Chapter 2 Thinking Like an Economist

MULTIPLE CHOICE

1. Economists use some familiar terms in specialized ways
   a. to make the subject sound more complex than it is.
   b. because every respectable field of study has its own language.
   c. to provide a new and useful way of thinking about the world.
   d. because it was too difficult to come up with new terms.

ANS: C   PTS: 1   DIF: 1   REF: 2-0

THE ECONOMIST AS SCIENTIST

1.The scientific method is

1. The scientific method is applicable to studying
   a. natural sciences, but not social sciences.
   b. social sciences, but not natural sciences.
   c. both natural sciences and social sciences.
   d. None of the above is correct.

ANS: C   PTS: 1   DIF: 2   REF: 2-1

2. Sir Isaac Newton's development of the theory of gravity after observing an apple fall from a tree is an example of
   a. a controlled experiment that lead to the formulation of a scientific theory.
   b. being in the right place at the right time.
   c. an idea whose time had come.
   d. the interplay between observation and theory in science.

ANS: D   PTS: 1   DIF: 2   REF: 2-1

3. Which of the following is an example of using the scientific method with a natural experiment?
   a. Measuring how long it takes a marble to fall from a ten story building.
   b. Comparing plant growth with and without a soil additive.
   c. Tracking the price of oil when a war in the Middle East interrupts the flow of crude oil.
   d. Observing the reaction when two chemicals are mixed together.

ANS: C   PTS: 1   DIF: 1   REF: 2-1

4. The goal of an economist who formulates new theories is to
   a. provide an interesting framework of analysis, whether or not the framework turns out to be of much use in understanding how the world works.
   b. provoke stimulating debate in scientific journals.
   c. contribute to an understanding of how the world works.
   d. demonstrate that economists, like other scientists, can formulate testable theories.

ANS: C   PTS: 1   DIF: 2   REF: 2-1

5. In conducting their research, economists often substitute historical events and historical episodes for
   a. theories and observations.
   b. laboratory experiments.
   c. models.
   d. assumptions.

ANS: B   PTS: 1   DIF: 2   REF: 2-1

6. When studying the effects of changes in public policy, economists believe that
   a. it is important to distinguish between the short run and the long run.
   b. the assumptions used in studying those effects should be the same for the short run as for the long run.
   c. the short-run effects of those changes are always more beneficial to society than are the long-run effects.
   d. the long-run effects of those changes are always more beneficial to society than are the short-run effects.

ANS: A   PTS: 1   DIF: 2   REF: 2-1

7. A model can be accurately described as a
   a. theoretical abstraction with very little value.
   b. device that is useful only to the people who created it.
   c. realistic and carefully constructed theory.
   d. simplification of reality.

ANS: D   PTS: 1   DIF: 2   REF: 2-1

8. The circular-flow diagram is a
   a. visual model of the economy.
   b. visual model of the relationships among money, prices, and businesses.
   c. model that shows the effects of government on the economy.
   d. mathematical model of how the economy works.

ANS: A   PTS: 1   DIF: 1   REF: 2-1

9. Another term for factors of production is
   a. inputs.
   b. output.
   c. goods.
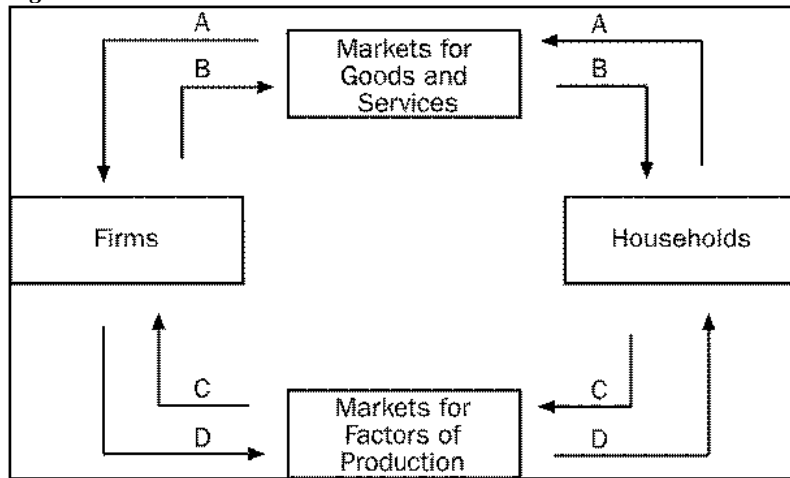   d. services.

