

Chapter 01 Economics and Economic Reasoning **Answer Key**

True / False Questions

1. The answers to an economy's three central economic problems are determined by the interaction of three forces: economic forces, political forces, and social forces.

TRUE

Economic, political, and social forces determine how an economy operates and thus answers the three economic problems.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Economics

2. Scarcity exists because economies cannot produce enough to meet the perceived desires of all individuals.

TRUE

Scarcity exists because what people desire exceeds what they are able to produce.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Scarcity

3. Only marginal costs, not sunk costs, affect economic decisions if individuals are rational.

TRUE

Sunk costs are costs that have already been incurred and cannot be recovered no matter what action is taken. Marginal costs represent the additional costs associated with undertaking an economic activity, and an individual must balance these costs against the marginal benefit from the activity to make a rational choice.

AACSB: Analytic

Blooms: Remember

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

4. The economic decision rule is to undertake an action only when the marginal benefits of that action are greater than its total costs.

FALSE

The economic decision rule is to undertake an action only when the marginal benefits of that action are greater than its marginal costs.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

5. The opportunity cost of undertaking an activity includes any sunk cost.

FALSE

Sunk costs are costs that already have been incurred and cannot be recovered no matter what action is taken. Thus, they do not represent an opportunity costs, which are an additional cost.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Opportunity Cost

6. The "invisible hand" is the price mechanism that guides people's actions in the market.

TRUE

This statement matches the definition of the invisible hand in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Invisible Hana

7. Social and political forces affect the way in which the invisible hand works.

TRUE

Social and political forces place cultural and legal limits on how the market mechanism works.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Invisible Hand

8. Macroeconomics is the study of how individual choices are affected by economic forces.

FALSE

Macroeconomics is the study of the economy as a whole. This statement describes microeconomics.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Macroeconomics

9. Deciding what the distribution of income should be is an example of normative economics.

TRUE

This statement questions what the goals of the economy should be and is thus an example of normative economics.

AACSB: Analytic

Blooms: Analyze

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Normative Economics

Multiple Choice Questions

10. Say a pill existed that made people selfless. After taking it they were only interested in others, not themselves. Under the coordination definition of economics:

- A. no economic problem would exist.
- B.** there still would be an economic problem.
- C. there would be a political problem but not an economic problem.
- D. there would be a social problem but not an economic problem.

The coordination definition of economics focuses on the need for the coordination of activities and resources. Even if everyone were selfless, there still would be the need for coordinating the selfless actions so that those actions and resources would be allocated efficiently.

AACSB: Analytic

Blooms: Analyze

Difficulty: 3 Hard

Learning Objective: 01-01 Define economics and identify its components.

Topic: Economics

11. According to the text, economics is the study of how:

- A. governments allocate resources in the face of constraints.
- B. government policies can be used to meet individuals' wants and desires.
- C.** human beings coordinate their wants and desires.
- D. scarce resources are allocated to their most productive uses.

According to the text, economics "is the study of how human beings coordinate their wants and desires given a society's decision-making mechanisms, social customs, and political realities."

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Economics

12. Dorm rooms usually are not allocated by markets. Allocating dorm rooms is:
- A. not an economic problem.
 - B. an economic problem.**
 - C. not affected by economic forces.
 - D. determined by prices.

An economic problem is the problem of coordinating the diverse wants of individuals. This includes the desire to have a dorm room. The type of allocation mechanism used to coordinate those wants does not eliminate the initial problem.

AACSB: Analytic

Blooms: Analyze

Difficulty: 3 Hard

Learning Objective: 01-01 Define economics and identify its components.

Topic: Economics

13. If allocating dorm rooms changes from allocation by lottery to allocation by the market:

- A. it becomes an economic problem.
- B. it becomes a political problem but not an economic problem.
- C. it becomes a social problem but not an economic problem.
- D.** the allocation problem is still an economic problem.

The economic problem arises when limited resources must be allocated among individuals.

The problem existed before any allocation mechanism was chosen.

AACSB: Analytic

Blooms: Analyze

Difficulty: 3 Hard

Learning Objective: 01-01 Define economics and identify its components.

Topic: Economics

14. Which of the following is *not* one of the three central coordination problems of the economy given in the book?

- A. What
- B.** Whether
- C. For whom
- D. How

The three central coordination problems are listed in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Economics

15. The quantity of goods and services available to society:

- A. is fixed.
- B.** depends on human action.
- C. is not of economic importance.
- D. will always grow to meet individuals' wants and desires.

The quantity of goods and services available depends on the incentives to work.

AACSB: Analytic

Blooms: Analyze

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Scarcity

16. Any economic system:

- A. can eliminate scarcity.
- B.** addresses the questions what is produced, how it is produced, and for whom it is produced.
- C. provides all the goods people want and desire.
- D. provides equal distribution of well-being among its participants.

Any economic system must solve the three coordination problems. An economic system does not necessarily eliminate scarcity. Individual decisions within an economic system are what solve the three central problems. An economic system allocates what is produced but may not do so equally.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Economics

17. Scarcity exists because:

- A. individuals cannot solve the three central coordination problems.
- B. governments cannot solve the three central coordination problems.
- C. the supply of goods is always less than the demand.
- D. new wants continue to develop and willingness to meet them is limited.

Scarcity is perceived because human desires have always exceeded human willingness to meet those desires.

AACSB: Analytic

Blooms: Remember

Difficulty: 2 Medium

Learning Objective: 01-01 Define economics and identify its components.

Topic: Scarcity

18. People can reasonably expect that an economic system will decide all of the following *except*.

- A. what goods to produce
- B. how to produce the goods
- C. how to assign initial property rights
- D. for whom to produce the goods

See the three central coordination problems listed in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

19. To engage in economic reasoning, one must compare:

- A. total cost and total benefit.
- B. marginal cost, sunk cost, and total benefit.
- C. sunk cost and marginal cost.
- D. marginal cost and marginal benefit.

Such a comparison makes it possible to determine whether the marginal benefit of an action exceeds the marginal cost.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

20. The economist Steven Landsburg claims that with a death penalty, each execution deters about eight murders, resulting in a benefit to society of approximately \$56 million. He argues that computer hackers do far more damage to society with their worms and viruses. He argues that computer hackers should be executed as well. From a purely economic perspective, the death penalty for computer hackers is:

- A. reasonable based on cost/benefit analysis, but society must also take into account social, political, and religious factors.
- B. never reasonable because it is not possible to place a dollar value on a human life.
- C. never reasonable because no one has died from computer hacking.
- D. the least efficient way to deter crime.

There is not enough information provided here to determine the most efficient way to deter crime; students should realize that other methods (such as increased probability of arrest or longer prison sentences) actually may be more efficient even if the death penalty does have a deterrent effect.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 3 Hard

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

21. More than 10,000 people waited in line for more than two hours to see a titan arum (a rare flower) at Cambridge's Botanic Garden. An economist would conclude that:

- A. people felt they got great benefit from seeing the flower.
- B. people did not know that they should ignore sunk costs in reaching decisions.
- C. some things do not have a cost because people do not have to pay for them.
- D. social forces are sometimes more important than market forces.

