

## Terms and Definitions

Choose a definition for each key term.

Key Terms	Definitions
___ Scarcity	1. The property of distributing economic prosperity uniformly among society's members
___ Economics	2. A situation in which the market fails to allocate resources efficiently
___ Efficiency	3. Limited resources and unlimited wants
___ Equality	4. The amount of goods and services produced from each unit of labor input
___ Opportunity cost	5. The case in which there is only one seller in the market
___ Rational	6. The principle that self-interested market participants may unknowingly maximize the welfare of society as a whole
___ Marginal change	7. The property of society getting the most from its scarce resources
___ Incentive	8. An economic system where interaction of households and firms in markets determines the allocation of resources
___ Market economy	9. Fluctuations in economic activity
___ Property rights	10. When one person's actions have an impact on a bystander
___ "Invisible hand"	11. An increase in the overall level of prices
___ Market failure	12. An incremental adjustment to an existing plan
___ Externality	13. Study of how society manages its scarce resources
___ Market power	14. Whatever is given up to get something else
___ Monopoly	15. The ability of an individual or group to substantially influence market prices
___ Productivity	16. Something that induces a person to act
___ Inflation	17. The ability of an individual to own and exercise control over scarce resources
___ Business cycle	18. Systematically and purposefully doing the best you can to achieve your objectives

## Problems and Short-Answer Questions

### Practice Problems

- People respond to incentives. Governments can alter incentives and, hence, behavior with public policy. However, sometimes public policy generates unintended consequences by producing results that were not anticipated. For each of the following public policies, determine which result was likely the intended result and which was the unintended consequence.
  - The government raises the minimum wage to \$10 per hour. Some workers find jobs at the higher wage making these workers better off. Some workers find no job at all because few firms want to hire low-productivity workers at this high wage.

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- b. The government places rent controls on apartments restricting rent to \$300 per month. Few landlords are willing to produce an apartment at this price causing more homelessness. Some low-income renters are able to rent an apartment more cheaply.

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- c. The government raises the tax on gasoline by \$2 per gallon. The deficit is reduced, and people economize on their use of gasoline. There is a boom in bicycle sales.

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- d. The government declares marijuana and cocaine illegal. The price of illegal drugs increases, creating more gangs and gang warfare. Due to the high price of illegal drugs, fewer street drugs are consumed.

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- e. The government prohibits the killing of wolves. The wolf population increases. Sheep and cattle herds suffer losses.

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- f. The government bans imports of sugar from South America. South American sugar beet growers can't repay their loans to U.S. banks and turn to more profitable crops such as coca leaves and marijuana. U.S. sugar beet growers avoid a financial crisis.

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- 2. Opportunity cost is what you give up to get an item. Because there is no such thing as a free lunch, what would likely be given up to obtain each of the items listed below?
  - a. Susan can work full time or go to college. She chooses college.

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- b. Susan can work full time or go to college. She chooses work.

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- c. Farmer Jones has 100 acres of land. He can plant corn, which yields 100 bushels per acre, or he can plant beans, which yield 40 bushels per acre. He chooses to plant corn.

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- d. Farmer Jones has 100 acres of land. He can plant corn, which yields 100 bushels per acre, or he can plant beans, which yield 40 bushels per acre. He chooses to plant beans.

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- e. In *a* and *b* above and *c* and *d* above, which is the opportunity cost of which—college for work or work for college? corn for beans or beans for corn?

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## Short-Answer Questions

1. Is air scarce? Is clean air scarce?

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2. What is the opportunity cost of saving some of your paycheck?

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3. Why is there a trade-off between equality and efficiency?

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4. Water is necessary for life. Diamonds are not. Is the marginal benefit of an additional glass of water greater or lesser than an additional one-carat diamond? Why?

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5. Your car needs to be repaired. You have already paid \$500 to have the transmission fixed, but it still doesn't work properly. You can sell your car "as is" for \$2,000. If your car were fixed, you could sell it for \$2,500. Your car can be fixed with a guarantee for another \$300. Should you repair your car? Why?

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6. Why do you think air bags have reduced deaths from auto crashes less than we had hoped?

