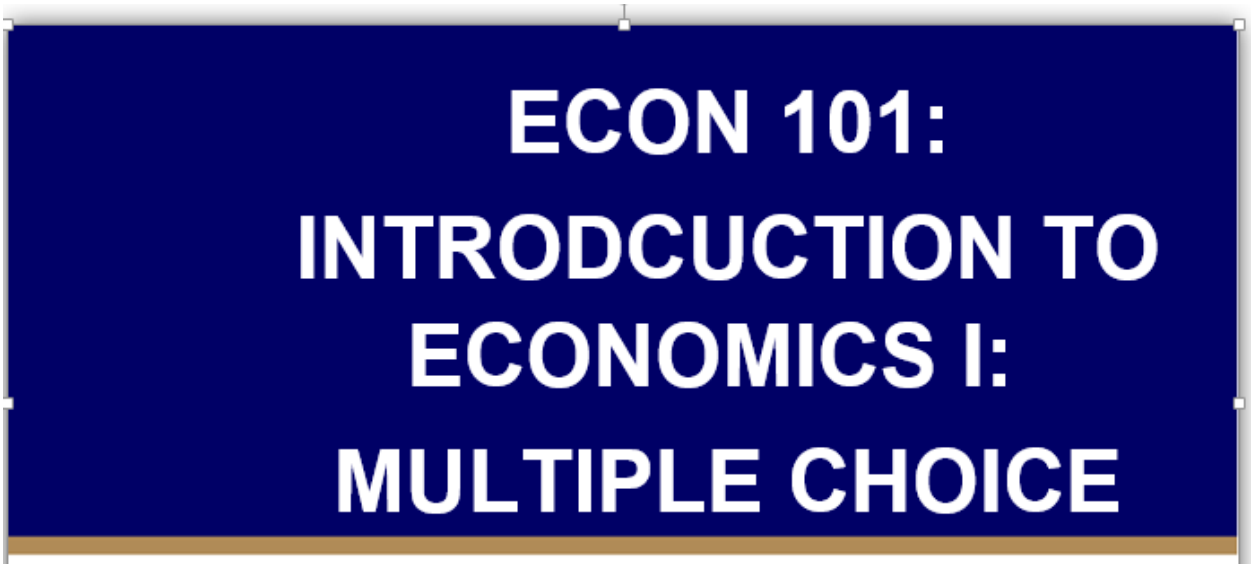
UGESS 2017/2018 IS WISHING ALL ECONOMICS LEVEL 100 STUDENTS SUCCESS IN THE ECON 101 EXAMINATION. GOOD LUCK



INTRODUCTION

1. Economics is
    a) the narrow study of how to make money in financial markets
    b) the broad study of how to allocate unlimited resources to satisfy limited uses
    c) the broad study of how to allocate limited resources to satisfy unlimited wants
    d) the narrow study of using stocks and bonds to their maximum potential
    e) the narrow study of how to be conservative in financial affairs

2. Economics deals with how
    a) individuals make decisions to use scarce resources in order to satisfy their unlimited wants.
    b) to run a business.
    c) individuals become rich.
    d) society can eliminate scarcity.

e) how to increase the profits of firms.

3. Microeconomics is the branch of economics that concerns
    a) the overall view of the economy
    b) the behavior of individual households, firms, and governments
    c) the overall level of trade between nations
    d) local governments only
    e) the general level of output

4. The problem of scarcity
    a) Exists only in economies that rely on the market mechanism
    b) Exists only in economies that rely on the command mechanism
    c) Exists in all economies
    d) Means that at least some prices are too high
    e) Can be solved by economists

5. Scarcity is a situation in which
    a) available resources cannot satisfy all potential uses for the resources
    b) there are unlimited wants
    c) resources outnumber the potential uses for resources in society
    d) there is a surplus, since buyers cannot obtain all of the goods that they want
    e) society's productive capital is publicly owned

6. When the government chooses to use resources to build a dam, those resources are no longer available to build a highway. This is illustrates the concept of
    a) Microeconomics
    b) Macroeconomics
    c) Rational choice
    d) Optimizing
    e) Opportunity cost

7. A mixed economy is one in which
    a) There are aspects of both a closed and open economy
    b) Labour, natural resources, and capital are all used in production
    c) Both the market mechanism and command mechanism are used
    d) Trade is sometimes restricted and sometimes free

e) Both c) and d)