If people are willing to wait two hours to see a flower, they are assessing the value of seeing the flower to be considerable. Economists like to assume that people make rational decisions, in which costs are less than benefits.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

22. Alexandra has determined that studying an hour for her economics quiz will improve her grade on the quiz from 75 to 100. She also determines that this improvement is worth \$20. To study for an hour for her economics quiz, however, she will have to work one fewer hour at her part-time job. Alexandra should:

- A. study for the quiz as long as her hourly wage rate is less than \$20.
- B. study for the quiz as long as her hourly wage rate is more than \$20.
- C. study for the quiz only if her hourly wage rate is exactly \$20.
- D. not study for the quiz because earning a higher grade cannot have a dollar value.

It is efficient for Alexandra to study if the marginal benefit exceeds the marginal cost. The marginal benefit is \$20 and the marginal cost is equal to her hourly wage rate, and so marginal benefit exceeds marginal cost as long as her hourly wage rate is less than \$20.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

23. Microsoft filed a lawsuit against people who sent spam (junk e-mail) and a website owner who hosted spam services. A spokesman for Microsoft said that Microsoft was "trying to change the economics of spam" by increasing the cost of being a spammer. An economist most likely would agree with which statement about Microsoft's actions?
- A. A more effective approach would be to educate spammers about the costs they impose on others.
 - B. A more effective approach would be to appeal to the morals of the spammers and tell them to follow the Golden Rule.
 - C. Microsoft's approach of trying to change the costs of spamming is the most effective way to change behavior.
 - D. Microsoft should not be involved because spamming is just part of the invisible hand at work and should be left alone.

When economists want to change behavior, they will change either the costs or the benefits of the behavior.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

24. The marginal benefit from consuming another unit of a good:

- A. must equal the marginal cost or the unit will not be consumed.
- B. must be less than the marginal cost or the unit will not be consumed.
- C. equals the increase in total benefits from consuming the unit.
- D. equals the total benefit obtained from the consumption of all prior units.

See the definition of marginal benefit in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Marginal Benefit

25. The marginal cost of consuming another unit of a good:

- A. must equal the marginal benefit or the unit will not be consumed.
- B. must exceed the marginal benefit or the unit will not be consumed.
- C. equals the increase in total cost when another unit is consumed.
- D. equals the total cost of consuming all prior units.

See the definition of marginal cost in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Marginal Cost

26. Mary buys cell-phone services from a company that charges \$30 per month. For that \$30 she is allowed 600 minutes of free calls and then pays 25 cents per minute for any calls above 600 minutes. Mary has used 300 minutes this month so far. What is her marginal cost per minute of making two more calls lasting 10 minutes each?

- A. \$2.50
- B. 25 cents
- C. 4 cents
- D.** Zero

Marginal cost is the cost of calling for another minute. Since Mary has not yet reached 600 minutes, making another call adds nothing to her bill.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Marginal Cost

27. Mary buys cell-phone services from a company that charges \$30 per month. For that \$30 she is allowed 600 minutes of free calls and then pays 25 cents per minute for any calls above 600 minutes. Mary has used 600 minutes this month so far. What is her marginal cost per minute of making additional calls?

- A. 25 cents
- B. 10 cents
- C. 5 cents
- D. Zero

Marginal cost is the cost of calling another minute. Since Mary has reached 600 minutes, making another call adds 25 cents per minute to her bill.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Marginal Cost

28. Sunk costs:

- A. are essential parts of economic decisions.
- B. are irrelevant to economic decisions.
- C. should be considered, but only when marginal cost is less than marginal benefit.
- D. should be considered only when there is no information about marginal cost and marginal benefit.

Sunk costs are costs that already have been incurred and cannot be recaptured. They are in essence "water under the bridge," and as such, they do not influence economic decisions.

AACSB: Analytic

Blooms: Remember

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Sunk Cost

29. Suppose the marginal cost of dating Perry is \$30 and the marginal benefit is worth \$40 to you. Following economic reasoning, you should:

- A.** date Perry.
- B. not date Perry.
- C. determine what your sunk costs are.
- D. determine what your total benefits and total costs are.

Since the marginal benefit of dating Perry exceeds the marginal cost, you will be better off going on a date.

AACSB: Reflective Thinking

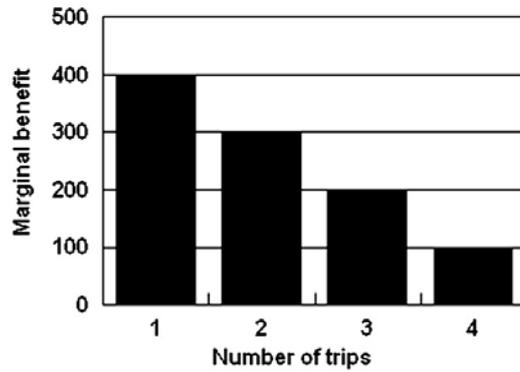
Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Marginal Cost

30.



Refer to the graph shown. If the marginal cost of each weekend trip this year is \$600 no matter how many trips Rodney takes, assuming he is rational, Rodney will:

- A. take three trips this year.
- B. take two trips this year.
- C. take one trip this year.
- D. not take any trips this year.**

The economic decision rule is to do something if the marginal benefit exceeds the marginal cost. Since the marginal benefit of taking any trip is always less than the marginal cost of \$600, Rodney will take no trips.

AACSB: Reflective Thinking

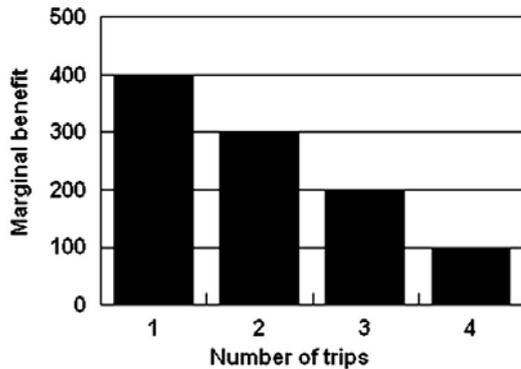
Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

31.



Refer to the graph shown. If the marginal cost of each weekend trip this year is \$299 no matter how many trips Rodney takes, assuming he is rational, Rodney will take:

- A. four trips this year.
- B. three trips this year.
- C. two trips this year.**
- D. one trip this year.

The economic decision rule is to do something if the marginal benefit exceeds the marginal cost. Since the marginal benefits of only the first two trips exceed the marginal costs of \$299, Rodney will take two trips.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

32. The table below shows how the marginal benefit of videotape rentals varies for Carol with the number rented per month.

Tapes rented per month	Marginal benefit of renting an additional tape
1	\$6.00
2	\$5.00
3	\$4.00
4	\$3.00
5	\$2.00

The price of each tape rental is reduced from \$2.99 to \$1.99. Assuming that the price of a rental accurately reflects the marginal cost to Carol and that she is rational, she will increase the number of tapes rented per month from:

- A. one to two.
- B. two to three.
- C. three to four.
- D.** four to five.

