

1. Which topic is studied in macroeconomics?
 - A) the change in automobile sales due to a change in the price of automobiles
 - B) the effect of a tax reduction on the profits of an individual business
 - C) recessions
 - D) the unemployment of workers displaced by technological change in the typesetting industry

2. The basic concern of microeconomics is to:
 - A) keep business firms from losing money.
 - B) prove that capitalism is better than socialism.
 - C) study the choices people make.
 - D) use unlimited resources to produce goods and services to satisfy limited wants.

3. How people choose among the alternatives available to them is:
 - A) not part of the study of economics.
 - B) impossible to describe.
 - C) the study of microeconomics.
 - D) not important in the study of microeconomics.

4. Scarcity in economics means that:
 - A) we often do not have sufficient resources to achieve our objectives.
 - B) the wants of people are limited.
 - C) there must be poor people in rich countries.
 - D) shortages exist in nearly all markets.

5. If resources are scarce, it means that they:
 - A) are insufficient to provide enough goods and services to satisfy all human material wants and needs.
 - B) have no opportunity cost.
 - C) are probably not valued by consumers.
 - D) have an unlimited supply.

6. A central and fundamental theme in economics is that:
 - A) wants are limited.
 - B) the United States is a rich country, but we are simply not aware of it.
 - C) people have unlimited wants but limited means to satisfy them.
 - D) resources are unlimited.

7. The problem of scarcity is confronted by:
- A) industrialized societies only.
 - B) preindustrial societies only.
 - C) societies governed by communist philosophies only.
 - D) all societies.
8. When we are forced to make choices, we are facing the concept of:
- A) human capital.
 - B) inflation.
 - C) scarcity.
 - D) market failure.
9. We are forced to make choices because of:
- A) exploitation.
 - B) efficiency.
 - C) scarcity.
 - D) the margin.
10. Scarcity exists when:
- A) making choices among two or more alternatives is not necessary.
 - B) individuals can have more of any good without giving up anything.
 - C) individuals can have more of one good but only by giving up something else.
 - D) resources are unlimited.
11. Although freshwater is very abundant in most places, it is scarce because:
- A) it has no alternative uses.
 - B) there is not enough of it to meet all needs.
 - C) it is a free good.
 - D) scarce goods in general are not all that costly.
12. Freshwater is considered a scarce good because:
- A) not enough of it is available for all needs.
 - B) it does not have any uses.
 - C) scarce goods are not expensive.
 - D) not enough of it is available for all needs and because it is not expensive.

13. The problem of determining what goods and services society should produce:
- A) exists because we can produce more than we need or want.
 - B) exists because there are not enough resources to provide all of the goods and services that people want.
 - C) would not exist if all goods and services were scarce.
 - D) would not exist if government owned all of the resources.
14. Which resource is not one that pertains to the production of rice?
- A) fertile land
 - B) labor
 - C) capital equipment
 - D) money
15. A resource is anything that:
- A) can be used in production.
 - B) you pay for.
 - C) is in scarce supply.
 - D) can be consumed.
16. We have to make choices because:
- A) we have unlimited income.
 - B) resources are scarce.
 - C) resources are infinite.
 - D) with good planning, trade-offs can be avoided.
17. When a chef prepares a dinner for a customer, which factor is physical capital?
- A) the chef
 - B) the oven
 - C) the food ingredients
 - D) the chef's training and experience
18. Manny is attending college and majoring in economics. By doing so, Manny is improving his:
- A) land.
 - B) labor.
 - C) capital.
 - D) human capital.

19. Which factor is not an example of a resource?
- A) land
 - B) labor
 - C) capital
 - D) production
20. Which factor can best be considered to be a resource used in the production of computers?
- A) money from investors
 - B) wages of computer engineers
 - C) computer engineers
 - D) taxes on the profits from the sale of the computers
21. Opportunity cost is:
- A) about half of the monetary cost of a product.
 - B) the dollar payment for a product.
 - C) the benefit derived from a product.
 - D) the value of the best alternative forgone in making any choice.
22. The opportunity cost of something is:
- A) larger during periods of rising prices.
 - B) equal to the monetary cost.
 - C) smaller during periods of falling prices.
 - D) what is given up to acquire it.
23. Whenever a choice is made:
- A) the cost of that choice is the opportunity cost.
 - B) the cost is easy to measure in dollar terms.
 - C) efficiency is improved.
 - D) scarcity is not a problem.
24. You can spend \$100 on either a new economics textbook or a new tablet computer. If you choose to buy the new economics textbook, the opportunity cost is:
- A) \$100.
 - B) your enjoyment of the new tablet computer.
 - C) both the \$100 and your enjoyment of the new tablet computer.
 - D) impossible to determine.

25. Margo spends \$30,000 on one year's college tuition. The opportunity cost of spending one year in college for Margo is:
- A) \$30,000.
 - B) whatever she would have purchased with the \$30,000 instead.
 - C) whatever she would have earned had she not been in college.
 - D) whatever she would have purchased with the \$30,000 plus whatever she would have earned had she not been in college.
26. If the state government allocates additional spending on education programs, the opportunity cost is:
- A) zero.
 - B) the dollar amount of the additional spending.
 - C) considered only if taxes have to be raised to fund the spending.
 - D) measured in terms of the best alternative uses for that money.
27. Khalil is offered a free ticket to the opera, which he cannot resell. His opportunity cost of going to the opera is:
- A) zero-the tickets were free.
 - B) the price listed on the ticket.
 - C) whatever Khalil would have done had he not gone to the opera.
 - D) the price listed on the ticket and whatever Khalil would have done had he not gone to the opera.
28. A new fast-food restaurant offered a prize-a free meal (valued at \$5) each week for a year-to its first 100 customers. Ramona camped out for 48 hours before the opening to be one of the first 100 customers, and she successfully obtained the prize. The cost to Ramona of obtaining the "free meal a week for a year" prize was:
- A) zero.
 - B) \$260.
 - C) whatever else she would have done with the 48 hours.
 - D) The cost is impossible to determine.
29. The Taco Hut charges the same price for everything on its menu: \$3 will buy a taco, a burrito, or nachos. You buy the taco and think that if you had not purchased the taco, you would have purchased the burrito. The opportunity cost of the taco is:
- A) \$3.
 - B) your enjoyment of the burrito.
 - C) \$3 and your enjoyment of the burrito.
 - D) \$3, your enjoyment of the burrito, and your enjoyment of the nachos.

30. For an economist, the cost of something is:
- A) the amount of money you paid for it.
 - B) what you gave up to get it.
 - C) always equal to its market value.
 - D) the quantity of resources used to produce it.
31. The best measure of the opportunity cost of any choice is:
- A) the monetary cost of that choice.
 - B) whatever you have given up to make that choice, even if no monetary costs are involved.
 - C) the cost associated with not taking full advantage of the opportunity offered by that choice.
 - D) your hourly wage.
32. While buying refreshments for an upcoming party, you notice that a six-pack of Americana Beer costs \$2 and a six-pack of Bavarian Beer costs \$4. You buy the six-pack of Bavarian Beer, although you wonder if maybe two six-packs of Americana Beer would have been a better choice. The opportunity cost of the Bavarian Beer is:
- A) \$4.
 - B) a six-pack of Americana Beer.
 - C) two six-packs of Americana Beer.
 - D) \$4 and the six-pack of Americana Beer.
33. Your elderly grandma tells you: "I haven't been taking my beloved walks because I'm concerned about falling and getting hurt. See, there is always a cost to doing something. But if you don't do anything, then there is no cost." Your grandma does not understand the economic concept of:
- A) scarcity.
 - B) efficiency.
 - C) opportunity cost.
 - D) marginal analysis.

34. Zoe's grandparents are excited about finally paying off their mortgage because, as they say, "Our cost of housing is now zero." Zoe should explain to them the economic concept of:
- A) marginal analysis: if the additional cost of housing is zero, then their additional benefit is also zero.
 - B) opportunity cost: by living in the house, they are giving up the opportunity to sell the house, buy a smaller one, and pocket the difference.
 - C) efficiency: If their cost of housing is now zero, they should let Zoe move in without charging her any rent. Zoe is better off, and her grandparents aren't hurt.
 - D) equity: it is unfair that some people are still paying off their mortgage.
35. The university recently inherited a large mansion from a wealthy alumnus. The university plans to use the mansion for faculty parties and to house distinguished guests. The opportunity cost of the mansion to the university is:
- A) zero because it was a gift.
 - B) the original cost of building the mansion.
 - C) the amount the university would receive if it sold the mansion.
 - D) the cost of catering the parties at the mansion.
36. A new startup airline is offering a free round-trip ticket to Hawaii to the first 600 people who enter the airline's main office on the airline's first day of business. You arrive 24 hours before it is scheduled to open to be sure to get the free ticket, and you buy food from vendors while waiting in line. You successfully obtain the ticket. What was the cost to you for obtaining the ticket?
- A) zero
 - B) the cost of food while you wait in line
 - C) the cost of food while you wait in line and the opportunity cost of your time spent in line
 - D) the actual value of the ticket
37. A friend comes up to you and offers you a free ticket to a professional baseball game that night. You decide to attend the game. The game takes five hours and costs you \$15 for transportation. If you had not attended the game, you would have worked at your part-time job for \$8 an hour. What is the cost to you of attending the game?
- A) The cost is zero-the ticket is free.
 - B) \$65
 - C) \$40
 - D) \$55

38. For a student who owns his or her own home and doesn't plan to live in the dorm, the cost of going to college is:
- A) tuition and the cost of housing.
 - B) tuition, the cost of housing, and the cost of books and other school materials.
 - C) tuition, the cost of books and other school materials, and forgone income.
 - D) forgone income only.
39. You have \$1 to spend on a vending machine snack. A bag of chips will cost you \$1 and a candy bar will also cost you \$1. If you choose the bag of chips, the opportunity cost of buying the chips is:
- A) \$1 plus the enjoyment you would have received from the candy bar.
 - B) \$2 minus the enjoyment you received from the bag of chips.
 - C) \$1.
 - D) the enjoyment you would have received from the candy bar.
40. A college student is faced with a difficult decision of how to spend one hour tonight. She could babysit her professor's child at an hourly wage of \$7; she could work at the college library at a wage of \$6; or she could finish her economics homework assignment. If she chooses to complete her homework assignment, she has incurred an opportunity cost equal to:
- A) \$7.
 - B) \$6.
 - C) \$13.
 - D) \$0.
41. If you decide to go to Cancun with your friends during spring break, you cannot go to Paris with your sister in the summer. Which economic principle does this statement best represent?
- A) The true cost of something is its opportunity cost.
 - B) "How much" is a decision at the margin.
 - C) People usually respond to incentives, exploiting opportunities to make themselves better off.
 - D) There are gains from trade.