8. Economic models
    a) Do not answer questions about the real economy
    b) Include most of the detail of the real economy
    c) Rely on abstraction
    d) Make no assumption in advance
    e) Are normative statements

9. The scientific purpose of simplifying assumptions in an economic model is to
    a) Avoid confronting difficult issues
    b) Eliminate the need for further testing of the implications of the model
    c) Abstract from the complexities of the real world those issues that are not important for the issues under examination
    d) Eliminate the possibility of personal bias in the model
    e) Promote controversial statements

10. During the next hour, John can choose one of the following three activities: playing basketball, watching television, or reading a book. The opportunity cost of reading a book
    a) Depends on how much John enjoys the book
    b) Is the value of playing basketball if John prefers that to watching television
    c) Is the value of playing basketball and the value of watching television
    d) Depends on how much the book cost when it was purchased
    e) Both b) and d)

11. Which of the following is an example of a normative statement?
    a) Economists should not make normative statements
    b) Malaria is caused by a bite from a mosquito
    c) As the price of compact discs falls, people will buy more of them
    d) If income increases, sales of luxury goods will fall
    e) None of the above

12. The production-possibility boundary
    a) illustrates scarcity, choice, and opportunity cost.

b) must be upward-sloping to the right in order to indicate opportunity cost.
c) shows the money values of alternative uses of resources.
d) illustrates scarcity and the operation of the price mechanism.
e) shows the relationship between substitutes and complements

13. The production possibility frontier
a) Is the boundary between attainable and unattainable levels of production
b) Illustrates the maximum quantities of all goods that can be produced for given resources and technology
c) Illustrates the fact that, in an economy using all its resources, to produce more of one good needs not mean less of another good is produced
d) Shows prices at which production is possible and impossible
e) Illustrates why there need not be any scarcity in the world

14. Which of the following concepts is not illustrated by a production possibility frontier
a) Scarcity
b) Monetary exchange
c) Opportunity cost
d) Attainable and unattainable points
e) The tradeoff between producing one good versus another

15. A point inside a production possibility frontier
a) Indicates one unemployed resources
b) Is unattainable
c) Is better than points on the production possibility frontier
d) Indicates fully employed resources
e) Illustrates the idea of opportunity cost

16. If Sam is producing at a point inside his production possibility frontier, then he
a) Can increase production of both goods with no increase in resources
b) Is fully using all his resources
c) Must be doing his best with limited resources
d) Is unaffected by costs and technology
e) Has a high opportunity cost of moving from his point

17. In general, if country A is accumulating capital at a faster rate than country B, then
    a) Country A is using a larger proportion of resources to produce consumption goods
    b) Country A's production possibility frontier will be out faster than country B's
    c) Country A will have a higher rate of inflation than country B
    d) Country A will have more unemployment than country B
    e) None of the above

18. In every economic system, scarcity imposes limitations on
    a) households, business firms, governments, and the nation as a whole
    b) households and business firms, but not the governments
    c) local and state governments, but not the federal government
    d) households and governments, but not business firms
    e) business firms, governments, and the nation as a whole

19. Because of relative scarcity, individuals are compelled to
    a) use resources inefficiently.
    b) make choices among alternatives.
    c) improve distribution but not production.
    d) sacrifice production but not consumption

20. People and organizations have to make choices about how to allocate time and money because
    a) government requires it
    b) corporations control our lives
    c) time and money are both scarce
    d) religious values conflict with economics
    e) there are unlimited resources

21. "The rich should face higher taxes than the poor". This is an example of
    a) A normative statement
    b) A positive statement
    c) A negative statement
    d) A proportional statement
    e) Neither a normative nor a positive statement

22. In a free-market economy, allocation of resources is decided by
    a) political parties and firms only.
    b) firms and households.
    c) central authorities only.
    d) the Central bank

23. Under a market mechanism, the determination of what, how and for whom to produce for is the result of
    a) Decisions by the wealthy
    b) Decisions by the government
    c) The political process
    d) The amount of shortages in the economy
    e) Price adjustments

24. At various points along the production possibilities frontier,
    a) the maximum output from available resources is obtained.
    b) resources are not fully employed.
    c) more of one good can be obtained without giving up more of the other.
    d) more efficient output levels are possible.
    e) society is equally well off.