The economic decision rule is to do something if the relevant (marginal) benefits exceed the relevant (marginal) costs. If they don't, one should not do it. Following the economic decision rule, Carol initially purchased four videotape rentals because the marginal benefit of only the first four rentals exceeded the marginal cost of \$2.99. When the price dropped to \$1.99, the marginal benefit of even the fifth rental exceeded its marginal cost, and so Carol purchased five rentals.

AACSB: Analytic

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

33. The table below shows how the marginal benefit of pizza dinners varies for Luigi with the number consumed per month.

Dinners per month	Marginal benefit per dinner
1	\$4.00
2	\$3.00
3	\$2.00
4	\$1.00

Suppose the price per dinner is \$4.99 and accurately reflects the marginal cost of the dinners to Luigi. Assuming that Luigi is rational, he will:

- A. not consume any pizza dinners this month.
- B. consume one pizza dinner this month.
- C. consume two pizza dinners this month.
- D. consume three pizza dinners this month.

The economic decision rule is to do something if the relevant (marginal) benefits exceed the relevant (marginal) costs. If they don't, one should not do it. Following the economic decision rule, Luigi will consume no pizza dinners this month since the marginal cost of a pizza dinner (\$4.99) is greater than the marginal benefit of even one dinner.

AACSB: Analytic

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

34. The price of a new model of iPod tends to fall significantly a year after it is introduced. Suppose Jane bought an iPod as soon as it was introduced (a year ago) and paid a premium price for it. Now she wants to buy a new iPod cover. Which of the following should she consider before buying the new accessory?
- A. The price she paid for her iPod, the price of the iPod cover, and the benefit she'll receive from using the iPod cover.
 - B. The price of replacing her iPod, the price of the iPod cover, and the benefit she'll receive from using the iPod cover.
 - C. The price of the iPod cover and the benefit she'll receive from using the iPod cover.
 - D. The price of the iPod cover had she bought it with the iPod, the current price of the iPod cover, and the benefit she'll receive from using the iPod cover.

According to the economic decision rule, one must compare the marginal benefits to the marginal costs. The marginal cost is the price of the iPod cover. The price Jane bought the iPod for is a sunk cost and therefore does not enter into the decision.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

35. You bought one share of McDonald's stock for \$10, one share of Coca-Cola for \$15, and one share of Pepto-Bismol for \$20. Currently, each stock is priced at \$15. Assuming that there are no tax issues and that you cannot predict the future price of any of the stocks, if you needed \$15, which stock would you sell?

- A. McDonalds
- B. Coca-Cola
- C. Pepto-Bismol
- D. Any one of them

Since the purchase price is a sunk cost, it will not enter into your decision. Without additional information, it would not matter which one you sell since you don't know the future performance of any of the stocks.

AACSB: Analytic

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Sunk Cost

36. Which of the following *best* defines rational behavior?

- A. Analyzing the total gains from a decision
- B.** Improving net gain by pursuing decisions as long as the marginal benefits exceed the marginal costs
- C. Seeking to gain by choosing to undertake actions as long as the marginal costs exceed the associated marginal benefits
- D. Seeking to maximize total gain regardless of cost

This is the economic decision rule discussed in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

37. Alan is sitting in a bar drinking beers that cost \$1 each. According to the economic decision rule, Alan will quit drinking when the marginal:

- A.** benefit to him of an additional beer is less than \$1.
- B. cost to him of an additional beer is less than the marginal benefit.
- C. cost remains at \$1.
- D. benefit to him of an additional beer is greater than \$1.

Alan will quit drinking only when the marginal cost exceeds the marginal benefit.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

38. Chuck offers \$70,000 for a house. The seller turns down the offer but says she will sell the house for \$72,000. However, Chuck refuses to pay the higher price. If Chuck is following the economic decision rule, the marginal benefit of the house to:

- A. Chuck must be less than \$72,000.
- B. Chuck must be greater than \$72,000.
- C. the seller must be less than \$72,000.
- D. the seller must be less than \$70,000.

The economic decision rule is do something if the marginal benefit exceeds the marginal cost and not do it otherwise. Since Chuck was unwilling to purchase the house at \$72,000, we can deduce that the marginal benefit of purchasing the house must be less than \$72,000.

AACSB: Analytic

Blooms: Understand

Difficulty: 3 Hard

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

39. The marginal benefit of another T-shirt this month to Mary is \$15. If the \$10 price of T-shirts reflects their marginal cost to Mary and Mary uses economic reasoning, she:

- A. will sell the T-shirts she has to others who are willing to pay \$10.
- B. cannot gain by buying more T-shirts.
- C. will buy more T-shirts this month.
- D. will not buy any T-shirts this month.

The economic decision rule is do something if the marginal benefit exceeds the marginal cost and not do it otherwise. Since the marginal benefit of buying more shirts exceeds the marginal cost, Mary will buy more shirts.

AACSB: Analytic

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

40. The marginal benefit of going to a movie during the week is currently \$6 for you. Assume that the \$4 price of going to the movies measures its marginal cost. Following the economic decision rule, you will:

- A. continue going to movies until the marginal benefit of doing so falls to zero.
- B. choose not to go to any movies during the week.
- C. continue going to movies until the marginal benefit of doing so falls below \$4.
- D. not be able to enjoy a net gain from going to the movies during the week.

You will continue to go to the movies until the marginal benefit falls below the marginal cost.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 3 Hard

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

41. Marginal analysis suggests that you will engage in more of an activity if the:

- A. total benefit of the activity is less than the total cost.
- B.** additional benefit from the activity exceeds the additional cost.
- C. total benefit from the activity exceeds the total cost.
- D. additional cost of the activity exceeds the additional benefit.

The economic decision rule is to do more of something if the marginal benefit exceeds the marginal cost.

AACSB: Analytic

Blooms: Analyze

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

42. You've purchased a car for \$10,000 and now are deciding whether to have a moonroof installed for \$400 and a security system installed for \$200. The marginal cost of adding both the moonroof and the security system is:

- A. \$10,600.
- B. \$10,000.
- C. \$400.
- D.** \$600.

The marginal cost is the additional cost over and above the costs already incurred. The \$10,000 price of the car should not be included in the marginal cost calculation since it is a sunk cost.

AACSB: Analytic

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Marginal Cost

43. You're deciding whether to install a \$400 moonroof and a \$200 security system in your car. Suppose the marginal benefit from the moonroof is \$350 and the marginal benefit from the security system is \$300. The economic decision rule dictates that you should:

- A. purchase only the moonroof because that will provide you with the greatest marginal benefit.
- B.** purchase only the security system because its marginal benefit exceeds its marginal cost.
- C. purchase both options because the combined cost of both is less than the combined benefit.
- D. not purchase either because the benefits of each do not exceed the costs.

The economic decision rule is that if relevant benefits exceed relevant costs, do it. If relevant costs exceed relevant benefits, don't do it. Since the marginal benefit of the moonroof does not exceed the marginal cost, don't buy it. Since the marginal benefit of the security system does exceed the marginal cost, buy it.

AACSB: Analytic

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Decision Rule

44. A student who has paid nonrefundable tuition of about \$45 a lecture estimates the marginal benefit of each lecture to be \$60. What additional information would she need to make a rational decision to attend class?
- A. The tuition for other classes
 - B.** The value of her time that she could spend doing something else
 - C. The value of the professor's time
 - D. None, since she has enough information already

The relevant cost in this case is the opportunity cost of attending class, which for this student means the value of her time doing the next best activity. The \$45 in this case is a sunk cost and should not enter into the decision.