42. You decide to join the economics club, but this means you can't join the accounting club because it meets at the same time. Which economic principle does this statement best represent?
- A) The true cost of something is its opportunity cost.
 - B) "How much" is a decision at the margin.
 - C) People usually respond to incentives, exploiting opportunities to make themselves better off.
 - D) There are gains from trade.
43. The student center on campus has burritos, bagels, or burgers for lunch, and they all cost the same. You decide to have a burger today, but if they were out of burgers, you would have bought a bagel. Your opportunity cost of buying a burger is your enjoyment of the:
- A) burger.
 - B) bagel.
 - C) burrito.
 - D) bagel and the burrito.
44. The economic way of thinking entails:
- A) the analysis of benefits but not costs.
 - B) the analysis of costs but not benefits.
 - C) making choices at the margin.
 - D) making the distinction between microeconomics and macroeconomics.
45. A choice made _____ is a choice whether to do a little more or a little less of an activity.
- A) at the front end
 - B) in the beginning
 - C) at the margin
 - D) *ceteris paribus*
46. Which decision is the best example of making a choice at the margin?
- A) buying a new car
 - B) quitting your job
 - C) drinking another cup of coffee
 - D) attending college

47. You decide whether to eat one more slice of pizza based on how hungry you feel. Which economic principle does this statement BEST represent?
- A) Choices are necessary because resources are scarce.
 - B) The true cost of something is its opportunity cost.
 - C) “How Much” is a decision at the margin.
 - D) There are gains from trade.
48. The concept of the margin decision deals with:
- A) making incremental choices.
 - B) choosing all or none of something.
 - C) engaging in unethical activities.
 - D) making difficult choices.
49. A choice made _____ is a choice whether to do a little more or a little less of an activity.
- A) at the fringe
 - B) in the beginning
 - C) at the margin
 - D) after the fact
50. The best example of making a choice at the margin is whether to:
- A) buy a new computer.
 - B) quit your job.
 - C) eat another slice of pizza.
 - D) attend college.
51. Marla will make \$10 by tutoring for an additional hour, but she will lose an hour of studying for her economics test. Marla decides to study, rather than tutor. Marla's choice indicates that she:
- A) values an additional hour of studying more than the \$10 she would earn tutoring.
 - B) values an hour of studying less than the \$10 she would earn tutoring.
 - C) does not understand that there is no benefit from studying.
 - D) doesn't need the money.
52. Thinking in economic terms, when Mary Sweet-Tooth is deciding whether to eat another brownie, she:
- A) considers only the price of the brownie.
 - B) considers only how much additional exercise she will need to do to work off the calories associated with eating another brownie.
 - C) compares all of the benefits and costs of eating another brownie.
 - D) considers whether she can do so without anyone else noticing.

53. For which decision would marginal analysis be most relevant?
- A) Should I go to college or work after graduating from high school?
 - B) Should I eat another doughnut?
 - C) Should I use \$20,000 as a down payment on a house or to buy a car?
 - D) Should I get married?
54. For which decision would marginal analysis be most relevant?
- A) Should George accept a job with Delta Airlines or with Greenpeace?
 - B) Should Mary go to graduate school after graduating from college?
 - C) Should Vivek emigrate to the United States or stay in India?
 - D) Should Hong work an additional hour or take a short nap?
55. Which of the following questions would not involve marginal analysis:
- A) How many minutes should I exercise?.
 - B) How many workers should I hire?.
 - C) What is an acceptable rate of negative side effects from a new medicine?.
 - D) Should I attend college?
56. Marginal analysis:
- A) refers to decisions about whether or not to engage in a particular activity.
 - B) is primarily used when making an either-or choice.
 - C) is used primarily when deciding how much of an activity should be done.
 - D) does not help when making a “how much” choice.
57. Your neighbor is mowing her yard one afternoon when she stops to have some lemonade. She drinks one glass and is now deciding whether or not to have a second glass. This is an example of _____ analysis.
- A) marginal
 - B) benefit
 - C) cost
 - D) equilibrium
58. After eating three slices of pizza, you decide to eat one more piece. Your decision is an example of the economic concept called:
- A) opportunity-cost decision.
 - B) people responding to incentives.
 - C) equity decision.
 - D) marginal decision making.

59. You are planning to study eight hours this week for your economics final and are considering studying a ninth hour. You should:
- A) compare the benefits of one more hour of study with the cost of one less hour of sleep.
 - B) compare the benefits of one more hour of study with the cost of one less hour of studying calculus.
 - C) compare the benefits of one more hour of study with the cost of one less hour of work at your part-time job.
 - D) make your decision based on the cost of the next best alternative use of your time compared to the benefit of one more hour of study.
60. Marginal analysis studies how individuals decide:
- A) whether to live on the margin of society.
 - B) whether to do a bit more of an activity versus a bit less of it.
 - C) whether to go to college.
 - D) how much down payment to make when buying stocks.
61. You are analyzing a trade-off when you compare the _____ and _____ of doing something.
- A) direct costs; opportunity costs
 - B) marginal benefits; total benefits
 - C) costs; benefits
 - D) direct costs; total costs
62. For which decision would marginal analysis be most relevant?
- A) Should I invest all of my savings in real estate or should I keep it all in a savings account?
 - B) After I graduate from college, should I go to graduate school or should I get a job?
 - C) How many hours should I study for my exam?
 - D) Should I keep a pet?
63. Some baseball fans leave the game in the seventh or eighth inning to avoid the postgame traffic. These fans are:
- A) not considering that they have already paid for their tickets.
 - B) making a marginal decision by comparing the cost of leaving early to the benefit of leaving early.
 - C) thinking only about the benefits of avoiding traffic.
 - D) underestimating the value of staying for the rest of the game.

64. Which question is an example of marginal analysis?
- A) What additional output does a family business produce when it hires one more worker?
 - B) How do tax cuts change the growth rate of median income?
 - C) What is the impact of a trade embargo on labor cost?
 - D) Should a commuter take the bus to work instead of driving.
65. Which decision is an example of marginal analysis?
- A) ordering a pizza, rather than eating leftover meatloaf
 - B) deciding whether to eat one more slice of pizza
 - C) using a coupon to save \$2 on a pizza
 - D) writing a check to pay for the pizza, rather than using a credit card
66. Which statement demonstrates how people respond to incentives to make themselves better off?
- A) More students major in economics when they hear that salaries for economists are rising.
 - B) Students are assigned dorm rooms through a lottery system.
 - C) Students are encouraged to donate blood because it is the right thing to do.
 - D) Students and faculty are encouraged to wear college apparel to support the college athletic teams.
67. Which of the following policies is most likely to reduce traffic congestion in a large metropolitan area because people usually exploit opportunities to make themselves better off?
- A) a limited number of free early-bird parking passes given only to those who arrive prior to 6 A.M.
 - B) a toll road that requires each car to pay a fee to enter the city center
 - C) an increase in the price of subway and bus fare to and from the city
 - D) asking citizens to carpool
68. Which method of encouraging recycling is likely to be most effective given that people usually exploit opportunities to make themselves better off?
- A) appealing to consumers to be a good citizen
 - B) publicizing the advantages of recycling
 - C) imposing a tax per unit of garbage generated
 - D) advertising different ways of recycling

69. Which method of discouraging speeding is likely to be most effective given that people usually exploit opportunities to make themselves better off?
- A) increasing the number of signs stating the speed limit
 - B) increasing the fine associated with speeding tickets
 - C) public service announcements reminding drivers of the dangers of speeding
 - D) asking drivers to reduce speed
70. In an attempt to reduce shooting deaths, some cities have offered money to people who turn in illegal guns. This program is an example of the government using _____ to influence behavior.
- A) financial incentives
 - B) law
 - C) marginal analysis
 - D) the gains from trade
71. Because people usually exploit opportunities to make themselves better off, if the price of gasoline rises and stays high for an extended period, we expect people to:
- A) increase the number of miles they drive.
 - B) buy larger and less fuel-efficient cars.
 - C) use more public transportation.
 - D) ride their bicycles less.
72. Because people usually exploit opportunities to make themselves better off, if the price of gasoline falls and stays low for an extended period, we expect people to:
- A) reduce their reliance on gasoline-powered cars.
 - B) buy larger and less fuel-efficient cars.
 - C) use more public transportation.
 - D) ride bicycles.
73. To encourage people to retire later, given that people usually exploit opportunities to make themselves better off, the government could:
- A) reduce Social Security benefits.
 - B) raise the tax rate on older, unretired individuals.
 - C) provide free housing to all retirees
 - D) increase Social Security benefits.

74. Because people usually exploit opportunities to make themselves better off, to encourage young people to go to college in their home state, state universities can:
- A) charge higher tuition to in-state students.
 - B) award special scholarships to out-of-state students.
 - C) offer high-interest loans to in-state students.
 - D) offer lower tuition to in-state students.
75. Because people usually exploit opportunities to make themselves better off, which method of reducing pollution is likely to be most effective?
- A) appealing to the polluter to be a good citizen
 - B) asking citizens to voluntarily reduce pollution
 - C) imposing a tax per unit of pollution generated
 - D) advertising the negative impact of pollution
76. Economists tend to believe that to change people's behavior you must:
- A) appeal to their concern for society.
 - B) change their incentives.
 - C) legislate the change.
 - D) appeal to their religious values.
77. Which statement is NOT true according to standard economic theory?
- A) Resources are scarce when they can satisfy everyone's wants.
 - B) The true cost of a choice is what you must give up to enjoy that choice.
 - C) People typically make choices that will make them better off.
 - D) Rational people use marginal analysis when making "how much" decisions.
78. Corner offices in high-rise office buildings usually cost more to rent than other offices. This best illustrates the economic concept of:
- A) specialization.
 - B) scarcity.
 - C) equilibrium.
 - D) opportunity costs.
79. In Ventura County, California, strawberry production is limited by the number of acres available for agriculture production. Which economic concept does this statement best represent?
- A) Scarcity
 - B) Marginal Analysis.
 - C) Equilibrium.
 - D) Opportunity Cost.

80. You like to read *Vogue* and *Sports Illustrated*. You have only \$5 to spend, so you buy only *Sports Illustrated*. Which economic concept does this statement best represent?
- A) Scarcity
 - B) Equilibrium
 - C) Marginal Analysis
 - D) Specialization
81. Intel finds it difficult to hire enough skilled computer engineers. Which economic concept does this statement best represent?
- A) scarcity
 - B) specialization
 - C) ceteris paribus
 - D) trade-off
82. In Colorado, there has been a drought, and rural communities are fighting with urban areas over water. Which economic concept does this statement best represent?
- A) scarcity
 - B) specialization
 - C) incentive
 - D) equilibrium
83. Which statement is not one of the four principles that underlie individual choice?
- A) Choices are necessary because resources are scarce.
 - B) Overall spending sometimes gets out of line with the economy's productive capacity.
 - C) "How much" is a decision at the margin.
 - D) People usually respond to incentives, exploiting opportunities to make themselves better off.
84. When the San Francisco city manager faces a complaint that the city council chamber podium is not accessible to individuals with disabilities, he responds that the \$1 million improvement will not happen because "that money could be spent building 70 curb ramps." Which economic principle does this statement best represent?
- A) Markets move toward equilibrium.
 - B) The true cost of something is its opportunity cost.
 - C) "How much" is a decision at the margin.
 - D) When markets don't achieve efficiency, government intervention can improve society's welfare.

85. The student center on campus has burritos, bagels, or burgers for lunch, and they all cost the same. You love burgers and bagels, but you decide to have a burger today. If they were out of burgers, you would have bought a bagel. Which economic principle does this statement best represent?
- A) The true cost of something is its opportunity cost.
 - B) “How much” is a decision at the margin.
 - C) One person's spending is another person's income.
 - D) There are gains from trade.
86. After swimming 100 laps at the pool, Erik decides to swim 10 more before lifting weights. Which economic principle does this statement best represent?
- A) Choices are necessary because resources are scarce.
 - B) The true cost of something is its opportunity cost.
 - C) “How much” is a decision at the margin.
 - D) There are gains from trade.
87. Nara has gone to three movies this week. She has some extra money, so she decides to go to another. Which economic principle does this statement BEST represent?
- A) Choices are necessary because resources are scarce.
 - B) The true cost of something is its opportunity cost.
 - C) “How much” is a decision at the margin.
 - D) There are gains from trade.
88. A busy professor needs to decide whether to stay in his office to grade papers for another hour or to go home and go to bed. This is an example of:
- A) equity versus efficiency.
 - B) how one person's spending is another person's income.
 - C) economic incentives.
 - D) marginal analysis.
89. Which principle underlies the economics of individual choices?
- A) There are gains from trade.
 - B) Markets move toward equilibrium.
 - C) People usually respond to incentives, exploiting opportunities to make themselves better off.
 - D) Resources should be used as efficiently as possible to achieve society's goals.

