

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) The opportunity cost of something is: 1) _____
A) what you sacrifice to get it. B) the price charged for it.
C) the cost of the labor used to produce it. D) the search cost required to find it.
- 2) The principle of opportunity cost: 2) _____
A) is only relevant in economics.
B) is more relevant for firms than for individuals.
C) is applicable to all decision making.
D) only refers to monetary payments.
- 3) The principle that the cost of something is equal to what is sacrificed to get it is known as the: 3) _____
A) principle of opportunity cost. B) reality principle.
C) principle of diminishing returns. D) marginal principle.
- 4) The saying that "There's no such thing as a free lunch" refers to the: 4) _____
A) spillover principle. B) principle of opportunity cost.
C) marginal principle. D) reality principle.
- 5) Suppose that your tuition to attend college is \$10,000 per year and you spend \$4,000 per year on room and board. If you were working full time, you could earn \$20,000 per year. What is your opportunity cost of attending college for one year? 5) _____
A) \$34,000 B) \$14,000 C) \$24,000 D) \$30,000
- 6) Suppose that your tuition to attend college is \$5,000 per year and you spend \$5,000 per year on room and board. If you were working full time, you could earn \$22,000 per year. What is your opportunity cost of attending college? 6) _____
A) \$30,000 B) \$35,000 C) \$27,000 D) \$13,000
- 7) Mark quit his job as a salesman where he made \$43,000 per year to start his own t-shirt making business. His business expenses are \$6,000 per year on rent, \$12,000 per year on supplies, and \$4,000 per year on part-time help. As for his personal expenses, his apartment costs him \$4,800 per year and his personal bills are an extra \$1,200 per year. What is Mark's opportunity cost of running the business? 7) _____
A) \$43,000 B) \$57,000 C) \$71,000 D) \$65,000
- 8) An unemployed individual decides to spend the day fishing. The opportunity cost of fishing is equal to: 8) _____
A) the cost of bait and any other monetary expenses.
B) zero, because the person doesn't have a job.
C) the cost of bait, any other monetary expenses, and the value of the best alternative use of the individual's time.
D) the value of the individual's wages while he was working.
- 9) The opportunity cost of going to college: 9) _____
A) is the same for all students at a particular school who pay full tuition.
B) is equal to the cost of tuition, room and board, and other expenses.
C) is zero if your parents pay your tuition.
D) includes wages you lose by going to school instead of working.
- 10) Pat claims to save a great deal of money on groceries by traveling to various supermarkets to ma ke her

purchase 10)
s at their
advertise
d sale
prices.
She
might
visit as
many as
five
different
stores in
one day
in order
to
complete
her
weekly
shopping
. Her
savings
are not
as great
as she
may
think
they are
if she
does not
consider
the:

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- A) cost of the gasoline in driving from one store to another.
- B) value of the time she is spending doing the shopping as opposed to other things.
- C) mileage she is putting on her car driving from one store to another.
- D) all of the above

- 11) Five years ago Tammy always took a big envelope full of coupons to the grocery store. Now she has a preschooler and rarely brings coupons. Which of the following is *not* a possible explanation of this change in her behavior? 11) _____
- A) The opportunity cost of clipping coupons has risen above their monetary value.
 - B) Fewer coupons appear in the newspapers than five years ago.
 - C) Grocery prices have decreased.
 - D) The opportunity cost of grocery shopping has decreased.
- 12) Nancy and Melissa both have broken light fixtures in their living rooms. Nancy opts to hire an electrician, while Melissa spends two hours replacing the fixture herself. Which of the following is a possible explanation of this behavior? 12) _____
- A) Nancy dislikes electrical work more than Melissa.
 - B) The opportunity cost of Nancy's time is higher than her cost to hire an electrician.
 - C) Melissa is better at doing electrical work than Nancy.
 - D) All of the above are possible explanations of this behavior.

- 13) Suppose that you own a house. What is the opportunity cost of living in the house? 13) _____
- A) There is no opportunity cost unless you could set up a business in the house.
 - B) The opportunity cost is the rent you could have received from a tenant if you didn't live there.
 - C) The opportunity cost is the cost of your monthly mortgage payment plus bills.
 - D) There is no opportunity cost because you own the house.
- 14) Steven lives in a big city where there is a shortage of parking. He has a parking spot in his driveway where he parks his car. Which of the following statement is most correct? 14) _____
- A) The opportunity cost of using the parking spot is the price he could charge someone else for using the spot.
 - B) The opportunity cost depends on how much Steven's mortgage payment is.
 - C) The opportunity cost of using the parking spot is zero, because Steven owns the house.
 - D) Steven has a lower opportunity cost of owning a car than his neighbor, who must rent a parking spot.
- 15) You have an hour between your economics and math classes. What is the opportunity cost of that time if you use it to do math homework? 15) _____
- A) It depends on what you would do if you had no math homework.
 - B) It depends on how much you like math.
 - C) Zero, because an hour isn't long enough to go to a paying job.
 - D) Zero, because it doesn't cost any money to do your math homework.
- 16) You rent a copy of a new action/adventure movie. The rental is for seven days and you watch the movie on the first day. You tell a friend about the film and your friend asks to come over and watch the movie with you before it is due back. What is your opportunity cost of watching the movie a second time? 16) _____
- A) Zero, because it won't cost you any money to keep the movie for another day.
 - B) One half the rental cost, because you have already watched the movie one time.
 - C) The answer depends on what else you could do besides watching the movie.
 - D) The answer depends on how much you liked the movie in the first place.
- 17) Jessica, age three, decides to dress up like Sleeping Beauty for Halloween. What is her opportunity cost of this decision? 17) _____
- A) the fact that she can't dress up like Barbie, her second choice
 - B) the cost of the costume
 - C) Zero, because three-year-olds do not have opportunity costs
 - D) Impossible to say, because Jessica does not understand what an opportunity cost is
- 18) Spending money on a fixed budget is an example of: 18) _____
- A) living on the edge.
 - B) how to survive with limited financial resources.
 - C) the principle of opportunity cost.
 - D) a bad thing to do because you run out of money.
- 19) The saying that: "There is no such thing as a free lunch" refers to: 19) _____
- A) the principle of diminishing returns.
 - B) the price of fast food in today's economy.
 - C) the principle of reality in a modern world.
 - D) the principle of opportunity cost.

