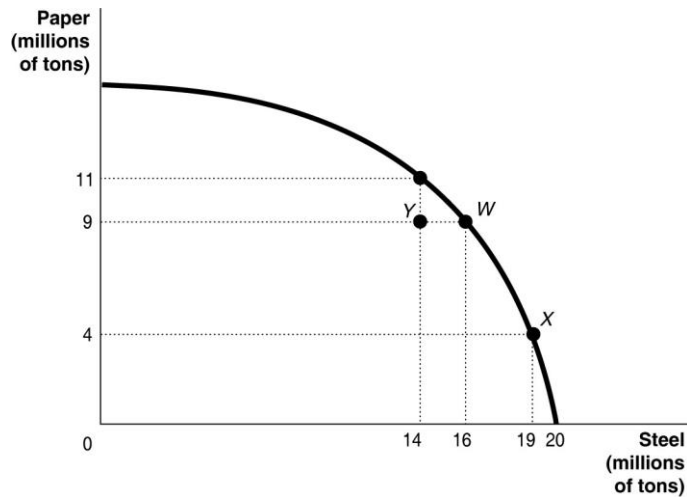
Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Figure 2-5



58) Refer to Figure 2-5. If the economy is currently producing at point Y, what is the opportunity cost of moving to point X?

- A) 5 million tons of steel
- B) 9 million tons of paper
- C) 5 million tons of paper
- D) 19 million tons of steel

Answer: C

Diff: 2 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

59) Refer to Figure 2-5. If the economy is currently producing at point X, what is the opportunity cost of moving to point W?

- A) 3 million tons of steel
- B) 19 million tons of steel
- C) 5 million tons of paper
- D) 9 million tons of paper

Answer: A

Diff: 1 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

60) Refer to Figure 2-5. If the economy is currently producing at point *W*, what is the opportunity cost of moving to point *Y*?

- A) 2 million tons of steel
- B) 14 million tons of steel
- C) 2 million tons of paper
- D) 9 million tons of paper

Answer: A

Diff: 1 Page Ref: 42/42

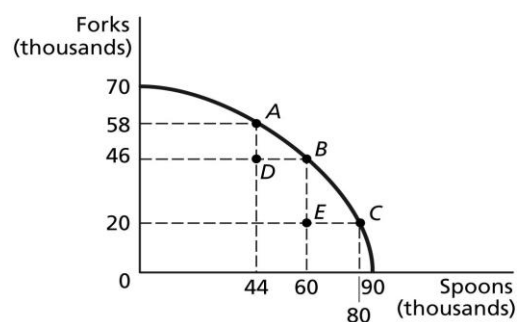
Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Figure 2-6



61) Refer to Figure 2-6. If the economy is currently producing at point *A*, what is the opportunity cost of moving to point *B*?

- A) 16 thousand spoons
- B) 12 thousand forks
- C) 60 thousand spoons
- D) 46 thousand forks

Answer: B

Diff: 1 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

62) *Refer to Figure 2-6.* If the economy is currently producing at point *C*, what is the opportunity cost of moving to point *B*?

- A) 20 thousand spoons
- B) 26 thousand forks
- C) 40 thousand spoons
- D) 46 thousand forks

Answer: A

Diff: 1 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

63) *Refer to Figure 2-6.* If the economy is currently producing at point *D*, what is the opportunity cost of moving to point *B*?

- A) 16 thousand spoons
- B) 46 thousand forks
- C) 60 thousand spoons
- D) 0 forks

Answer: D

Diff: 1 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

64) *Refer to Figure 2-6.* If the economy is currently producing at point *E*, what is the opportunity cost of moving to point *B*?

- A) 26 thousand forks
- B) 20 thousand forks
- C) 60 thousand spoons
- D) 0 spoons

Answer: D

Diff: 1 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

65) *Refer to Figure 2-6.* If the economy is currently producing at point *E*, what is the opportunity cost of moving to point *D*?

- A) 26 thousand forks
- B) 20 thousand forks
- C) 16 thousand spoons
- D) 0 spoons

Answer: C

Diff: 1 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

66) A student comments to his roommate that the only way he will be able to pass his final exams is to not sleep for the next three days. This statement suggests that

- A) students are more concerned about good grades than good health.
- B) society should value sleep more highly than good grades.
- C) there is a trade-off between studying and sleep.
- D) society should value good grades more highly than sleep because students can catch up on their sleep once final exams are over.

Answer: C

Diff: 2 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

67) Suppose your expenses for this term are as follows: tuition: \$5,000, room and board: \$3,000, books and other educational supplies: \$500. Further, during the term, you can only work part-time and earn \$4,000 instead of your full-time salary of \$10,000. What is the opportunity cost of going to college this term, assuming that your room and board expenses would be the same even if you did not go to college?

- A) \$5,500
- B) \$8,500
- C) \$11,500
- D) \$14,500

Answer: C

Diff: 3 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

- 68) The opportunity cost of taking an on-line history class is
- A) the knowledge and enjoyment you receive from taking the class.
 - B) the value of the time spent on line.
 - C) equal to the highest value of an alternative use of the time and money spent on the class.
 - D) zero because there is no classroom time involved if you are enrolled in the course.
 - E) the cost of tuition and fees only.

Answer: C

Diff: 2 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

- 69) Horatio can produce either a combination of 15 bird houses and 25 wind chimes or a combination of 30 bird houses and 15 wind chimes. If he now produces 30 bird houses and 15 wind chimes, what is the opportunity cost of producing an additional 10 wind chimes?

- A) 2 bird houses
- B) 15 bird houses
- C) 30 bird houses
- D) 45 bird houses

Answer: B

Diff: 2 Page Ref: 39/39

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Table 2-2

Production choices for Nadia's Neckware

Choice	Quantity of Ascots Produced	Quantity of Bowties Produced
A	32	0
B	24	6
C	16	12
D	8	18
E	0	24

70) Refer to Table 2-2. Assume Nadia's Neckware only produces ascots and bowties. A combination of 8 ascots and 18 bowties would appear

- A) along Nadia's production possibilities frontier.
- B) inside Nadia's production possibilities frontier.
- C) outside Nadia's production possibilities frontier.
- D) at the horizontal intercept of Nadia's production possibilities frontier.

Answer: A

Diff: 2 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

71) Refer to Table 2-2. Assume Nadia's Neckware only produces ascots and bowties. A combination of 16 ascots and 6 bowties would appear

- A) along Nadia's production possibilities frontier.
- B) inside Nadia's production possibilities frontier.
- C) outside Nadia's production possibilities frontier.
- D) at the horizontal intercept of Nadia's production possibilities frontier.

Answer: B

Diff: 2 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

72) *Refer to Table 2-2.* Assume Nadia's Neckware only produces ascots and bowties. A combination of 24 ascots and 12 bowties would appear

- A) along Nadia's production possibilities frontier.
- B) inside Nadia's production possibilities frontier.
- C) outside Nadia's production possibilities frontier.
- D) at the horizontal intercept of Nadia's production possibilities frontier.

Answer: C

Diff: 2 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

73) *Refer to Table 2-2.* Assume Nadia's Neckties only produces ascots and bowties. Nadia faces _____ opportunity costs in the production of ascots and bowties.

- A) increasing
- B) decreasing
- C) constant
- D) negative

Answer: C

Diff: 2 Page Ref: 39/39

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

74) An inward shift of the production possibilities frontier represents

- A) positive economic growth.
- B) negative economic growth.
- C) a rise in the unemployment rate.
- D) technological improvement.

Answer: B

Diff: 2 Page Ref: 43/43

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-17: Explain the effects of the factors of production, factor demand, and factor supply and labor in factor markets

AACSB: Analytic thinking

75) Which of the following would shift a nation's production possibilities frontier outward?

- A) discovering a more efficient process to desalinate water
- B) an increase in the minimum wage
- C) a decrease in the unemployment rate
- D) more restrictive immigration policies

Answer: A

Diff: 2 Page Ref: 43/43

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

76) Suppose your expenses for this term are as follows: tuition: \$9,000, room and board: \$1,500, books and other educational supplies: \$1,000. Further, during the term, you can only work part-time and earn \$3,000 instead of your full-time salary of \$8,000. What is the opportunity cost of going to college this term, assuming that your room and board expenses would be the same even if you did not go to college?

- A) \$10,000
- B) \$13,000
- C) \$15,000
- D) \$18,000

Answer: C

Diff: 3 Page Ref: 39/39

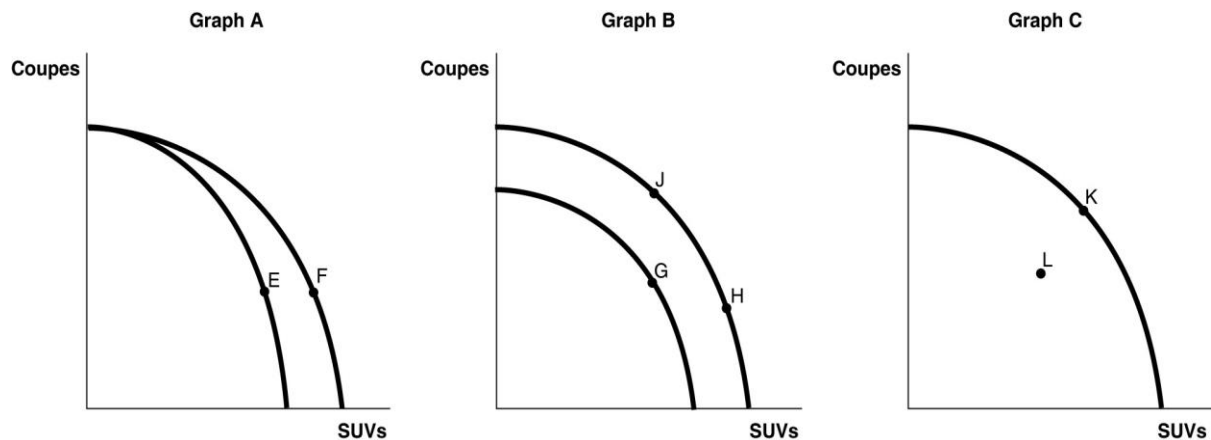
Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Figure 2-7



Mercedes Benz produces a full line of luxury automobiles, including coupes, sedans, and SUVs, at a variety of manufacturing plants across the globe. Assume Mercedes Benz produces both coupes and SUVs at its Tuscaloosa, Alabama factory. Figure 2-7 shows changes to its production possibilities frontier in response to new developments and different strategic production decisions at this factory.