90. Which statement is one of the four principles of individual choice?
- A) Resources are usually renewable.
 - B) The true cost of something is impossible to measure.
 - C) People take advantage of opportunities to make themselves better off only if there is no risk involved.
 - D) Choices are necessary because resources are scarce.
91. Which statement is an example of individual choice?
- A) The government announces plans to ban smoking in all Florida restaurants.
 - B) Lauren spends her allowance on pillows for her bed.
 - C) France decides to withhold funding to rebuild Iraq.
 - D) Africa decides to accept U.S. aid for humanitarian efforts.
92. Which statement is not one of the four principles of individual choice?
- A) Choices are necessary because resources are scarce.
 - B) Unpaid volunteer work is irrational since economic rationality dictates that individuals should only engage in work they are paid for.
 - C) The true cost of something is its opportunity cost.
 - D) “How much” is a decision at the margin.
93. Florida schools offered cash bonuses to students who scored high on the state's standardized exams. The cash bonuses are motivated by which economic principle?
- A) Choices are necessary because resources are scarce.
 - B) The true cost of something is its opportunity cost.
 - C) “How much” is a decision at the margin.
 - D) People usually respond to incentives, exploiting opportunities to make themselves better off.
94. Grades are low in your biology class, so your professor offers an optional 10-point extra-credit assignment. Most of the students turn in the assignment. Which economic principle does this statement BEST represent?
- A) The true cost of something is its opportunity cost.
 - B) “How much” is a decision at the margin.
 - C) People usually respond to incentives, exploiting opportunities to make themselves better off.
 - D) There are gains from trade.

95. Your health club is offering a free one-year membership for the person who attends the most yoga classes in March. This results in more people attending yoga. Which economic principle does this statement best represent?
- A) The true cost of something is its opportunity cost.
 - B) People usually respond to incentives, exploiting opportunities to make themselves better off.
 - C) There are gains from trade.
 - D) Markets move toward equilibrium.
96. Specialization and trade usually lead to:
- A) lower economic growth.
 - B) the exchange of goods and services in markets.
 - C) lower living standards.
 - D) higher prices.
97. Which book illustrates the advantages of specialization using an eighteenth-century pin factory as an example?
- A) *Free to Choose*, by Milton Friedman
 - B) *The Wealth of Nations*, by Adam Smith
 - C) *Das Kapital*, by Karl Marx
 - D) *The General Theory*, by John Maynard Keynes
98. Who wrote *The Wealth of Nations*, a book that many credit with establishing economics as a discipline?
- A) Karl Marx
 - B) David Ricardo
 - C) Adam Smith
 - D) John Maynard Keynes
99. Increases in total output realized when individuals specialize in particular tasks and trade are known as:
- A) the gains from trade.
 - B) the profits obtained from sales of a good or service.
 - C) marginal analysis.
 - D) a trade-off.

100. Gains from trade arise because of:
- A) specialization in production.
 - B) specialization in consumption.
 - C) marginal analysis.
 - D) individual choice.
101. Gains from trade exist for:
- A) individuals only.
 - B) states only.
 - C) countries only.
 - D) individuals, states, and countries.
102. According to economic models of trade, when the United States and Mexico trade:
- A) the United States will be worse off because wages in Mexico are so low.
 - B) Mexico will be worse off because the United States is a stronger economic power.
 - C) both Mexico and the United States will be better off.
 - D) both Mexico and the United States will be worse off.
103. If every individual were required to be self-sufficient:
- A) living standards would fall.
 - B) living standards for some individuals would fall, but for others they would rise.
 - C) living standards would rise.
 - D) it's impossible to say how living standards would change.
104. Which statement is not true?
- A) Resource scarcity is a major economic concern in the rich countries of the world.
 - B) Most opportunity costs are zero.
 - C) An economic situation is in equilibrium when no individual would be better off taking a different action.
 - D) Very talented individuals, who can do most things better than most people, may still benefit greatly from specializing in doing one thing.
105. Specialization and trade should not lead to:
- A) individuals learning specific skills and earning a salary.
 - B) a decrease in total economic output.
 - C) higher living standards.
 - D) the exchange of goods and services in markets.

106. The phrase *gains from trade* refers to the:
- A) profits obtained from sales of a good or service.
 - B) increase in total output that is realized when individuals specialize in particular tasks and trade with each other.
 - C) gains that one obtains by taking advantage of an uninformed buyer and selling at a higher than average price.
 - D) gains that one obtains by taking advantage of a temporary discount, or sale price.
107. Individuals gain from trade because:
- A) of specialization in production.
 - B) they can sell at a lower price than they can buy at.
 - C) self-sufficiency is efficient.
 - D) of the principle of absolute advantage.
108. Specialization in production was the starting point for:
- A) *The Wealth of Nations*, by Adam Smith.
 - B) *The General Theory*, by John Maynard Keynes.
 - C) *Das Kapital*, by Karl Marx.
 - D) *Free to Choose*, by Milton Friedman.
109. Two neighbors, Molly and Sandy, are separated by a white picket fence. Each neighbor has a garden that grows tomatoes and peppers. To gain from trade, _____ can trade _____ to _____ for _____ if _____ is the more efficient grower of peppers.
- A) Molly; peppers; Sandy; peppers; Molly
 - B) Sandy; tomatoes; Molly; peppers; Sandy
 - C) Sandy; peppers; Molly; tomatoes; Molly
 - D) Molly; peppers; Sandy; tomatoes; Molly
110. If equilibrium exists:
- A) all individuals must have an equal amount of income.
 - B) the price in that market will not fluctuate by more than 5%.
 - C) there will be no remaining opportunities for individuals to make themselves better off.
 - D) the number of buyers will equal the number of sellers.

111. If a market is in disequilibrium:
- A) it will continue unless there is government intervention.
 - B) no individual will be better off doing something different.
 - C) there are opportunities for some people to make themselves better off.
 - D) it must be because the government has intervened in the market, resulting in the market's failure to reach equilibrium.
112. Equilibrium exists when:
- A) output is distributed equitably.
 - B) scarcity is eliminated.
 - C) an individual would be better off taking a different action.
 - D) no individual has an incentive to change his or her behavior.
113. Which statement is true?
- A) The concept of equilibrium requires that all individuals have an equal amount of income.
 - B) If a market is in equilibrium, the price in that market will not fluctuate by more than 5%.
 - C) If a market is in equilibrium, there will be no remaining opportunities for individuals to make themselves better off.
 - D) A market is in equilibrium when the number of buyers is equal to the number of sellers.
114. Which statement is correct?
- A) Resource scarcity is not a major concern in the rich countries of the world.
 - B) Most opportunity costs are zero.
 - C) An economic situation is in equilibrium when no individual would be better off taking a different action.
 - D) Some very talented, skilled individuals who can do everything better than most people should not specialize in doing any one thing.
115. In baseball, when one manager decides to send in a pinch hitter, the other manager often changes pitchers. This sometimes causes the first manager to send in a new pinch hitter. Once both managers decide that no more player substitutions will benefit their team, the situation has reached:
- A) efficiency.
 - B) equilibrium.
 - C) equity.
 - D) the market.

116. Economists use the term *equilibrium* to describe situation when:
- A) individuals are equal.
 - B) goods are distributed equitably.
 - C) there are equal number of buyers and sellers.
 - D) no individual would be better off taking a different action or no individual has an incentive to change his or her behavior.
117. A dozen friends got together to celebrate a birthday. If the birthday cake is cut into 12 pieces of the same size and each of the 12 partygoers gets a slice, this cake distribution is:
- A) efficient but not equitable.
 - B) equitable but not efficient.
 - C) efficient and equitable.
 - D) equitable.
118. An economy is efficient if it is:
- A) possible to produce more of all goods and services.
 - B) possible to produce more of one good without producing less of another.
 - C) not possible to produce more of one good without producing less of another good.
 - D) producing a combination of goods.
119. If all of the opportunities to make someone better off (without making someone else worse off) have been exploited, an economy is:
- A) equitable.
 - B) inefficient.
 - C) marginally optimal.
 - D) efficient.
120. A trade-off between equity and efficiency may not exist because of the fact that:
- A) allocating resources fairly may increase efficiency.
 - B) the efficient allocation of resources may lead to an outcome that most people consider unfair.
 - C) policies that promote equity often come at a cost of decreased efficiency.
 - D) allocating resources fairly may cause inefficiency.

121. An economy is efficient when:
- A) the problem of scarcity is eliminated.
 - B) output is distributed equitably.
 - C) all opportunities to make some people better off without making other people worse off have been taken.
 - D) all opportunities to make some people worse off without making other people better off have been taken.
122. Economists believe that resources should be used as efficiently as possible to:
- A) achieve society's goals.
 - B) eliminate scarcity.
 - C) reduce inequity.
 - D) maximize profits.
123. If an economy has not achieved efficiency, there must be ways to:
- A) increase opportunity costs.
 - B) eliminate inequity.
 - C) make some people better off without making others worse off.
 - D) increase the incentives for its citizens to follow their own self-interest.
124. Resources are being used efficiently when:
- A) scarcity is no longer an issue.
 - B) they are also used equitably.
 - C) every opportunity to make people better off without making others worse off has been seized.
 - D) gains from trade are still available.
125. Equity means that:
- A) everyone gets an efficient share of the goods and services produced.
 - B) everyone gets his or her fair share of the goods and services produced.
 - C) more of some goods and services can be produced only if the production of others is reduced.
 - D) more of all goods and services may be produced.
126. Which statement is not a reason that markets usually lead to efficiency?
- A) People are naturally efficient.
 - B) Individuals have incentives to offer what people want.
 - C) Trade encourages efficiency.
 - D) Inefficient firms will lose business.

127. An increase in efficiency means that an economy has:
- A) reduced its opportunity costs.
 - B) increased the equity of its distribution of goods and services.
 - C) made more people better off without making others worse off.
 - D) increased the incentives for its citizens to follow their own self-interest.
128. The trade-off between equity and efficiency occurs because:
- A) the efficient allocation of resources is bad for business and industry.
 - B) allocating resources fairly may cause inefficiency.
 - C) everyone must pay more tax to ensure equity.
 - D) efficiency is politically unpopular.
129. Economists define an efficient use of resources as a situation in which:
- A) one person can be made better off but only by making another person worse off.
 - B) all persons can be made better off without making anyone worse off.
 - C) all persons receive an equal share of the resources.
 - D) all persons are made worse off when one person is made better off.
130. In most cases, economic efficiency is achieved through:
- A) incentives built into a market economy.
 - B) reducing regulation.
 - C) individuals seeking out opportunities that involve no risk.
 - D) maximizing equity.
131. An economy has achieved _____ if it _____ pass up any opportunities to make some people better off without making others worse off.
- A) efficiency; does not
 - B) equity; does
 - C) efficiency; does
 - D) equity; does not
132. Which statement is false?
- A) Efficiency exists when an economy realizes the maximum possible gains from trade given the available resources.
 - B) If an economy is efficient, it is possible to make only a few people better off without reducing other individuals' economic welfare.
 - C) Economic efficiency exists when all opportunities to make people better off have been fully exploited.
 - D) Free markets usually lead to efficiency, but not necessarily equity.