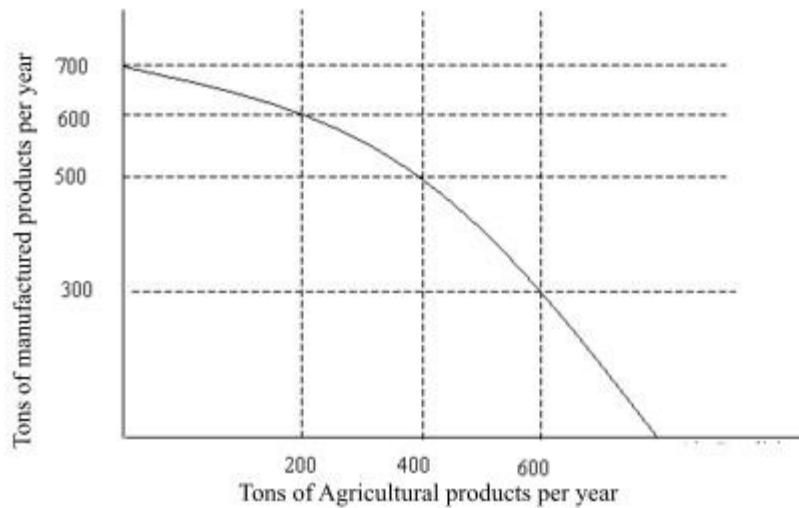


Figure 2.1

- 20) Referring to Figure 2.1, if you increase the production of farm goods, what other area is affected? 20) _____
- A) the production of factory goods
B) the wages earned by farm workers
C) how much people can purchase
D) the price of produce
- 21) The production possibilities curve in Figure 2.1 illustrates the notion of: 21) _____
- A) increased factory goods production.
B) increased farm produce production.
C) opportunity cost.
D) diminishing resources.
- 22) On the production possibilities curve in Figure 2.1 as agricultural production increases by 200 tons per year from 200 tons to 400 tons and then to 600 tons, the opportunity cost in terms of tons of manufacturing goods: 22) _____
- A) rises.
B) becomes negative.
C) falls.
D) is constant.
- 23) On the production possibilities curve in Figure 2.1 the opportunity costs of increasing agricultural production from 200 tons to 400 tons is: 23) _____
- A) 600 tons of manufacturing products.
B) 100 tons of manufacturing products.
C) 500 tons of manufacturing products.
D) 200 tons of manufacturing products.
- 24) On the production possibilities curve in Figure 2.1 the opportunity costs of increasing agricultural production from 400 tons to 600 tons is: 24) _____
- A) 600 tons of manufacturing.
B) 100 tons of manufacturing.
C) 200 tons of manufacturing.
D) 500 tons of manufacturing.
- 25) On the production possibilities curve in Figure 2.1 the gain from decreasing manufacturing production from 700 tons to 500 tons is: 25) _____
- A) 200 tons of agriculture.
B) 700 tons of agriculture.
C) 500 tons of agriculture.
D) 100 tons of agriculture.
- 26) On the production possibilities curve in Figure 2.1 the gain from decreasing manufacturing production from 500 tons to 300 tons is: 26) _____
- A) 200 tons of agriculture.
B) 100 tons of agriculture.
C) 700 tons of agriculture.
D) 500 tons of agriculture.

- 27) If an economy is fully utilizing its resources, it can produce more of one product only if it: 27) _____
- A) produces less of another product.
 - B) adds more people to the labor force.
 - C) doubles manufacturing of the product.
 - D) reduces the prices of the most expensive products.

- 28) If you remove resources from factory production, the quantity of factory goods will: 28) _____
- A) be diverted to other production.
 - B) remain the same but their price will decrease.
 - C) increase.
 - D) decrease.

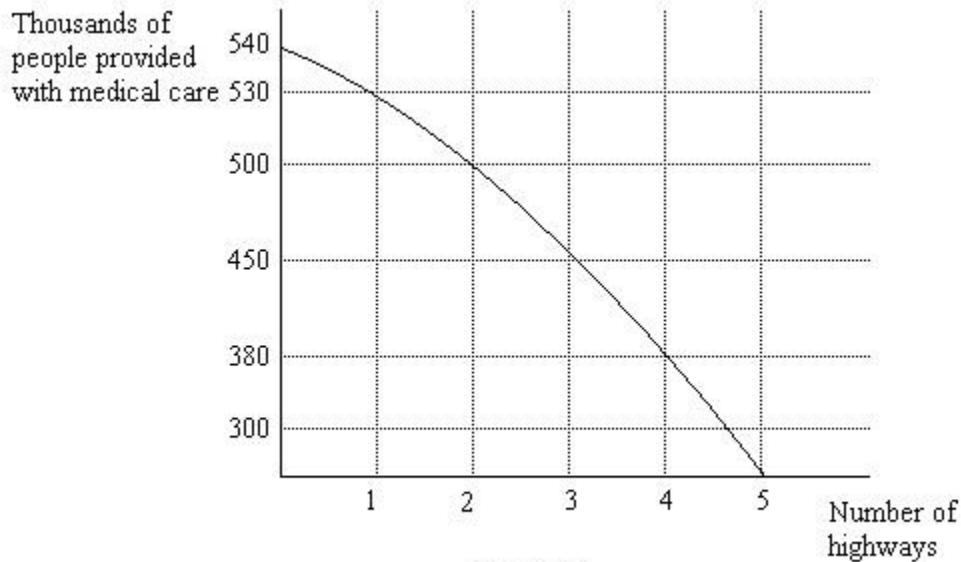


Figure 2.2

- 29) Figure 2.2 presents a production possibilities curve for a country that can either produce highways or provide people with medical care in a given year. The opportunity cost of the second new highway built in a year is: 29) _____
- A) 500,000 people provided with medical care.
 - B) 50,000 people provided with medical care.
 - C) 30,000 people provided with medical care.
 - D) 40,000 people provided with medical care.

- 30) Figure 2.2 presents a production possibilities curve for a country that can either produce highways or provide people with medical care in a given year. The opportunity cost of the third new highway built in a year is: 30) _____
- A) 50,000 people provided with medical care.
 - B) 90,000 people provided with medical care.
 - C) 10,000 people provided with medical care.
 - D) 450,000 people provided with medical care.