77) Refer to Figure 2-7. Suppose worker productivity increases so that the total number of vehicles produced increases as the company adds more machinery, workers and changes the layout of the factory. This is best represented by the

- A) movement from E to F in Graph A.
- B) movement from G to H in Graph B.
- C) movement from K to L in Graph C.
- D) movement from J to H in Graph B.

Answer: B

Diff: 2 Page Ref: 43/43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Special Feature: An Inside LOOK: What's on the Horizon at Mercedes-Benz?

78) *Refer to Figure 2-7.* In response to changing consumer demands, Mercedes-Benz cuts back on the production of SUVs and increases its production of coupes. This strategy is best represented by

- A) movement from *E* to *F* in Graph A.
- B) movement from *G* to *H* in Graph B.
- C) movement from *K* to *L* in Graph C.
- D) movement from *H* to *J* in Graph B.

Answer: D

Diff: 2 Page Ref: 42/42

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Special Feature: An Inside LOOK: What's on the Horizon at Mercedes-Benz?

79) *Refer to Figure 2-7.* Suppose Mercedes-Benz has to shut down a portion of its facility as it works on remodeling the facility to merge two of its separate assembly lines in preparation for the production of a new, hybrid models. The production decision to shut down temporarily will result in a

- A) movement from *E* to *F* in Graph A.
- B) movement from *G* to *H* in Graph B.
- C) movement from *K* to *L* in Graph C.
- D) movement from *J* to *H* in Graph B.

Answer: C

Diff: 2 Page Ref: 43/43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Special Feature: An Inside LOOK: What's on the Horizon at Mercedes-Benz?

80) An increase in the unemployment rate may be represented as a movement from a point on the production possibilities frontier to a point inside the frontier.

Answer: TRUE

Diff: 2 Page Ref: 43/43

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

81) If a country is producing efficiently and is on the production possibilities frontier, the only way to produce more of one good is with an advance in technology.

Answer: FALSE

Diff: 1 Page Ref: 43/43

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

82) Consider a country that produces only two goods: pineapples and tractors. Suppose it is possible for this country to increase its production of pineapples without producing fewer tractors. In this case, its current output combination is inefficient.

Answer: TRUE

Diff: 2 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

83) Any output combination inside a production possibility frontier is associated with unused or underutilized resources.

Answer: TRUE

Diff: 1 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

84) An increase in population shifts the production possibility frontier inwards over time.

Answer: FALSE

Diff: 1 Page Ref: 43/43

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

85) If additional units of a good could be produced at a constant opportunity cost, the production possibility frontier would be linear.

Answer: TRUE

Diff: 2 Page Ref: 39/39

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

86) On a diagram of a production possibility frontier, opportunity cost is represented by the slope of the production possibility frontier.

Answer: TRUE

Diff: 2 Page Ref: 39/39

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

87) To increase gas mileage, automobile manufacturers make cars small and light. Large cars absorb more of the impact of an accident than small cars but yield lower gas mileage. These facts suggest that a positive relationship exists between safety and gas mileage.

Answer: FALSE

Diff: 2 Page Ref: 39/39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Economics in Your Life: The Trade-offs When You Buy a Car

88) A decrease in the unemployment rate may be represented as a movement from a point inside the production possibilities frontier to a point on the frontier.

Answer: TRUE

Diff: 2 Page Ref: 43/43

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

89) If a country is producing efficiently and is on the production possibilities frontier, producing more of one good would result in a movement along the frontier.

Answer: TRUE

Diff: 1 Page Ref: 39/39

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

90) Consider a country that produces only two goods: bird feeders and binoculars. Suppose it is possible for this country to increase its production of bird feeders without producing fewer binoculars. In this case, its current output combination is inefficient.

Answer: TRUE

Diff: 2 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

91) Any output combination along a production possibility frontier is associated with overused or unattainable resources.

Answer: FALSE

Diff: 1 Page Ref: 39/39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

92) A decrease in the labor force shifts the production possibility frontier inwards over time.

Answer: TRUE

Diff: 1 Page Ref: 43/43

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

93) If additional units of a good are produced at an increasing opportunity cost, the production possibility frontier would be bowed outward (concave).

Answer: TRUE

Diff: 2 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

94) On a diagram of a production possibility frontier, economic decline (negative growth) is represented by the production possibility frontier shifting inward.

Answer: TRUE

Diff: 2 Page Ref: 43/43

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

95) What causes a production possibilities frontier to shift outward?

Answer: A production possibilities curve shifts outward with economic growth, which occurs with an increase in resources or a positive technology change.

Diff: 2 Page Ref: 43/43

Topic: Economic Growth

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

96) What causes a production possibilities frontier to shift inward?

Answer: A production possibilities curve shifts inward with economic decline, or negative growth. This occurs with a decrease in resources or a negative technology change.

Diff: 2 Page Ref: 43/43

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

97) How are efficiency and inefficiency represented on a production possibilities frontier?

Answer: Efficiency is represented by points along the production possibilities frontier. Inefficiency is represented by points inside the production possibilities frontier.

Diff: 2 Page Ref: 38-39/38-39

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

98) What does the term "increasing marginal opportunity cost" mean? How are increasing marginal opportunity costs represented on a bowed out production possibilities frontier?

Answer: Increasing marginal opportunity costs means that as more and more of a product is made, the opportunity cost of making each additional unit rises. They are represented by moving down a bowed out production possibilities frontier.

Diff: 2 Page Ref: 42/42

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

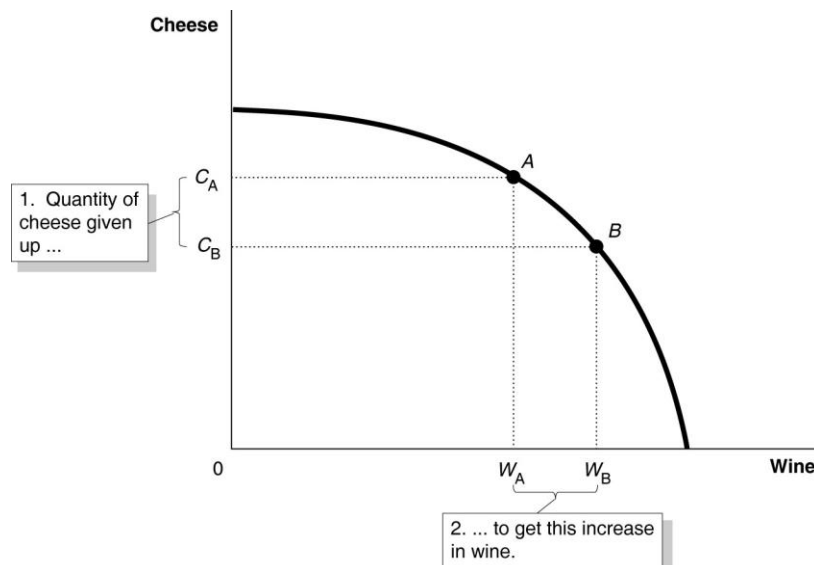
AACSB: Analytic thinking

99) a. Draw a production possibilities frontier for a country that produces two goods, wine and cheese. Assume that resources are not equally suited to both tasks.

b. Define opportunity costs.

c. Use your production possibilities frontier graph to demonstrate the principle of opportunity costs.

Answer: a. The PPF is concave (bowed away from the origin) to reflect the fact that resources are not equally suited to both tasks.



b. Opportunity cost is defined as the highest valued alternative that must be forgone by taking an action.

c. In the PPF graph in part (a), suppose the country is currently producing at point A and wishes to move to point B so that it can produce more wine. The only way it can obtain more wine is to give up some amount of cheese.

Diff: 2 Page Ref: 42/42

Topic: Production Possibilities Frontiers

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

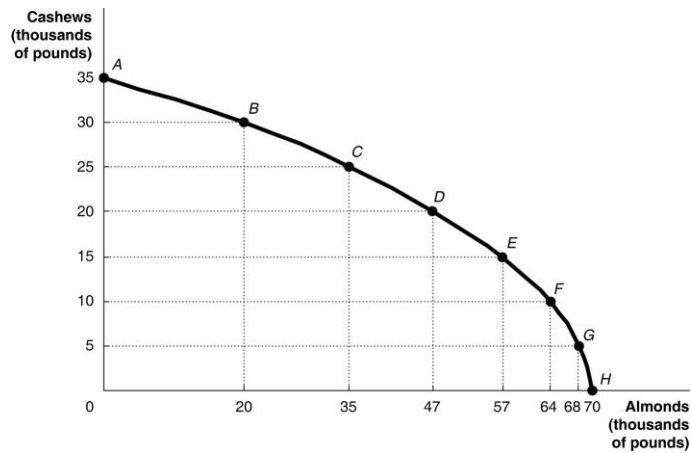
Table 2-3

Possible Output Combinations	Cashews (thousands of pounds)	Almonds (thousands of pounds)
A	35	0
B	30	20
C	25	35
D	20	47
E	15	57
F	10	64
G	5	68
H	0	70

100) *Refer to Table 2-3.* The Nut House produces only cashews and almonds. The table above shows the maximum possible output combinations of the two nuts using all resources and currently available technology.

