

Problems and Short-Answer Questions

Practice Problems

1. Identify the parts of the circular-flow diagram immediately involved in the following transactions.

a. Mary buys a car from General Motors for \$20,000.

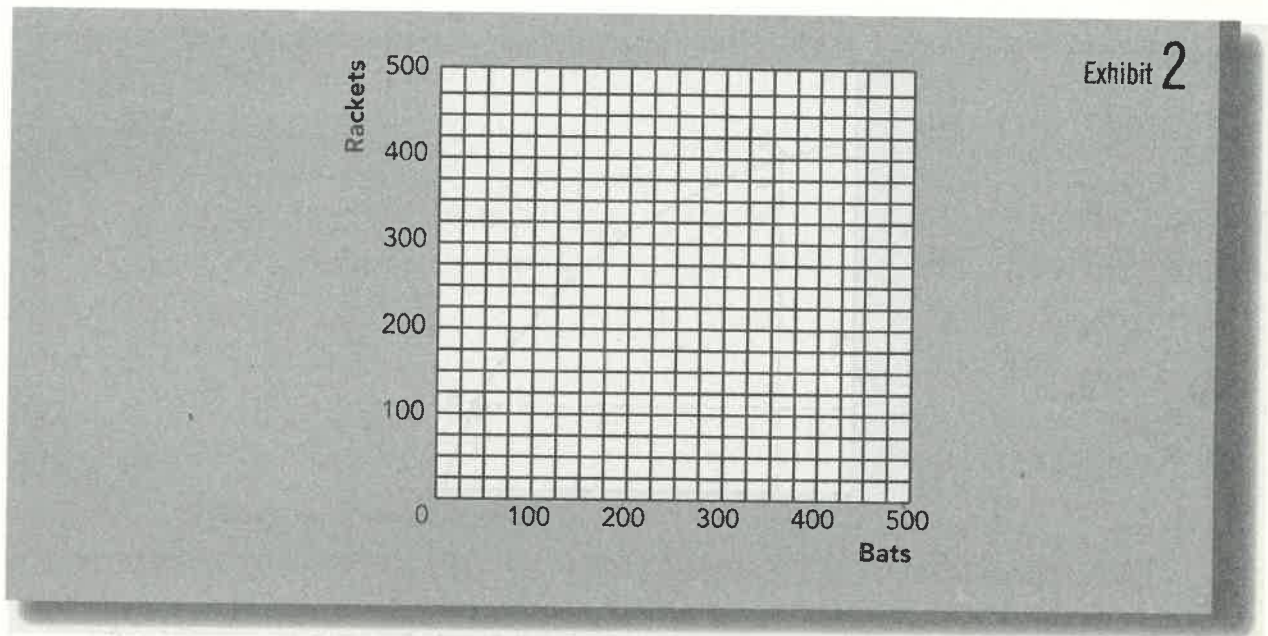
b. General Motors pays Joe \$5,000 per month for work on the assembly line.

c. Joe gets a \$15 haircut.

d. Mary receives \$10,000 of dividends on her General Motors stock.

2. The following table provides information about the production possibilities frontier of Athletic Country.

Bats	Rackets
0	420
100	400
200	360
300	300
400	200
500	0



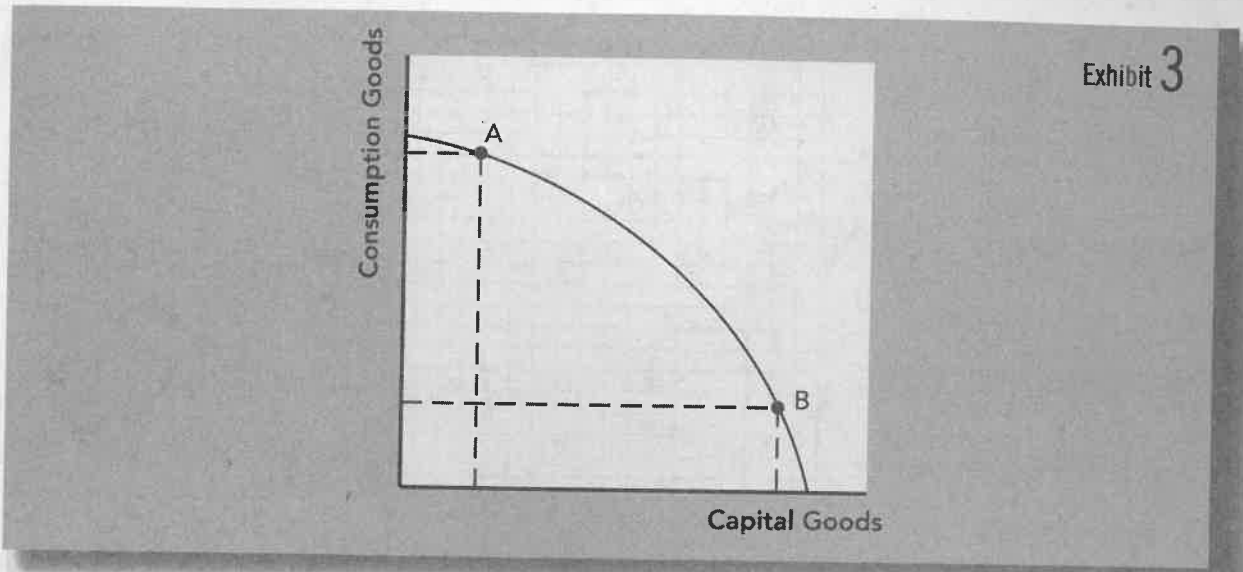
- a. In Exhibit 2, plot and connect these points to create Athletic Country's production possibilities frontier.
- b. If Athletic Country currently produces 100 bats and 400 rackets, what is the opportunity cost of an additional 100 bats?