- 31) Figure 2.2 presents a production possibilities curve for a country that can either produce highways or provide people with medical care in a given year. The opportunity cost of the fourth new highway built in a year is: 31) _____
- A) greater than the opportunity cost of the third new highway.
 - B) less than the opportunity cost of the third new highway.
 - C) the sum of the opportunity costs of the first three highways built.

D) the same as the opportunity cost of the third new highway.

32) Figure 2.2 presents a production possibilities curve for a country that can either produce highways or provide people with medical care in a given year. The opportunity cost of the fourth new highway built in a year is: 32) _____

- A) the same as the opportunity cost of the fifth new highway.
- B) greater than the opportunity cost of the fifth new highway.
- C) less than the opportunity cost of the fifth new highway.
- D) the sum of the first three highways built in a year.

Houses	Yards
0	21
1	20
2	18
3	15
4	11
5	6
6	0

Table 2.1

33) A group of people has formed a house cleaning and yard maintenance business. The number of houses or yards that they can clean or maintain in any given day is depicted in Table 2.1. The opportunity cost of cleaning the first house in a day is: 33) _____

- A) 2 yards.
- B) 20 yards.
- C) 1 yard.
- D) 0 yards.

34) A group of people has formed a house cleaning and yard maintenance business. The number of houses or yards that they can clean or maintain in any given day is depicted in Table 2.1. The opportunity cost of cleaning the second house in a day is: 34) _____

- A) 3 yards.
- B) 18 yards.
- C) 1 yard.
- D) 2 yards.

35) A group of people has formed a house cleaning and yard maintenance business. The number of houses or yards that they can clean or maintain in any given day is depicted in Table 2.1. The opportunity cost of cleaning the third house in a day is: 35) _____

- A) 2 yards.
- B) 3 yards.
- C) 15 yards.
- D) 1 yard.

36) A group of people has formed a house cleaning and yard maintenance business. The number of houses or yards that they can clean or maintain in any given day is depicted in Table 2.1. As the group cleans more houses the opportunity cost of cleaning houses: 36) _____

- A) falls.
- B) rises.
- C) stays the same.
- D) is the sum of the opportunity costs of cleaning all the houses prior to that one.

37) A group of people has formed a house cleaning and yard maintenance business. The number of houses or yards that they can clean or maintain in any given day is depicted in Table 2.1. As the group cleans more houses the opportunity cost of doing yard work: 37) _____

- A) rises.
- B) falls.
- C) stays the same.
- D) becomes equal to the opportunity cost of cleaning houses.

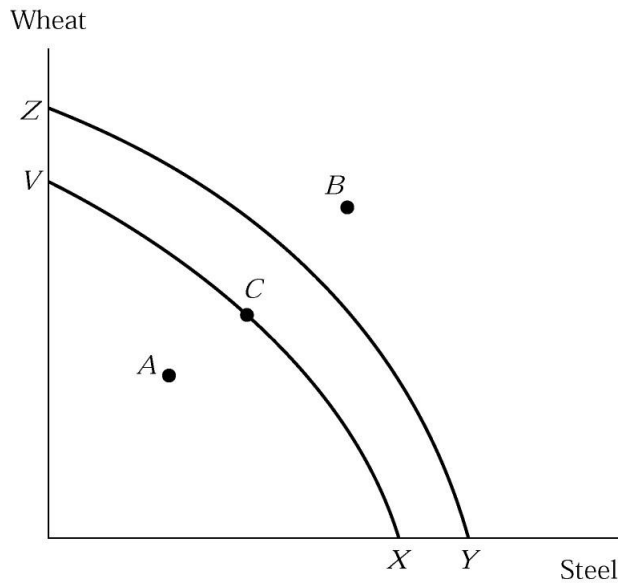


Figure 2.3

- 38) In figure 2.3, the move from production possibility curve XV to production possibility curve YZ, could be caused by: 38) _____
- A) a decline in technology. B) more land, labor or capital.
C) decreased unemployment. D) all of the above.
- 39) In figure 2.3, point B: 39) _____
- A) is the optimum.
B) cannot be produced.
C) implies unemployment of some resources.
D) all of the above.
- 40) In figure 2.3, point A: 40) _____
- A) implies unemployment of some resources.
B) cannot be produced.
C) is the optimum.
D) all of the above.
- 41) In figure 2.3, the optimum production point on production possibility curve XV is 41) _____
- A) point A. B) point B.
C) point C. D) none of the above.
- 42) In figure 2.3, the move from production possibility curve YZ to production possibility curve XV, could be caused by: 42) _____
- A) more land, labor or capital. B) a decline in technology.
C) increased unemployment. D) all of the above.
- 43) Recall the application on "The Opportunity Cost of Time and Invested Funds." If this year a business owner spends \$100,000 of his own money on materials, the interest rate is 5%, has living expenses of \$20,000 and could have made \$50,000 in his former line of employment, then the opportunity cost to the business owner of operating the business this year is: 43) _____
- A) \$150,000. B) \$55,000. C) \$50,000. D) \$155,000.
- 44) Recall the application on "The Opportunity Cost of Time and Invested Funds." If the interest rate rises, then the opportunity costs of running a business: 44) _____

- A) is unchanged.
- B) rises
- C) falls
- D) cannot be determined with the information given.

- 45) Recall the application on "The Opportunity Cost of Military Spending." The opportunity costs of military spending includes 45) _____
- A) the social programs the money spent on the military could have paid for.
 - B) the money spent on social programs.
 - C) the money spent to redistribute income.
 - D) all of the above.
- 46) Recall the application on "The Opportunity Cost of Military Spending." One implication of the opportunity cost of military spending is that: 46) _____
- A) spending the military should be cut.
 - B) spending on social programs could be increased.
 - C) more spending on social programs implies less spending on national defense and more danger of an attack.
 - D) all of the above.