ANS: A   PTS: 1   DIF: 1   REF: 2-1

10. In economics, capital refers to
    a. the finances necessary for firms to produce their products.
    b. buildings and machines used in the production process.
    c. the money households use to purchase firms' output.
    d. stocks and bonds.

ANS: B   PTS: 1   DIF: 1   REF: 2-1

11. In the circular-flow diagram,
    a. taxes flow from households to firms, and transfer payments flow from firms to households.
    b. income payments flow from firms to households, and sales revenue flows from households to firms.
    c. resources flow from firms to households, and goods and services flow from households to firms.
    d. inputs and outputs flow in the same direction as the flow of dollars, from firms to households.

ANS: B   PTS: 1   DIF: 2   REF: 2-1

Figure 2-1

12. **Refer to Figure 2-1**. Which arrow represents the flow of goods and services?
    a. A
    b. B
    c. C
    d. D
ANS: B   PTS: 1   DIF: 2   REF: 2-1

13. **Refer to Figure 2-1**. Which arrow represents the flow of spending by households?
    a. A
    b. B
    c. C
    d. D
ANS: A   PTS: 1   DIF: 2   REF: 2-1

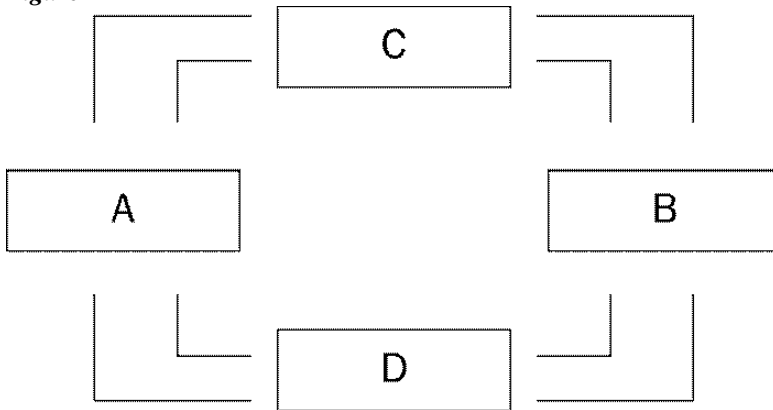14. **Refer to Figure 2-1**. Which arrow represents the flow of land, labor, and capital?
    a. A
    b. B
    c. C
    d. D
ANS: C   PTS: 1   DIF: 2   REF: 2-1

Figure 2-2

15. **Refer to Figure 2-2**. Boxes A and B of this circular-flow diagram represent
    a. firms and households.
    b. households and government.
    c. the markets for goods and services and the markets for financial assets.
    d. the markets for goods and the markets for services.
ANS: A   PTS: 1   DIF: 2   REF: 2-1

16. **Refer to Figure 2-2**. Boxes C and D of this circular-flow diagram represent
    a. households and government.
    b. firms and government.
    c. the markets for goods and services and the markets for financial assets.
    d. the markets for goods and services and the markets for factors of production.
ANS: D   PTS: 1   DIF: 2   REF: 2-1

17. **Refer to Figure 2-2**. If the flow of goods and services is part of what is represented by the inner loop of this circular-flow diagram, then
    a. the flow of factors of production is also part of what is represented by the inner loop.
    b. the flow of income paid to households is also part of what is represented by the inner loop.
    c. the flow of revenue to firms is also part of what is represented by the inner loop.
    d. households must be sellers of output.
ANS: A   PTS: 1   DIF: 2   REF: 2-1

18. The production possibilities frontier is a graph that shows the various combinations of output that an economy
    a. should produce.
    b. wants to produce.
    c. can produce.
    d. demands.
ANS: C   PTS: 1   DIF: 1   REF: 2-1

19. When constructing a production possibilities frontier, which of the following assumptions is *not* made?
    a. The economy produces only two goods or two types of goods.
    b. Firms produce goods using factors of production.
    c. The technology available to firms is given.
    d. The quantities of the factors of production that are available are increasing over the relevant time period.
ANS: D   PTS: 1   DIF: 2   REF: 2-1

Table 2-1
The following table contains some production possibilities for an economy for a given month.

Tables	Chairs
5	300
10	?
15	100

20.   **Refer to Table 2-1**. If the production possibilities frontier is bowed outward, then "?" could be
    a. 100.
    b. 150.
    c. 200.
    d. 250.
ANS: D   PTS: 1   DIF: 2   REF: 2-1

21. The production possibilities frontier is used to illustrate some basic economic ideas, including
    a. scarcity.
    b. opportunity cost.
    c. economic growth.
    d. All of the above are correct.