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7. Suppose one country is better at producing agricultural products (because they have land that is more fertile), while another country is better at producing manufactured goods (because they have a better educational system and more engineers). If each country produced their specialty and traded, would there be more or less total output than if each country produced all of their agricultural and manufacturing needs? Why?

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8. In the *Wealth of Nations*, Adam Smith said, "It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest." What do you think he meant?

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9. If we save more and use it to build more physical capital, productivity will rise and we will have rising standards of living in the future. What is the opportunity cost of future growth?

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10. If the government printed twice as much money, what do you think would happen to prices and output if the economy were already producing at maximum capacity?

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11. A goal for a society is to distribute resources more equally and fairly. How might you distribute resources if everyone were equally talented and worked equally hard? What if people had different talents and some people worked hard, while others did not?

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12. Who is more self-interested, the buyer or the seller?

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## Self-Test

### True/False Questions

- \_\_\_ 1. When the government redistributes income with taxes and welfare, the economy becomes more efficient.
- \_\_\_ 2. When economists say, "There ain't no such thing as a free lunch," they mean that all economic decisions involve trade-offs.
- \_\_\_ 3. Adam Smith's "invisible hand" concept describes how corporate business reaches into the pockets of consumers like an "invisible hand."

- \_\_\_\_\_ 4. Rational people act only when the marginal benefit of the action exceeds the marginal cost.
- \_\_\_\_\_ 5. The United States will benefit economically if we eliminate trade with Asian countries because we will be forced to produce more of our own cars and clothes.
- \_\_\_\_\_ 6. When a jet flies overhead, the noise it generates is an externality.
- \_\_\_\_\_ 7. A tax on liquor raises the price of liquor and provides an incentive for consumers to drink more.
- \_\_\_\_\_ 8. An unintended consequence of public support for higher education is that low tuition provides an incentive for many people to attend state universities even if they have no desire to learn anything.
- \_\_\_\_\_ 9. Sue is better at cleaning, and Bob is better at cooking. It will take fewer hours to eat and clean if Bob specializes in cooking and Sue specializes in cleaning than if they share the household duties evenly.
- \_\_\_\_\_ 10. High and persistent inflation is caused by excessive growth in the quantity of money in the economy.
- \_\_\_\_\_ 11. In the short run, a reduction in inflation tends to cause a reduction in unemployment.
- \_\_\_\_\_ 12. An auto manufacturer should continue to produce additional autos as long as the firm is profitable, even if the cost of the additional units exceeds the price received.
- \_\_\_\_\_ 13. An individual farmer is likely to have market power in the market for wheat.
- \_\_\_\_\_ 14. To a student, the opportunity cost of going to a basketball game would include the price of the ticket and the value of the time that could have been spent studying.
- \_\_\_\_\_ 15. Workers in the United States have a relatively high standard of living because the United States has a relatively high minimum wage.

### Multiple-Choice Questions

1. Which of the following involve a trade-off?
  - a. buying a new car
  - b. going to college
  - c. watching a football game on Saturday afternoon
  - d. taking a nap
  - e. All of the above involve trade-offs.
2. Trade-offs are required because wants are unlimited and resources are
  - a. efficient.
  - b. economical.
  - c. scarce.
  - d. unlimited.
  - e. marginal.
3. Economics is the study of how
  - a. to fully satisfy our unlimited wants.
  - b. society manages its scarce resources.
  - c. to reduce our wants until we are satisfied.
  - d. to avoid having to make trade-offs.
  - e. society manages its unlimited resources.