- Graph The Nut House's production possibilities frontier. Put almonds on the horizontal axis and cashews on the vertical axis. Be sure to identify the output combination points on your diagram.
- Suppose The Nut House is currently producing at point C. What is the opportunity cost of producing an additional 12,000 pounds of almonds?
- Suppose The Nut House is currently producing at point C. What happens to the opportunity cost of producing more and more almonds? Does it increase, decrease or remain constant? Explain your answer.
- Suppose The Nut House is currently producing at point F. What happens to the opportunity cost of producing more and more cashews? Does it increase, decrease or remain constant? Explain your answer.
- Suppose The Nut House is plagued by a variety of white root-rot disease, which destroys cashew trees but not almond trees. Show in a graph what happens to its PPF.

Answer: a.

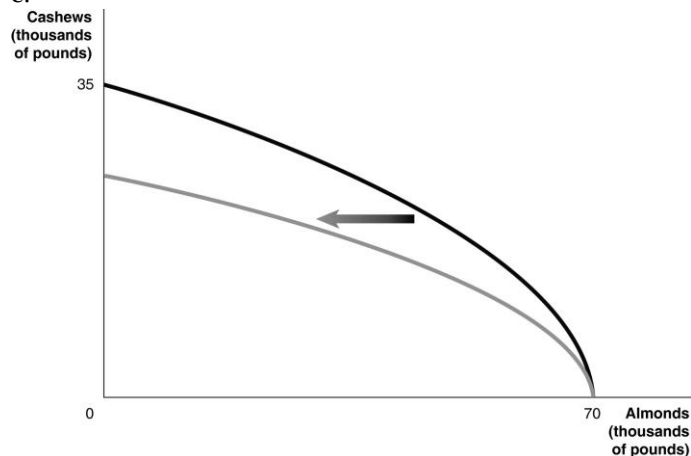


b. 5,000 pounds of cashews

c. It increases. For example to move to *D*, The Nut House has to give up 5,000 pounds of cashews to produce an additional 10,000 pounds of almonds. For each additional 5,000 pounds of cashews foregone, the payoff in terms of almonds gets progressively smaller.

d. It increases. Each time it wants to produce an additional 5,000 pounds of cashews, more and more almonds must be given up.

e.



Diff: 3 Page Ref: 40-41/40-41

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Solved Problem: Drawing a Production Possibilities Frontier for Tesla Motors

2.2 Comparative Advantage and Trade

1) If you can produce more of something than others with the same resources, you have

- A) a comparative advantage.
- B) an absolute advantage.
- C) an efficient production system.
- D) a free-market economy.

Answer: B

Diff: 1 Page Ref: 45/45

Topic: Absolute Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Table 2-4

	George	Jack
Lawns Mowed	10	6
Gardens Cultivated	5	4

Table 2-4 shows the output per day of two gardeners, George and Jack. They can either devote their time to mowing lawns or cultivating gardens.

2) *Refer to Table 2-4.* Which of the following statements is true?

- A) Jack has an absolute advantage in both tasks.
- B) George has an absolute advantage in both tasks.
- C) Jack has an absolute advantage in lawn mowing and George in garden cultivating.
- D) Jack has an absolute advantage in garden cultivating and George in lawn mowing.

Answer: B

Diff: 1 Page Ref: 46/46

Topic: Absolute Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

3) *Refer to Table 2-4.* What is Jack's opportunity cost of mowing a lawn?

- A) half a garden cultivated
- B) two lawns mowed
- C) two-thirds of a garden cultivated
- D) one and a half lawns mowed

Answer: C

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

4) *Refer to Table 2-4.* What is Jack's opportunity cost of cultivating a garden?

- A) half a garden cultivated
- B) two lawns mowed
- C) two-thirds of a garden cultivated.
- D) one and a half lawns mowed

Answer: D

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

5) *Refer to Table 2-4.* What is George's opportunity cost of mowing a lawn?

- A) half a garden cultivated
- B) two lawns mowed
- C) two-thirds of a garden cultivated.
- D) one and a half lawns mowed

Answer: A

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

6) *Refer to Table 2-4.* What is George's opportunity cost of cultivating a garden?

- A) half a garden cultivated
- B) two lawns mowed
- C) two-thirds of a garden cultivated
- D) one and a half lawns mowed

Answer: B

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

7) *Refer to Table 2-4.* Which of the following statements is true?

- A) Jack has a comparative advantage in both tasks.
- B) George has a comparative advantage in both tasks.
- C) Jack has a comparative advantage in lawn mowing and George in garden cultivating.
- D) Jack has a comparative advantage in garden cultivating and George in lawn mowing.

Answer: D

Diff: 3 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

8) Comparative advantage means

- A) the ability to produce more of a product with the same amount of resources than any other producer.
- B) the ability to produce a good or service at a lower opportunity cost than any other producer.
- C) the ability to produce a good or service at a higher opportunity cost than any other producer.
- D) compared to others you are better at producing a product.

Answer: B

Diff: 1 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

9) Specializing in the production of a good or service in which one has a comparative advantage enables a country to do which of the following?

- A) never have to engage in trade with other nations
- B) increase the variety of products that it can produce with a decrease in resources
- C) consume a combination of goods that lies outside its own production possibilities frontier
- D) produce a combination of goods that lies outside its own production possibilities frontier

Answer: C

Diff: 3 Page Ref: 46/46

Topic: Specialization

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

10) For each watch that Switzerland produces, it gives up the opportunity to make 50 pounds of chocolate. Germany can produce 1 watch for every 100 pounds of chocolate it produces. Which of the following is true about the comparative advantage between the two countries?

- A) Switzerland has the comparative advantage in chocolate.
- B) Switzerland has the comparative advantage in watches.
- C) Germany has the comparative advantage in watches and chocolate.
- D) Germany has the comparative advantage in watches.

Answer: B

Diff: 2 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Figure 2-8

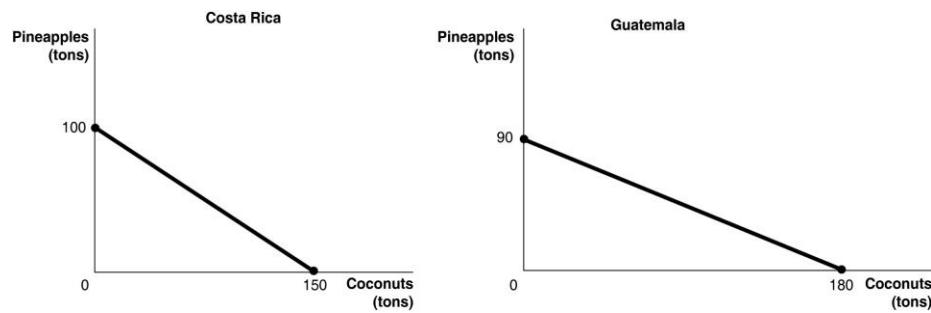


Figure 2-8 shows the production possibilities frontiers for Costa Rica and Guatemala. Each country produces two goods, pineapples and coconuts.

11) Refer to Figure 2-8. What is the opportunity cost of producing 1 ton of coconuts in Costa Rica?

- A) $\frac{3}{8}$ of a ton of pineapples
- B) $\frac{2}{3}$ of a ton of pineapples
- C) $1\frac{1}{2}$ tons of pineapples
- D) 100 tons of pineapples

Answer: B

Diff: 2 Page Ref: 44-45/44-45

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

12) Refer to Figure 2-8. What is the opportunity cost of producing 1 ton of coconuts in Guatemala?

- A) $\frac{1}{2}$ of a ton of pineapples
- B) $1\frac{1}{3}$ tons of pineapples
- C) 2 tons of pineapples
- D) 90 tons of pineapples

Answer: A

Diff: 2 Page Ref: 44-45/44-45

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

13) *Refer to Figure 2-8.* What is the opportunity cost of producing 1 ton of pineapples in Costa Rica?

- A) 3/8 of a ton of coconuts
- B) 2/3 of a ton of coconuts
- C) 1 1/2 tons of coconuts
- D) 100 tons of coconuts

Answer: C

Diff: 2 Page Ref: 44-45/44-45

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

14) *Refer to Figure 2-8.* What is the opportunity cost of producing 1 ton of pineapples in Guatemala?

- A) 1/2 of a ton of coconuts
- B) 1 1/3 tons of coconuts
- C) 2 tons of coconuts
- D) 180 tons of coconuts

Answer: C

Diff: 2 Page Ref: 44-45/44-45

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

15) *Refer to Figure 2-8.* Which country has a comparative advantage in the production of coconuts?

- A) Guatemala
- B) They have equal productive abilities.
- C) Costa Rica
- D) neither country

Answer: A

Diff: 2 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

16) *Refer to Figure 2-8.* Which country has a comparative advantage in the production of pineapples?

- A) Guatemala
- B) They have equal productive abilities.
- C) Costa Rica
- D) neither country

Answer: C

Diff: 2 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

17) *Refer to Figure 2-8.* If the two countries have the same amount of resources and the same technological knowledge, which country has an absolute advantage in the production of both pineapples and coconuts?

- A) Guatemala
- B) neither country
- C) Costa Rica
- D) cannot be determined

Answer: B

Diff: 2 Page Ref: 46/46

Topic: Absolute Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

18) Individuals who have never been the best at doing anything

- A) cannot have a comparative advantage in producing any product.
- B) can still have a comparative advantage in producing some product.
- C) perform all tasks at a higher opportunity cost than others.
- D) must have an absolute advantage in at least ones task.

Answer: B

Diff: 2 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Table 2-5

	One Cell Phone	Lumber (per board foot)
Estonia	40 hours	8 hours
Finland	16 hours	4 hours

Table 2-5 shows the number of labor hours required to produce a cell phone and a board foot of lumber in Estonia and Finland.

19) *Refer to Table 2-5.* Does either Estonia or Finland have an absolute advantage and if so, in what product?