ANS: D   PTS: 1   DIF: 1   REF: 2-1

Table 2-2

Production Possibilities for Libraryland

Books	Magazines
400	0
300	200
200	350
100	450
0	500

22. **Refer to Table 2-2**. What is the opportunity cost to Libraryland of increasing the production of books from 200 to 300?
    a. 100 magazines
    b. 150 magazines
    c. 200 magazines
    d. 350 magazines

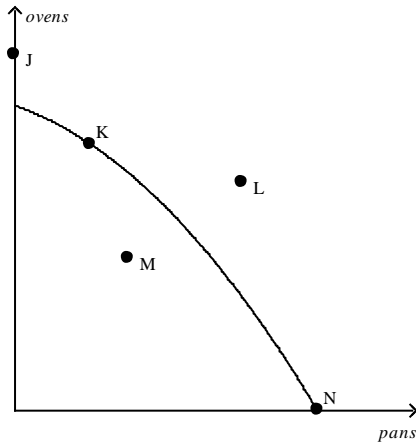ANS: B   PTS: 1   DIF: 2   REF: 2-1

TOP: Opportunity cost   MSC: Interpretive

Figure 2-3

23. **Refer to Figure 2-3**. At which point is this economy producing its maximum possible quantity of pans?
    a. J
    b. L
    c. M
    d. N

ANS: D   PTS: 1   DIF: 2   REF: 2-1

24. **Refer to Figure 2-3**. This economy has the ability to produce at which point(s)?
    a. J, K, M, N
    b. K, M, N
    c. K, N
    d. M

ANS: B   PTS: 1   DIF: 2   REF: 2-1

25. **Refer to Figure 2-3**. This economy *cannot* produce at which point(s)?
    a. J
    b. J, L
    c. J, L, M
    d. L

ANS: B   PTS: 1   DIF: 2   REF: 2-1

26. **Refer to Figure 2-3**. Unemployment could cause this economy to produce at which point(s)?
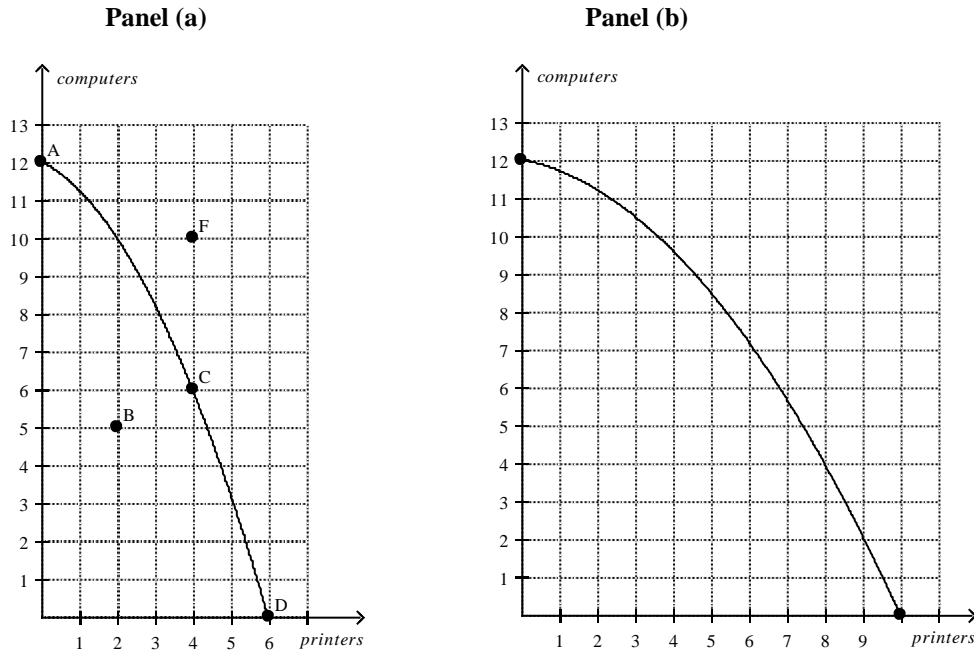   a. J, L
    b. J, L, M
    c. K, N
    d. M
ANS: D   PTS: 1   DIF: 2   REF: 2-1

Figure 2-4

Panel (a)   **Panel (b)**

27. **Refer to Figure 2-4, Panel (a).** Production at point B is
    a. impossible and inefficient.
    b. impossible but efficient.
    c. possible but inefficient.
    d. possible and efficient.
ANS: C   PTS: 1   DIF: 2   REF: 2-1