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 47) A principle is a self-evident truth that most people readily understand and accept. 47) _____
- 48) Opportunity cost is the difference between the benefit and cost of some action. 48) _____
- 49) In order to go to college James incurs an opportunity cost even though all he gave up was a full time job as a clerk at Wally World. 49) _____
- 50) The opportunity cost of going to a particular college is not the same for everyone. 50) _____
- 51) The cost of a master's degree in engineering equals the tuition plus the cost of books. 51) _____
- 52) The opportunity cost of something is what you sacrifice to get it. 52) _____
- 53) Tradeoffs involve an exchange of one thing for another because resources are limited and can be used in different ways. 53) _____
- 54) The notion of opportunity cost allows the measurement of tradeoffs. 54) _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 55) What is the opportunity cost of your college degree? 55) _____
- 56) What do economists mean when they say that there is no such thing as a free lunch? 56) _____
- 57) Suppose that you lend \$1,000 to a friend who pays you back \$1,100 the next year. Suppose that prices that year rose by 8% and the real rate of return in the stock market was 4%. Your friend says that he or she was being more than fair by giving you more than the rate of inflation as a return. What do you think? 57) _____
- 58) What is the opportunity cost of investing \$10,000 of your own money in a business you wish to start? 58) _____

59) By making acquisitions, resources are used that could have been used to _____. 59) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 60) The additional cost resulting from a small increase in some activity is called the: 60) _____
A) diminishing returns of the activity. B) opportunity cost.
C) marginal cost. D) marginal benefit.
- 61) The extra benefit resulting from a small increase in an activity is called the: 61) _____
A) opportunity cost. B) diminishing returns of the activity.
C) marginal cost. D) marginal benefit.
- 62) The additional cost resulting from a small increase in some activity is called the: 62) _____
A) marginal benefit. B) diminishing returns of the activity.
C) opportunity cost. D) marginal cost.
- 63) The principle that individuals and firms pick the activity level where the incremental benefit of that activity equals the incremental cost of that activity is known as the: 63) _____
A) principle of diminishing returns. B) principle of opportunity cost.
C) spillover principle. D) marginal principle.
- 64) The marginal principle implies that an individual will do best by producing or consuming where: 64) _____
A) marginal benefit equals marginal cost.
B) marginal benefit is less than marginal cost.
C) marginal benefit exceeds marginal cost.
D) total benefit equals total cost.
- 65) If a consumer can buy four DVDs for \$44 and five DVDs for \$50, then the marginal cost of the fifth DVD is: 65) _____
A) \$6. B) \$10. C) \$11 D) \$50.
- 66) If a consumer can buy four pizzas for \$24 and five pizzas for \$25, then the marginal cost of the fifth pizza is: 66) _____
A) \$25. B) \$5. C) \$1. D) \$6.

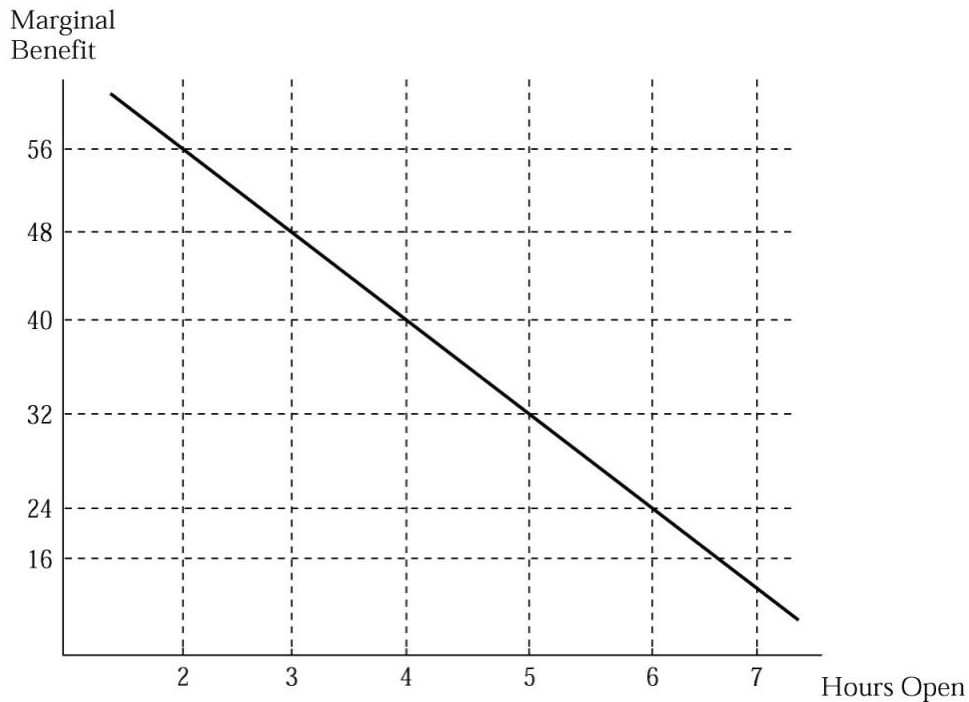


Figure 2.4

- 67) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that Joe's marginal cost of staying open per hour is \$24. How many hours should Joe stay open? 67) _____
 A) 5 hours B) 4 hours C) 6 hours D) 3 hours
- 68) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that Joe's marginal cost of staying open per hour is \$32. How many hours should Joe stay open? 68) _____
 A) 5 hours B) 4 hours C) 6 hours D) 7 hours
- 69) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that Joe's marginal cost of staying open per hour is \$40. How many hours should Joe stay open? 69) _____
 A) 4 hours B) 3 hours C) 6 hours D) 5 hours
- 70) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that we observe Joe staying open 5 hours per day. If he is following the marginal principle, what must his marginal cost be? 70) _____
 A) \$40 B) \$32 C) \$16 D) \$24
- 71) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that we observe Joe staying open 3 hours per day. If he is following the marginal principle, what must his marginal cost be? 71) _____
 A) \$32 B) \$48 C) \$24 D) \$40
- 72) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that we observe Joe staying open 4 hours per day. If he is following the marginal principle, what must his marginal cost be? 72) _____
 A) \$16 B) \$32 C) \$24 D) \$40

- 73) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that we observe Joe staying open 6 hours per day. If he is following the marginal principle, what must his marginal cost be?
 A) \$48 B) \$24 C) \$16 D) \$32

73) _____

Hours of operation	Marginal cost
1	4
2	8
3	12
4	16
5	20
6	24
7	28

Table 2.2

- 74) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Julianne's marginal benefit of staying open per hour is \$20. If she is following the marginal principle, how many hours should Julianne stay open?