133. If in Equitania, 20% of the population receive 80% of the income and the remaining 80% of the population receive 20% of the income, Equitania's economy:
- A) is efficient.
 - B) cannot be efficient since efficiency requires a more nearly equal distribution of income.
 - C) may be efficient.
 - D) is neither efficient nor equitable.
134. The incentives built into the market economy ensure that resources are put to good use and that opportunities to make people better off are not wasted. This means that:
- A) people usually are not selfish enough to exploit opportunities to make themselves better off.
 - B) markets move toward equilibrium.
 - C) resources should be used as efficiently as possible to achieve society's goals.
 - D) markets usually lead to efficiency.
135. When markets fail:
- A) government intervention may help.
 - B) the market realizes the maximum possible gains from trade given the available resources.
 - C) there may still be an efficient allocation of resources.
 - D) no goods and services are produced.
136. When the nations that constitute the Organization of Petroleum Exporting Countries (OPEC) restrict the supply of oil to increase their profits, the oil market:
- A) achieves an efficient outcome because profits increase.
 - B) achieves an equitable outcome because the nations with oil resources receive the profits commensurate with that resource.
 - C) fails because there is no longer an efficient allocation of resources.
 - D) fails because there is no longer an equitable allocation of resources.
137. Everyone benefits from street lighting, yet the marginal benefit to any one individual usually falls short of the marginal cost. This is an example of:
- A) individual actions whose side effects are not properly taken into account by the market.
 - B) one party preventing mutually beneficial trades in an attempt to capture a greater share of resources for itself.
 - C) the unsuitability of some goods for efficient management by markets.
 - D) regulating self-interest.

138. When markets don't achieve efficiency:
- A) they must achieve equity.
 - B) the government must be participating in the market.
 - C) the government may intervene to improve society's welfare.
 - D) they should be closed.
139. One parent picks up the child from day care while the other parent goes to the grocery store and begins to make dinner. This is an example of the principle that:
- A) markets move toward equilibrium.
 - B) government policies can change spending.
 - C) there are gains from trade.
 - D) markets usually lead to efficiency.
140. Which principle underlies the interaction of individual choices?
- A) Choices are necessary because resources are scarce.
 - B) There are gains from trade.
 - C) "How Much" Is a decision at the margin
 - D) People usually respond to incentives, exploiting opportunities to make themselves better off.
141. It is cheaper to produce corn in Kansas than in Death Valley, California, because corn needs a lot of water and moderate temperatures. Which economic concept does this statement BEST represent?
- A) Government policies can change spending.
 - B) Markets move toward equilibrium.
 - C) Resources should be used as efficiently as possible to achieve society's goals.
 - D) One person's spending is another person's income.
142. Which statement is not one of the five principles for understanding how individual choices interact?
- A) There are gains from trade.
 - B) Markets move toward equilibrium.
 - C) Resources should be used as efficiently as possible to achieve society's goals.
 - D) Overall spending sometimes gets out of line with the economy's productive capability.

143. When a factory closes, why is it bad news for the local restaurants?
- A) Sales taxes are likely to increase.
 - B) Unemployed factory workers have lower incomes and are less likely to dine out.
 - C) Unemployed factory workers are eligible for government unemployment benefits.
 - D) The opportunity cost of dining out has fallen.
144. Because one person's spending is another person's income:
- A) if one group in the economy spends more, the incomes of other groups will decrease.
 - B) if one group in the economy spends less, the incomes of other groups will increase.
 - C) if one group in the economy spends more, the incomes of other groups will increase.
 - D) spending by one group does not influence the income of any other group.
145. One person's spending is another person's:
- A) loss.
 - B) income.
 - C) physical capital.
 - D) opportunity cost.
146. Buying vegetables at a farmers' market benefits the community because:
- A) it is not possible to be self-sufficient when it comes to growing food.
 - B) this will eliminate the opportunity cost of buying food.
 - C) buying locally will decrease human capital in the community.
 - D) one person's local spending will increase another local person's income.
147. If Allison drives to a large city 100 miles from her small community to do her back-to-school shopping, this will:
- A) hurt Allison's community because Allison's spending will be income for people in the large city.
 - B) hurt the city because Allison will take the goods that she purchases back home to her small town.
 - C) help Allison's community because Allison's shopping in the big city leaves more goods for the other small-town residents to buy.
 - D) help the city because people from small towns usually buy things that people in big cities don't want.

148. A grocery store benefits when a new furniture factory moves to town and hires workers because the:
- A) new jobs at the factory will increase local incomes, some of which will be spent at the grocery store.
 - B) new factory will eliminate scarcity in the area.
 - C) presence of a new factory will guarantee that resources are used efficiently.
 - D) local circular flow will be smaller with a new factory in town.
149. If the value of homes in University City increases and, as a result, the people of University City spend more, incomes in University City will:
- A) decrease.
 - B) increase.
 - C) remain the same.
 - D) be unaffected.
150. If the value of beach-front property in Beach City decreases, the people of Beach City will likely spend _____, causing incomes in Beach City to _____.
- A) more; increase
 - B) more; decrease
 - C) less; increase
 - D) less; decrease
151. Which statement demonstrates one of the three principles of economy-wide interactions?
- A) A student chooses to rent a movie with friends, rather than study for an economics quiz.
 - B) Your roommate offers to pay for the movie tickets if you drive to the theater.
 - C) A city builds a new public park on the grounds of an abandoned warehouse.
 - D) In 2008, fearing a recession, Congress approved a White House proposal to rebate some taxes for 2007.
152. Sometimes the government varies its spending, depending on the needs of the country. Which economic principle does this statement best represent?
- A) Resources should be used efficiently to achieve society's goals.
 - B) When markets don't achieve efficiency, government intervention can improve society's welfare.
 - C) The true cost of something is its opportunity cost.
 - D) Government policies can change spending.

153. Lena and Jess are roommates. Lena hates to clean the bathroom. Jess will agree to clean the bathroom only if Lena vacuums the living room. Which economic concept does this statement best represent?
- A) When markets don't achieve efficiency, government intervention can improve society's welfare.
 - B) "How much" is a decision at the margin.
 - C) One person's spending is another person's income.
 - D) There are gains from trade.
154. Nate and Dylan are brothers. They have to mow the lawn and clean their rooms before they can go to the high school football game. Nate mows the lawn and Dylan cleans up the rooms, and they make it to the football game on time. Which economic concept does this statement best represent?
- A) "How much" is a decision at the margin.
 - B) There are gains from trade.
 - C) Markets usually lead to efficiency.
 - D) One person's spending is another person's income.
155. You notice that when a new yoga class is offered at the student recreation center at a highly desirable time, some students from the other yoga classes go to the new class instead. Which economic principle does this statement best represent?
- A) Choices are necessary because resources are scarce.
 - B) The true cost of something is its opportunity cost.
 - C) People usually respond to incentives, exploiting opportunities to make themselves better off.
 - D) "How much" is a decision at the margin.
156. The federal government regulates how much carbon dioxide a factory can emit. Which economic principle does this statement best represent?
- A) There are gains from trade.
 - B) "How much" is a decision at the margin.
 - C) Markets usually lead to efficiency.
 - D) When markets don't achieve efficiency, government intervention can improve society's welfare.

157. All children have to be immunized against polio, measles, mumps, and other diseases. If you don't have enough money to pay for the immunizations, they will be provided free at the county health clinic. Which economic principle does this statement best represent?
- A) People usually respond to incentives, exploiting opportunities to make themselves better off.
 - B) Resources should be used efficiently to achieve society's goals.
 - C) When markets don't achieve efficiency, government intervention can improve society's welfare.
 - D) Government policies can change spending.
158. The government of a small town has decided to ban smoking in all restaurants, stores, and government offices. This is an example of the principle that:
- A) one person's spending is another person's income.
 - B) when markets fail to achieve efficiency, government intervention can improve society's welfare.
 - C) there are gains from trade.
 - D) "How much" is a decision at the margin.
159. I know when I shop at the local grocery store, I am helping my community. Which economic principle does this statement best represent?
- A) People usually respond to incentives, exploiting opportunities to make themselves better off.
 - B) There are gains from trade.
 - C) One person's spending is another person's income.
 - D) Overall spending sometimes gets out of line with the economy's productive capacity.
160. Owen had a typewriter shop, but he went out of business because no one buys typewriters anymore. Which economic principle does this statement best represent?
- A) Choices are necessary because resources are scarce.
 - B) People usually respond to incentives, exploiting opportunities to make themselves better off.
 - C) Markets move toward equilibrium.
 - D) One person's spending is another person's income.

161. During the Great Depression, consumers and producers in the United States dramatically reduced their spending relative to the quantity of goods and services available at the time. Which economic principle does this statement best represent?
- A) Choices are necessary because resources are scarce.
 - B) When markets don't achieve efficiency, government intervention can improve society's welfare.
 - C) Overall spending sometimes gets out of line with the economy's productive capacity.
 - D) Government policies can change spending.
162. When people want more goods and services than are available, the economy undergoes inflation. Which economic principle does this statement BEST represent?
- A) There are gains from trade.
 - B) When markets don't achieve efficiency, government intervention can improve society's welfare.
 - C) Overall spending sometimes gets out of line with the economy's productive capacity.
 - D) Government policies can change spending.
163. Because the United States is a rich nation, free health care can be provided for all citizens without considering the issue of scarcity.
- A) True
 - B) False
164. The study of economics arises because of the necessity of choice, and the necessity of choice arises because of the fundamental problem of scarcity of resources.
- A) True
 - B) False
165. Because of the opportunity cost, if the United States spends \$87 billion in the rebuilding of Iraq, it has to forgo the opportunity to spend \$87 billion on some other program.
- A) True
 - B) False
166. In 2003, Congress passed a tax cut. The country did NOT incur any opportunity cost from this decision.
- A) True
 - B) False

167. A trade-off involves weighing costs and benefits.
A) True
B) False
168. Using marginal analysis to decide whether to consume an additional slice of pizza requires making a comparison of the benefits and costs associated with the consumption of an additional slice of pizza.
A) True
B) False
169. Economists make predictions about individual behavior based on the assumption that people exploit opportunities to make themselves better off. The fact that different individuals make different choices when confronted with the same situation implies that this assumption is often violated.
A) True
B) False
170. The principle that people will exploit opportunities to do what is best for others is the basis of all predictions by economists about individual behavior.
A) True
B) False
171. When people in Brazil engage in trade with people in Germany, all citizens in both nations are necessarily made better off.
A) True
B) False
172. As long as individuals know that they can find the goods and services they want in the market, they are willing to forgo being self-sufficient and are willing to specialize.
A) True
B) False
173. Trade theoretically allows people to get more of what they want.
A) True
B) False

174. In equilibrium, there will be no further opportunities for gains from trade.
A) True
B) False
175. An economic situation is in equilibrium when no individual would be better off taking a different action.
A) True
B) False
176. An economy is efficient if one person can be made better off by reallocating resources without making anyone else worse off.
A) True
B) False
177. Equity is the same as efficiency.
A) True
B) False
178. If an economy's resources are used efficiently, then it is guaranteed that the economy will also achieve equity.
A) True
B) False
179. Handicapped-designated parking spaces are an example of the market economy achieving efficiency.
A) True
B) False
180. The fact that individuals in a market economy act so as to make themselves better off is a major reason a market equilibrium is usually efficient.
A) True
B) False
181. According to standard economic theory, markets usually lead to efficiency.
A) True
B) False

182. Market failure occurs when the pursuit of self-interest leads to bad results for society.
A) True
B) False
183. Because one person's spending is another person's income, if one group in the economy spends more, the incomes of other groups will increase.
A) True
B) False
184. Because one person's spending is another person's income, if one group in the economy spends more, they increase their share of income and decrease the incomes of other groups.
A) True
B) False
185. Some products, like tobacco, are taxed. Why would the government interfere in a market that if left untaxed would probably move to equilibrium on its own?
186. Many college freshmen describe themselves as pre-med, but a very small percentage of these freshmen will ever attend medical school. After the first course in biology or chemistry, many decide to major in something other than the natural sciences. Which of the twelve principles is at work here?
187. A college student stays up late writing a history paper and as a result sleeps through her morning economics class. What is the cost of sleeping through the class?
188. A college student waits in line for hours to purchase a ticket to the Rose Bowl, but an attorney does not. Rather than spend hours in line, he purchases a much more expensive ticket through a ticket broker. Why?
189. A two-year-old child is eating raisins one at a time from a large box. Even though the child doesn't understand formal economic theory, he knows when to stop eating because he is full. Describe how this child has already mastered marginal analysis.