AACSB: Analytic

Blooms: Understand

Difficulty: 3 Hard

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Opportunity Cost

45. More than 10,000 visitors waited in line up to two hours to see the rare flower titan arum at the Cambridge Botanic Gardens. Before the decision to wait in line is made, economists consider the two-hour waiting time part of the:

- A. marginal benefit of viewing the flower.
- B. sunk costs of viewing the flower.
- C. invisible hand.
- D.** opportunity cost of viewing the flower.

In this case, the cost of viewing the flower was not monetary but time. Opportunity costs are what you give up.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Opportunity Cost

46. Your opportunity cost of taking this course is:

- A. the tuition you paid for the course.
- B.** the net benefit of the activity you would have chosen if you had not taken the course.
- C. the net benefit of taking this course.
- D. the cost of the activity you would have chosen if you had not taken the course.

Opportunity cost is what you must sacrifice when you choose an activity. By taking this course, you are sacrificing the benefit you could have obtained from the activity you would have chosen if you had not taken the course.

AACSB: Analytic

Blooms: Analyze

Difficulty: 2 Medium

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Opportunity Cost

47. Economic reasoning would argue that there is an opportunity cost to:

- A.** all choices.
- B. more choices.
- C. only choices that involve money.
- D. only choices that do not involve money.

All activities involve choices and hence opportunity costs.

AACSB: Analytic

Blooms: Analyze

Difficulty: 3 Hard

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Opportunity Cost

48. Suppose you paid \$300 to take this economics course, which meets 30 times for one hour a class during the course of the semester. Instead of attending class you could have either flipped hamburgers for \$8 an hour or waited tables for \$5 an hour. Given this information, the opportunity cost of attending each class session is:

- A. \$30.
- B. \$8.**
- C. \$5.
- D. \$13.

The opportunity cost of an activity is the benefit forgone by not undertaking the next best activity. In this case, the next best activity is the job that pays \$8 an hour.

AACSB: Analytic

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Opportunity Cost

49. Opportunity cost:

- A. includes only monetary outlays.
- B. is the net benefit forgone by not undertaking the next best alternative.**
- C. is nonexistent for some choices.
- D. is the same as sunk cost.

Opportunity costs are the benefits forgone when an activity is undertaken, not the money paid to undertake an activity. All decisions involve opportunity costs because all decisions involve choices.

AACSB: Analytic

Blooms: Remember

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Opportunity Cost

50. Based on scientific nutritional studies, in most countries an income of \$1 a day does not provide sufficient food, shelter, and clothing to live. Under these conditions the medical risk of death is high. This statement is:

- A. a normative statement.
- B. a subjective statement.
- C. an art-of-economics statement.
- D.** an objective statement.

The statement, because it is stating factual information, is objective.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Positive Economics

51. The opportunity cost of attending college for one year is *best* measured by the:

- A. benefit received by the student.
- B. tuition paid for the year.
- C.** value of the next-best activity forgone by attending college.
- D. total money expenses associated with attending college.

Opportunity cost is the benefit forgone by undertaking an activity.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Opportunity Cost

52. The opportunity cost of attending college is likely to be *highest* for a high school graduate:
- A. whose next-best option is to flip hamburgers and who has access to no student loans.
 - B. whose next-best option is to be a retail salesperson and whose family is extremely wealthy.
 - C. whose next-best option is to drive a school bus but who has the promise of a six-figure salary after college.
 - D. who is capable of competing successfully in professional tennis.

Opportunity cost is the benefit forgone by undertaking an activity. Everyone except the potential tennis player has a relatively low opportunity cost since his or her next-best option does not pay well.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 3 Hard

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Opportunity Cost

53. Brooke and Sandy both attend the same college and have the same expenses for tuition, books, and supplies. However, Brooke is a famous actress who could earn \$2 million per year if she were not attending college whereas Sandy could earn \$10,000 a year serving hamburgers if he were not attending college. It follows that the opportunity cost of attending college:

- A. is the same for both Brooke and Sandy.
- B.** is greater for Brooke than for Sandy.
- C. is greater for Sandy than for Brooke.
- D. for Brooke and Sandy cannot be compared.

Opportunity cost is the benefit forgone by undertaking an activity. Since Brooke is forgoing a \$2 million salary and Sandy is forgoing a \$10,000 salary, the opportunity cost of attending college is greater for Brooke.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Opportunity Cost

54. Deion Sanders is a two-sport athlete who plays both pro football and pro baseball. He could earn \$1,000,000 playing either sport. Troy Aikman is also a two-sport athlete who plays both football and auto racing. He could earn \$1,000,000 playing football or \$200,000 racing cars. Garo Yepremian can play both football and soccer. He could earn \$1,000,000 playing football or \$50,000 playing soccer. Assuming that all three men have only two options for work and can pursue only one sport full-time, who has the highest opportunity cost of playing football?

- A. Deion Sanders
- B. Troy Aikman
- C. Garo Yepremian
- D. Their opportunity costs are the same.

Opportunity cost is the benefit forgone of the next best alternative. The opportunity cost of playing football is \$1,000,000 for Sanders, \$200,000 for Aikman, and \$50,000 for Yepremian. The highest opportunity cost of playing football is for Sanders, who would earn \$1,000,000 playing baseball.

AACSB: Analytic

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Opportunity Cost

55. Suppose a chemical plant dumps waste in a stream that also is used by a fish farm. If the chemical plant is granted the right to dump waste in the stream but is free to give up that right in exchange for a payment from the fish farm, the chemical plant will:
- A. never consider the damage done to the stream by its wastes as a cost.
 - B. never agree to give up the right to emit waste in the stream.
 - C. view the dumping damage as part of the opportunity cost of its output.
 - D. have the same opportunity cost of dumping before and after it is granted the right to dump.

The chemical plant could sell the right to dump to the fish farm. The opportunity cost of not selling the right to dump is the market value of the right to pollute. The chemical plant takes this into account when deciding whether to pollute the stream.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 3 Hard

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Opportunity Cost

56. When your wages rise, the:

- A. opportunity cost of an hour of work decreases.
- B. opportunity cost of an hour of leisure stays the same.
- C. cost of working increases.
- D.** opportunity cost of an hour of leisure increases.

The opportunity cost of working is the forgone benefit of leisure. The benefit of leisure does not change with a change in wage. The opportunity cost of leisure is the benefit forgone of working, or wages earned. In this case, the wage has risen and so has the opportunity cost of leisure.

AACSB: Analytic

Blooms: Analyze

Difficulty: 3 Hard

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Opportunity Cost

57. Economic reasoning would never help you decide:

- A. whom to marry.
- B. what kind of work to do.
- C. whether to read this book.
- D.** what is morally right and what is wrong.

What is right and wrong is a normative judgment about which economic reasoning has nothing to say.