- c. If Athletic Country currently produces 300 bats and 300 rackets, what is the opportunity cost of an additional 100 bats?

- d. Why does the additional production of 100 bats in part *c* cause a greater trade-off than the additional production of 100 bats in part *b*?

- e. Suppose Athletic Country is currently producing 200 bats and 200 rackets. How many additional bats could they produce without giving up any rackets? How many additional rackets could they produce without giving up any bats?

- f. Is the production of 200 bats and 200 rackets efficient? Explain.

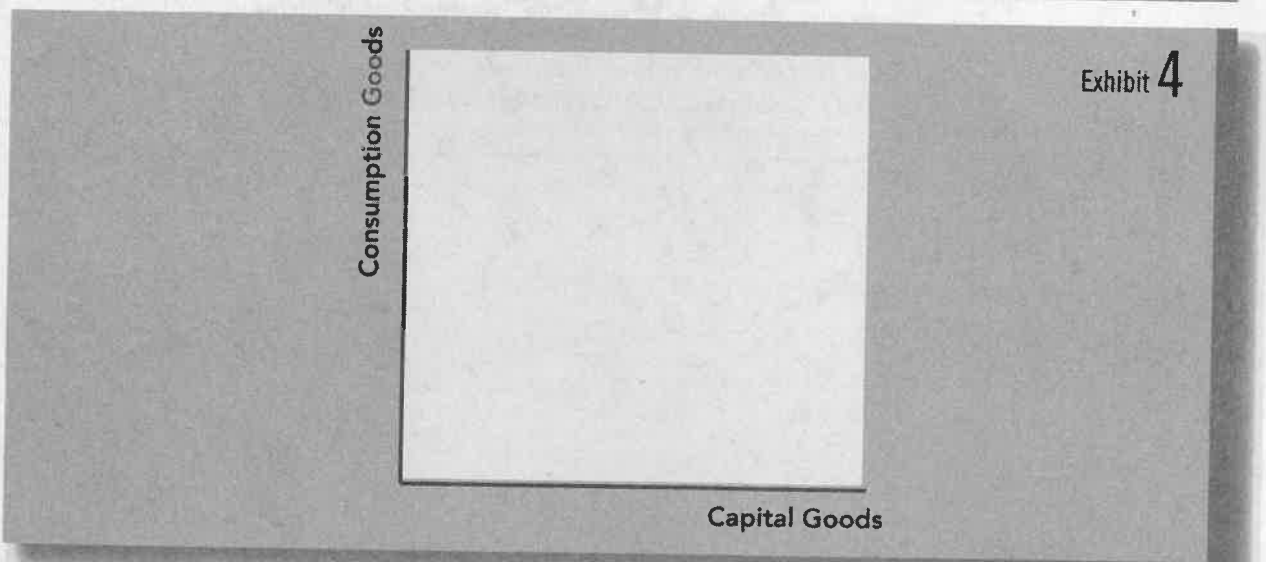


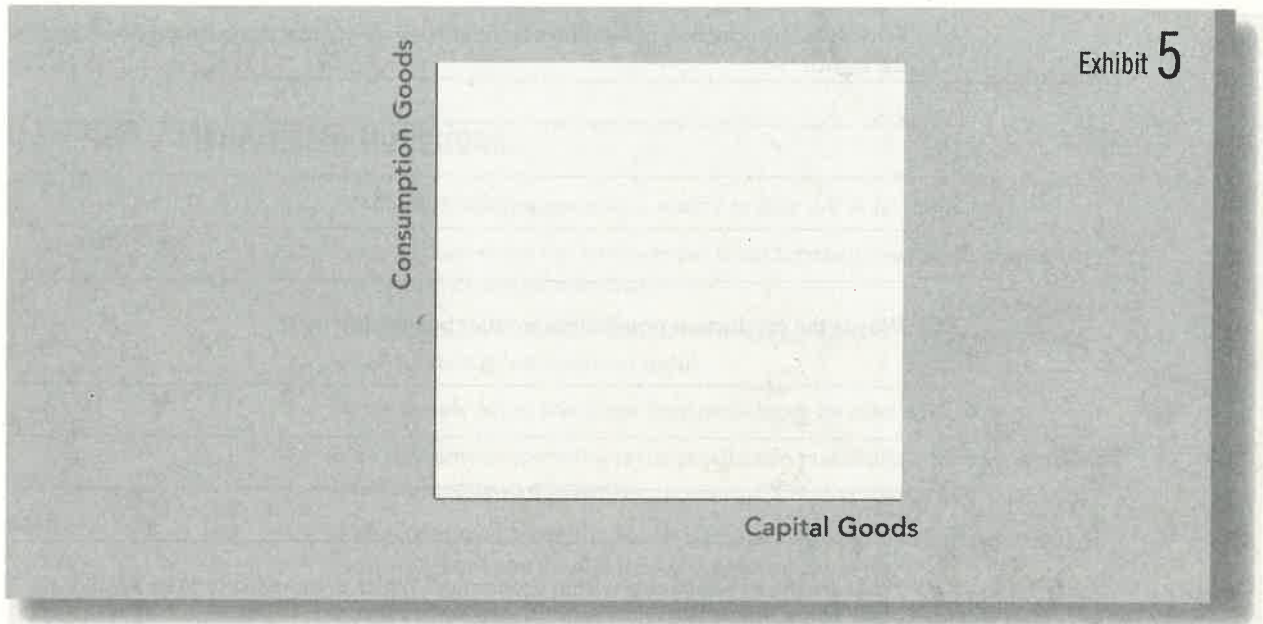
3. The production possibilities frontier in Exhibit 3 shows the available trade-offs between consumption goods and capital goods. Suppose two countries face this identical production possibilities frontier.

- a. Suppose Party Country chooses to produce at point A, while Parsimonious Country chooses to produce at point B. Which country will experience more growth in the future? Why?

- b. In this model, what is the opportunity cost of future growth?

- c. Demonstrate in Exhibit 4 the impact of growth on a production possibilities frontier such as the one shown here. Would the production possibilities frontier for Parsimonious Country shift more or less than that for Party Country? Why?





- d. On the graph in Exhibit 5, show the shift in the production possibilities curve if there was an increase in technology that only affected the production of capital goods.
- e. Does the shift in part *d* imply that all additional production must be in the form of capital goods? Why?

Short-Answer Questions

1. Describe the scientific method.

2. What is the role of assumptions in any science?

3. Is a more realistic model always better?

4. Why does a production possibilities frontier have a negative slope (slope down and to the right)?

5. Why is the production possibilities frontier bowed outward?

6. What are the two subfields within economics? Which is more likely to be a building block of the other? Why?

7. When an economist makes a normative statement, is she more likely to be acting as a scientist or a policy adviser? Why?