- A) Finland has an absolute advantage in lumber.
- B) Estonia has an absolute advantage in lumber.
- C) Finland has an absolute advantage in both products.
- D) Estonia has an absolute advantage in cell phones.

Answer: C

Diff: 1 Page Ref: 47-48/47-48

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

20) *Refer to Table 2-5.* What is Estonia's opportunity cost of producing one cell phone?

- A) 0.2 board feet of lumber
- B) 5 board feet of lumber
- C) 8 board feet of lumber
- D) 32 board feet of lumber

Answer: B

Diff: 2 Page Ref: 47-48/47-48

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

21) *Refer to Table 2-5.* What is Finland's opportunity cost of producing one cell phone?

- A) 0.25 board feet of lumber
- B) 4 board feet of lumber
- C) 12 board feet of lumber
- D) 16 board feet of lumber

Answer: B

Diff: 2 Page Ref: 47-48/47-48

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

22) *Refer to Table 2-5.* What is Estonia's opportunity cost of producing one board foot of lumber?

- A) 0.2 cell phones
- B) 5 cell phones
- C) 8 cell phones
- D) 32 cell phones

Answer: A

Diff: 2 Page Ref: 47-48/47-48

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

23) *Refer to Table 2-5.* What is Finland's opportunity cost of producing one board foot of lumber?

- A) 0.25 cell phones
- B) 4 cell phones
- C) 12 cell phones
- D) 16 cell phones

Answer: A

Diff: 2 Page Ref: 47-48/47-48

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

24) *Refer to Table 2-5.* Estonia has a comparative advantage in the production of

- A) both products.
- B) lumber.
- C) cell phones.
- D) neither product.

Answer: B

Diff: 2 Page Ref: 47-48/47-48

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

25) *Refer to Table 2-5.* Finland has a comparative advantage in the production of

- A) both products.
- B) lumber.
- C) cell phones.
- D) neither product.

Answer: C

Diff: 2 Page Ref: 47-48/47-48

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

26) *Refer to Table 2-5.* If the two countries specialize and trade, who should export lumber?

- A) There is no basis for trade between the two countries.
- B) Estonia
- C) Finland
- D) They should both be exporting lumber.

Answer: B

Diff: 1 Page Ref: 47-48/47-48

Topic: Specialization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

27) *Refer to Table 2-5.* If the two countries specialize and trade, who should export cell phones?

- A) There is no basis for trade between the two countries.
- B) Estonia
- C) Finland
- D) They should both be importing cell phones.

Answer: C

Diff: 1 Page Ref: 47-48/47-48

Topic: Specialization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

28) If the best lawyer in town is also the best at operating a word processor, then according to economic reasoning, this person should

- A) split her time evenly between being a lawyer and a word processor.
- B) specialize in being a lawyer because its opportunity cost is lower.
- C) should pursue the activity she enjoys more.
- D) specialize in being a word processor because it is more capital-intensive.

Answer: B

Diff: 1 Page Ref: 46/46

Topic: Specialization

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

29) Izzy Amador is a highly talented tattoo artist. She has chosen to specialize in tattoo art because of all of the following *except* _

- A) her tattoos are highly esteemed by tattoo lovers who are willing to pay very high prices.
- B) for her, this is the most lucrative way to purchase the products that she wants to consume.
- C) her opportunity cost of pursuing another career is very low.
- D) she obviously has a comparative advantage in tattoo art.

Answer: C

Diff: 3 Page Ref: 46/46

Topic: Specialization

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

30) As job opportunities for women and the wages those jobs pay have increased, the opportunity cost of doing housework has _____, so many families have chosen to hire specialists in household chores, such as cleaning services and lawn care services, because the cost of these specialists is _____ than the cost of the wife (or husband) performing those chores.

- A) increased; higher
- B) increased; lower
- C) decreased; higher
- D) decreased; lower

Answer: B

Diff: 2 Page Ref: 49/49

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Special Feature: Making the Connection: Comparative Advantage, Opportunity Cost, and Housework

Table 2-6

	James	Lucy
Wagons	16	18
Tricycles	32	24

Table 2-6 shows the output per week of two people, James and Lucy. They can either devote their time to making bracelets or making necklaces.

31) *Refer to Table 2-6.* Which of the following statements is true?

- A) Lucy has an absolute advantage in making both products.
- B) James has an absolute advantage in making both products.
- C) Lucy has an absolute advantage in making wagons and James in making tricycles.
- D) James has an absolute advantage in making tricycles and Lucy in making wagons.

Answer: C

Diff: 1 Page Ref: 46/46

Topic: Absolute Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

32) *Refer to Table 2-6.* What is Lucy's opportunity cost of making a wagon?

- A) 3/4 of a wagon
- B) 3 wagons
- C) 1 1/3 tricycles
- D) 2 tricycles

Answer: C

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

33) *Refer to Table 2-6.* What is Lucy's opportunity cost of making a tricycle?

- A) 3/4 of a wagon
- B) 3 wagons
- C) 1 1/3 tricycles
- D) 2 tricycles

Answer: A

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

34) *Refer to Table 2-6.* What is James's opportunity cost of making a wagon?

- A) 2 tricycles
- B) 1/2 of a wagon
- C) 1/2 of a tricycle
- D) 3/4 of a wagon

Answer: A

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

35) *Refer to Table 2-6.* What is James's opportunity cost of making a tricycle?

- A) 2 tricycles
- B) 1/2 of a wagon
- C) 1/2 of a tricycle
- D) 3/4 of a wagon

Answer: B

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

36) *Refer to Table 2-6.* Which of the following statements is true?

- A) Lucy has a comparative advantage in making both products.
- B) James has a comparative advantage in making both products.
- C) Lucy has a comparative advantage in making wagons and James in making tricycles.
- D) Lucy has a comparative advantage in making tricycles and James in making wagons.

Answer: C

Diff: 3 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Table 2-7

	Minnie	Mickey
Hats	40	50
Umbrellas	10	5

Table 2-7 shows the output per week of two people, Minnie and Mickey. They can either devote their time to making hats or making umbrellas.

37) *Refer to Table 2-7.* Which of the following statements is true?

- A) Mickey has an absolute advantage in making both products.
- B) Minnie has an absolute advantage in making both products.
- C) Minnie has an absolute advantage in making hats and Mickey in making umbrellas.
- D) Minnie has an absolute advantage in making umbrellas and Mickey in making hats.

Answer: D

Diff: 1 Page Ref: 46/46

Topic: Absolute Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

38) *Refer to Table 2-7.* What is Minnie's opportunity cost of making a hat?

- A) 1/5 of an umbrella
- B) 1/4 of an umbrella
- C) 4 umbrellas
- D) 10 umbrellas

Answer: B

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

39) *Refer to Table 2-7.* What is Mickey's opportunity cost of making a hat?

- A) 1/10 of an umbrella
- B) 1/5 of an umbrella
- C) 5 umbrellas
- D) 10 umbrellas

Answer: A

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

40) *Refer to Table 2-7.* What is Minnie's opportunity cost of making an umbrella?

- A) 1/10 of a hat
- B) 1/4 of a hat
- C) 4 hats
- D) 40 hats

Answer: C

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

41) *Refer to Table 2-7.* What is Mickey's opportunity cost of making an umbrella?

- A) 1/5 of a hat
- B) 5 hats
- C) 10 hats
- D) 50 hats

Answer: C

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

42) *Refer to Table 2-7.* Which of the following statements is true?

- A) Minnie has a comparative advantage in making both products.
- B) Mickey has a comparative advantage in making both products.
- C) Minnie has a comparative advantage in making hats and Mickey in making umbrellas.
- D) Mickey has a comparative advantage in making hats and Minnie in making umbrellas.

Answer: D

Diff: 3 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Table 2-8

	Wilma	Betty
Statues	12	14
Benches	4	7

Table 2-8 shows the output per month of two people, Wilma and Betty. They can either devote their time to making marble statues or making marble benches.

43) *Refer to Table 2-8.* Which of the following statements is true?

- A) Wilma has an absolute advantage in making both products.
- B) Betty has an absolute advantage in making both products.
- C) Betty has an absolute advantage in making statues and Wilma in making benches.
- D) Betty has an absolute advantage in making benches and Wilma in making statues.

Answer: B

Diff: 3 Page Ref: 46/46

Topic: Absolute Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

44) *Refer to Table 2-8.* What is Wilma's opportunity cost of making a statue stick?

- A) 1/3 bench
- B) 3 benches
- C) 6/7 statue
- D) 1/2 bench

Answer: A

Diff: 3 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

45) *Refer to Table 2-8.* What is Wilma's opportunity cost of making a bench?

- A) 1/3 statue
- B) 3 statues
- C) 1/2 bench
- D) 1.3 statues

Answer: B

Diff: 3 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

46) *Refer to Table 2-8.* What is Betty's opportunity cost of making a statue?

- A) 1/2 bench
- B) 2 benches
- C) 1/3 bench
- D) 1.4 statues

Answer: A

Diff: 3 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

47) *Refer to Table 2-8.* What is Betty's opportunity cost of making a bench?

- A) 1/2 statue
- B) 2 statues
- C) 1.75 benches
- D) 2.8 statues

Answer: B

Diff: 3 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

48) *Refer to Table 2-8.* Which of the following statements is true?

- A) Wilma has a comparative advantage in making both products.
- B) Betty has a comparative advantage in making both products.
- C) Betty has a comparative advantage in making statues and Wilma in making benches.
- D) Betty has a comparative advantage in making benches and Fred in making statues.

Answer: D

Diff: 3 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

49) For each pound of salami that Hungary produces, it gives up the opportunity to make 10 bottles of beer. Slovakia can produce 1 pound of salami for every 8 bottles of beer it produces. Which of the following is true about the comparative advantage between the two countries?

- A) Hungary has the comparative advantage in salami.
- B) Hungary has the comparative advantage in beer.
- C) Slovakia has the comparative advantage in salami and beer.
- D) Slovakia has the comparative advantage in beer.