74) _____

- A) 5 hours B) 7 hours C) 6 hours D) 4 hours

- 75) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Julianne's marginal benefit of staying open per hour is \$12. If she is following the marginal principle, how many hours should Julianne stay open?

75) _____

- A) 3 hours B) 7 hours C) 6 hours D) 4 hours

- 76) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Julianne's marginal benefit of staying open per hour is \$16. If she is following the marginal principle, how many hours should Julianne stay open?

76) _____

- A) 7 hours B) 3 hours C) 4 hours D) 5 hours

- 77) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that we observe Julianne staying open 5 hours per day. If she is following the marginal principle, what must her marginal benefit be?

77) _____

- A) \$10 B) \$24 C) \$16 D) \$20

- 78) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that we observe Julianne staying open 3 hours per day. If she is following the marginal principle, what must her marginal benefit be?

78) _____

- A) \$18 B) \$24 C) \$16 D) \$12

- 79) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that we observe Julianne staying open 2 hours per day. If she is following the marginal principle, what must her marginal benefit be?

79) _____

- A) \$22 B) \$8 C) \$20 D) \$12

- 80) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her margin

her margin

al costs 80)
of
staying
open for
each
addition
al hour.
Suppose
that
Julianne'
s
marginal
benefit of
staying
open per
hour is
\$24. If
she is
followin
g the
marginal
principle
, how
many
hours
should
Julianne
stay
open?

- A) 2 hours B) 6 hours C) 4 hours D) 7 hours

81) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Julianne's marginal benefit of staying open per hour is \$28. If she is following the marginal principle, how many hours should Julianne stay open? 81) _____

- A) 3 hours B) 7 hours C) 6 hours D) 1 hour

82) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Julianne's marginal benefit of staying open per hour is \$3. If she is following the marginal principle, how many hours should Julianne stay open? 82) _____

- A) 6 hours B) 1 hour
C) 3 hours D) none of the above

83) Considering how a one-unit change in one variable affects the value of another variable is called: 83) _____

A) the marginal principle. B) the Peter Principle.
C) functional decision-making. D) the principle of supply and demand.

84) When referring to "marginal" changes, the economic focus is on: 84) _____

A) large changes on the low end.
B) changes that affect only a few people or products.
C) graduated changes on the high end.

D) small or incremental changes.

- 85) The extra benefit resulting from a small increase in some activity is called the: 85) _____
A) marginal equilibrium. B) marginal cost.
C) marginal value. D) marginal benefit.
- 86) When deciding whether to engage in an activity or how much to do, people should follow: 86) _____
A) the marginal principle. B) the principle of macroeconomics.
C) the law of supply and demand. D) the principle of microeconomics.
- 87) Recall the application "Continental Airline Uses the Marginal Principle." Continental Airlines 87) _____
ran planes that were half full while losing money because:
A) the management was concerned with average costs.
B) government regulations required a certain number of flights.
C) the marginal revenue from the flights was great than the marginal costs.
D) the management was irrational.
- 88) Recall the application "Continental Airline Uses the Marginal Principle." Continental Airlines 88) _____
ran planes that were half full while losing money because the management correctly realized
that:
A) it would keep the government from taking over the firm.
B) airplanes need to be used to keep them flight worthy.
C) fixed costs are not part of marginal costs.
D) it would be good public relations.
- 89) In the fall of 2006, there were many calls to pull out US troops from Iraq and many calls to stay 89) _____
the course in Iraq, an economic analysis of this would say:
A) pull the troops out slowly to over time reduce the costs of having them in Iraq..
B) compare the costs of keeping the troop there from now on to the defense benefits that will
be received from having them there from now on and if the cost are greater withdraw but if
the benefits are greater leave the troops there.
C) pull out the troops now as it is too costly to have them in Iraq.
D) stay the course as the US has spent so much money and needs to finish the job.
- 90) In the fall of 2006, there have been many calls to pull out US troops from Iraq and many calls to 90) _____
stay the course in Iraq, an economic analysis of this would consider:
A) the costs of having troops in Iraq from now on.
B) what else the troops could be doing and what else the money keeping them there could
be spent on.
C) the defense benefits of having troops in Iraq from now on.
D) all of the above.

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 91) When Jimmy produces one guitar his costs total \$250. When he produces two guitars his total 91) _____
costs are \$400. This means that Jimmy's marginal cost of producing the second guitar is \$200.
- 92) Economists argue that individuals should continue to consume until total benefit equals total 92) _____
cost.
- 93) If a company's total costs per day increase from \$500 to \$600 by adding another worker, but its 93) _____
additional benefits are \$150, it is sensible to add that additional worker.

- 94) When applying the marginal principle, you should pick the level at which the activity's marginal benefit equals its marginal cost. 94) _____
- 95) Basically, the marginal principle teaches us to evaluate the factors involved in taking an action to decide if the action it is worth the effort. 95) _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 96) Increase the level of an activity if its marginal benefit exceeds its marginal cost; reduce the level of an activity if its marginal cost exceeds its marginal benefit. This is known as the _____. 96) _____
- 97) Different people eat different amounts of food when they go to buffet restaurants, even though they all pay the same price. Explain how this relates to the marginal principle. 97) _____
- 98) Farmer Bill grows corn on his 27-acre farm. To increase production, he puts more and more fertilizer on the corn. What does the marginal principle say will happen? 98) _____
- 99) Consider a firm that is trying to determine how many hours to remain open in a day. How would the firm make this decision? 99) _____
- 100) The additional cost resulting from a one unit increase in the production of a good is known as the _____. 100) _____
- 101) Marginal cost is the additional cost resulting from a *large* or *small* increase in some activity. 101) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 102) When people act in their own self interest, it is described as the: 102) _____
 A) laws of each state. B) principle of voluntary exchange.
 C) principle of supply and demand. D) principle of scarcity.
- 103) When two people engage in voluntary trade,: 103) _____
 A) each will expect to lose. B) one will necessarily lose.
 C) both will expect to be made better off. D) both will necessarily lose.
- 104) Firms expect to make money on repeat business because: 104) _____
 A) firms have more power than customers.
 B) they think they can put one over on their customers.
 C) the management of the firm expects both the firm and their customers to be made better off by their exchange.
 D) all firms are monopolists.
- 105) Remember the Application on "Tiger Woods and Weeds." In this application Mr. Woods can whack the weeds on his estate in one hour, while his gardener will take 20 hours, yet Mr. Woods still hires a gardener because: 105) _____
 A) Mr. Woods' gardener is poor and needs a job.
 B) Mr. Woods' opportunity cost of time is large enough that he can pay a gardener and still be better off.
 C) Mr. Woods is rich.
 D) all of the above.