In a given afternoon, you can either do 4 loads of dishes or rake 3 bags of leaves. Your roommate can wash 3 loads of dishes or rake 1 bag of leaves. Use this information to answer the following question.

25. What is the opportunity cost to you of one bag of leaves?
    a) 3/4 a load of dishes.
    b) 1/3 a load of dishes.
    c) 4/3 a load of dishes.
    d) 1 load of dishes.

26. Society's core economic problem is
    a) the role of government in the economy
    b) a scarcity of land, labor, and machinery to produce goods and services

c) the federal budget deficit
d) an unequal distribution of income
e) low living standards

27. Which of the following is the study of what "should be" rather than the study of what "is"?
    a) positive economics
    b) law and economics
    c) Microeconomics
    d) development economics
    e) normative economics

28. An economic model
    a) uses equations to understand normative economic phenomena
    b) often omits crucial elements
    c) simplifies reality in order to focus on crucial elements
    d) produces poor predictions if it includes unrealistic assumptions
    e) cannot be proven wrong

29. All production involves an opportunity cost because
    a) to produce costs money
    b) costs of production are sky rocketing
    c) to produce more of one thing, we must produce more of everything
    d) to produce more of one thing, we must produce less of something else
    e) when an individual obtains more of a good, he may not be fully satisfied

30. If the economy is producing a combination of goods inside its production possibilities frontier, then
    a) workers are on vacation
    b) a significant number of workers have little education
    c) some resources are being wasted
    d) technology must improve before output can increase
    e) the opportunity cost of producing more output is greater than the value of the additional output that could be produced

31. Which of the following could lead to an inward shift of the production possibilities frontier?
    a) an increase in the cost of one good
    b) an increase in the utilization of resources
    c) a rise in the level of technology
    d) a law is passed whereby a mandatory retirement age of 60 is imposed, from an original age of 65
    e) a decrease in the utilization of resources

32. The production possibilities frontier can be used to illustrate all of the following concepts, except one. Which is the exception?
    a) productive inefficiency
    b) opportunity cost
    c) the law of demand
    d) Scarcity
    e) the law of increasing opportunity costs

33. According to the law of increasing opportunity cost,
    a) production points outside the production possibility frontier are unattainable
    b) the production possibility frontier becomes flatter as production increases along the horizontal axis
    c) the opportunity cost of producing a good rises as production of that good falls
    d) production points inside the production possibility frontier are unattainable
    e) the opportunity cost of producing a good rises as production of that good rises

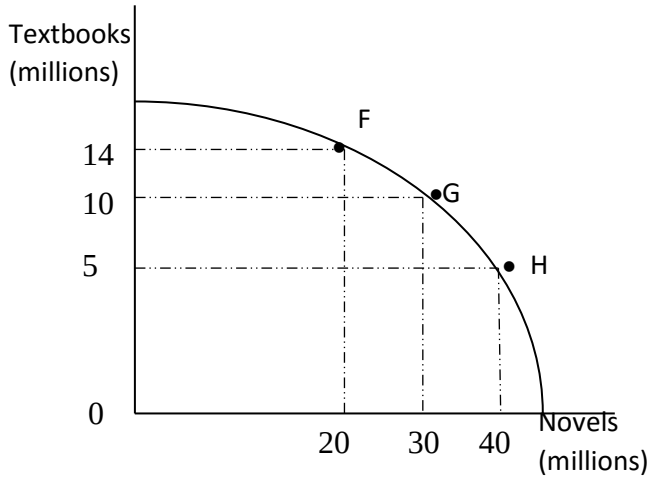
34. If Pat can produce a good or service at a lower opportunity cost than Chris can, then
    a) Pat has a comparative advantage in producing the good or service
    b) no gains are possible through specialization
    c) Pat must have an absolute advantage in producing the good or service
    d) Pat must be more talented than Chris
    e) society is at a point along its production possibilities frontier

35. The three primary systems for allocating resources are
    a) tradition, command, and central planning
    b) tradition, central planning, and communal
    c) command, market, and socialism

d) tradition, command, and market
e) communal, command, and capitalism

36. Traditional economies tend to be
    a) unstable and unpredictable
    b) stable, predictable, and growing
    c) unstable, unpredictable, and stagnant
    d) unstable and unpredictable, but growing
    e) stable and predictable, but stagnant