190. An apartment complex included a fixed price of water in the monthly rent. One day, the city decided to attach a water meter to each individual apartment and charge the tenant for actual water usage. As a result, water usage in the apartment complex went way down. Explain this situation using a principle of economics.
191. You and your roommate are taking the same economics class. When it comes to doing homework assignments, your roommate draws beautifully precise graphs, while you are an extremely fast typist. Therefore, you and your roommate work on the assignments together. Which of the twelve principles is at work here?
192. At most airports, there are multiple security guards ready to screen passengers and their luggage through the X-ray and metal detector checkpoints. The length of the wait for each line is about the same. Why?
193. The most efficient way to dispose of industrial waste is to dump it in a nearby river or parcel of land. Why is this illegal?
194. When Hurricane Katrina devastated the Gulf coast, the businesses in the area, even those not physically damaged by the storm, had losses. Explain how this illustrates the principle that “one person's spending is another person's income.”
195. By early 2008, the U.S. economy was in a significant downturn. The unemployment rate began to increase, and home prices began to fall. Congress passed a stimulus package that gave tax rebates to virtually every person who paid taxes in 2007. Which of the twelve principles is described by this package?
196. When someone says resources are scarce, this suggests that:
- A) lower-income individuals must be especially careful about the choices they make.
 - B) choices must be made to utilize resources in the best manner possible.
 - C) additional resources could be found if there were additional funds allocated to the effort.
 - D) we have enough resources to meet all of our needs and wants.

197. One day, Martha wakes up and in frustration yells, “Decisions, decisions, decisions! Why do I have to make decisions about everything?” Martha's frustrations stem from the fact that:
- A) like all economic beings, she faces constraints and cannot have everything she wants.
 - B) she doesn't realize she can have everything she wants.
 - C) she is the only one who faces constraints in life.
 - D) she really doesn't want anything.
198. Katherine has a physics exam tomorrow. However, a free lecture by one of her favorite authors is taking place this evening. Katherine decides to attend the lecture instead of studying for her exam. Katherine's opportunity cost of attending the lecture is:
- A) the time spent listening to the lecture.
 - B) not relevant since no money is involved.
 - C) the transportation and time cost of getting to the lecture itself plus the reduction in her physics exam grade as a result of not studying tonight.
 - D) the time spent getting to the lecture.
199. Mr. Freezee operates a fleet of ice cream trucks that drive around neighborhoods selling ice cream. He is trying to decide whether he should buy another ice cream truck to add to his fleet. He determines that one more truck will add \$750 to his revenue but that the truck will also increase his costs by \$1,000. Based on marginal analysis, Mr. Freezee decides:
- A) that he should not purchase the truck since the costs outweigh the benefits.
 - B) that he should purchase the truck since the benefits outweigh the costs.
 - C) that he should purchase the truck since his profits will rise by \$250.
 - D) to purchase several trucks with the same costs and benefits.
200. Julie is getting ready for final exams. She has three exams during the first three days of the exam period. To prepare, she has outlined a schedule that includes reviewing for her first exam on one day, her next exam on the following day, and her third exam on the third day. On each day, she has also allocated some time when she can watch TV or basically do nothing. Which statement best explains why Julie provides some time for leisure?
- A) Julie is not that smart and cannot study that long.
 - B) Julie is slacking off and will most likely fail all of her finals.
 - C) Julie realizes that there are benefits to leisure time that outweigh the costs of constant studying.
 - D) Julie does not understand the importance of studying.

201. A popular train station has free parking for commuters who take the train. This often results in many people being unable to find a parking spot and missing their train. To solve this problem, all commuters should be:
- A) given a parking pass along with their ticket.
 - B) required to pay for parking.
 - C) barred from parking at the station.
 - D) exempt from parking lot fees.
202. Beth promises to do Alice's taxes, and in exchange, Alice will set up several spreadsheets for Beth's household budget. This trade will MOST likely:
- A) be beneficial to both individuals.
 - B) hurt both individuals.
 - C) help Beth but hurt Alice.
 - D) help Alice but hurt Beth.
203. Overall, trade between China and the United States will:
- A) benefit the United States more than China.
 - B) benefit China more than the United States.
 - C) benefit both countries.
 - D) hurt both countries.
204. When a market is in equilibrium:
- A) a person could do better if he or she did something different.
 - B) people have exploited all opportunities to make themselves better off.
 - C) the government has wrongly interfered in this market.
 - D) markets are not working efficiently.
205. If an economy is efficient:
- A) all goods are produced at their maximum quantity.
 - B) all opportunities to make people better off without making other people worse off have been taken.
 - C) more resources have been used to produce specific consumer goods than producer goods.
 - D) prices are the lowest they can possibly be.

206. The provision of disabled-parking passes to those with disabilities often requires that more than enough spaces be available for those with disabilities. As a result, many of these spaces are vacant quite often when they could be used by able-bodied individuals. Such a situation illustrates the:
- A) trade-off between efficiency and equity.
 - B) trade-off between efficiency and specialization.
 - C) ability of markets to provide efficient and equitable outcomes.
 - D) power of the market to provide for equilibrium outcomes.
207. The existence of government intervention often suggests that:
- A) markets may not be able to provide for efficient results all of the time.
 - B) individual actions have no side effects.
 - C) an equitable outcome will necessarily be achieved through this intervention.
 - D) markets can efficiently manage the allocation of goods.
208. Suppose small business owners decide to spend less. How will this affect an economy?
- A) It will have no impact since this group makes up a small portion of any economy.
 - B) It will decrease the level of income of other people since one person's spending is someone else's income.
 - C) It will cause prices for many goods to increase.
 - D) It will increase the level of income in the economy since other groups will spend more.
209. People who live in large cities decide to spend less in their day-to-day activities. This will most likely lead to:
- A) less income for other people
 - B) more income for other people.
 - C) no impact on other people.
 - D) inflation.
210. Too little spending in an economy often leads to:
- A) a recession.
 - B) inflation.
 - C) equilibrium.
 - D) efficiency.

Answer Key

1. C
2. C
3. C
4. A
5. A
6. C
7. D
8. C
9. C
10. C
11. B
12. A
13. B
14. D
15. A
16. B
17. B
18. D
19. D
20. C
21. D
22. D
23. A
24. B
25. D
26. D
27. C
28. C
29. B
30. B
31. B
32. C
33. C
34. B
35. C
36. C
37. D
38. C
39. D
40. A
41. A
42. A
43. B
44. C

45. C
46. C
47. C
48. A
49. C
50. C
51. A
52. C
53. B
54. D
55. D
56. C
57. A
58. D
59. D
60. B
61. C
62. C
63. B
64. A
65. B
66. A
67. B
68. C
69. B
70. A
71. C
72. B
73. A
74. D
75. C
76. B
77. A
78. B
79. A
80. A
81. A
82. A
83. B
84. B
85. A
86. C
87. C
88. D
89. C
90. D

- 91. B
- 92. B
- 93. D
- 94. C
- 95. B
- 96. B
- 97. B
- 98. C
- 99. A
- 100. A
- 101. D
- 102. C
- 103. A
- 104. B
- 105. B
- 106. B
- 107. A
- 108. A
- 109. D
- 110. C
- 111. C
- 112. D
- 113. C
- 114. C
- 115. B
- 116. D
- 117. D
- 118. C
- 119. D
- 120. A
- 121. C
- 122. A
- 123. C
- 124. C
- 125. B
- 126. A
- 127. C
- 128. B
- 129. A
- 130. A
- 131. A
- 132. B
- 133. C
- 134. D
- 135. A
- 136. C

- 137. C
- 138. C
- 139. C
- 140. B
- 141. C
- 142. D
- 143. B
- 144. C
- 145. B
- 146. D
- 147. A
- 148. A
- 149. B
- 150. D
- 151. D
- 152. D
- 153. D
- 154. B
- 155. C
- 156. D
- 157. C
- 158. B
- 159. C
- 160. D
- 161. C
- 162. C
- 163. B
- 164. A
- 165. A
- 166. B
- 167. A
- 168. A
- 169. B
- 170. B
- 171. B
- 172. A
- 173. A
- 174. A
- 175. A
- 176. B
- 177. B
- 178. B
- 179. B
- 180. A
- 181. A
- 182. A

- 183. A
- 184. B
- 185.
- 186.
- 187.
- 188.
- 189.
- 190.
- 191.
- 192.
- 193.
- 194.
- 195.
- 196. B
- 197. A
- 198. C
- 199. A
- 200. C
- 201. B
- 202. A
- 203. C
- 204. B
- 205. B
- 206. A
- 207. A
- 208. B
- 209. A
- 210. A

1. The point at which the axes of a graph intersect is called the:
 - A) slope.
 - B) origin.
 - C) graph.
 - D) intercept.

2. The _____ of a curve shows the point at which the curve intersects an axis.
 - A) slope
 - B) steepness
 - C) intercept
 - D) origin

3. If two variables are positively related, on a graph they will always be represented by a:
 - A) line or curve that slopes downward.
 - B) straight line.
 - C) horizontal line.
 - D) line or curve that slopes upward.

4. If two variables are negatively related, they will always be represented by a:
 - A) line or curve that slopes downward.
 - B) straight line.
 - C) horizontal line.
 - D) line or curve that slopes upward.

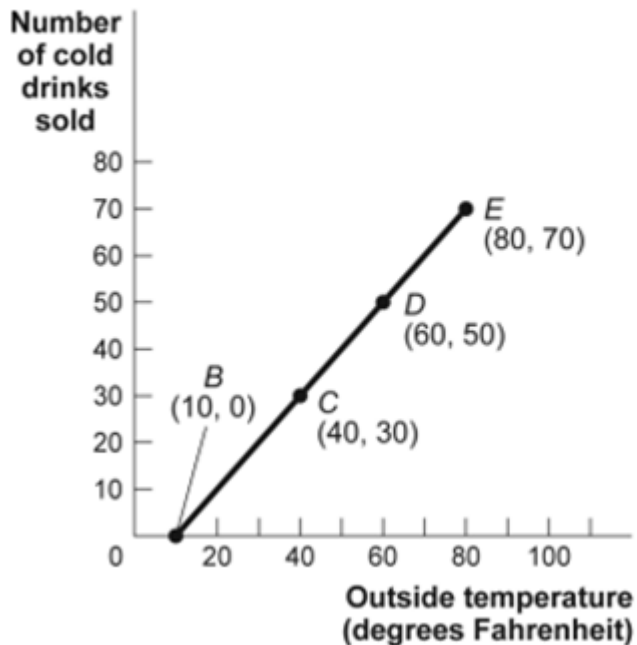
5. If two variables are negatively related:
 - A) as one goes up in value, the other must go up in value, too.
 - B) as one goes up in value, the other must go down in value.
 - C) there is no relationship between the two.
 - D) one variable is always the reciprocal of the other.