8. Which statements are testable: positive statements or normative statements? Why?

9. Name two reasons why economists disagree.

10. Name two economic propositions for which more than 90 percent of economists agree.

Self-Test

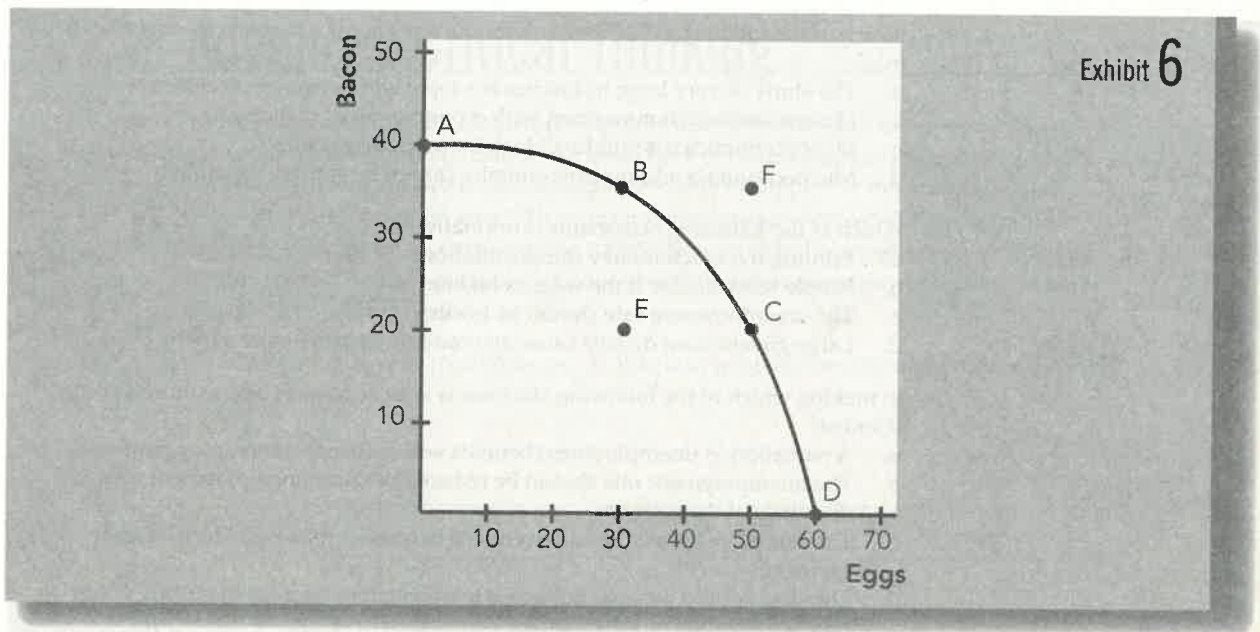
True/False Questions

- 1. Economic models must mirror reality or they are of no value.
- 2. Assumptions make the world easier to understand because they simplify reality and focus our attention.
- 3. It is reasonable to assume that the world is composed of only one person when modeling international trade.
- 4. When people act as scientists, they must try to be objective.
- 5. If an economy is operating on its production possibilities frontier, it must be using its resources efficiently.
- 6. If an economy is operating on its production possibilities frontier, it must produce less of one good if it produces more of another.
- 7. Points outside the production possibilities frontier are attainable but inefficient.
- 8. If an economy were experiencing substantial unemployment, the economy is producing inside the production possibilities frontier.
- 9. The production possibilities frontier is bowed outward because the trade-off between the production of any two goods is constant.
- 10. An advance in production technology would cause the production possibilities curve to shift outward.
- 11. Macroeconomics is concerned with the study of how households and firms make decisions and how they interact in specific markets.
- 12. The statement, "An increase in inflation tends to cause unemployment to fall in the short run" is normative.
- 13. When economists make positive statements, they are more likely to be acting as scientists.
- 14. Normative statements can be refuted with evidence.
- 15. Most economists believe that tariffs and import quotas usually reduce general economic welfare.

Multiple-Choice Questions

- 1. The scientific method requires that
 - a. scientists use test tubes and have clean labs.
 - b. scientists be objective.
 - c. scientists use precision equipment.
 - d. only incorrect theories are tested.
 - e. only correct theories are tested.
- 2. Which of the following is most likely to produce scientific evidence about a theory?
 - a. an economist employed by the AFL/CIO doing research on the impact of trade restrictions on workers' wages
 - b. a radio talk show host collecting data on how capital markets respond to taxation
 - c. a tenured economist employed at a leading university analyzing the impact of bank regulations on rural lending
 - d. a lawyer employed by General Motors addressing the impact of air bags on passenger safety

3. Which of the following statements regarding the circular-flow diagram is true?
 - a. The factors of production are owned by households.
 - b. If Susan works for IBM and receives a paycheck, the transaction takes place in the market for goods and services.
 - c. If IBM sells a computer, the transaction takes place in the market for factors of production.
 - d. The factors of production are owned by firms.
 - e. None of the above is true.
4. In which of the following cases is the assumption most reasonable?
 - a. To estimate the speed at which a beach ball falls, a physicist assumes that it falls in a vacuum.
 - b. To address the impact of money growth on inflation, an economist assumes that money is strictly coins.
 - c. To address the impact of taxes on income distribution, an economist assumes that everyone earns the same income.
 - d. To address the benefits of trade, an economist assumes that there are two people and two goods.
5. Economic models are
 - a. created to duplicate reality.
 - b. built with assumptions.
 - c. usually made of wood and plastic.
 - d. useless if they are simple.
6. Which of the following is *not* a factor of production?
 - a. land
 - b. labor
 - c. capital
 - d. money
 - e. All of the above are factors of production.
7. Points on the production possibilities frontier are
 - a. efficient.
 - b. inefficient.
 - c. unattainable.
 - d. normative.
 - e. none of the above.
8. Which of the following will not shift a country's production possibilities frontier outward?
 - a. an increase in the capital stock
 - b. an advance in technology
 - c. a reduction in unemployment
 - d. an increase in the labor force
9. Economic growth is depicted by
 - a. a movement along a production possibilities frontier toward capital goods.
 - b. a shift in the production possibilities frontier outward.
 - c. a shift in the production possibilities frontier inward.
 - d. a movement from inside the curve toward the curve.