- 106) Remember the Application on "Tiger Woods and Weeds.." In this application Mr. Woods can whack the

weeds 106)

on his
estate in
one
hour,
while his
gardener
will take
20 hours,
yet Mr.
Woods
still hires
a
gardener
because:

-

- A) It is worth more to Mr. Woods than what he must pay his gardener to pull his weeds and worth less than he will be paid to give up his time and effort doing the job.
- B) It is worth less to Mr. Woods than what he must pay his gardener to pull his weeds and worth less than he will be paid to give up his time and effort doing the job.
- C) It is worth less to Mr. Woods than what he must pay his gardener to pull his weeds and worth more than he will be paid to give up his time and effort doing the job.
- D) It is worth more to Mr. Woods than what he must pay his gardener to pull his weeds and worth more than he will be paid to give up his time and effort doing the job.

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 107) The principle of voluntary exchange is the concept that a voluntary exchange between two people makes both people better off. 107) ____
- 108) When two parties engage in voluntary exchange, one must be made worse off. 108) ____
- 109) Two parties engage in exchange when each one expects to be made better off by the exchange. 109) ____
- 110) Firms that make their customers better off get more repeat business and make earn more profits. 110) ____
- 111) People acting in their own self interest try to gain at the expense of others in exchange leads to someone necessarily losing in a voluntary exchange. 111) ____
- 112) When you have a job and your employer compensates you for your time with money, resulting in both of you being better off, it is an example of a voluntary exchange. 112) ____
- 113) A "market" is an arrangement that allows people to exchange things. 113) ____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 114) If each of us could produce everything we needed for ourselves, we would be considered to be _____. 114) _____
- 115) When does voluntary exchange take place? 115) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 116) The principle of diminishing returns implies that as one input increases while the other inputs are held fixed, output: 116) ____
 - A) increases at a decreasing rate.
 - B) decreases at an increasing rate.

C) increases at an increasing rate.

D) decreases at a decreasing rate.

- 117) The principle that "as one input increases while the other inputs are held fixed, output increases at a decreasing rate" is known as the: 117) ____
A) marginal principle. B) spillover principle.
C) principle of diminishing returns. D) principle of opportunity cost.
- 118) Diminishing returns occurs because: 118) ____
A) not enough people have jobs.
B) two people have not satisfied their self-interests.
C) consumers do not buy enough of the products produced.
D) one of the inputs to the production process is fixed.
- 119) The period of time over which one or more factors of production is fixed is the: 119) ____
A) period of marginal costs. B) short run.
C) long run. D) none of the above
- 120) The short run is: 120) ____
A) when demand is fixed.
B) that period when some factors of production are fixed and some of factors of production are variable .
C) always less than a year.
D) all of the above.
- 121) The long run is: 121) ____
A) that period when all factors of production are variable.
B) that period when demand is variable.
C) always more than a year.
D) all of the above.
- 122) The period of time over which a firm can change all the factors of production is the: 122) ____
A) long run. B) period of fixed production.
C) period of marginal costs. D) period of diminishing returns.
- 123) According to the principle of diminishing returns, if all factors of production but one are held constant and if that one factor is doubled, then eventually output will most likely: 123) ____
A) more than double. B) less than double.
C) double too. D) none of the above
- 124) A firm produces its product using both capital and labor. When it does not change its capital usage, but doubles its labor input, its output increases by less than 50%. Which of the following is the most likely explanation of this finding? 124) ____
A) the marginal principle B) the principle of diminishing returns
C) the spillover principle D) the principle of opportunity cost
- 125) According to the principle of diminishing returns, if the number of workers is increased beyond the point of diminishing returns, then the additional worker: 125) ____
A) increases total output by less than the amount of previous workers.
B) increases total output by the same amount as previous workers.
C) increases total output by more than the amount of previous workers.
D) decreases total output.

126) The principle of diminishing returns occurs:

126) _____

- A) only in the short run.
- B) only in the long run.
- C) in both the short run and the long run.
- D) in either the short run or the long run, depending on the circumstances.

Units of Capital	Number of Workers	Output/Day
5	0	0
5	1	100
5	2	180
5	3	240
5	4	280
5	5	300

Table 2.3

127) The firm depicted in Table 2.3 is facing a short-run choice because:

127) _____

- A) capital and labor are both fixed.
- B) the number of workers can only be increased to 5.
- C) capital is fixed.
- D) capital and labor are both variable.

128) Refer to Table 2.3. The marginal product of the 4th worker is:

128) _____

- A) 40 units of output.
- B) 60 units of output.
- C) 80 units of output.
- D) 100 units of output.

129) Refer to Table 2.3. The marginal product of the 3rd worker is:

129) _____

- A) 40 units of output.
- B) 100 units of output.
- C) 60 units of output.
- D) 80 units of output.

130) Refer to Table 2.3. The marginal product of the 1st worker is:

130) _____

- A) 60 units of output.
- B) 100 units of output.
- C) 80 units of output.
- D) 40 units of output.

131) Refer to Table 2.3. The marginal product of the 2nd worker is:

131) _____

- A) 60 units of output.
- B) 40 units of output.
- C) 100 units of output.
- D) 80 units of output.

132) Refer to Table 2.3. The principle of diminishing returns sets in with the addition of the _____ worker.

132) _____

- A) 1st
- B) 2nd
- C) 3rd
- D) 4th

Acres of Land	Tanks of Fertilizer	Truckloads of Fruit
10	0	45
10	1	63
10	2	83
10	3	88
10	4	89
10	5	89

Table 2.4

133) The firm depicted in Table 2.4 is facing a short-run choice because:

133) _____

- A) the amount of fertilizer can only be increased to 5.
- B) land and fertilizer are both variable.
- C) land is fixed but fertilizer is variable.
- D) land and fertilizer are both fixed.