Answer: B

Diff: 2 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Figure 2-9

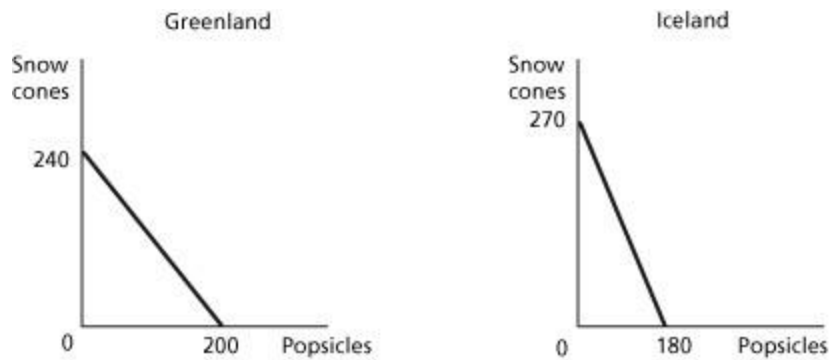


Figure 2-9 shows the production possibilities frontiers for Greenland and Iceland. Each country produces two goods, snow cones and popsicles.

50) *Refer to Figure 2-9.* What is the opportunity cost of producing 1 popsicle in Greenland?

- A) $\frac{2}{3}$ of a snow cone
- B) $\frac{5}{6}$ of a snow cone
- C) $1\frac{1}{5}$ snow cones
- D) 240 snow cones

Answer: C

Diff: 2 Page Ref: 44-45/44-45

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

51) *Refer to Figure 2-9.* What is the opportunity cost of producing 1 popsicle in Iceland?

- A) $1\frac{1}{2}$ snow cones
- B) $\frac{3}{4}$ of a snow cone
- C) $\frac{2}{3}$ of a snow cone
- D) 270 snow cones

Answer: A

Diff: 2 Page Ref: 44-45/44-45

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

52) *Refer to Figure 2-9.* What is the opportunity cost of producing 1 snow cone in Greenland?

- A) $\frac{2}{3}$ of a popsicle
- B) $\frac{5}{6}$ of a popsicle
- C) $1\frac{1}{5}$ popsicles
- D) 200 popsicles

Answer: B

Diff: 2 Page Ref: 44-45/44-45

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

53) *Refer to Figure 2-9.* What is the opportunity cost of producing 1 snow cone in Iceland?

- A) $\frac{2}{3}$ of a popsicle
- B) $\frac{3}{4}$ of a popsicle
- C) $1\frac{1}{2}$ popsicles
- D) 180 popsicles

Answer: A

Diff: 2 Page Ref: 44-45/44-45

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

54) *Refer to Figure 2-9.* Which country has a comparative advantage in the production of popsicles?

- A) Greenland
- B) They have equal productive abilities.
- C) Iceland
- D) neither country

Answer: A

Diff: 2 Page Ref: 44-45/44-45

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

55) *Refer to Figure 2-9.* Which country has a comparative advantage in the production of snow cones?

- A) Greenland
- B) They have equal productive abilities.
- C) Iceland
- D) neither country

Answer: C

Diff: 2 Page Ref: 44-45/44-45

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

56) *Refer to Figure 2-9.* If the two countries have the same amount of resources and the same technological knowledge, which country has an absolute advantage in the production of popsicles?

- A) Greenland
- B) They have the same advantage.
- C) Iceland
- D) cannot be determined

Answer: A

Diff: 2 Page Ref: 44-45/44-45

Topic: Absolute Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Table 2-9

	One Wristwatch	Rice (per pound)
Japan	50 hours	2 hours
Thailand	30 hours	1.5 hours

Table 2-9 shows the number of labor hours required to produce a wristwatch and a pound of rice in Japan and Thailand.

57) *Refer to Table 2-9.* Does either Japan or Thailand have an absolute advantage and if so, in what product?

- A) Thailand has an absolute advantage in rice.
- B) Japan has an absolute advantage in rice.
- C) Thailand has an absolute advantage in both products.
- D) Japan has an absolute advantage in wristwatches.

Answer: C

Diff: 1 Page Ref: 47-48/47-48

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

58) *Refer to Table 2-9.* What is Japan's opportunity cost of producing one wristwatch?

- A) 0.04 pounds of rice
- B) 4 pounds of rice
- C) 25 pounds of rice
- D) 40 pounds of rice

Answer: C

Diff: 2 Page Ref: 47-48/47-48

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

59) *Refer to Table 2-9.* What is Thailand's opportunity cost of producing one wristwatch?

- A) 0.05 pounds of rice
- B) 20 pounds of rice
- C) 25 pounds of rice
- D) 60 pounds of rice

Answer: B

Diff: 2 Page Ref: 47-48/47-48

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

60) *Refer to Table 2-9.* What is Japan's opportunity cost of producing one pound of rice?

- A) 0.04 units of a wristwatch
- B) 4 wristwatches
- C) 25 wristwatches
- D) 40 wristwatches

Answer: A

Diff: 2 Page Ref: 47-48/47-48

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

61) *Refer to Table 2-9.* What is Thailand's opportunity cost of producing one pound of rice?

- A) 60 wristwatches
- B) 20 wristwatches
- C) 5 wristwatches
- D) 0.05 units of a wristwatch

Answer: D

Diff: 2 Page Ref: 47-48/47-48

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

62) *Refer to Table 2-9.* Japan has a comparative advantage in the production of

- A) rice.
- B) wristwatches.
- C) both products.
- D) neither product.

Answer: A

Diff: 2 Page Ref: 47-48/47-48

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

63) *Refer to Table 2-9.* Thailand has a comparative advantage in the production of

- A) rice.
- B) wristwatches.
- C) both products.
- D) neither product.

Answer: B

Diff: 2 Page Ref: 47-48/47-48

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

64) *Refer to Table 2-9.* If the two countries specialize and trade, who should export rice?

- A) There is no basis for trade between the two countries.
- B) Japan
- C) Thailand
- D) They should both be exporting rice.

Answer: B

Diff: 1 Page Ref: 47-48/47-48

Topic: Specialization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

65) *Refer to Table 2-9.* If the two countries specialize and trade, who should export wristwatches?

- A) There is no basis for trade between the two countries.
- B) Japan
- C) Thailand
- D) They should both be importing wristwatches.

Answer: C

Diff: 1 Page Ref: 47-48/47-48

Topic: Specialization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

66) If Blake can pick more cherries in one hour than Cody, then Blake has a comparative advantage in cherry picking.

Answer: FALSE

Diff: 2 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

67) The basis for trade is absolute advantage, not comparative advantage.

Answer: FALSE

Diff: 2 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

68) If a country produces only two goods, then it is not possible to have a comparative advantage in the production of both those goods.

Answer: TRUE

Diff: 2 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

69) In a two-good, two country world, if one country has an absolute advantage in the production of both goods, it can still benefit by trading with the other country.

Answer: TRUE

Diff: 2 Page Ref: 46/46

Topic: Absolute Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

70) If the opportunity cost of producing more of one good increases as more of that good is produced, then the production method is inefficient.

Answer: FALSE

Diff: 2 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

71) It is not possible to have a comparative advantage in producing a good or service without having an absolute advantage.

Answer: FALSE

Diff: 2 Page Ref: 47/47

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Don't Let This Happen to You: Don't Confuse Absolute Advantage and Comparative Advantage

72) If Abigail can make more candles in one day than Pierre, then Abigail has an absolute advantage in making candles.

Answer: TRUE

Diff: 2 Page Ref: 45/45

Topic: Absolute Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

73) If a country produces only two goods, it is possible to have an absolute advantage in the production of both those goods.

Answer: TRUE

Diff: 1 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

74) In a two-good, two country world, if one country has a comparative advantage in the production of one good, it can benefit by trading with other countries.

Answer: TRUE

Diff: 2 Page Ref: 46/46

Topic: Absolute Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

75) For a person to have a comparative advantage in producing a product, he must be able to produce that product at a higher opportunity cost than his competitors.

Answer: FALSE

Diff: 1 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

76) It is not possible to have an absolute advantage in producing a good or service without having a comparative advantage.

Answer: FALSE

Diff: 1 Page Ref: 47/47

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Special Feature: Don't Let This Happen to YOU!: Don't Confuse Absolute Advantage and Comparative Advantage

77) Is it possible for a firm to have a comparative advantage in producing something without having an absolute advantage? Why or why not?

Answer: Yes, a firm can have a comparative advantage without having an absolute advantage if it can produce a good or service at a lower opportunity cost than competitors, even if it is not able to produce more of the good or service than its competitors.

Diff: 2 Page Ref: 46/46

Topic: Comparative Advantage

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

78) Should countries specialize in producing goods and services based on having a comparative advantage or an absolute advantage? Why?

Answer: Countries should specialize in producing products based on comparative advantage because this allows countries to produce those products and services at a lower opportunity cost than competitors.

Diff: 2 Page Ref: 46/46

Topic: Specialization

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Table 2-10

	Wristwatch	Rice (bushels)
Japan	200 hours	10 hours
Thailand	180 hours	6 hours

79) *Refer to Table 2-10.* This table shows the number of labor hours required to produce a wristwatch and a bushel of rice in Japan and Thailand.

- Which country has an absolute advantage in the production of wristwatches?
- Which country has an absolute advantage in the production of rice?
- What is Japan's opportunity cost of producing one wristwatch?
- What is Thailand's opportunity cost of producing one wristwatch?
- What is Japan's opportunity cost of producing one pound of rice?
- What is Thailand's opportunity cost of producing one pound of rice?
- If each country specializes in the production of the product in which it has a comparative advantage, who should produce wristwatches?
- If each country specializes in the production of the product in which it has a comparative advantage, who should produce rice?