28. **Refer to Figure 2-4, Panel (a) and Panel (b).** A shift of the economy's production possibilities frontier from Panel (a) to Panel (b) could be caused by
    a. unemployment.
    b. an improvement in computer production technology.
    c. an improvement in printer production technology.
    d. an improvement in both computer and printer production technology.
ANS: C   PTS: 1   DIF: 2   REF: 2-1

Table 2-3

Cookies (in dozens)	Coffee (in pounds)
1000	0
800	350
600	650
400	800
200	1000
0	1150

29. **Refer to Table 2-3.** What is the opportunity cost of increasing the production of cookies from 200 dozen to 400 dozen?
    a. 100 pounds of coffee
    b. 200 pounds of coffee
    c. 300 pounds of coffee
    d. 400 pounds of coffee

ANS: B   PTS: 1   DIF: 2   REF: 2-1

30. Home is a country that produces two goods, pears and cellular phones. Last year, Home produced 450 bushels of pears and 1050 cellular phones. This year it produced 450 bushels of pears and 2000 cellular phones. Given no other information, which of the following events could explain this change?
    a. Home experienced increased unemployment.
    b. Home experienced a decline in pear-producing technology.
    c. Home experienced an improvement in cellular phone-making technology.
    d. Home experienced a reduction in resources.

ANS: C   PTS: 1   DIF: 2   REF: 2-1

31. Which of the following areas of study typifies microeconomics as opposed to macroeconomics?
    a. the impact of minimum-wage laws on employment in the fast food industry
    b. the effect of changes in household saving rates on the growth rate of national income
    c. the impact of faster money growth on the rate of inflation
    d. a comparison of alternative tax policies and their respective impacts on the rate of the nation's economic growth

ANS: A   PTS: 1   DIF: 2   REF: 2-1

THE ECONOMIST AS POLICY ADVISER

1. Which of the following statements is correct about the roles of economists?
    a. Economists are best viewed as policy advisers.
    b. Economists are best viewed as scientists.
    c. In trying to explain the world, economists are policy advisers; in trying to improve the world, they are scientists.
    d. In trying to explain the world, economists are scientists; in trying to improve the world, they are policy advisers.
ANS: D   PTS: 1   DIF: 2   REF: 2-2

2. For economists, statements about the world are of two types:
    a. assumptions and theories.
    b. true statements and false statements.
    c. specific statements and general statements.
    d. positive statements and normative statements.
ANS: D   PTS: 1   DIF: 2   REF: 2-2

3. When economists make
    a. positive statements, they are speaking not as policy advisers but as scientists.
    b. positive statements, they are speaking not as scientists but as forecasters.
    c. normative statements, they are speaking not as policy advisers but as scientists.
    d. normative statements, they are speaking not as policy advisers but as model-builders.
ANS: A   PTS: 1   DIF: 2   REF: 2-2

4. One difference between a hypothetical benevolent king implementing the best policy and the president implementing the best policy in the real world is the president has to be concerned about
    a. any misunderstandings in communicating the policy to the public.
    b. whether the policy will affect his standing among different groups in the electorate.
    c. what amendments will be suggested by members of Congress.
    d. All of the above are correct.
ANS: D   PTS: 1   DIF: 1   REF: 2-2

5. John Maynard Keynes observed that during rare times of deep financial and economic crisis, when the "invisible hand" has temporarily ceased to function,
    a. there is a more urgent need for government to play an active role in restoring markets to their healthy function.
    b. government should avoid intervening in the market and wait patiently for proper market function to return.
    c. economists need to re-evaluate all of their basic principles.
    d. the economy can rely on entrepreneurs to take creative actions to end the crisis.
ANS: A   PTS: 1   DIF: 2   REF: 2-2

6. Economist Joseph Schumpeter coined the phrase "creative destruction" to describe the process by which
    a. the government destroys the failing markets that caused an economic crisis.
    b. innovation and enterpreneurial initiative have great power to drive economic growth.
    c. economists destroy long-held beliefs about how markets function.
    d. free markets need government intervention to create economic growth.
ANS: B   PTS: 1   DIF: 2   REF: 2-2

WHY ECONOMISTS DISAGREE

1. Which of the following is one of the basic reasons why economists often appear to give conflicting advice to policymakers?
   a. similar opinions about the validity of economic theories
   b. significant differences in education
   c. differences in personal values
   d. a reliance on normative statement for research theories

ANS: C   PTS: 1   DIF: 1   REF: 2-3

2. Which of the following statements is correct about the extent of disagreement among economists?
   a. There is a great deal of agreement among economists on virtually every economic issue.
   b. There is a great deal of agreement among economists on many important economic issues.
   c. All disagreements among economists are attributable to differences in their values.
   d. All disagreements among economists are attributable to the fact that different economists have different degrees of faith in the validity of alternative economic theories.