- 134) Refer to Table 2.4. The marginal product of the 3rd tank of fertilizer is: 134) ____
 A) 5 truckloads of fruit. B) 20 truckloads of fruit.
 C) 1.67 truckloads of fruit. D) 29.33 truckloads of fruit.
- 135) Refer to Table 2.4. The marginal product of the 2nd tank of fertilizer is: 135) ____
 A) 10 truckloads of fruit. B) 20 truckloads of fruit.
 C) 41.5 truckloads of fruit. D) 5 truckloads of fruit.
- 136) Refer to Table 2.4. The principle of diminishing returns sets in with the addition of the _____ 136) ____
 tank of fertilizer.
 A) 2nd B) 3rd C) 4th D) 5th
- 137) The principle of diminishing returns does not apply to labor in the long run because: 137) ____
 A) eventually the marginal product of labor will begin to increase again.
 B) a firm can fire inefficient workers.
 C) a firm can build an additional production facility so each worker's share of the facility doesn't necessarily decrease.
 D) None of the above, diminishing returns always apply.
- 138) Remember the Application on "Fertilizer and Crop Yields." As bags of nitrogen applied went 138) ____
 from 0 to 1 to 2 to 3 to 4, crop yield went from 85 to 120 to 135 to 144 to 147 bushels per acre or as
 more nitrogen was added output:
 A) rose but at an increasing rate. B) fell.
 C) stayed the same. D) rose but at a declining rate.
- 139) Remember the Application on "Fertilizer and Crop Yields." As bags of nitrogen applied went 139) ____
 from 0 to 1 to 2 to 3 to 4, crop yield went from 85 to 120 to 135 to 144 to 147 bushels per acre or
 production exhibited:
 A) increasing returns to fertilizer. B) diminishing returns to fertilizer.
 C) constant returns to land. D) decreasing returns to land.

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 140) According to the principle of diminishing returns, an additional worker decreases total output. 140) ____
- 141) The short run is the same amount of time for all businesses. 141) ____
- 142) The short run is a year or less. 142) ____
- 143) As more and more of a variable input is combined with some fixed inputs, additions to the total 143) ____
 output decline.
- 144) In the long run all inputs are variable. 144) ____
- 145) The marginal output of labor is the amount of output that can be produced if one more unit of 145) ____
 labor is added.

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 146) You are running a small yard maintenance business for the summer. What do you expect to happen to the number of yards you can maintain in a day as you add workers if you don't purchase more capital equipment (like mowers and leaf blowers)? 146) _____
- 147) When a firm hired its tenth worker, its factory output increased by four units per month. Would you expect the firm's output to increase by eight more units per month if the firm hired two more workers? 147) _____
- 148) Producing more output in an existing production facility by increasing the number of workers sharing the facility will bring into effect the principle of _____. 148) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 149) The real-nominal principle states that: 149) _____
 A) what matters to people is the face value of money or income.
 B) people respond more to implicit costs than to explicit costs.
 C) what matters to people is the purchasing power of money or income.
 D) people respond more to explicit, or real, costs than to implicit costs.
- 150) The principle that what matters to people is the real value or purchasing power of money is the: 150) _____
 A) real-nominal principle. B) principle of diminishing returns.
 C) marginal principle. D) spillover principle.
- 151) The face value of money or income is called its _____ value. 151) _____
 A) nominal B) marginal C) real D) external
- 152) The value of money or income in terms of the quantity of goods the money can buy is called its: 152) _____
 A) real value. B) marginal value. C) implicit value. D) nominal value.
- 153) The real value of money: 153) _____
 A) matters less to people than its nominal value.
 B) reflects the purchasing power of the sum of money.
 C) is another word for the face value.
 D) Both B and C are correct.
- 154) If real salaries increase but nominal salaries do not, this means that: 154) _____
 A) the purchasing power of money has decreased.
 B) prices have not changed.
 C) prices have fallen.
 D) prices have risen.
- 155) If real salaries decrease but nominal salaries do not, this means that: 155) _____
 A) prices have risen.
 B) the purchasing power of money has increased.
 C) prices have fallen.
 D) prices have not changed.
- 156) A major league baseball player signs a contract that pays \$50 million over five years. The \$50 million is its _____ value. 156) _____
 A) external B) implicit
 C) real D) none of the above
- 157) Suppose your bank pays you 6% interest per year on your savings account, so that \$100 grows to \$106 over a

one-year 157)
period. If
prices
increase
by 3%
per year
over that
time,
approx-
imately
how
much do
you gain
by
keeping
\$100 in
the bank
for a
year?

- A) \$0 B) \$4 C) \$3 D) \$1

158) Suppose your bank pays you 5% interest per year on your savings account. If prices increase by 3% per year over that time, approximately how much do you gain by keeping \$100 in the bank for a year? 158) _____

- A) \$2 B) \$0 C) \$3 D) \$6

159) Suppose prices increase by 4% per year. What nominal percentage return on your savings account would you require to get a 1% real return? 159) _____

- A) 5% B) 7% C) 2% D) 0%

160) Suppose prices increase by 3% per year. What nominal percentage return on your savings account would you require to get a 3% real return? 160) _____

- A) 6% B) 3% C) 9% D) 8%

161) Suppose that you lend \$1,000 to a friend and he or she pays you back one year later. What is the opportunity cost of lending the money? 161) _____

- A) the implicit cost of the money
B) the real interest rate that would have been earned on the money
C) There is no cost.
D) the nominal interest rate that would have been earned on the money

162) You borrow money to buy a house in 1999 at a fixed interest rate of 6.5%. By 2003, the inflation rate has risen to 8.5%. Considering *only* your mortgage, is inflation good news or bad news for you? 162) _____

- A) Good news, because it makes the real value of your mortgage payments decrease.
B) Bad news, because it makes the real value of your mortgage payments increase.
C) Bad news, because it makes the nominal value of your mortgage payments increase.
D) Bad news, because inflation hurts everyone.

163) You borrow money to buy a house in 1999 at a variable interest rate of 6.5%. Your interest rate is always 2% more than the rate of inflation. By 2003, the inflation rate has risen to 8.5%. Considering *only* your mortgage, is inflation good news or bad news for you? 163) _____

- A) Bad news, because inflation hurts everyone.
- B) Bad news, because it makes the nominal value of your mortgage payments increase.
- C) Good news, because it makes the real value of your mortgage payments decrease.
- D) Neither, because your interest rate is tied to the rate of inflation.