AACSB: Analytic

Blooms: Analyze

Difficulty: 3 Hard

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Reasoning

58. If it takes you an hour to make a rational decision and the opportunity cost of that hour is \$100, you will:

A. always make rational decisions.

B. make rational decisions only if the benefit from doing so exceeds \$100.

C. make rational decisions only if the benefit from doing so is less than \$100.

D. never make rational decisions.

Only if the benefit from making rational decisions is greater than \$100 will it be worthwhile to make such decisions. Otherwise the time spent making rational decisions would be better spent doing the best alternative.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Reasoning

59. Applying the concept of opportunity cost to the pollution of a lake, an economist probably would conclude that:
- A. all pollution in the lake should be eliminated regardless of cost.
 - B. no pollution in the lake should be eliminated regardless of benefit.
 - C.** pollution should be eliminated as long as the benefit from a cleanup exceeds the opportunity cost.
 - D. pollution should be eliminated as long as the opportunity cost of a cleanup exceeds the cost of the resources required for the cleanup.

Only when this is true will the elimination of pollution produce net benefits.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Reasoning

60. For a given benefit, a rational person chooses the option that has:
- A.** the lowest opportunity cost.
 - B. the highest opportunity cost.
 - C. the average opportunity cost.
 - D. no opportunity cost.

The opportunity cost of an action is the benefit forgone when that action is undertaken.

Recognizing that all actions have an opportunity cost, the rational individual will choose the action that has the lowest opportunity cost.

AACSB: Analytic

Blooms: Analyze

Difficulty: 2 Medium

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Reasoning

61. More than 10,000 visitors waited up to two hours in line to see the rare flower titan arum at the Cambridge Botanical Gardens. What does this situation illustrate to an economist about rationing?

- A. Goods don't have to be rationed by lottery or first-come, first-served. Goods can be rationed by price.
- B.** When goods are not fully rationed by price, other rationing mechanisms such as waiting arise.
- C. When goods are not rationed by price, other rationing mechanisms such as lottery must be introduced.
- D. There is no need for rationing if anyone who waits long enough can see the flower.

Anything scarce must be rationed. Rationing by queue is an alternative to rationing by price.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Economic Force

62. Cockfighting is against the law in New Jersey, resulting in high-priced events held illegally in that state. What idea from Chapter 1 of the text does this story best illustrate?

- A. There ain't no such thing as a free lunch.
- B. The invisible hand is always invisible.
- C. Social and political forces sometimes rein in market forces.
- D. Maintaining objectivity is easiest in positive economics.

It is possible to get many messages from this incident, but it clearly illustrates a restriction on market activity by political and social forces in New Jersey.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Economic Reality

63. Prostitution is legal in Churchill County, Nevada, but a referendum threatened to close two brothels (prostitution businesses) in that county. What idea from Chapter 1 of the text does this story best illustrate?

- A. Sunk costs do not matter in making decisions.
- B. Marginal revenue should equal marginal cost.
- C. Social and political forces sometimes rein in market forces.
- D. Microeconomics and macroeconomics are very much interrelated.

It is possible to get many messages from this incident, but it clearly illustrates a restriction on market activity by political and social forces in most of the United States. Source:

www.lahontanvalleynews.com, August 25, 2004.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Economic Reality

64. Nepalese villagers sell their kidneys as a way to earn much-needed money. Unfortunately, although the demand for such kidneys in developed economies is high and the medical facilities are available to conduct kidney transplants, the selling and buying of organs is illegal. What idea from Chapter 1 of the text does this situation best illustrate?

- A. Sunk costs do not matter in making decisions.
- B. Marginal revenue should equal marginal cost.
- C. Social and political forces sometimes rein in market forces.
- D. Microeconomics and macroeconomics are very much interrelated.

It is probably possible to get many messages from this incident, but it clearly illustrates an attempt to restrict market activity by political and social forces.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Economic Reality

65. Countries such as Brazil, India, and Moldova—well-known sources of donors—have banned buying and selling organs. This legal action comes at the risk of driving the trade underground. What idea from Chapter 1 of the text does this story best illustrate?

- A. Legal and social forces can eliminate economic forces.
- B. Marginal revenue should equal marginal cost.
- C.** Economic forces always operate despite legal forces.
- D. The invisible hand is not always invisible.

It is possible to draw many conclusions from this story, but the fact that an underground trade emerged illustrates that legal forces cannot eliminate economic forces.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Economic Force

66. Economic forces:

- A.** are a reaction to scarcity.
- B. give rise to scarcity.
- C. are not related to scarcity.
- D. are not related to rationing.

Scarcity leads to rationing, and economic forces determine how rationing occurs.

AACSB: Analytic

Blooms: Analyze

Difficulty: 2 Medium

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

67. An economic force given relatively free rein by society to work through the market is:

- A.** a market force.
- B. a social force.
- C. a price mechanism.
- D. a political force.

The price mechanism is the mechanism that converts economic forces into market forces. See the definition of market force.

AACSB: Analytic

Blooms: Analyze

Difficulty: 2 Medium

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Market Force

68. The price mechanism that guides people's actions is called the:

- A. invisible market force.
- B.** invisible hand.
- C. invisible handshake.
- D. invisible foot.

The invisible hand is the price mechanism that guides people's actions as defined in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Invisible Hand

69. Antitrust laws are an example of:

- A. social forces.
- B. political forces.**
- C. economic forces.
- D. the invisible hand.

Political forces determine the legal environment, and this environment constrains the workings of the price mechanism. Antitrust laws may have been passed because of social forces, but as laws, they are political forces.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Political Force

70. Microsoft has just taken some senators out to dinner in Paris in a private jet. This is probably an example of an attempt to influence:

- A. economic forces.
- B. political forces.**
- C. social forces.
- D. the price mechanism.

This is an example in which Microsoft is lobbying lawmakers in order to influence political forces.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 3 Hard

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Political Force

71. The price of computers has fallen each year for the last 10 years. This is probably an example of the working of:

- A.** economic forces.
- B. political forces.
- C. social forces.
- D. nonmarket forces.

This is an example of the price mechanism changing as a result of changes in supply and demand, or the invisible hand.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 3 Hard

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Economic Force

72. A cultural norm is:

- A. an economic force.
- B.** a social force.
- C. a political force.
- D. a market force.

A cultural norm defines what is socially acceptable and is thus a social force.

AACSB: Analytic

Blooms: Remember

Difficulty: 2 Medium

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Social Force

73. The price mechanism is:

- A. not affected by social and political forces.
- B. affected by social but not political forces.
- C. affected by political but not social forces.
- D.** affected by both political and social forces.

Political and social forces affect the price mechanism through the legal system and through cultural norms.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Market Force

74. The price mechanism is:

- A.** also known as the invisible hand.
- B. the most efficient coordinating mechanism.
- C. part of the political process.
- D. the only possible outcome of economic forces.

The invisible hand is another name for the price mechanism.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Market Force

75. Political forces:

- A. affect the price mechanism through cultural norms.
- B.** affect the price mechanism through the legal system.
- C. affect the price mechanism through scarcity.
- D. do not affect the price mechanism.

Political forces determine the legal environment, and this environment constrains the workings of the price mechanism.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Political Force

76. Social forces:

- A.** affect the price mechanism through cultural norms.
- B. affect the price mechanism but not the legal system.
- C. affect the price mechanism through scarcity.
- D. do not affect the price mechanism.