6. If two variables are positively related:
 - A) as one goes up in value, the other must go up in value, too.
 - B) as one goes up in value, the other must go down in value.
 - C) there is no relationship between the two.
 - D) one variable is always the reciprocal of the other.

7. The relation between two variables that move in the same direction is said to be:
- A) independent.
 - B) neutral.
 - C) positive.
 - D) indirect.
8. The relation between two variables that move in opposite directions is said to be:
- A) independent.
 - B) positive.
 - C) direct.
 - D) negative.
9. On a two-dimensional graph representing two variables:
- A) a positive slope of a curve means the variables are negatively related.
 - B) a negative slope of a curve means the two variables are positively related.
 - C) a line that is horizontal has a zero slope.
 - D) a line that is vertical has a zero slope.

Use the following to answer questions 10-12:

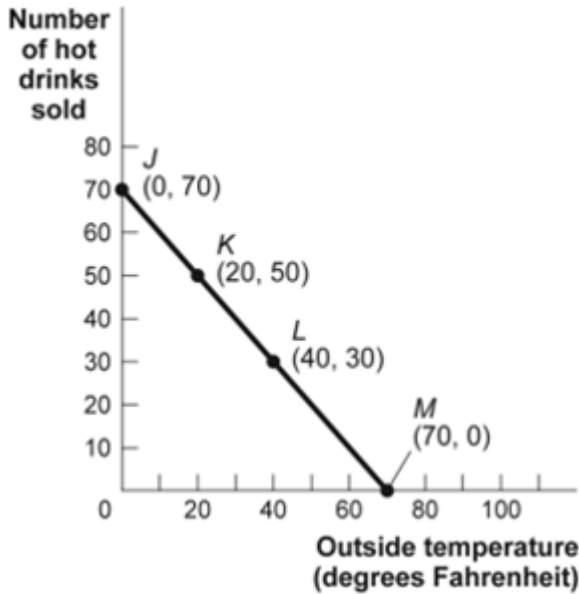
Figure: Cold Drinks Sold and Temperature



10. (Ref 1A-1 Figure: Cold Drinks Sold and Temperature) Use Figure: Cold Drinks Sold and Temperature. If we move from point *C* to point *E* in the figure, the outside temperature has _____ degrees and the number of cold drinks sold has _____.
- A) decreased by 30; decreased by 30
 - B) increased by 20; increased by 20
 - C) increased by 30; increased by 30
 - D) increased by 40; increased by 40
11. (Ref 1A-1 Figure: Cold Drinks Sold and Temperature) Use Figure: Cold Drinks Sold and Temperature. If we move from point *B* to point *C* in the figure, the outside temperature has _____ degrees and the number of cold drinks sold has _____.
- A) decreased by 30; decreased by 30
 - B) increased by 20; increased by 20
 - C) increased by 30; increased by 30
 - D) increased by 40; increased by 40
12. (Ref 1A-1 Figure: Cold Drinks Sold and Temperature) Use Figure: Cold Drinks Sold and Temperature. If we move from point *C* to point *D* in the figure, the outside temperature has _____ degrees and the number of cold drinks sold has _____.
- A) decreased by 30; decreased by 30
 - B) increased by 20; increased by 20
 - C) increased by 30; increased by 30
 - D) increased by 40; increased by 40

Use the following to answer questions 13-15:

Figure: Hot Drinks Sold and Temperature

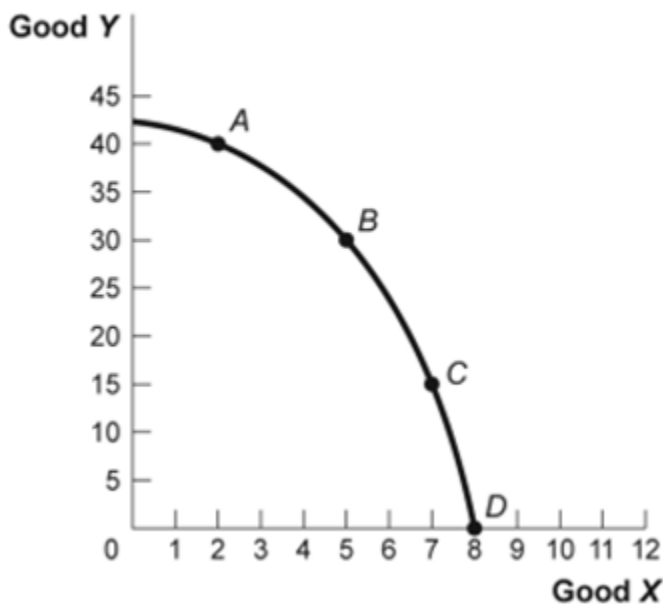


13. (Ref 1A-2 Figure: Hot Drinks Sold and Temperature) Use Figure: Hot Drinks Sold and Temperature. If we move from point *K* to point *L* in the figure, the outside temperature has _____ degrees and the number of hot drinks sold has _____.
- A) decreased by 30; increased by 30
 - B) increased by 20; decreased by 20
 - C) increased by 30; decreased by 30
 - D) increased by 40; decreased by 40
14. (Ref 1A-2 Figure: Hot Drinks Sold and Temperature) Use Figure: Hot Drinks Sold and Temperature. If we move from point *J* to point *L* in the figure, the outside temperature has _____ degrees and the number of hot drinks sold has _____.
- A) decreased by 30; increased by 30
 - B) increased by 20; decreased by 20
 - C) increased by 30; decreased by 30
 - D) increased by 40; decreased by 40

15. (Ref 1A-2 Figure: Hot Drinks Sold and Temperature) Use Figure: Hot Drinks Sold and Temperature. If we move from point *L* to point *M* in the figure, the outside temperature has _____ degrees and the number of hot drinks sold has _____.
- A) decreased by 30; increased by 30
 - B) increased by 20; decreased by 20
 - C) increased by 30; decreased by 30
 - D) increased by 40; decreased by 40

Use the following to answer questions 16-17:

Figure: Good X and Good Y

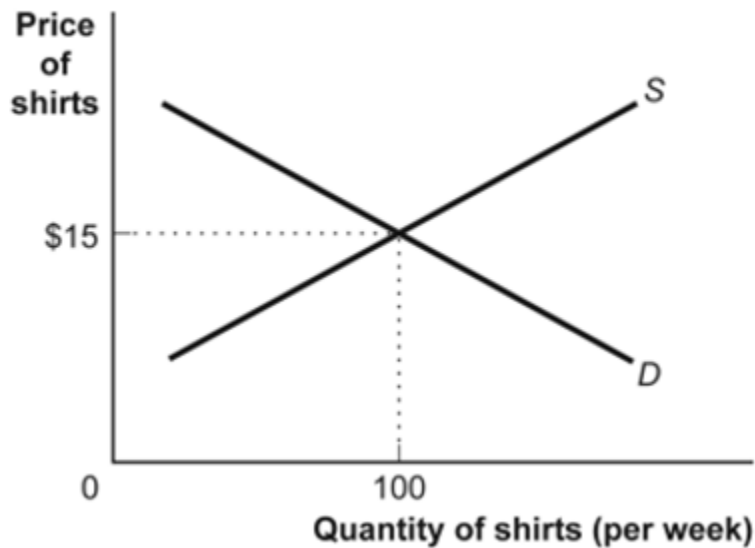


16. (Ref 1A-3 Figure: Good X and Good Y) Use Figure: Good X and Good Y. If we move from point *B* to point *C* in the figure, the *x*-variable has _____ units and the *y*-variable has _____ units.
- A) decreased by 2; increased by 15
 - B) increased by 2; decreased by 15
 - C) decreased by 15; increased by 2
 - D) increased by 15; decreased by 2

17. (Ref 1A-3 Figure: Good X and Good Y) Use Figure: Good X and Good Y . If we move from point C to point B in the figure, the x -variable has _____ units and the y -variable has _____ units.
- A) decreased by 2; increased by 15
 - B) increased by 2; decreased by 15
 - C) decreased by 15; increased by 2
 - D) increased by 15; decreased by 2
18. In the graph of a curve, the vertical intercept is the:
- A) value of the y -variable when the value of the x -variable is equal to zero.
 - B) change in the y -variable between two points divided by the change in the x -variable between those same two points.
 - C) value of the y -variable when the value of the slope is equal to zero.
 - D) value of the x -variable when the value of the y -variable is equal to zero.

Use the following to answer questions 19-20:

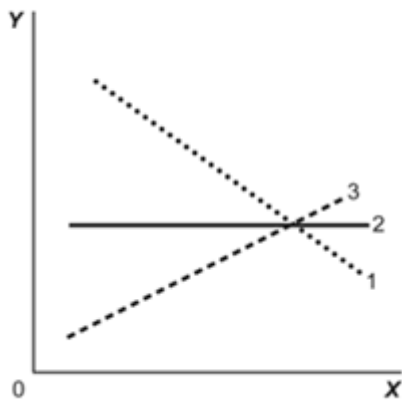
Figure: Demand and Supply of Shirts



19. (Ref 1A-5 Figure: Demand and Supply of Shirts) Use Figure: Demand and Supply of Shirts. In the graph, if the line labeled *D* shows how many shirts per week will be demanded at various prices, then it is clear that, as the price of shirts falls:
- A) fewer shirts will be demanded.
 - B) more shirts will be demanded.
 - C) the same quantity of shirts will be demanded.
 - D) it is unclear what will happen to the quantity of shirts demanded.
20. (Ref 1A-5 Figure: Demand and Supply of Shirts) Use Figure Demand and Supply of Shirts. If the line labeled *S* shows how many shirts per week will be offered for sale at various prices, then it is clear that, for supply, quantity and price are:
- A) linear.
 - B) coordinated.
 - C) nonlinear.
 - D) negatively sloped.

Use the following to answer questions 21-22:

Figure: Illustrating Slope

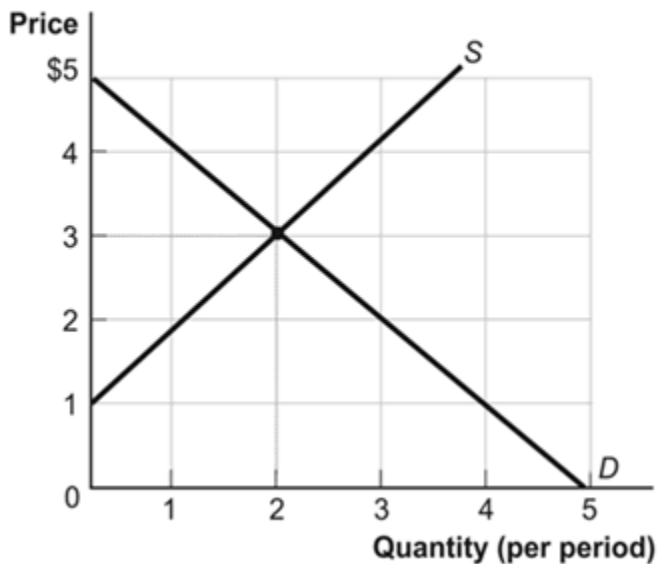


21. (Ref 1A-7 Figure: Illustrating Slope) Use Figure: Illustrating Slope. In the graph, line 1 depicts *X* and *Y* to be:
- A) positively related.
 - B) nonlinearly related.
 - C) unrelated.
 - D) negatively related.