ANS: B   PTS: 1   DIF: 2   REF: 2-3

3. A survey which sought the opinion of professional economists on fourteen propositions about economic policy found that
   a. the respondents were almost equally divided on the propositions.
   b. the respondents favored the propositions by a slight margin.
   c. the respondents disagreed with the propositions by a slight margin.
   d. there was overwhelming endorsement of the propositions among the respondents.

ANS: D   PTS: 1   DIF: 1   REF: 2-3

LET'S GET GOING

1. How did the influential economist John Maynard Keynes explain his remark that though economics is an easy subject compared with the higher branches of philosophy or pure science, it is a subject at which few excel?
   a. Most people who study economics are not very bright.
   b. Good economists must possess a rare combination of gifts.
   c. Economics is quite boring; hence, people tend to lose interest in it before mastering it.
   d. Good thinkers become frustrated with economics because it does not make use of the scientific method.

ANS: B   PTS: 1   DIF: 2   REF: 2-4

2. In the past, environmentalists thought of economics as a method of maximizing profits. Presently,
   a. there is now realization that economics offers a framework for natural resource allocation.
   b. economists are helping to formulate the intellectual framework behind approaches to protecting endangered species, reducing pollution, and preventing climate change.
   c. economics informs environmental studies but economists still do not work for environmental advocacy groups.
   d. More than one of the above is correct.

ANS: D   PTS: 1   DIF: 2   REF: 2-4

GRAPHING: A BRIEF REVIEW

1. Graphs such as bar graphs and pie charts are limited in that they
   a. can only show variables that are positively related.
   b. can only show variables that have a negative correlation.
   c. provide information on only one variable.
   d. provide information on no more than two variables.
ANS: C   PTS: 1   DIF: 2   REF: 2-5

2. The use of the coordinate system allows
   a. for the display of the flows of dollars, goods and services, and factors of production in an economic system.
   b. for the display of how labor and other resources are organized in the production process.
   c. for the display of two variables on a single graph.
   d. for the creation of pie charts and bar graphs.
ANS: C   PTS: 1   DIF: 2   REF: 2-5

3. In the ordered pair (17, 75), 75 is the
   a. horizontal location of the point.
   b. the slope.
   c. the x-coordinate.
   d. the y-coordinate.
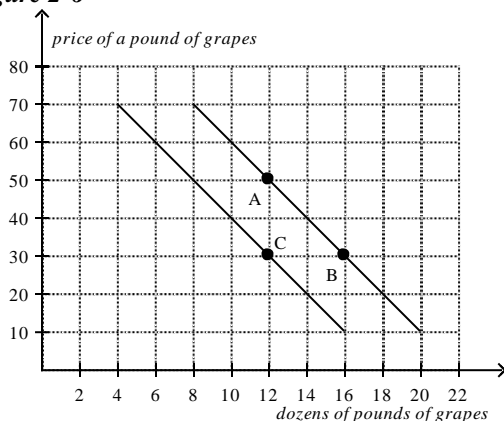ANS: D   PTS: 1   DIF: 2   REF: 2-5

Figure 2-5
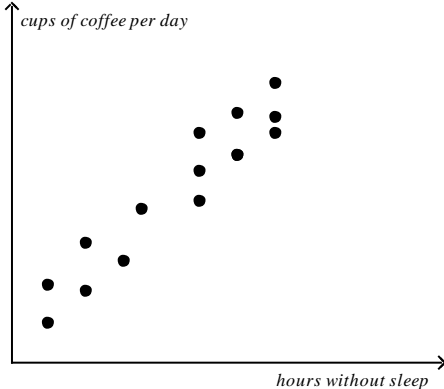
4. **Refer to Figure 2-5**. Cups of coffee per day and the hours that someone can go without sleep appear to have
   a. a positive correlation.
   b. a negative correlation.
   c. a random correlation.
   d. no correlation.
ANS: A   PTS: 1   DIF: 2   REF: 2-5