Figure 4



37. Assume that the publishing industry produces novels and textbooks, as shown in the production possibilities frontier in Figure-4. Between points F and G, the opportunity cost of one more novel equals _____. Between points G and H, the opportunity cost of one more novel equals_____.
    a) 0.4 textbooks; 0.5 textbooks
    b) 4 textbooks; 5 textbooks
    c) 4 million textbooks; 5 million textbooks
    d) 2.5 textbooks; 2 textbooks
    e) 10 million textbooks; 5 million textbooks

38. Assume that the publishing industry produces novels and textbooks, as shown in the production possibilities frontier in Figure-4. Between points G and H, the opportunity cost of one more textbook equals;

a) 0.5 novels
b) 10 million novels
c) 3 novels
d) 8 novels
e) 2 novels

39. Which of the following statements could explain the concave shape of the production possibilities curve in Figure-4?
    a) the publishing industry develops improved printing presses
    b) productive efficiency increases as the publishing industry moves from point F to point H
    c) more editors and writers are employed as the publishing industry moves from point F to point H
    d) some writers are better suited to writing novels; some are better suited to writing textbooks
    e) the prices of paper and ink fall as the publishing industry moves from point H to point F

40. Land, labor, and money are the three categories of economic resources.
    a) mTrue
    b) False

41. Due to a scarcity of resources,
    a) every society must undertake central planning
    b) the government must decide how to allocate available resources
    c) some members of each society must live in poverty
    d) every society must choose among competing uses of available resources
    e) resource availability exceeds the possible uses for available resources

42. Macroeconomics focuses on the behavior of economic agents such as the consumer, a business firm, or a specific market.
    a) True
    b) False

43. Microeconomic topics include the overall unemployment rate in Ghana and the rate of inflation.
    a) True
    b) False

44. Microeconomics deals with which of the following?
    a) the total output of an economy
    b) the measurement of a nation's inflation rate
    c) how producers and consumers interact in individual markets
    d) how tax policies influence economic growth
    e) whether wage growth will outpace inflation in the coming year

45. Which of the following would be strictly a microeconomic topic?
    a) a general rise in interest rates
    b) a drop in inflation
    c) an increase in total production in Ghana
    d) a drop in the nation's unemployment rate
    e) an increase in the price of the Ford car

46. If the president of Ghana commented that "the crime rate in Ghana is currently too high," this would be an example of a normative statement.
    a) True
    b) False

47. Economists tend to disagree primarily over positive statements about the economy.
    a) True
    b) False

48. "The Consumer Price Index increased by 4.2 percent in the first quarter of this year." What type of statement is this?
    a) normative
    b) negative
    c) positive
    d) subjective
    e) biased

49. Which of the following is a normative statement?
    a) Kotoko has won 70 matches this year
    b) the Consumer Price Index rose three-tenths of one percent in May
    c) in January, the average temperature in Accra exceeds the average temperature in Kumasi
    d) Accra Hearts of Oak needs a better manager
    e) the French trade deficit reached an all-time high last year

50. Which of the following is a positive statement?
    a) driving speeds should be lowered so that fewer accidents will occur
    b) when per capita income falls, fewer meals are consumed at restaurants
    c) the minimum wage is too low; college students deserve a raise
    d) cigarette sales should be made illegal in order to reduce the incidence of cancer
    e) Social Security is a good program for Ghanaian workers

51. "Senior citizens deserve an income that will allow them to live in comfort for their remaining years." This is
    a) neither a normative nor a positive statement
    b) both a positive and a normative statement
    c) strictly a macroeconomic issue
    d) a positive statement
    e) a normative statement

52. A newspaper headline announces that "more college graduates than ever are in the labour force." This is an example of
    a) microeconomic analysis
    b) an abstraction
    c) a value judgment
    d) a positive statement
    e) macroeconomic analysis

53. Economic models do not have to completely describe every aspect of the economy in order to be useful.
    a) True
    b) False

54. Economic models come in the form of
    a) three-dimensional objects
    b) all of the following
    c) words
    d) diagrams
    e) mathematical equations

55. Consider an economic model designed to analyze the purchasing decisions of households. An assumption that a household chooses between only two goods would be an example of a
    a) simplifying assumption
    b) critical assumption
    c) macroeconomic assumption
    d) financial assumption
    e) positive assumption