164) What is the real value of money? 164) _____
 A) its face value
 B) its compounded earnings in banks
 C) the amount of it you have.
 D) the quantity of goods and services it can buy

165) What is the nominal value of money? 165) _____
 A) its actual face value
 B) what can be purchased with the money
 C) savings by shopping on specific days of the week
 D) discounts taken by multiple purchases

166) Remember the Application on "The Declining Real Minimum Wage." If the nominal minimum wage is unchanged while prices rise, then the real minimum wage: 166) _____
 A) rises. B) declines. C) is unaffected. D) stays the same.

167) Remember the Application on "The Declining Real Minimum Wage." If the nominal minimum wage is unchanged while prices fall, then the real minimum wage: 167) _____
 A) stays the same. B) rises. C) falls. D) is unaffected.

168) Remember the Application on "Repaying Student Loans." If you are a debtor who owes student loans, you are helped in paying back your student loans by: 168) _____
 A) unexpected deflation. B) expected inflation.
 C) unexpected inflation. D) expectedly deflation.

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

169) From 1974 to 2005 as the nominal minimum wage rose from \$2 to \$5.15, the real minimum wage fell. 169) _____

170) When prices rise, increases in real income are greater than increases in nominal income. 170) _____

171) What matters to people is the face value of money or income. 171) _____

172) The government uses the buying power of wages rather than face value or nominal value in reporting changes in "real wages" in the economy. 172) _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

173) Is it possible for nominal wages to decrease while real wages increase? 173) _____

174) People are interested in how much their money can buy. This is called the _____. 174) _____

175) What does an increase in prices in retail stores do to the real value of the money you earn as wages? 175) _____

176) If your salary increases and the cost of goods in stores increase at the same rate, does a unit of money have *more* or *less* buying power? 176) _____

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

- 52) TRUE
- 53) TRUE
- 54) TRUE
- 55) A quick answer would be to say that the cost is the tuition, room and board, and books expenditures that are borne during the college years. But such a statement would be incorrect. First, it understates one aspect of costs: one is giving up income while a student. But it also overstates the costs in another dimension: people would eat and sleep somewhere regardless of their attendance in college. So one should not consider room and board to be part of the cost of college attendance.
- 56) Everything has a cost, even when you do not pay money for it. Suppose that somebody bought you lunch. The opportunity cost of that lunch is the lost opportunity to spend your time otherwise.
- 57) The opportunity cost of that money was not just the 8% inflation, but also the real rate of return that would have been enjoyed had the money been put in the stock market. For you to have been indifferent between loaning your money versus keeping it, your friend should have reimbursed you by \$1,120, or a 12% return. This is another example of considering all the costs, both the loss in purchasing power of the money due to inflation and the implicit cost of the return that could have been earned if the money was invested in the stock market.
- 58) The opportunity cost of your \$10,000 is the money you lose because you cannot invest the money elsewhere.
- 59) acquire something else
- 60) C
- 61) D
- 62) D
- 63) D
- 64) A
- 65) A
- 66) C
- 67) C
- 68) A
- 69) A
- 70) B
- 71) B
- 72) D
- 73) B
- 74) A
- 75) A
- 76) C
- 77) D
- 78) D
- 79) B
- 80) B
- 81) B
- 82) D
- 83) A
- 84) D
- 85) D
- 86) A
- 87) C
- 88) C
- 89) B
- 90) D
- 91) FALSE
- 92) FALSE
- 93) TRUE
- 94) TRUE

- 95) TRUE
- 96) marginal principle
- 97) The marginal monetary cost of eating more is zero, so people will eat until they would not enjoy eating other bite. There is an implicit cost of eating more once you are full (extra weight gain and physical discomfort). Therefore, people will eat until marginal benefit equals marginal cost, and this will occur at different amounts of food for different people.
- 98) Eventually the marginal benefit of adding fertilizer will decrease. In fact, eventually the fertilizer will begin to burn the plants, so the marginal benefit of fertilizer will become negative.
- 99) The firm would continue to stay open as long as the incremental benefit of staying open (say, the increased revenues) each extra hour exceeds (or at least equals) the incremental costs (e.g., electricity, wages, etc.) incurred from staying open that hour.
- 100) marginal cost
- 101) small
- 102) B
- 103) C
- 104) C
- 105) B
- 106) A
- 107) TRUE
- 108) FALSE
- 109) TRUE
- 110) TRUE
- 111) FALSE
- 112) TRUE
- 113) TRUE
- 114) self-sufficient
- 115) When both parties expect to be made better off by the exchange.
- 116) A
- 117) C
- 118) D
- 119) B
- 120) B
- 121) A
- 122) A
- 123) B
- 124) B
- 125) A
- 126) A
- 127) C
- 128) A
- 129) C
- 130) B
- 131) D
- 132) B
- 133) C
- 134) A
- 135) B
- 136) B
- 137) C
- 138) D
- 139) B
- 140) FALSE

- 141) FALSE
- 142) FALSE
- 143) TRUE
- 144) FALSE
- 145) TRUE
- 146) It is likely that as you add workers, you will get incrementally less output out of each additional worker. Holding constant your materials, such as trucks, lawnmowers, etc., you'll almost surely be able to maintain more yards per day. But as you hire more workers, there might be waits for the use of the tools, or for transportation to the next job.
- 147) No. The principle of diminishing marginal returns suggests that after some point of increasing returns, each incremental worker should have a progressively lower level of marginal productivity.
- 148) diminishing returns
- 149) C
- 150) A
- 151) A
- 152) A
- 153) B
- 154) C
- 155) A
- 156) D
- 157) C
- 158) A
- 159) A
- 160) A
- 161) B
- 162) A
- 163) D
- 164) D
- 165) A
- 166) B
- 167) B
- 168) C
- 169) FALSE
- 170) FALSE
- 171) FALSE
- 172) TRUE
- 173) Yes, though unlikely. This would imply that prices have fallen, and that the decrease is sufficiently negative to offset any losses in nominal wages.
- 174) real-nominal principle
- 175) An increase in prices in retail stores reduces what you can purchase and thus the real value of earnings.
- 176) Since prices have risen in stores, each unit, ie dollar, can buy less and its purchasing power is less.