Social forces determine cultural norms, and these norms constrain the workings of the price mechanism.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Social Force

77. Even though 60,000 individuals in the United States wait for kidney transplants and, for a price, there are many individuals who would be willing to supply a kidney (a healthy person can donate one kidney without any problems), it remains illegal to buy and sell organs in the United States. A market for kidneys does not exist because of:

- A. political forces.
- B. social forces.
- C. economic forces.
- D. market forces.

This example is similar to the discussion of adoption and a market for babies described in the text. Because it is illegal to buy and sell organs, there isn't a market because of political forces.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Political Force

78. Many drugs are illegal in the United States. Despite this law, illegal drugs are usually available at a price many times higher than they would be if the drugs weren't illegal. The high price of illegal drugs is an example of:

- A. the market affecting political forces.
- B.** political forces affecting the market.
- C. the failure of the market.
- D. the failure of political forces.

The fact that selling drugs is illegal is the consequence of the legal system. Economic forces, however, still operate, and the price mechanism, the invisible hand, also operates in this case in the black market.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Political Force

79. The fact that the price of a gallon of milk is likely to be more expensive at a convenience store than at a supermarket is an example of:

- A.** market forces.
- B. political forces.
- C. social forces.
- D. normative economics.

The higher price of milk at convenience stores is the effect of the invisible hand, or market forces.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Market Force

80. Economic forces:

- A. are more powerful than social and political forces.
- B. are more powerful than social forces but less powerful than political forces.
- C. are less powerful than social and political forces.
- D.** can be more or less powerful than political and social forces depending on the circumstances.

Economic forces are conditioned by the legal system and cultural norms. The extent of this conditioning varies depending on the nature of the legal system and cultural norms.

AACSB: Analytic

Blooms: Analyze

Difficulty: 2 Medium

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Economic Force

81. An economic model:

- A.** applies economic theory to understand real-world events.
- B. is so abstract that it cannot be applied to real-world events.
- C. can be used only to understand free markets.
- D. is an action taken to influence the course of economic events.

An economic model uses insights in more general theories to understand real-world events.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Economic Model

82. An economic principle:

- A. should be used to make every individual decision.
- B. generally is stated as a normative statement.
- C. can be combined with knowledge of economic institutions to make policy proposals.
- D. is an action taken to influence the course of economic events.

Economic principles are meant to describe individual or societal choices, not determine them.

To the best of their abilities economists strive to state economic principles in positive terms.

See the definition of economic principle in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Economic Principle

83. Economics is primarily:

- A. a normative science.
- B.** an observational science.
- C. a laboratory science.
- D. a natural science.

Economics is primarily an observational science because economists cannot in general conduct controlled experiments and must instead make inferences based on careful observation.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Economic Model

84. Which of the following is primarily an observational science rather than a laboratory science?

- A. Medicine
- B.** Economics
- C. Physics
- D. Chemistry

Economics is primarily an observational science because economists cannot in general conduct controlled experiments and must instead make inferences based on careful observation.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Economic Model

85. Experimental economics is:

- A. a naturally occurring event that approximates a controlled experiment.
- B. not possible given that economists study real-world events.
- C. a branch of economics that studies the economy through controlled lab experiments.
- D. what all economists do when they develop their models.

See the definition of experimental economics in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Experimental economics

86. An economist secures volunteers from her college campus and divides them into two groups that are ushered into different rooms. Both groups are given a test. Those in the first group who score 90 percent or more receive an Apple iPod. Upon exiting the room, those given iPods are offered the choice of receiving \$150 in exchange for the iPod. Only a few take the exchange. Those in the second group who score 90 percent are offered either an Apple iPod or \$150. About half the students choose \$150. The professor uses these data to support a principle known as the endowment effect. The professor is engaging in:

- A. experimental economics.
- B. natural experiments.
- C. the economic decision rule.
- D. a market coordination mechanism.

Since it is a laboratory experiment, it resides in experimental economics.

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Medium

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Experimental economics

87. A natural experiment is:

- A. a naturally occurring event that approximates a controlled experiment.
- B. not possible given that economists study real-world events.
- C. a branch of economics that studies the economy through controlled lab experiments.
- D. what all economists do when they develop their models.

See the definition of natural experiment in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Natural experiment

88. New Jersey raises its minimum wage while neighboring Pennsylvania does not. Economists compare the labor market in both states to draw conclusions about the effect of a minimum wage on employment and wages. This is an example of:

- A. experimental economics.
- B. a natural experiment.**
- C. an economic principle.
- D. the economic decision rule.

Since it is a naturally occurring event, it is a natural experiment.

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Medium

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Experimental economics

89. A theorem is:

- A. the application of models combined with judgment.
- B. a policy rule that concludes that a particular course of action is preferable.
- C. a proposition that is logically true based on the assumptions of a model.**
- D. a set of equations that define a model.

See the definition of theorem in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Economic Models

90. Propositions that are logically true based on the assumptions of a model are known as:

- A. precepts.
- B. theorems.**
- C. insights.
- D. policies.

See the definition of theorems in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Economic Models

91. That price tends to fall when quantity supplied is greater than quantity demanded is an example of:

- A. an economic theorem.**
- B. an economic precept.
- C. a natural experiment.
- D. efficiency.

This is the invisible hand theorem, and so it is a theorem.

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Medium

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Economic Models

92. A precept is:

- A. the application of models combined with judgment.
- B.** a policy rule that concludes that a particular course of action is preferable.
- C. a proposition that is logically true based on the assumptions of a model.
- D. a set of equations that define a model.

See the definition of precept in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Economic Models

93. A policy rule that concludes that a particular course of action is preferable is known as a(n):

- A.** precept.
- B. theorem.
- C. insight.
- D. policy.

See the definition of precept in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-04 Explain how economic insights are developed and used.

94. Because the invisible hand allocates resources efficiently, economies ought to minimize government interference is an example of:
- A. an economic theorem.
 - B. an economic precept.**
 - C. a natural experiment.
 - D. efficiency.

Because the theorem (the invisible hand allocates resources efficiently) is combined with judgment (that real-world economies conform to the assumptions of the invisible hand theorem) to result in a policy recommendation, this is an example of a precept.

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Medium

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Economic Model

95. Which statement *best* summarizes the invisible hand theorem?

- A. Government policies direct people's selfish desires (tempered by social and economic forces) to the common good.
- B. Cultural norms direct people's selfish desires (tempered by political and economic forces) to the common good.
- C. Markets direct people's selfish desires (tempered by political and social forces) to the common good.
- D. Social, political, and economic forces act against people's selfish desires to promote the common good.

The invisible hand theorem states that economic forces (or the invisible hand) guide the actions of individuals to the common good. We know, however, that these forces are checked by culture (social forces) and the government (political forces).

AACSB: Analytic

Blooms: Analyze

Difficulty: 1 Easy

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Invisible Hand Theorem

96. A necessary assumption behind the invisible hand theorem is that:

- A. market forces are determined by cultural norms.
- B. market forces produce inefficient outcomes.
- C. the price mechanism is not constrained by political or social forces.
- D. people behave rationally.

Unless people behave rationally, market forces will not work.