Answer:

- Thailand has an absolute advantage in the production of wristwatches.
- Thailand has an absolute advantage in rice production.
- Japan's opportunity cost of producing one wristwatch is 20 bushels of rice.
- Thailand's opportunity cost of producing one wristwatch is 30 bushels of rice
- Japan's opportunity cost of one bushel of rice is 0.05 units of a wristwatch.
- Thailand's opportunity cost of one bushel of rice is 0.03 units of a wristwatch.
- Japan should specialize in producing wristwatches.
- Thailand should specialize in producing rice.

Diff: 3 Page Ref: 46/46

Topic: Specialization

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

80) Suppose in Belgium, the opportunity cost of producing a trombone is 8 clarinets. In Denmark, the opportunity cost of producing a trombone is 6 clarinets.

- a. What is the opportunity cost of producing a clarinet for Belgium?
- b. What is the opportunity cost of producing a clarinet for Denmark?
- c. Which country has a comparative advantage in the production of clarinets?
- d. Which country has a comparative advantage in the production of trombones?

Answer:

- a. For Belgium, the opportunity cost of producing a clarinet is $1/8$ of a trombone.
- b. For Denmark, the opportunity cost of producing a clarinet is $1/6$ of a trombone.
- c. Belgium has a comparative advantage in the production of clarinets.
- d. Denmark has a comparative advantage in the production of trombones.

Diff: 3 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Table 2-11

	Cell Phone	Lumber (board feet)
Estonia	20 hours	5 hours
Finland	18 hours	4 hours

81) *Refer to Table 2-11.* This table shows the number of labor hours required to produce a cell phone and a board foot of lumber in Estonia and Finland.

- Which country has an absolute advantage in the production of cell phones?
- Which country has an absolute advantage in the production of lumber?
- What is Estonia's opportunity cost of producing one cell phone?
- What is Finland's opportunity cost of producing one cell phone?
- What is Estonia's opportunity cost of producing one board foot of lumber?
- What is Finland's opportunity cost of producing one board foot of lumber?
- If each country specializes in the production of the product in which it has a comparative advantage, who should produce cell phones?
- If each country specializes in the production of the product in which it has a comparative advantage, who should produce lumber?

Answer:

- Finland has an absolute advantage in the production of cell phones.
- Finland has an absolute advantage in lumber production.
- Estonia's the opportunity cost of producing one cell phone is 4 board feet of lumber.
- Finland's opportunity cost of producing one cell phone is 4.5 board feet of lumber
- Estonia's opportunity cost of one board foot of lumber is 0.25 units of a cell phone.
- Finland's opportunity cost of one board foot of lumber is 0.22 units of a cell phone.
- Estonia should specialize in producing cell phones.
- Finland should specialize in producing lumber.

Diff: 3 Page Ref: 46/46

Topic: Specialization

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Table 2-12

	Cell Phone	Lumber (board foot)
Estonia	20 hours	5 hours
Finland	18 hours	4 hours

82) *Refer to Table 2-12.* This table shows the number of labor hours required to produce a cell phone and a board foot of lumber in Estonia and Finland.

- If each country has a total of 3,600 labor hours to devote to the production of the two goods, draw the production possibilities frontier for each country. Put "Cell Phone" on the horizontal axis and "Lumber" on the vertical axis. Be sure to identify the intercept values on your graphs.
- Suppose each country allocates 55% its labor hours to lumber production and 45% to the production of cell phones. Complete Table 2-13 below to show each country's output of the two products.

Table 2-13: Production and Consumption with no Trade

	Cell Phone Output	Lumber Output (board feet)
Estonia		
Finland		
Total		

- If the two countries do not trade and consume whatever they produce, identify the current production and consumption point for each country on their respective production possibilities frontiers. Label Estonia's consumption point "E" and Finland's consumption point, "F."
- Suppose the two countries specialize and trade. Who should produce cell phones and who should produce lumber? Explain your answer.
- Complete Table 2-14 below to show each country's output with specialization.

Table 2-14: Output with Specialization

	Cell Phone Output	Lumber Output (board feet)
Estonia		
Finland		
Total		

- Did specialization increase the combined output for the two countries without any increase in resources? If so, by how much?
- Suppose Estonia and Finland agree to trade so that in exchange for 400 board feet of lumber, the exporter of lumber receives 90 cell phones. Complete Table 2-15 below to show each country's consumption bundle after trade.

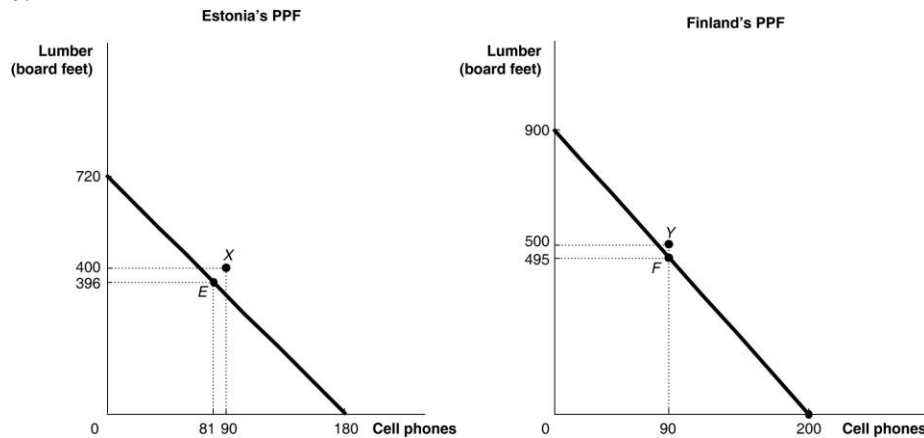
Table 2-15: Consumption with Trade

	Cell Phone	Lumber (board feet)
Estonia		
Finland		

- h. Show the consumption points after trade on each country's production possibilities frontier. Label these points "X" for Estonia and "Y" for Finland.
- i. Has trade made the two countries better off? Explain your answer.

Answer:

a.



b.

Table 2-13: Production and Consumption with no Trade

	Cell Phone Output	Lumber Output (board feet)
Estonia	81	396
Finland	90	495
Total	171	891

- c. See graph in part (a)
- d. Estonia should specialize in producing cell phones because it has a lower opportunity cost: 4 board feet of lumber as opposed to Finland's 4.5 board feet of lumber. Finland should specialize in producing lumber because it has a lower opportunity cost: 0.22 units of a cell phone as opposed to Estonia's 0.25 units of a cell phone.

e.

Table 2-14: Output with Specialization

	Cell Phone Output	Lumber output (board feet)
Estonia	180	0
Finland	0	900
Total	180	900

f. Yes, cell phone output increased by 9 units (from 171 units to 180 units) and lumber output increased by 9 board feet (from 891 board feet to 900 board feet).

g.

Table 2-15: Consumption with Trade

	Cell Phone	Lumber (board feet)
Estonia	90	400
Finland	90	500

h. See graph in part (a)

i. Yes, trade has enabled the two countries to consume outside their PPFs. (Compare Table 2-15 with Table 2-13)

Diff: 3 Page Ref: 47-48/47-48

Topic: Specialization

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

83) Suppose in the United States, the opportunity cost of producing a motor engine is 4 auto bodies. In Canada, the opportunity cost of producing a motor engine is 2 auto bodies.

- What is the opportunity cost of producing an auto body for the United States?
- What is the opportunity cost of producing an auto body for Canada?
- Which country has a comparative advantage in the production of auto bodies?
- Which country has a comparative advantage in the production of motor engines?

Answer:

- For the United States, the opportunity cost of producing an auto body is 1/4 of a motor engine.
- For Canada, the opportunity cost of producing an auto body is 1/2 of a motor engine.
- The United States has a comparative advantage in the production of auto bodies.
- Canada has a comparative advantage in the production of motor engines.

Diff: 3 Page Ref: 46/46

Topic: Opportunity Cost

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

2.3 The Market System

1) Which of the following is a factor of production?

- A) a sofa produced by a furniture manufacturer
- B) 20 shares of Microsoft stock
- C) the janitor at the local elementary school
- D) \$500 in cash

Answer: C

Diff: 2 Page Ref: 50/50

Topic: Factors of Production

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

2) An example of a factor of production is

- A) a car produced by an auto manufacturer.
- B) a worker hired by an auto manufacturer.
- C) a loan granted to an auto manufacturer.
- D) the automobiles exported by an auto manufacturer.

Answer: B

Diff: 2 Page Ref: 50/50

Topic: Factors of Production

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

3) If a vineyard wants to raise funds to purchase a new bottling machine, it does so in the

- A) factor market.
- B) output market.
- C) product market.
- D) alcoholic beverages market.

Answer: A

Diff: 1 Page Ref: 50/50

Topic: Markets

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 4) A worker is hired in a
- A) goods and services market.
 - B) product market.
 - C) government market.
 - D) factor market.

Answer: D

Diff: 1 Page Ref: 50/50

Topic: Markets

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 5) When you purchase a new surfboard you do so in the

- A) resource market.
- B) product market.
- C) input market.
- D) factor market.

Answer: B

Diff: 1 Page Ref: 50/50

Topic: Markets

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 6) The resource income earned by those who supply labor services is called

- A) wages and salaries.
- B) stock options.
- C) profit.
- D) bonus.

Answer: A

Diff: 1 Page Ref: 50/50

Topic: Factors of Production

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 7) Which of the following statements about an entrepreneur is true?

- A) purchases other factors of production in the output market
- B) develops the vision for the firm and funds the producing unit
- C) sells his entrepreneurial services in the output market
- D) does not face personal risk

Answer: B

Diff: 2 Page Ref: 50/50

Topic: Factors of Production

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

8) The circular flow model demonstrates

- A) the role of the government in overseeing the market system.
- B) the roles played by households and firms in the market system.
- C) how shortages and surpluses are eliminated in a market.
- D) how demand and supply for goods and services are brought into equilibrium.