56. Suppose your friends take you out for dinner on your birthday and you have a much better time than you would have had doing anything else. There is still an opportunity cost, even though they will not let you pay for anything.
    a) True
    b) False

57. Opportunity costs arise because of resource scarcity.
    a) True
    b) False

58. The opportunity cost of a particular activity
    a) is the same for everyone pursuing this activity
    b) may include both monetary costs and forgone income
    c) always decreases as more of that activity is pursued
    d) usually is known with certainty
    e) measures the direct benefits of that activity

59. After graduating from high school, Steve had three choices, listed in order of preference: (1) matriculate at our campus, (2) work in a printing company, or (3) attend a rival college. His opportunity cost of going to college here includes which of the following?
    a) the cost of books and supplies at the rival college
    b) the income he could have earned at the printed circuit board factory plus the direct cost of attending college here (tuition, textbooks, etc.)
    c) the benefits he could have received from going to the rival college
    d) only the tuition and fees paid for taking classes here
    e) cannot be determined from the given information

60. A professional basketball players' union negotiates a contract that dramatically increases all players' salaries. How would this influence the opportunity cost for a player who was considering giving up basketball to pursue a career in broadcasting?
    a) it would not affect the opportunity cost of playing basketball or of broadcasting
    b) it would increase the opportunity cost of continuing to play professional basketball
    c) it would cause the production possibilities frontier to become convex
    d) it would increase the opportunity cost of becoming a broadcaster
    e) it should have no bearing on the player's decision from an economic standpoint

61. Assume that Kelly's various possible activities are mutually exclusive. The opportunity cost from choosing one activity equals the
    a) summed value of all her alternative activities
    b) summed value of all her alternative activities minus the value of the chosen activity
    c) value of the next most valuable alternative activity
    d) value of the next most valuable alternative activity minus the value of the chosen activity
    e) summed value of all her alternative activities minus the value of the next most valuable alternative activity

62. Carl is considering attending a concert with a ticket price of ¢35. He estimates that the cost of driving to the concert and parking there will total an additional ¢20. In order to attend the concert, Carl will have to take time off from his part-time job. He estimates that he will lose 5 hours at work, at a wage of ¢6 per hour. Carl's opportunity cost of attending the concert equals
    a) ¢35

b) ¢55
c) ¢30
d) ¢65
e) ¢85

63. Opportunity costs arise in production because
    a) resources are unlimited
    b) resources must be shifted away from producing one good in order to produce another
    c) wants are limited in society
    d) monetary costs of inputs usually outweigh non-monetary costs
    e) the monetary costs of only a few resources are zero

64. In one hour, George can fix 4 flat tires or type 200 words. His opportunity cost of fixing a flat tire is
    a) 200 words
    b) 4 flat tires
    c) 1 word
    d) 50 words
    e) 800 words

65. When there is an improvement in technology, holding all else constant,
    a) the production possibilities frontier will shift inward
    b) society faces larger opportunity costs from shifting productive resources from one use to another
    c) goods and services will increase in price
    d) the economy must have some idle resources
    e) the production possibilities frontier will shift outward

66. If an economy's production possibilities frontier shifted to the right, this would illustrate
    a) increasing opportunity cost
    b) decreasing opportunity cost
    c) a fall in resource utilization
    d) economic growth
    e) a rise in resource utilization

67. Along a society's production possibilities frontier,
    a) the level of technology is changing
    b) more of one good can be produced without giving up some of the other good
    c) resources are not being fully utilized
    d) available resources are being used efficiently
    e) there is productive inefficiency in the economy

68. The law of increasing opportunity cost is based on the idea that
    a) wages tend to increase with the level of employment
    b) interest rates tend to rise with increasing inflation
    c) labor costs for a typical firm are a large and growing proportion of total cost
    d) most resources are better suited to producing some goods than others
    e) the less of something we produce, the greater is the opportunity cost of producing still more

69. If a society is on its production possibilities frontier, and decides to produce more health care,
    a) the cost of producing an additional unit of health care will rise
    b) it must employ some previously unemployed resources
    c) its standard of living will rise
    d) some kind of inefficiency will occur
    e) the cost of producing an additional unit of some other good will rise

70. After graduating from senior high school, Steve had three choices, listed in order of preference: (1) study economics at University of Ghana, (2) work in a school, or (3) work in his fathers' company. His opportunity cost of going to the university here includes which of the following?
    a) the cost of books and supplies at the rival college
    b) the income he could have earned from working elsewhere plus the direct cost of attending university here (tuition, textbooks, etc.)
    c) the benefits he could have received from going to the rival college
    d) only the tuition and fees paid for taking classes here
    e) cannot be determined from the given information

71. A bowed out (concave) production possibility frontier (curve) shows that the
    a) opportunity cost of a good is constant as more of the good is produced.

b) opportunity cost of a good decreases as more of the good is produced.
c) opportunity cost of a good increases as more of the good is produced.
d) opportunity cost relationship is linear.