5. When a relevant variable that is not named on either axis changes,
   a. there will be a movement along the curve.
   b. the curve will rotate clockwise.
   c. the curve will be unaffected since only the variables on the axis affect the curve.
   d. the curve will shift.
ANS: D   PTS: 1   DIF: 2   REF: 2-5

Figure 2-6

6. **Refer to Figure 2-6**. The movement from point A to point B is a(n)
   a. shift of the demand curve.
   b. indication of a change in preferences for grapes.
   c. movement along the demand curve.
   d. indication of an increase in income.
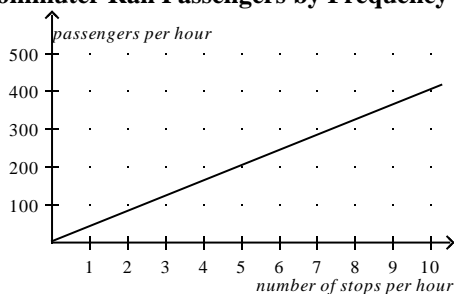
ANS: C   PTS: 1   DIF: 2   REF: 2-5

Figure 2-7

In the following graph the x-axis shows the number of times a commuter rail train stops at a station per hour and the y-axis shows the number of commuter rail passengers per hour.

Commuter Rail Passengers by Frequency of Service

7. **Refer to Figure 2-16.** A policymaker observes this graph and concludes that increasing the frequency of commuter rail service is a certain way to get more commuters to choose the commuter rail instead of driving their own cars. You warn the policymaker about making a reverse causality mistake with which of the following statements?
   a. Higher gas prices are causing more people to choose the commuter rail over driving.
   b. The service frequency was increased in response to an increase in the number of passengers per hour.
   c. There is a positive relationship between frequency of stops and number of passengers.
   d. None of the above is correct.

ANS: B   PTS: 1   DIF: 2   REF: 2-5

TRUE/FALSE

1. An economic model can accurately explain how the economy is organized because it is designed to include, to the extent possible, all features of the real world.

ANS: F   PTS: 1   DIF: 2   REF: 2-1

2. In the circular-flow diagram, factors of production include land, labor, and capital.
ANS: T   PTS: 1   DIF: 2   REF: 2-1

3. In the circular-flow diagram, payments for labor, land, and capital flow from firms to households through the markets for the factors of production.
ANS: T   PTS: 1   DIF: 2   REF: 2-1

4. Unemployment causes production levels to be inefficient.
ANS: T   PTS: 1   DIF: 2   REF: 2-1

5. The opportunity cost of something is what you give up to get it.
ANS: T   PTS: 1   DIF: 1   REF: 2-1

6. A production possibilities frontier has a bowed shape if the opportunity cost is constant at all levels of output.
ANS: F   PTS: 1   DIF: 2   REF: 2-1
NAT: Analytic   LOC: Understanding and applying economic models
TO: Production possibilities frontier   MSC: Interpretive

7. A technological advance in the production of the first good increases the opportunity cost of the first good in terms of the second good.
ANS: T   PTS: 1   DIF: 3   REF: 2-1

8. A macroeconomist, rather than a microeconomist, would study the effects on a market from two firms merging.
ANS: F   PTS: 1   DIF: 2   REF: 2-1

9. When economists are trying to explain the world, they are scientists, and when they are trying to help improve the world, they are policy advisers.
ANS: T   PTS: 1   DIF: 1   REF: 2-2

10.   "Minimum wage laws result in unemployment" is a normative statement, while "the minimum wage should be higher" is a positive statement.
ANS: F   PTS: 1   DIF: 2   REF: 2-2

11. Trade-offs are involved in most policy decisions.
ANS: T   PTS: 1   DIF: 1   REF: 2-2

12. There is only one explanation for why economists give conflicting advice on policy issues, and it is that they have different values about what policy should try to accomplish.
ANS: F   PTS: 1   DIF: 2   REF: 2-3

13. According to John Maynard Keynes, an economist must possess a rare combination of skills including being a mathematician, historian, statesman, and philosopher.
ANS: T   PTS: 1   DIF: 1   REF: 2-4

14. When a variable that is not named on either axis of a graph changes, we read the change as a movement along the curve.
ANS: F   PTS: 1   DIF: 2   REF: 2-5
NAT: Analytic   LOC: The study of economics and definitions in economics
TOP: Graphs   MSC: Interpretive