Use Exhibit 6 to answer questions 10 through 13.

10. If the economy is operating at point C, the opportunity cost of producing an additional 15 units of bacon is
 - a. 10 units of eggs.
 - b. 20 units of eggs.
 - c. 30 units of eggs.
 - d. 40 units of eggs.
 - e. 50 units of eggs.
11. If the economy were operating at point E,
 - a. the opportunity cost of 20 additional units of eggs is 10 units of bacon.
 - b. the opportunity cost of 20 additional units of eggs is 20 units of bacon.
 - c. the opportunity cost of 20 additional units of eggs is 30 units of bacon.
 - d. 20 additional units of eggs can be produced with no impact on bacon production.
12. Point F represents
 - a. a combination of production that can be reached if we reduce the production of eggs by 20 units.
 - b. a combination of production that is inefficient because there are unemployed resources.
 - c. a combination of production that can be reached if there is a sufficient advance in technology.
 - d. none of the above.
13. As we move from point A to point D,
 - a. the opportunity cost of eggs in terms of bacon is constant.
 - b. the opportunity cost of eggs in terms of bacon falls.
 - c. the opportunity cost of eggs in terms of bacon rises.
 - d. the economy becomes more efficient.
 - e. the economy becomes less efficient.
14. Which of the following issues is related to microeconomics?
 - a. the impact of money on inflation
 - b. the impact of technology on economic growth
 - c. the impact of the deficit on saving
 - d. the impact of oil prices on auto production

15. Which of the following statements about microeconomics and macroeconomics is *not* true?
- The study of very large industries is a topic within macroeconomics.
 - Macroeconomics is concerned with economy-wide phenomena.
 - Microeconomics is a building block for macroeconomics.
 - Microeconomics and macroeconomics cannot be entirely separated.
16. Which of the following statements is normative?
- Printing too much money causes inflation.
 - People work harder if the wage is higher.
 - The unemployment rate should be lower.
 - Large government deficits cause an economy to grow more slowly.
17. In making which of the following statements is an economist acting more like a scientist?
- A reduction in unemployment benefits will reduce the unemployment rate.
 - The unemployment rate should be reduced because unemployment robs individuals of their dignity.
 - The rate of inflation should be reduced because it robs the elderly of their savings.
 - The state should increase subsidies to universities because the future of our country depends on education.
18. Positive statements are
- microeconomic.
 - macroeconomic.
 - statements of prescription that involve value judgments.
 - statements of description that can be tested.
19. Suppose two economists are arguing about policies that deal with unemployment. One economist says, "The government should fight unemployment because it is the greatest social evil." The other economist responds, "Hogwash. Inflation is the greatest social evil." These economists
- disagree because they have different scientific judgments.
 - disagree because they have different values.
 - really don't disagree at all. It just looks that way.
 - do none of the above.
20. Suppose two economists are arguing about policies that deal with unemployment. One economist says, "The government could lower unemployment by one percentage point if it would just increase government spending by 50 billion dollars." The other economist responds, "Hogwash. If the government spent an additional 50 billion dollars, it would reduce unemployment by only one-tenth of 1 percent, and that effect would only be temporary!" These economists
- disagree because they have different scientific judgments.
 - disagree because they have different values.
 - really don't disagree at all. It just looks that way.
 - do none of the above.

Advanced Critical Thinking

You are watching the *PBS NewsHour* on public television. The first focus segment is a discussion of the pros and cons of free trade (lack of obstructions to international trade). For balance, there are two economists present—one in support of free trade and one opposed. Your roommate says, “Those economists have no idea what’s going on. They can’t agree on anything. One says free trade makes us rich. The other says it will drive us into poverty. If the experts don’t know, how is the average person ever going to know whether free trade is best?”

1. Can you give your roommate any insight into why economists might disagree on this issue?

2. Suppose you discover that 93 percent of economists believe that free trade is generally best (which is the greatest agreement on any single issue). Could you now give a more precise answer as to why economists might disagree on this issue?

3. What if you later discovered that the economist opposed to free trade worked for a labor union. Would that help you explain why there appears to be a difference of opinion on this issue?