22. (Ref 1A-7 Figure: Illustrating Slope) Use Figure: Illustrating Slope. In the graph, line 3 depicts X and Y to be:
- A) positively related.
 - B) unrelated.
 - C) negatively related.
 - D) both fixed in value.

Use the following to answer questions 23-24:

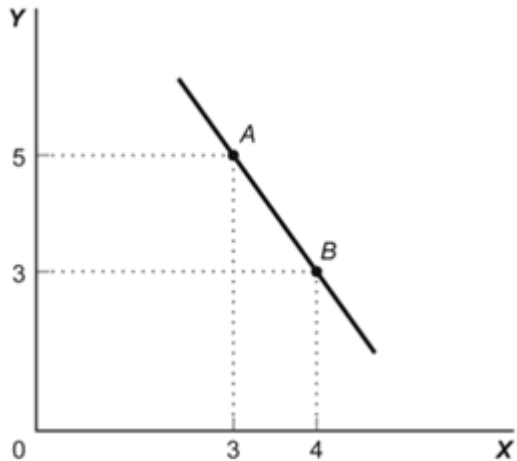
Figure: Demand and Supply



23. (Ref 1A-8 Figure: Demand and Supply) Use Figure: Demand and Supply. The curve labeled D indicates that a price of \$2 is associated with a quantity of:
- A) 0.
 - B) 1.
 - C) 2.
 - D) 3.
24. (Ref 1A-8 Figure: Demand and Supply) Use Figure: Demand and Supply. The curve labeled S indicates that a price of \$2 is associated with a quantity of:
- A) 0.
 - B) 1.
 - C) 2.
 - D) 3.

Use the following to answer question 25:

Figure: Slope



25. (Ref 1A-9 Figure: Slope) Use Figure: Slope. This graph depicts _____ relationship between the X and Y variables.
- A) a positive
 - B) a negative
 - C) an independent
 - D) no

Use the following to answer questions 26-27:

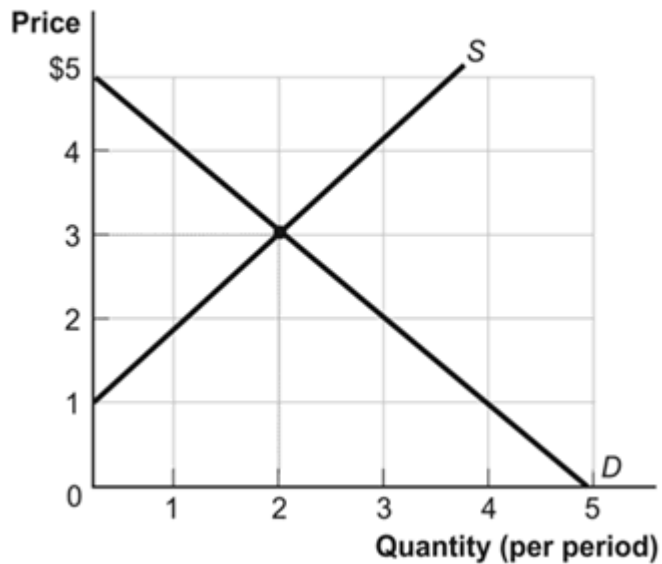
Table: Wages and Hours Worked

Point	Wage	Hours Worked
A	6	0
B	8	5
C	12	20
D	20	40
E	30	45

26. (Ref 1A-10 Table: Wages and Hours Worked) Use Table: Wages and Hours Worked. Graphing the relation with wages on the vertical axis and hours worked on the horizontal axis, the slope between point D and point E is:
- A) 0.5.
 - B) 5.
 - C) 45.
 - D) 2.
27. (Ref 1A-10 Table: Wages and Hours Worked) Use Table: Wages and Hours Worked. Graphing the relation with wages on the vertical axis and hours worked on the horizontal axis, the slope between point A and point B is:
- A) 2.5.
 - B) 5.
 - C) 2.
 - D) $2/5$.
28. Two points on a nonlinear curve have coordinates given by $(5, 15)$ and $(17, 13)$. The average slope of the curve between these points is:
- A) $-1/6$.
 - B) -6 .
 - C) $1/4$.
 - D) 2.5.
29. If two points on a graph are $(0, 8)$ and $(12, 15)$:
- A) +1.
 - B) 0.
 - C) -1.
 - D) infinity.

Use the following to answer questions 30-31:

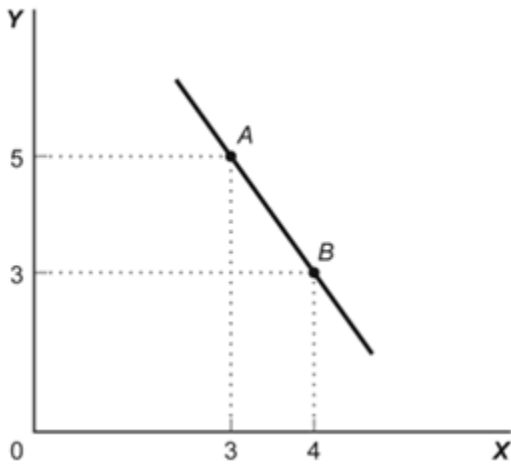
Figure: Demand and Supply



30. (Ref 1A-12 Figure: Demand and Supply) Use Figure: Demand and Supply. The slope of the curve labeled *D* is:
- A) -1.
 - B) 0.
 - C) 1.
 - D) 3.
31. (Ref 1A-12 Figure: Demand and Supply) Use Figure: Demand and Supply. The slope of the curve labeled *S* is:
- A) -1.
 - B) 0.
 - C) 1.
 - D) 3.
32. The slope of a straight line is the ratio of the:
- A) vertical change to the horizontal change.
 - B) horizontal change to the vertical change.
 - C) run over the rise.
 - D) vertical change to the horizontal change, and it must be positive.

Use the following to answer questions 33-34:

Figure: Slope



33. (Ref 1A-13 Figure: Slope) Use Figure: Slope. In the graph, the slope of the line between points *A* and *B* is:
- A) +8.
 - B) -8.
 - C) -2.
 - D) +2.
34. (Ref 1A-13 Figure: Slope) Use Figure: Slope. The slope of the line in the graph can be calculated by:
- A) dividing the horizontal change by the vertical change.
 - B) dividing the vertical change by the horizontal change.
 - C) subtracting the sum of the *Y* values from the sum of the *X* values.
 - D) adding the sum of the *X* values to the sum of the *Y* values.
35. The ratio of the change in the variable on the vertical axis to the change in the variable on the horizontal axis, measured between two points on the curve, is the:
- A) axis.
 - B) slope.
 - C) dependent variable.
 - D) independent variable.

Use the following to answer questions 36-39:

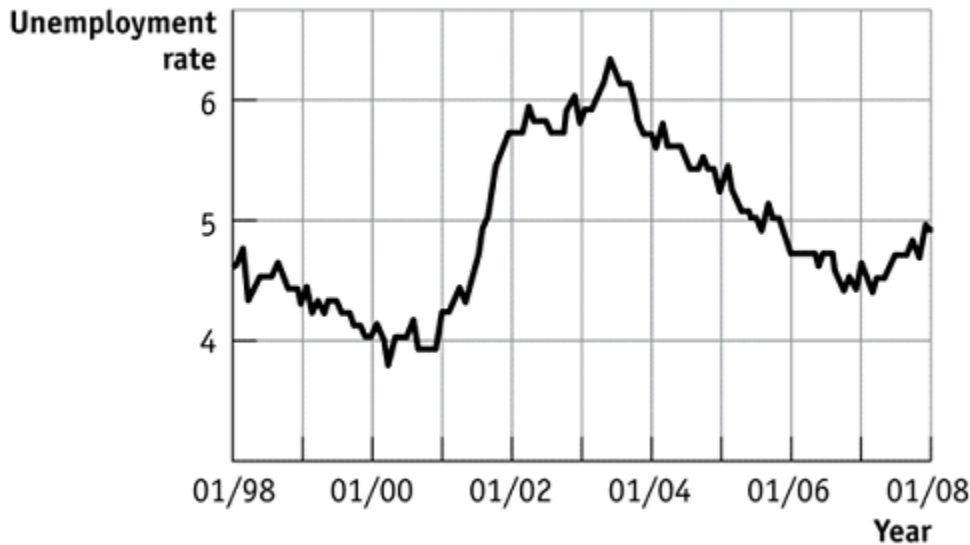
Table: Price, Quantity Demanded, and Quantity Supplied

Price	1	2	3	4	5
Quantity demanded	16	8	4	2	1
Quantity supplied	3	5	7	9	11

36. (Ref 1A-14 Table: Price, Quantity Demanded, and Quantity Supplied) Use Table: Price, Quantity Demanded, and Quantity Supplied. A linear relationship exists between:
- A) price and quantity demanded.
 - B) price and quantity supplied.
 - C) price and quantity demanded minus quantity supplied.
 - D) quantity demanded and quantity supplied.
37. (Ref 1A-14 Table: Price, Quantity Demanded, and Quantity Supplied) Use Table: Price, Quantity Demanded, and Quantity Supplied. The data in the figure suggest a nonlinear relation between:
- A) price and quantity demanded.
 - B) price and quantity supplied.
 - C) price and quantity demanded, as well as price and quantity supplied.
 - D) The table does not show a nonlinear relation.
38. (Ref 1A-14 Table: Price, Quantity Demanded, and Quantity Supplied) Use Table: Price, Quantity Demanded, and Quantity Supplied. The slope of the line representing the relation between price on the vertical axis and quantity supplied on the horizontal axis is:
- A) equal to $1/2$.
 - B) equal to 1.
 - C) equal to 2.
 - D) different at different points on the line.
39. (Ref 1A-14 Table: Price, Quantity Demanded, and Quantity Supplied) Use Table: Price, Quantity Demanded, and Quantity Supplied. The slope of the line representing the relationship between price on the vertical axis and quantity demanded on the horizontal axis is:
- A) positive and constant.
 - B) negative and getting steeper.
 - C) positive and getting steeper.
 - D) positive and getting flatter.