15. Changes in one variable on a graph might be caused by the other variable on the graph or by a third omitted variable.
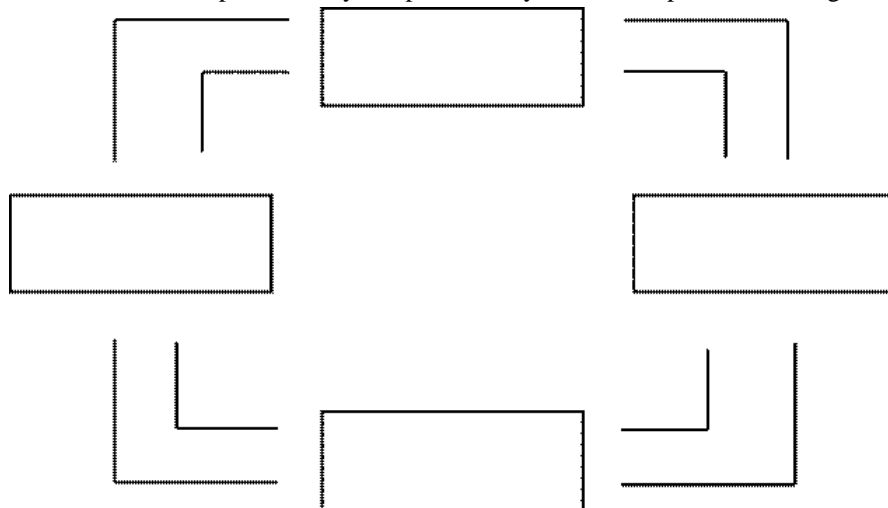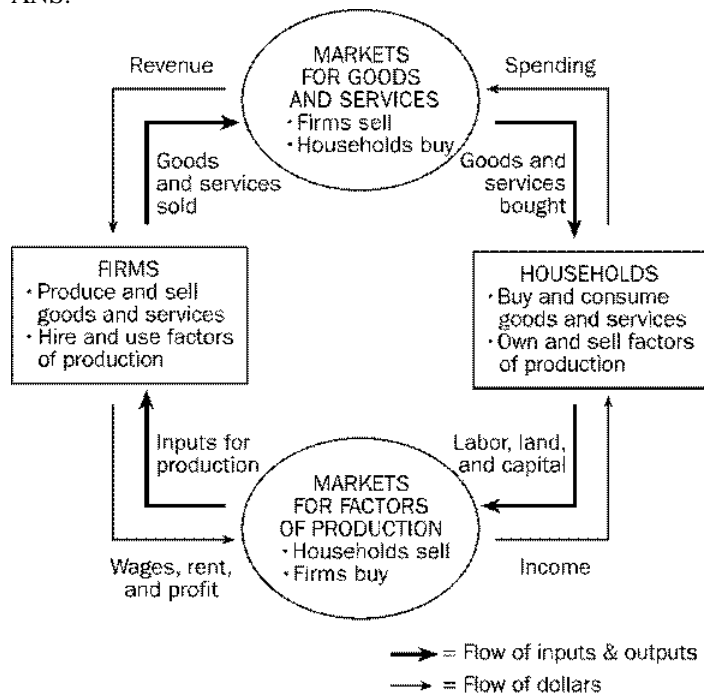
ANS: T PTS: 1 DIF: 2 REF: 2-5

SHORT ANSWER

1. Using the outline below, draw a circular-flow diagram representing the interactions between households and firms in a simple economy. Explain briefly the various parts of the diagram.

ANS:

This diagram should duplicate the essential characteristics of the diagram in the text, with an explanation of the meaning of each flow and each market. It is important that the student understands that the inner loop represents the flow of real goods and services and that the outer loop represents the corresponding flow of payments.
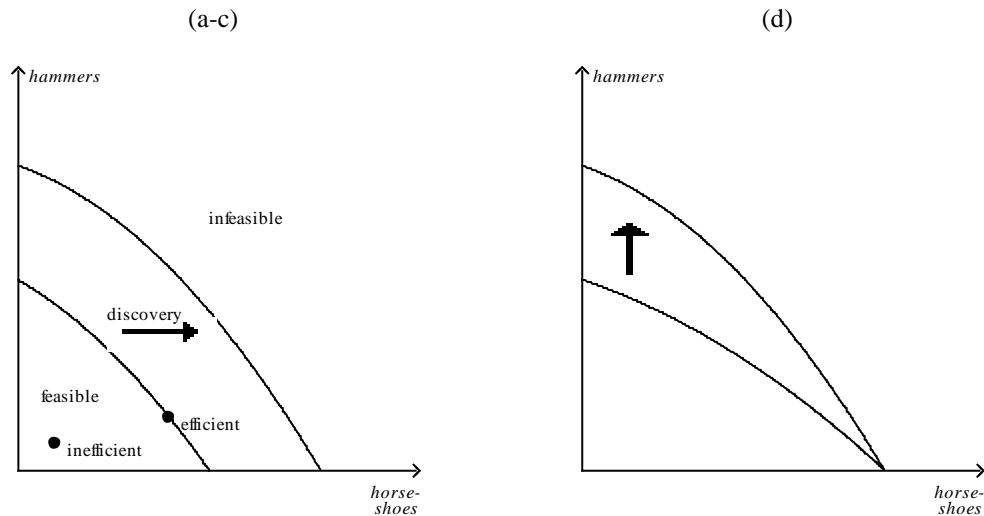
PTS: 1 DIF: 1 REF: 2-1