Answer: B

Diff: 2 Page Ref: 50/50

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

9) Firms

- A) have no influence on the circular flow in a market economy.
- B) purchase resources in the product market.
- C) sell goods in the product market.
- D) sell resources in the factor market.

Answer: C

Diff: 1 Page Ref: 50/50

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

10) Households

- A) purchase final goods and services in the factor market.
- B) purchase final goods and services in the product market.
- C) purchase resources in the product market.
- D) purchase resources in the factor market.

Answer: B

Diff: 1 Page Ref: 50/50

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

11) In the circular flow model, households

- A) sell goods and services in the input market.
- B) and firms spend earnings from resource sales on goods and services in the factor market.
- C) hire resources sold by firms in the factor market.
- D) spend earnings from resource sales on goods and services in the product market.

Answer: D

Diff: 1 Page Ref: 50/50

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions

AACSB: Analytic thinking

- 12) Which of the following is *not* a flow in the circular flow model?
- A) the flow of goods and services and the flow of resources to produce goods and services
 - B) the flow of profit and the flow of revenue
 - C) the flow of income earned by households and the flow of expenditures incurred by households
 - D) the flow of revenue received by producers and the flow of payments to resource owners

Answer: B

Diff: 2 Page Ref: 50/50

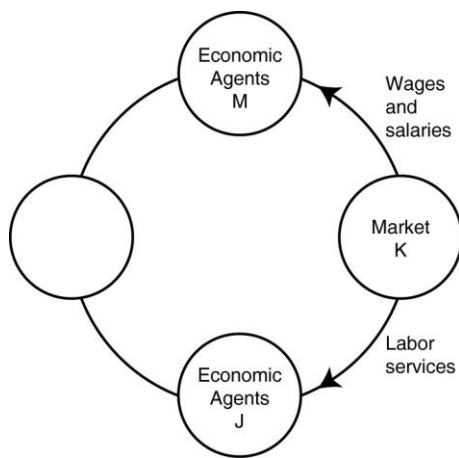
Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Figure 2-10



- 13) Refer to Figure 2-10. In the circular flow diagram, market K represents

- A) households.
- B) product markets.
- C) firms.
- D) factor markets.

Answer: D

Diff: 2 Page Ref: 51/51

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

14) *Refer to Figure 2-10.* In the circular flow diagram, economic agents *M* represent

- A) households.
- B) product markets.
- C) firms.
- D) factor markets.

Answer: A

Diff: 2 Page Ref: 51/51

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

15) Which of the following are represented by the same flow in the circular flow model?

- A) the flow of goods and the flow of factors of production
- B) the flow of costs and the flow of revenue
- C) the flow of income earned from the sale of resources and the flow of expenditures on goods and services
- D) the flow of income received by households and the flow of tax revenues paid by firms

Answer: B

Diff: 2 Page Ref: 51/51

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

16) Which of the following statements is true about a simple circular flow model?

- A) Producers are neither buyers nor sellers in the product market.
- B) Households are neither buyers nor sellers in the input market.
- C) Producers are buyers in the factors market.
- D) Households are sellers in the product market.

Answer: C

Diff: 2 Page Ref: 51/51

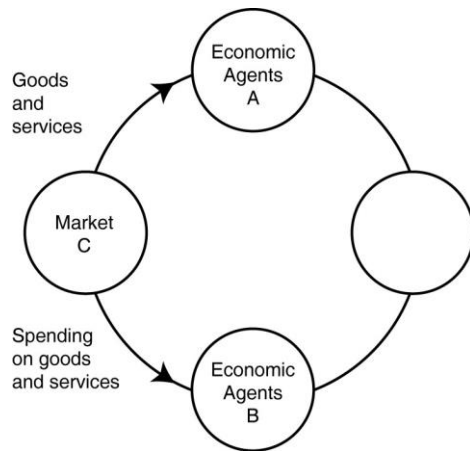
Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Figure 2-11



17) Refer to Figure 2-11. In the circular flow diagram, who are economic agents A and who are economic agents B?

- A) A = firms; B = households
- B) A = households; B = firms
- C) A = households; B = factor markets
- D) A = firms; B = product markets

Answer: B

Diff: 2 Page Ref: 51/51

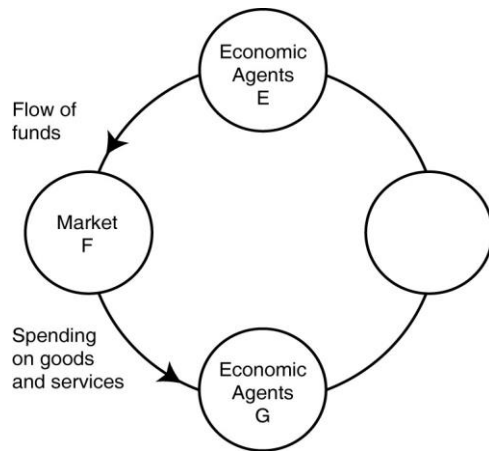
Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

Figure 2-12



18) Refer to Figure 2-12. One segment of the circular flow diagram in the Figure shows the flow of funds from market *F* to economic agents *G*. The funds represent spending on goods and services. What is market *F* and who are economic agents *G*?

- A) *F* = factor markets; *G* = households
- B) *F* = product markets; *G* = households
- C) *F* = factor markets; *G* = firms
- D) *F* = product markets; *G* = firms

Answer: D

Diff: 2 Page Ref: 51/51

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade
AACSB: Analytic thinking

19) Which of the following is an examples of spending on factors of production in the circular flow model?

- A) Tuan purchases a cappuccino at the student union.
- B) Laurence rents a car to drive to a wedding in San Diego.
- C) Yvette pays \$50 to join a softball league.
- D) The "Lucky Ducky" casino buys a new craps table for the casino floor.

Answer: D

Diff: 2 Page Ref: 51/51

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade
AACSB: Analytic thinking

- 20) All of the following are examples of spending on goods and services in the circular flow model *except*
- A) Amanda purchases a new electric guitar to pursue her hobby seriously.
 - B) Chaitanya buys a new spa pedicure chair for her expanding nail salon business.
 - C) Hernan buys a pizza at Papa C's.
 - D) Lenny buys a new digital camera to take pictures at his son's graduation.

Answer: B

Diff: 2 Page Ref: 51/51

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 21) Published in 1776, _____ was written by Adam Smith.

- A) "The General Theory of Employment, Interest, and Money"
- B) "The Communist Manifesto"
- C) "The Declaration of Economics"
- D) "An Inquiry into the Nature and Causes of the Wealth of Nations"

Answer: D

Diff: 1 Page Ref: 52/52

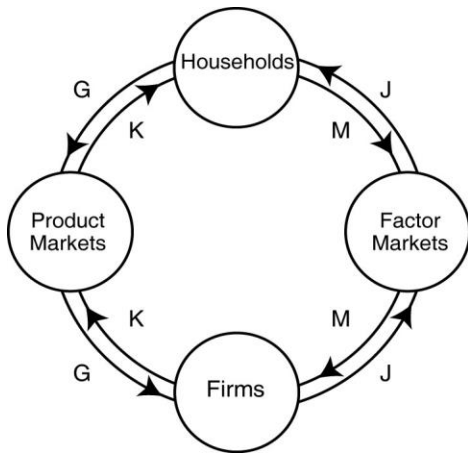
Topic: Markets

*: Recurring

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist

AACSB: Analytic thinking

Figure 2-13



22) Refer to Figure 2-13. Which two arrows in the diagram depict the following transaction: Stanley purchases the novel, "Night of Sorrows" for his summer reading pleasure.

- A) J and M
- B) J and G
- C) K and M
- D) K and G

Answer: D

Diff: 2 Page Ref: 51/51

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

23) Refer to Figure 2-13. Which two arrows in the diagram depict the following transaction: Lizzie Haxem hires "The Paint Pros," a professional painting company, to paint her home.

- A) J and M
- B) K and G
- C) K and M
- D) J and G

Answer: B

Diff: 2 Page Ref: 51/51

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

24) *Refer to Figure 2-13.* Which two arrows in the diagram depict the following transaction: Carter earns a \$400 commission for selling men's designer shoes at Brooks Brothers.

- A) *J and M*
- B) *K and G*
- C) *K and M*
- D) *J and G*

Answer: A

Diff: 2 Page Ref: 51/51

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs

AACSB: Analytic thinking

25) _____ behavioral assumption about humans was that people usually act in a rational, self-interested way.

- A) Thomas Malthus's
- B) Adam Smith's
- C) Karl Marx's
- D) Ben Bernanke's

Answer: B

Diff: 1 Page Ref: 52/52

Topic: Markets

*: Recurring

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist

AACSB: Analytic thinking

26) Which of the following countries does not come close to the free market benchmark?

- A) the United States
- B) Japan
- C) Cuba
- D) France

Answer: C

Diff: 1 Page Ref: 52/52

Topic: Markets

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

27) Adam Smith's _____ refers to the process by which individuals acting in their own self-interest bring about a market outcome that benefits society as a whole.

- A) Utopian society
- B) comparative advantage model
- C) invisible hand
- D) survival of the fittest theory

Answer: C

Diff: 2 Page Ref: 53/53

Topic: Markets

*: Recurring

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist

AACSB: Analytic thinking

28) A critical function of the government in facilitating the operation of a market economy is

- A) producing goods and services for low income households.
- B) setting up and enforcing private property rights.
- C) ensuring an equal distribution of income to all citizens.
- D) controlling the market prices of food items.

Answer: B

Diff: 2 Page Ref: 56/56

Topic: Markets

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

29) The ability to exercise control over one's own resources within the confines of the law refers to

- A) the free market.
- B) one's property rights.
- C) entrepreneurship.
- D) having an absolute advantage.