AACSB: Analytic

Blooms: Remember

Difficulty: 2 Medium

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Invisible Hand Theorem

97. An economist who is studying the relationship between the money supply, interest rates, and the rate of inflation is engaged in:

- A. microeconomic research.
- B.** macroeconomic research.
- C. theoretical research because there are no data on these variables.
- D. empirical research because there is no economic theory related to these variables.

Students should recognize that inflation is one of the topics mentioned in the text that are considered in macroeconomics, but they will have to demonstrate some understanding of research methods to know that one can obtain data on the money supply, interest rates, and the rate of inflation and that macroeconomic theory must relate to these variables.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Macroeconomics

98. The invisible hand theorem comes from:

- A. microeconomics.
- B. macroeconomics.
- C. sociology.
- D. political science.

This statement is directly from the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-04 Explain how economic insights are developed and used.

Topic: Microeconomics

99. Microeconomics and macroeconomics are:

- A. not related because they are taught as separate courses.
- B. virtually identical, though one is much more difficult than the other.
- C. interrelated because what happens in the economy as a whole is based on individual decisions.
- D. interrelated because both are taught by the same teacher.

What happens in the economy as a whole is based on individual decisions, but individual decisions are made within an economy and can be understood only within that context.

AACSB: Analytic

Blooms: Remember

Difficulty: 2 Medium

Learning Objective: 01-01 Define economics and identify its components.

Topic: Microeconomics/Macroeconomics

100. Which of the following is least likely to be studied in macroeconomics?

- A. Inflation
- B. Unemployment
- C. Business cycles
- D. Advertising**

Macroeconomics is the study of inflation, unemployment, business cycles, and growth as defined in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 2 Medium

Learning Objective: 01-01 Define economics and identify its components.

Topic: Macroeconomics

101. Macroeconomics is:

- A. the study of individual choice and how that choice is influenced by economic forces.
- B. the study of the pricing policies of firms and the purchasing decisions of households.
- C. the study of aggregate economic relationships.**
- D. an analysis of economic reality that proceeds from the parts to the whole.

As discussed in the text, macroeconomics focuses on aggregate relationships.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Macroeconomics

102. Which of the following topics is *best* categorized as a macroeconomic issue?

- A. The choices a student makes in selecting college courses
- B. The decision by Apple to produce fewer Macintosh computers
- C. The effect of a drought on the price of corn
- D.** The effect of an increase in federal spending on the unemployment rate

"The effect of an increase in federal spending on the unemployment rate" focuses on an aggregate relationship.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Macroeconomics

103. Who would probably argue that you need to study the forest before you can understand the trees?

- A. A microeconomist
- B.** A macroeconomist
- C. A normative economist
- D. A classical economist

Macroeconomists focus on aggregate relationships first.

AACSB: Analytic

Blooms: Analyze

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Macroeconomics

104. Who probably would argue that you need to study the trees before you can understand the forest?

- A. A microeconomist
- B. A macroeconomist
- C. A positive economist
- D. A Marshallian economist

Microeconomists focus on individual relationships first.

AACSB: Analytic

Blooms: Analyze

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Microeconomics

105. Microeconomics includes the study of:

- A. inflation.
- B. unemployment.
- C. business cycles.
- D. a firm's pricing policies.

Inflation, unemployment, and business cycles are all part of macroeconomics.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Microeconomics

106. Macroeconomics includes the study of:

- A. inflation.
- B. firm pricing policies.
- C. the relative prices of oil and coal.
- D. individual choice.

Macroeconomics is the study of inflation, unemployment, business cycles, and growth.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Macroeconomics

107. The invisible hand theorem relates mostly to:

- A. microeconomics.
- B. macroeconomics.
- C. normative economics.
- D. Marshallian economics.

The invisible hand theorem is the price mechanism that affects individual decisions.

AACSB: Analytic

Blooms: Analyze

Difficulty: 1 Easy

Learning Objective: 01-03 Explain real-world events in terms of economic forces; social forces; and political forces.

Topic: Microeconomics

108. The study of individual choice is a focus in:

- A.** microeconomics.
- B. macroeconomics.
- C. normative economics.
- D. Ricardian economics.

Microeconomics is the study of individual choice.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Microeconomics

109. The study of inflation is a topic in:

- A. microeconomics.
- B.** macroeconomics.
- C. classical economics.
- D. normative economics.

Macroeconomics is the study of inflation, unemployment, business cycles, and growth.

AACSB: Analytic

Blooms: Remember

Difficulty: 2 Medium

Learning Objective: 01-01 Define economics and identify its components.

Topic: Macroeconomics

110. A basic difference between microeconomics and macroeconomics is that:

- A. microeconomics focuses on the choices of individual consumers, whereas macroeconomics considers the behavior of large businesses.
- B. microeconomics focuses on financial reporting by individuals, whereas macroeconomics focuses on financial reporting by large firms.
- C. microeconomics examines the choices made by individual participants in an economy, whereas macroeconomics considers the economy's overall performance.
- D. microeconomics focuses on national markets, whereas macroeconomics concentrates on international markets.

See the definition of microeconomics and macroeconomics in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

Topic: Microeconomics/Macroeconomics

111. The determination of prices and the behavior of individual markets are studied in _____, whereas topics such as business cycles, unemployment, and inflation are studied in _____:

- A. macroeconomics, microeconomics.
- B. positive analysis, normative analysis.
- C. microeconomics, normative analysis.
- D. microeconomics, macroeconomics.**

Microeconomics is the study of individual choice, whereas macroeconomics is the study of inflation, unemployment, business cycles, and growth.

AACSB: Analytic

Blooms: Analyze

Difficulty: 2 Medium

Learning Objective: 01-01 Define economics and identify its components.

Topic: Microeconomics/Macroeconomics

112. Which of the following topics is most appropriately studied in a microeconomics course?

- A. The decision by a nurse to change professions**
- B. When the next recession will arrive
- C. Why unemployment is so low and inflation has not accelerated
- D. How the presidential candidates' tax plans might affect economic growth

Microeconomics is the study of individual choice.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-01 Define economics and identify its components.

113. Which of the following is *not* an economic institution?

- A. Corporations
- B. Government
- C. Cultural norms
- D.** None of these options

Each of the above is a physical or mental structure that significantly influences economic decisions.

AACSB: Analytic

Blooms: Analyze

Difficulty: 3 Hard

Learning Objective: 01-02 Discuss various ways in which economists use economic reasoning.

Topic: Economic Institution

114. An economic policy is:

- A. a generalization about the workings of an abstract economy.
- B. a physical or mental structure that significantly influences economic decisions.
- C.** an action taken to influence the course of economic events.
- D. a standard people use when they determine whether a particular activity or behavior is acceptable.

See the definition of an economic policy in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

115. Positive economics seeks to:

- A. determine the most appropriate economic goals for society.
- B. determine what government economic policies are best.
- C.** objectively explain how the economy functions.
- D. objectively explain how societies value different economic outcomes.

Positive economics attempts to explain why the economy works the way it does without making value judgments.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Positive Economics

116. Normative economics seeks to:

- A.** determine the most appropriate economic goals for a society.
- B. determine how government policies affect the economy.
- C. objectively explain how the economy functions.
- D. objectively explain economic problems such as inflation and unemployment.