2. Draw a production possibilities frontier showing increasing opportunity cost of hammers in terms of horse-shoes.
   a. On the graph, identify the area of feasible outcomes and the area of infeasible outcomes.
   b. On the graph, label a point that is efficient and a point that is inefficient.
   c. On the graph, illustrate the effect of the discovery of a new vein of iron ore, a resource needed to make both horseshoes and hammers, on this economy.
   d. On a second graph, illustrate the effect of a new computerized assembly line in the production of hammers on this economy.

ANS:

(a-c)   (d)

PTS: 1   DIF: 2   REF: 2-1

3. Identify each of the following topics as being part of microeconomics or macroeconomics:
   a. the impact of a change in consumer income on the purchase of luxury automobiles
   b. the effect of a change in the price of Coke on the purchase of Pepsi
   c. the impact of a war in the Middle East on the rate of inflation in the United States
   d. factors influencing the rate of economic growth
   e. factors influencing the demand for tractors
   f. the impact of tax policy on national saving
   g. the effect of pollution taxes on the U.S. copper industry
   h. the degree of competition in the cable television industry
   i. the effect of a balanced-budget amendment on economic stability
   j. the impact of deregulation on the savings and loan industry

ANS:
   a, b, e, g, h, and j are microeconomic topics. c, d, f, and i are macroeconomic topics.
PTS: 1   DIF: 2   REF: 2-1   NAT: Analytic
LOC: The study of economics and definitions in economics
TOP: Microeconomics | Macroeconomics   MSC: Applicative

4. Which of the following statements are positive and which are normative?
   a. The minimum wage creates unemployment among young and unskilled workers.
   b. The minimum wage ought to be abolished.
   c. If the price of a product in a market decreases, then, other things equal, quantity demanded will increase.
   d. A little bit of inflation is worse for society than a little bit of unemployment.
   e. There is a tradeoff between inflation and unemployment in the short run.
   f. If consumer income increases, then, other things equal, the demand for automobiles will increase.
   g. The U.S. income distribution is not fair.
   h. U.S. workers deserve more liberal unemployment benefits.
   i. If interest rates increase, then investment will decrease.
   j. If welfare benefits were reduced, then the country would be better off.

ANS:
   a, c, e, f, and i are positive statements. b, d, g, h, and j are normative statements.

PTS: 1   DIF: 2   REF: 2-2

5. Use the following graph to answer the following questions.
   a. How would point J be represented as an ordered pair?
   b. What type of curve is this?
   c. Does this curve show a positive or negative correlation between price and quantity?
   d. Compute the slope of D_1 between points J and L.
   e. What is the slope of D_1 between points L and N? Why would you not have to calculate this answer?
   f. What is it called if we move from D_1 to D_2?
   g. How do you know that the slope of D_2 is the same as the slope of D_1?
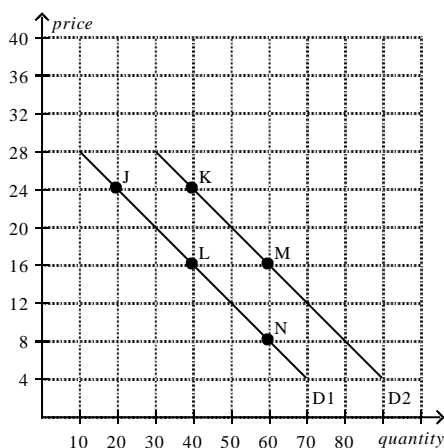
ANS:
   a. (20,24)
   b. a demand curve
   c. a negative correlation between price and quantity
   d. -8/20 or -2/5
   e. -2/5; because the slope of a straight line is constant
   f. an increase in demand.
   g. because the 2 lines are parallel

PTS: 1   DIF: 2   REF: 2-5