Answer: B

Diff: 1 Page Ref: 56/56

Topic: Property Rights

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

30) The primary purpose of patents and copyrights is to

- A) provide owners with large profit forever.
- B) protect firms from being taken advantage of by competing firms.
- C) protect domestic firms from foreign competition.
- D) encourage the expenditure of funds on research and development to create new products.

Answer: D

Diff: 1 Page Ref: 56/56

Topic: Property Rights

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

31) If property rights are not well enforced, all of the following are likely to occur *except*

- A) fewer goods and services will be produced.
- B) economic efficiency will be reduced.
- C) an economy will produce inside its production possibilities frontier.
- D) a significant number of people will be willing to risk their funds by investing them in local businesses.

Answer: D

Diff: 2 Page Ref: 58/58

Topic: Property Rights

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 32) A successful market economy requires well defined property rights and
- A) balanced supplies of all factors of production.
 - B) an independent court system to adjudicate disputes based on the law.
 - C) detailed government regulations.
 - D) a safety net to ensure that those who cannot participate in the market economy can earn an income.

Answer: B

Diff: 2 Page Ref: 58/58

Topic: Property Rights

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 33) All of the following are considered intellectual property *except*

- A) books.
- B) films.
- C) software.
- D) shares of stock.

Answer: D

Diff: 2 Page Ref: 56/56

Topic: Property Rights

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 34) A guild is

- A) a group of independent producers competing with each other.
- B) an organization of producers that limits the amount of a good produced.
- C) a group of nations who agree not to compete with each other.
- D) a nation that is a free market benchmark.

Answer: B

Diff: 1 Page Ref: 52/52

Topic: Markets

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 35) In 18th century Europe, governments gave guilds legal authority to limit production of goods. This authority obstructed the market mechanism because the guild's actions prevented the forces of _____ from coordinating the self-interested decisions of producers and consumers.

- A) absolute advantage
- B) demand and supply
- C) opportunity cost
- D) nature

Answer: B

Diff: 2 Page Ref: 52/52

Topic: Markets

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

36) When a celebrity has the desire to have his image protected following his death, this is best described as an example of the protection of

- A) an invention.
- B) a patent.
- C) a trademark.
- D) intellectual property.

Answer: D

Diff: 2 Page Ref: 56/56

Topic: Property Rights

*: Recurring

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention

AACSB: Analytic thinking

37) In the desire to have a celebrity's image protected to prevent it from being used in ways he would not approve, a celebrity's estate

- A) will probably not be successful, since there are no laws regulating this kind of use in the United States.
- B) will have to be granted a patent declaring the celebrity's image a new product, and this will give the estate protection for 7 years.
- C) can rely on U.S. laws that protect intellectual property rights to prevent the unauthorized use of his image.
- D) will most likely be more successful in developing countries than in high-income countries, since property regulations are better enforced in developing countries.

Answer: C

Diff: 2 Page Ref: 56/56

Topic: Property Rights

*: Recurring

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention

AACSB: Analytic thinking

38) Which of the following is a factor of production?

- A) an acre of forested land
- B) a U.S. Treasury bond
- C) 20 shares of Ford stock
- D) \$25,000 in cash

Answer: A

Diff: 2 Page Ref: 50/50

Topic: Factors of Production

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

- 39) Which of the following is an example of spending on goods and services in the circular flow model?
- A) Micah purchases a new wrench for his auto repair business.
 - B) Chester buys a first-class ticket from Atlanta to London for his long-awaited vacation.
 - C) Toby buys a new lawn mower to use in his lawn care business.
 - D) Lily purchases a new massage table for use in her therapy center.

Answer: B

Diff: 2 Page Ref: 51/51

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

Article Summary

Since 2008, the United States has been involved in trade negotiations over the Trans-Pacific Partnership (TPP), a free trade agreement with 11 other countries on both sides of the Pacific Ocean. One area of the negotiations involves patents and intellectual property rights in the pharmaceutical industry. A number of developing countries have ignored international agreements concerning patents and intellectual property rights as a way to benefit their domestic pharmaceutical industries, to the detriment of those companies which have spent considerable time and money developing new medicines. For every 5,000 to 10,000 experimental drugs contemplated, only one will typically gain FDA approval, and this occurs only after up to 15 years of research at an average cost of more than \$1 billion. Also, 30 percent of the U.S. workforce is either directly or indirectly employed in the pharmaceutical industry, so protection of these intellectual property rights is very important for the U.S. economy.

Source: Doug Schoen, "Intellectual Property Rights Matter," *Forbes*, September 24, 2013.

- 40) *Refer to the Article Summary.* If these developing countries continue to ignore the international agreements which protect intellectual property rights, all of the following would most likely occur *except*
- A) pharmaceutical companies would decrease investment in the development of more experimental drugs.
 - B) pharmaceutical companies would consider expanding operations to these developing countries.
 - C) fewer patents would be issued to pharmaceutical companies.
 - D) fewer dollars would be spent on the development of new medicines.

Answer: B

Diff: 2 Page Ref: 56/56

Topic: Property Rights

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention

AACSB: Analytic thinking

Special Feature: Making the Connection: Intellectual Property Rights Matter

41) Because the copyright on the L. Frank Baum book *The Wonderful Wizard of Oz* expired many years ago, the actual written words from the book are in the public domain, which means

- A) any publisher can now claim copyright of Baum's words.
- B) only the first publisher to reissue the book can claim copyright of Baum's words.
- C) no publisher can claim copyright of Baum's words, but the book can be reissued by any publisher.
- D) no publisher can claim copyright of Baum's words because the book can never be reissued.

Answer: C

Diff: 2 Page Ref: 57/57

Topic: Property Rights

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention

AACSB: Analytic thinking

Special Feature: Making the Connection: Who Owns The Wizard of Oz?

42) The payment received by suppliers of entrepreneurial skills is called profit.

Answer: TRUE

Diff: 1 Page Ref: 50/50

Topic: Factors of Production

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

43) In the circular flow model, households demand resources such as labor services in the product market.

Answer: FALSE

Diff: 1 Page Ref: 50/50

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

44) In economics, the term "free market" refers to a market where no sales tax is imposed on products sold.

Answer: FALSE

Diff: 1 Page Ref: 52/52

Topic: Markets

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

45) In a free market there are virtually no restrictions, or at best few restrictions, on how a good or service can be produced or sold.

Answer: TRUE

Diff: 1 Page Ref: 52/52

Topic: Markets

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

46) A stand of redwood trees is not an example of a factor of production but the harvested and processed redwood is a factor of production.

Answer: FALSE

Diff: 2 Page Ref: 50/50

Topic: Factors of Production

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

47) The idea underlying Adam Smith's "invisible hand" is that people tend to behave in ways that go unnoticed in society.

Answer: FALSE

Diff: 2 Page Ref: 53/53

Topic: Markets

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

48) The payment received by suppliers of entrepreneurial skills is called rent.

Answer: FALSE

Diff: 1 Page Ref: 50/50

Topic: Factors of Production

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

49) In the circular flow model, households supply resources such as labor services in the product market.

Answer: FALSE

Diff: 1 Page Ref: 50/50

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

50) A welding machine is an example of a factor of production if it is being used to produce automobiles.

Answer: TRUE

Diff: 2 Page Ref: 50/50

Topic: Factors of Production

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

51) In a simple circular flow diagram, who supplies factors of production in markets and who buys these factors of production? Who supplies goods and services in markets and who buys these goods and services?

Answer: Households supply factors of production and buy goods and services in markets. Firms buy factors of production and supply goods and services in markets.

Diff: 2 Page Ref: 50-51/50-51

Topic: The Circular Flow

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

52) List the four broad categories of factors of production.

Answer: labor, capital, natural resources, and entrepreneurship

Diff: 2 Page Ref: 50/50

Topic: Factors of Production

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

53) Define the term "property rights." Explain why the lack of well defined and enforceable property rights is detrimental to the smooth functioning of a market system.

Answer: The term "property rights" refers to the rights that individuals or firms have to the exclusive use of their resources, within the confines of the law. Well defined and enforceable property rights provide the incentive for people and firms to invest resources and undertake risks. This encourages the production of a wide range of goods and services. Without property rights and the means to enforce these rights, no person would want to undertake such a risk.

Diff: 2 Page Ref: 56/56

Topic: Property Rights

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

54) Why are music, television, and movie companies concerned about their products being posted to Internet websites such as YouTube?

Answer: These companies believe that their intellectual property rights are being violated when the unauthorized use of their material appears on these websites, and this reduces their ability to sell CDs and DVDs of this material.

Diff: 3 Page Ref: 56/56

Topic: Property Rights

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking

55) Adam Smith, the father of modern economics wrote in his book, *An Inquiry into the Nature and Causes of the Wealth of Nations*, "It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner but from their regard to their own interest." Explain what he meant by that statement and how such behavior promotes the wealth of a nation.

Answer: The statements refer to the fact that people act in their own self interest. For example, the butcher who sells meat and the baker who bakes bread carry out these activities because these tasks contributed to their livelihood, not because they were concerned about the diner. Nevertheless, their actions benefited the diner. This is precisely one of the virtues of a market: people do not have to act virtuously to produce worthwhile outcomes. Producing goods and services that consumers value increases the wealth of a nation.

Diff: 3 Page Ref: 53-54/53-54

Topic: Markets

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist

AACSB: Analytic thinking

Special Feature: Making the Connection: A Story of the Marketing System in Action: How Do You Make an iPad?

56) Identify whether each of the following transactions will take place in the factor market or in the product market:

- a. Shondra buys a Harley-Davidson Softail motorcycle.
- b. Aimee works 20 hours a week at a grocery store.
- c. Gustavo sells a warehouse to a produce delivery company.
- d. Ocean Spray increases employment at its Middleboro, Massachusetts plant.

Answer:

a takes place in the product market.

b, c, and d take place in the factor market.

Diff: 2 Page Ref: 50/50

Topic: Markets

*: Recurring

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade

AACSB: Analytic thinking