Normative economics attempts to determine what an economy should look like and what it should accomplish.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

117. The statement "government should provide affordable health care coverage for every member of society" is:

- A. a statement that everyone agrees with.
- B. a statement that everyone disagrees with.
- C. a positive statement.
- D.** a normative statement.

Regardless of how many agree or disagree with this statement, it is making a specific policy recommendation and therefore qualifies as a normative statement.

AACSB: Analytic

Blooms: Analyze

Difficulty: 1 Easy

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Normative Economics

118. Say that an economic model concludes that "government can maintain current Social Security benefit levels for every retiree by raising payroll taxes." This conclusion is:

- A. a normative statement because there is disagreement over whether Social Security benefits should be maintained.
- B.** a positive statement because raising payroll taxes is one way to maintain Social Security benefits.
- C. a statement in the art of economics because it is about policy.
- D. false because there is no payroll tax rate high enough to maintain current benefits.

In spite of controversy regarding how best to maintain Social Security, it is true that a higher payroll tax rate could be used to maintain current benefit levels. This is not a normative statement since it does not advocate a particular action.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Positive Economics

119. The United States provides less than 10 cents for every dollar of income as foreign aid even though it is the richest country in the world. This is:

- A. a normative statement.
- B. a subjective statement.
- C. an art-of-economics statement.
- D.** an objective statement.

The statement, because it is stating factual information, is objective.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Positive Economics

120. Every four years during presidential campaigns, the issue of whether the United States should replace the electoral college method of determining the winner of the presidency arises. Which of the following statements about this debate is the best example of a statement in positive economics?

- A.** A candidate could lose the popular vote and win the electoral vote.
- B. Because the present system works, we should keep it.
- C. Any system that does not weigh votes equally is unfair.
- D. We should abandon the electoral college because only the popular vote represents true democracy.

That a candidate could lose the popular vote and win the electoral vote is factual. All the other statements are discussing what is desirable or undesirable and hence are normative. This question was inspired by an editorial in the *Wall Street Journal* on September 8, 2004.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Positive Economics

121. Which of the following statements about urban sprawl and traffic congestion is the best illustration of a normative statement?

- A. Snarled traffic cost motorists in the 85 largest U.S. cities 3.5 billion hours in 2002.
- B. The average U.S. urban traveler was stuck in road traffic 46 hours in 2002.
- C. Traffic congestion has increased in the last 20 years.
- D. Because urban sprawl is the result of individual choice, it is okay.

Statistical statements are positive. Statements that argue what should be are normative. The source for part of this question is an article of September 7, 2004, on www.canada.com titled "Urban sprawl making for bigger cities and bigger traffic jams: US study."

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Normative Economics

122. Which of the following is the best example of a positive question?

- A. How should the government deal with the next recession?
- B. Should the government reduce inflation?
- C. How are price and quantity demanded related?
- D. Should government allow two large companies to merge?

The answer to this question does not involve a value judgment, and so the question is not normative.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Positive Economics

123. Positive economics is:

- A. subjective.
- B. neither objective nor subjective.
- C. more objective than normative economics.
- D. more subjective than normative economics.

Positive economics relies on objective analysis and tries to keep subjective analysis to a minimum.

AACSB: Analytic

Blooms: Analyze

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Positive Economics

124. Value judgments in economics:

- A. are necessary when objective analysis cannot address a question.
- B. can always be avoided with the use of objective analysis.
- C. are essential parts of positive economics.
- D. can be avoided through the use of normative economics.

Objective analysis is useful only in explaining what is and cannot be used to address what should be. Value judgments must be made in deciding what should be.

AACSB: Analytic

Blooms: Analyze

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Normative Economics

125. Economics is an art because it:

- A. is not scientific.
- B. relies entirely on value judgments.
- C.** blends objective and subjective analyses.
- D. blends positive and objective analyses.

Economics is an art because economists must combine the results of their objective analysis with their own value judgments to determine what economic policies are most appropriate for a society.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Art of Economics

126. The art of economics is:

- A. the application of the knowledge gained by positive economics to the goals set in normative economics.
- B. purely technical and therefore more objective than positive or normative economics.
- C. purely subjective so that the economist as artist does not have to strive for the same level of objectivity that positive or normative economists do.
- D. the branch of economics farthest removed from practical application, since its goal is to create the most elegant mathematical models.

See the definition of the art of economics given in the text.

AACSB: Analytic

Blooms: Remember

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Art of Economics

127. "We should support the market because it is efficient" is an example of:

- A. positive economics.
- B. normative economics.
- C. objective economics.
- D. negative economics.

Although economic theory (positive economics) says that the market is efficient, a statement that we should support it is a normative statement.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 3 Hard

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Normative Economics

128. "The distribution of income should be left to the market" is an example of:

- A. positive economics.
- B. normative economics.**
- C. the art of economics.
- D. negative economics.

"Should" statements are always normative.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 3 Hard

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Normative Economics

129. What relates positive economics to normative economics?

- A. Microeconomics
- B. Macroeconomics
- C. The art of economics**
- D. The science of economics

The art of economics relates positive economics to normative economics.

AACSB: Analytic

Blooms: Remember

Difficulty: 1 Easy

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Art of Economics

130. "Price controls in competitive markets cause shortages" is an example of:

- A. positive economics.
- B. normative economics.
- C. the art of economics.
- D. classical economics.

Positive economics is the study of what is. We know that price controls usually cause shortages from the text.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 3 Hard

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Positive Economics

131. "Government should not use price controls" is an example of:

- A. positive economics.
- B. normative economics.
- C. the art of economics.
- D. Marshallian economics.

"Should" statements are always normative, or based on opinion.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 3 Hard

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Normative Economics

132. Maintaining objectivity is easiest in:

- A. positive economics.
- B. the art of economics.
- C. normative economics.
- D. subjective economics.

Maintaining objectivity is easiest when one is working with abstract models to understand how the economy works, as is the case in positive economics.

AACSB: Analytic

Blooms: Analyze

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Positive Economics

133. Identifying the effect of an increase in the money supply on prices requires the use of:

- A. positive economics.
- B. the art of economics.
- C. normative economics.
- D. subjective economics.

This requires only the application of an abstract model to understand how the economy works, which is positive economics.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 2 Medium

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Positive Economics

134. Which of the following is a normative statement?

- A. Reducing the budget deficit will also reduce the balance of trade deficit.
- B. Tariffs on imported cars result in higher prices for domestic auto consumers.
- C. A tax cut will cause higher inflation.
- D.** The governments should spend more to aid the poor.

A normative statement is a statement about what should be.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Normative Economics

135. Which of the following is the best example of a normative question?

- A. How does the market for corn work?
- B. How do prices affect the market for coffee?
- C. How does the money market work?
- D.** Will the redistribution of income make society better off?

Normative economics is the study of what the economy should be, not the study of how the economy works, which is positive economics.

AACSB: Reflective Thinking

Blooms: Understand

Difficulty: 1 Easy

Learning Objective: 01-05 Distinguish among positive economics; normative economics; and the art of economics.

Topic: Normative Economics