4. A rational person does not act unless
  - a. the action makes money for the person.
  - b. the action is ethical.
  - c. the action produces marginal costs that exceed marginal benefits.
  - d. the action produces marginal benefits that exceed marginal costs.
  - e. None of the above is true.
5. Raising taxes and increasing welfare payments
  - a. proves that there is such a thing as a free lunch.
  - b. reduces market power.
  - c. improves efficiency at the expense of equality.
  - d. improves equality at the expense of efficiency.
  - e. does none of the above.
6. Suppose you find \$20. If you choose to use the \$20 to go to the football game, your opportunity cost of going to the game is
  - a. nothing, because you found the money.
  - b. \$20 (because you could have used the \$20 to buy other things).
  - c. \$20 (because you could have used the \$20 to buy other things) plus the value of your time spent at the game.
  - d. \$20 (because you could have used the \$20 to buy other things) plus the value of your time spent at the game plus the cost of the dinner you purchased at the game.
  - e. none of the above.
7. Foreign trade
  - a. allows a country to have a greater variety of products at a lower cost than if it tried to produce everything at home.
  - b. allows a country to avoid trade-offs.
  - c. makes the members of a country more equal.
  - d. increases the scarcity of resources.
  - e. is none of the above.
8. Because people respond to incentives, we would expect that if the average salary of accountants increases by 50 percent while the average salary of teachers increases by 20 percent,
  - a. students will shift majors from education to accounting.
  - b. students will shift majors from accounting to education.
  - c. fewer students will attend college.
  - d. None of the above is true.
9. Which of the following activities is most likely to produce an externality?
  - a. A student sits at home and watches television.
  - b. A student has a party in her dorm room.
  - c. A student reads a novel for pleasure.
  - d. A student eats a hamburger in the student union.
10. Which of the following products would be least capable of producing an externality?
  - a. cigarettes
  - b. stereo equipment
  - c. inoculations against disease
  - d. education
  - e. food
11. Which of the following situations describes the greatest market power?
  - a. a farmer's impact on the price of corn
  - b. Volvo's impact on the price of autos
  - c. Microsoft's impact on the price of desktop operating systems
  - d. a student's impact on college tuition

12. Which of the following statements is true about a market economy?
  - a. Market participants act as if guided by an "invisible hand" to produce outcomes that promote general economic well-being.
  - b. Taxes help prices communicate costs and benefits to producers and consumers.
  - c. With a large enough computer, central planners could guide production more efficiently than markets.
  - d. The strength of a market system is that it tends to distribute resources evenly across consumers.
13. Workers in the United States enjoy a high standard of living because
  - a. unions in the United States keep the wage high.
  - b. we have protected our industry from foreign competition.
  - c. the United States has a high minimum wage.
  - d. workers in the United States are highly productive.
  - e. None of the above is true.
14. High and persistent inflation is caused by
  - a. unions increasing wages too much.
  - b. OPEC raising the price of oil too much.
  - c. governments increasing the quantity of money too much.
  - d. regulations raising the cost of production too much.
15. In the short run,
  - a. an increase in inflation temporarily increases unemployment.
  - b. a decrease in inflation temporarily increases unemployment.
  - c. inflation and unemployment are unrelated.
  - d. the business cycle has been eliminated.
  - e. None of the above is true.
16. An increase in the price of beef provides
  - a. information that tells consumers to buy more beef.
  - b. information that tells consumers to buy less pork.
  - c. information that tells producers to produce more beef.
  - d. no information because prices in a market system are managed by planning boards.
17. You have spent \$1,000 building a hot-dog stand based on estimates of sales of \$2,000. The hot-dog stand is nearly completed, but now you estimate total sales to be only \$800. You can complete the hot-dog stand for another \$300. Should you complete the hot-dog stand? (Assume that the hot dogs cost you nothing.)
  - a. Yes.
  - b. No.
  - c. There is not enough information to answer this question.
18. Referring to question 17, your decision rule should be to complete the hot-dog stand as long as the cost to complete the stand is less than
  - a. \$100.
  - b. \$300.
  - c. \$500.
  - d. \$800.
  - e. none of the above.
19. Which of the following is not part of the opportunity cost of going on vacation?
  - a. the money you could have made if you had stayed home and worked
  - b. the money you spent on food
  - c. the money you spent on airline tickets
  - d. the money you spent on a Broadway show
20. Productivity can be increased by
  - a. raising minimum wages.
  - b. raising union wages.
  - c. improving the education of workers.
  - d. restricting trade with foreign countries.

## Advanced Critical Thinking

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Suppose your university decides to lower the cost of parking on campus by reducing the price of a parking permit from \$200 per semester to \$5 per semester.

1. What do you think would happen to the number of students desiring to park their cars on campus?

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2. What do you think would happen to the amount of time it would take to find a parking place?

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3. Thinking in terms of opportunity cost, would the lower price of a parking permit necessarily lower the true cost of parking?

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4. Would the opportunity cost of parking be the same for students with no outside employment and students with jobs earning \$15 per hour?

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