Use the following to answer questions 40-44:

Figure: Seasonally Adjusted Unemployment Rate

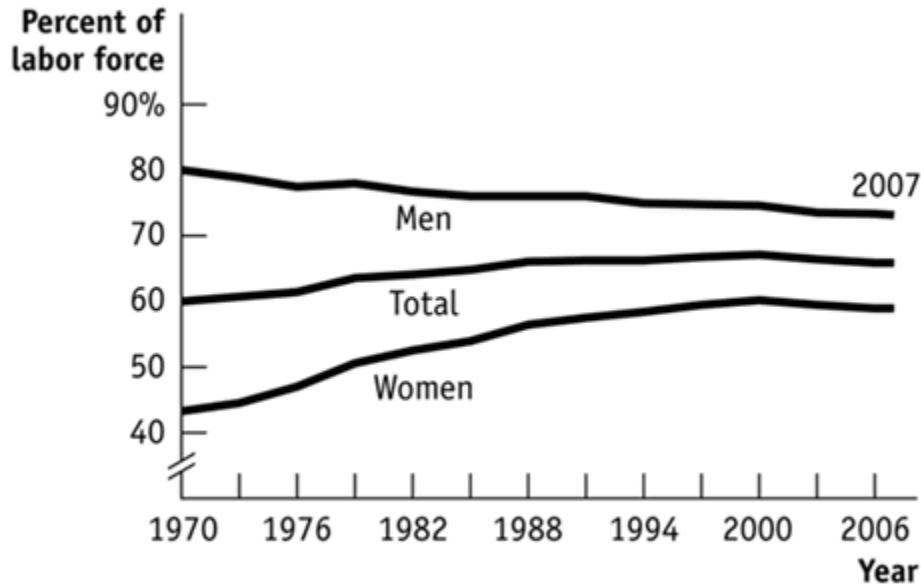


40. (Ref 1A-16 Figure: Seasonally Adjusted Unemployment Rate) Use Figure: Seasonally Adjusted Unemployment Rate. The distance between each labeled point on the horizontal axis is one year, and the distance between each labeled point on the vertical axis is one percentage point of unemployment. What is the approximate slope of the graph between 1/2004 and 1/2006 (using percentage point and years as the units on the vertical and horizontal axes, respectively)?
- A) $1/2$
 - B) 1
 - C) $-1/2$
 - D) -2
41. (Ref 1A-16 Figure: Seasonally Adjusted Unemployment Rate) Use Figure: Seasonally Adjusted Unemployment Rate. The distance between each labeled point on the horizontal axis is one year, and the distance between each labeled point on the vertical axis is one percentage point of unemployment. What is the approximate slope of the graph between 1/2001 and 1/2003 (using percentage point and years as the units on the vertical and horizontal axes, respectively)?
- A) 2
 - B) 1
 - C) -1
 - D) -2

42. (Ref 1A-16 Figure: Seasonally Adjusted Unemployment Rate) Use Figure: Seasonally Adjusted Unemployment Rate. The distance between each labeled point on the horizontal axis is one year, and the distance between each labeled point on the vertical axis is one percentage point of unemployment. Unemployment was _____ between 1/2001 and 1/2002 and _____ between 1/1999 and 1/2000.
- A) increasing; decreasing
 - B) increasing; increasing
 - C) decreasing; increasing
 - D) decreasing; decreasing
43. (Ref 1A-16 Figure: Seasonally Adjusted Unemployment Rate) Use Figure: Seasonally Adjusted Unemployment Rate. The distance between each labeled point on the horizontal axis is one year, and the distance between each labeled point on the vertical axis is one percentage point of unemployment. Unemployment was _____ between 1/2001 and 1/2003 and _____ between 1/2007 and 1/2008.
- A) increasing; decreasing
 - B) increasing; increasing
 - C) decreasing; increasing
 - D) decreasing; decreasing
44. (Ref 1A-16 Figure: Seasonally Adjusted Unemployment Rate) Use Figure: Seasonally Adjusted Unemployment Rate. The distance between each labeled point on the horizontal axis is one year, and the distance between each labeled point on the vertical axis is one percentage point of unemployment. Using this graph, the unemployment rate was at its lowest point (in the time window) shown in _____ and at its highest point (in the time window shown) in _____.
- A) 2003; 2000
 - B) 2007; 2001
 - C) 2003; 1999
 - D) 2000; 2003

Use the following to answer questions 45-46:

Figure: Labor Force Participation Rate



45. (Ref 1A-17 Figure: Labor Force Participation Rate) Use Figure: Labor Force Participation Rate. Using the figure, the labor force participation rate for women was _____ during 1970-1985 and _____ during 1998-2006.
- A) increasing; slightly decreasing
 - B) increasing; increasing
 - C) decreasing; increasing
 - D) decreasing; constant
46. (Ref 1A-17 Figure: Labor Force Participation Rate) Use Figure: Labor Force Participation Rate. During 1970-1985, the labor force participation rate was _____ for women and _____ for men.
- A) increasing; decreasing
 - B) increasing; increasing
 - C) decreasing; increasing
 - D) decreasing; decreasing

47. Your boss asks you to graph company profits for the past 10 years. The best way to show this information is with a(n):
- A) scatter diagram.
 - B) pie chart.
 - C) time-series graph.
 - D) independent graph.
48. The owner of the Dismal Philosopher, one of five bookstores on College Road, asks you to make a graph showing each College Road bookstore's share of all five stores' book purchases. The BEST way to show this information is with a(n):
- A) scatter diagram.
 - B) pie chart.
 - C) time-series graph.
 - D) independent graph.
49. Professor Macro wants to use a numerical graph to show the percentage of government spending accounted for by its various components. Which graph is most suitable for this purpose?
- A) a bar graph
 - B) a pie chart
 - C) a time-series graph
 - D) a scatter diagram
50. A positive relationship between swimsuits purchased and ice cream purchased could be the result of:
- A) reverse causality.
 - B) a magnified scale on the swimsuit axis.
 - C) a truncation of the ice cream axis.
 - D) an omitted variable, such as the external temperature.
51. Taylor sees a bar graph showing the average weight of adult males over the past 200 years and concludes that men get more obese over time. Taylor's conclusion may be wrong since she did not consider:
- A) the features of construction.
 - B) omitted variables.
 - C) reverse causality.
 - D) tangent lines.

Use the following to answer questions 52-55:

Figure: Unemployment Rate over Time



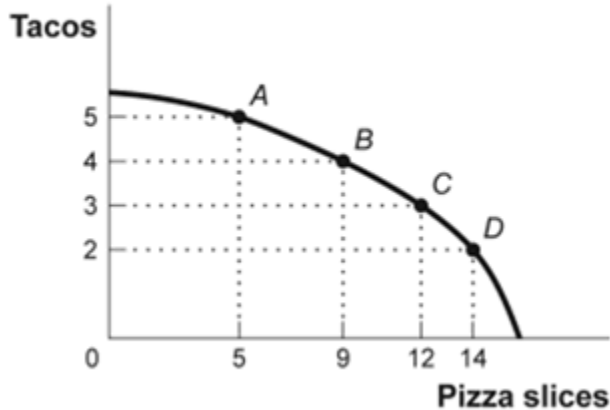
52. (Ref 1A-18 Figure: Unemployment Rate over Time) Look at the figure Unemployment Rate over Time. In the time-series graph, as we move from the beginning of 2001 to the beginning of 2003, we see that the unemployment rate has _____ from approximately _____ to approximately _____.
- A) decreased; 5%; 4%
 - B) increased; 5.3%; 7.3%
 - C) decreased; 7.7%; 5.5%
 - D) increased; 4%; 6%
53. (Ref 1A-18 Figure: Unemployment Rate over Time) Use Figure: Unemployment Rate over Time. In the time-series graph, as we move from 1993 to 1995, we see that the unemployment rate has _____ from approximately _____% to approximately _____%.
- A) decreased; 5; 4
 - B) increased; 5.3; 7.3
 - C) decreased; 7; 5.5
 - D) increased; 4; 6.3

54. (Ref 1A-18 Figure: Unemployment Rate over Time) Use Figure: Unemployment Rate over Time. In the time-series graph, as we move from 1991 to 1993, we see that the unemployment rate has _____ from approximately _____% to approximately _____%.
- A) decreased; 5; 4
 - B) increased; 5.5; 7
 - C) decreased; 7.8; 5
 - D) increased; 4; 6.3
55. (Ref 1A-18 Figure: Unemployment Rate over Time) Use Figure: Unemployment Rate over Time. In the time-series graph, as we move from 1997 to 2001, we see that the unemployment rate has _____ from approximately _____% to approximately _____%.
- A) decreased; 5; 4
 - B) increased; 5.3; 7.3
 - C) decreased; 7.8; 5.5
 - D) increased; 4; 6.3
56. A _____ graph shows how the value of one or more variables has changed over some period.
- A) linear
 - B) time-series
 - C) nonlinear
 - D) periodic table
57. The scaling of the axes of a time-series graph:
- A) is not a critical element in presenting the intended information.
 - B) may change the visual interpretation of the data.
 - C) generally places the time period on the vertical axis.
 - D) generally puts values of a variable, such as the unemployment rate, on the vertical axis.
58. In a time-series graph, large changes can be made to appear insignificant by:
- A) changing the scale of the axes.
 - B) labeling more intervals.
 - C) defining the dependent variable.
 - D) defining the independent variable.

59. A scatter diagram shows:
- A) how far apart dependent variables are.
 - B) individual points of data showing both variable values.
 - C) the slope of a line.
 - D) the intercept of a curve.
60. The fact that two variables always move together over time:
- A) does not prove that one of the variables is dependent on the other.
 - B) proves that one of the variables is dependent on the other.
 - C) proves that changes in one variable cause changes in the other.
 - D) is often illustrated or depicted using either a pie chart or a bar chart.
61. A pie chart is used to depict information about:
- A) the relative shares of categories of data.
 - B) the changes of a particular variable over time.
 - C) positive, not negative, relationships among variables.
 - D) the changes of a particular variable over time and positive relationships.
62. A bar graph:
- A) is useful when showing what has happened over time.
 - B) may be shown by vertical bars to illustrate the comparative sizes of different observations.
 - C) is useful when the true direction of causality between two variables is reversed.
 - D) shows the percentages of a total amount that can be attributed to various components.
63. In looking at a chart of the positive relationship between police officers and crime, the mayor remarks that more police officers cause more crime. The mayor may be wrong because she did not consider:
- A) the features of construction.
 - B) omitted variables.
 - C) reverse causality.
 - D) tangent lines.

Use the following to answer questions 64-65:

Figure: Consumption of Pizza and Tacos



64. (Ref 1A-19 Figure: Consumption of Pizza and Tacos) Use Figure: Consumption of Pizza and Tacos. The figure shows the number of tacos and pizza slices Matt can eat in a day. The relation is nonlinear, and there is a negative relation between the number of tacos and pizza slices that Matt can eat in a day.
- A) True
 - B) False
65. (Ref 1A-19 Figure: Consumption of Pizza and Tacos) Use Figure: Consumption of Pizza and Tacos. The figure shows the number of tacos and pizza slices Matt can eat in a day. The best estimate of the slope between point *A* and point *B* is -4 .
- A) True
 - B) False
66. A linear curve has the same slope between every pair of points.
- A) True
 - B) False
67. The owner of the Dismal Philosopher, one of the five bookstores on College Road, asks you to make a graph showing each College Road bookstore's share of all five stores' book purchases. A good way to show this information is with a pie chart.
- A) True
 - B) False

68. A town hires more police officers and then has an increase in arrests. One can conclude that the larger police force caused more crime.
- A) True
 - B) False
69. An economist wishes to build a model to explain the relationship between the number of diamonds purchased every year and the average income of consumers in that year. Which variable should be the dependent variable and which should be the independent variable? All else equal, do you expect this relationship to be positive or negative? Explain.

Answer Key

1. B
2. C
3. D
4. A
5. B
6. A
7. C
8. D
9. C
10. D
11. C
12. B
13. B
14. D
15. C
16. B
17. A
18. A
19. B
20. C
21. D
22. A
23. D
24. B
25. B
26. D
27. D
28. A
29. B
30. A
31. C
32. A
33. C
34. B
35. B
36. B
37. A
38. A
39. C
40. C
41. B
42. A
43. B
44. D

- 45. A
- 46. A
- 47. C
- 48. B
- 49. B
- 50. D
- 51. B
- 52. D
- 53. C
- 54. B
- 55. A
- 56. B
- 57. B
- 58. A
- 59. B
- 60. A
- 61. A
- 62. D
- 63. C
- 64. A
- 65. B
- 66. A
- 67. A
- 68. B
- 69.