Scenario 13-3

Tony is a wheat farmer, but he also spends part of his day teaching guitar lessons. Due to the popularity of his local country western band, Farmer Tony has more students requesting lessons than he has time for if he is to also maintain his farming business. Farmer Tony charges ¢25 an hour for his guitar lessons. One raining season, he spends 10 hours in his fields planting ¢130 worth of seeds on his farm. He expects that the seeds he planted will yield ¢300 worth of wheat.

72. Refer to Scenario 13-3. What is the total opportunity cost of the day that Farmer Tony incurred for his spring day in the field planting wheat?
    a) ¢130
    b) ¢250
    c) ¢300
    d) ¢380

73. A weakness of the market system of resource allocation is that
    a) such economies tend to be stagnant
    b) most participants in such an economy have low standards of living
    c) there are no limits on an individual's freedom of action
    d) it does not address the problem of initial inequities in endowments
    e) its participants are free to act according to their desires

DEMAND AND SUPPLY ANALYSIS

1. An increase in the price of beef will
    a) Increase the demand for chicken, a substitute
    b) Increase the demand for hamburger buns, a complement
    c) Increase the demand for beef
    d) Decrease the demand for beef
    e) Both a) and d)

2. Changes in which of the following variables will not shift the demand curve?
    a) Income
    b) Price of other goods
    c) The price of the good itself
    d) Population size
    e) Preferences

3. If an increase in the price of good A causes the demand curve for B to shift to the left, then
    a) A and B are substitutes
    b) A and B are complements
    c) The price of A must be higher than the price of B
    d) B must be a normal good
    e) None of the above

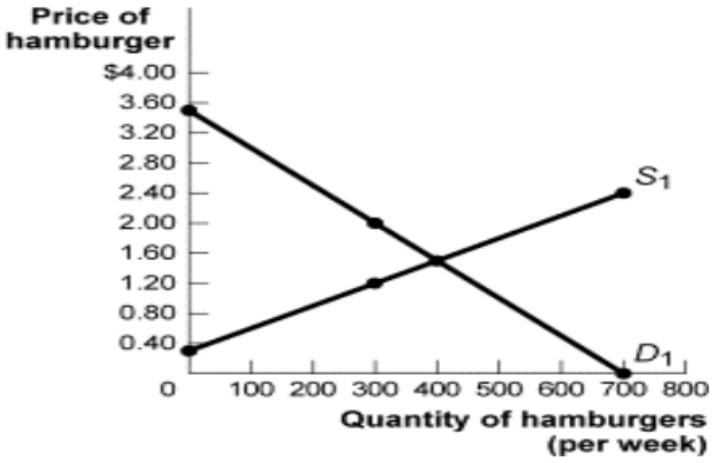
4. When the demand for good A increases,
    a) Both the price and quantity traded will increase
    b) The price will increase but quantity traded will decrease
    c) Both the price and quantity traded will decrease
    d) The price will decrease but the quantity traded will increase
    e) A surplus will result

5. The price of a good will increase if
    a) Demand for the good decreases
    b) Supply of the good decreases
    c) There is a surplus of the good
    d) The price of a substitute decreases
    e) It is an inferior good and income increases

6. An increase in income will
    a) Increases the demand for oranges if oranges are inferior goods
    b) Increases the demand for oranges if oranges are normal goods
    c) Increase the supply of oranges
    d) Decrease the demand for oranges if oranges have a very low price
    e) Decrease the supply of oranges

Use the following to answer questions 8-10:

Figure: Market for Hamburgers



7. The figure shows the weekly market for hamburgers at the Tasty Burger Palace. If the price of a hamburger is $1.20 and 300 hamburgers are supplied, producer surplus will equal:
   a) $60.
   b) $65.
   c) $135.
   d) $360.

8. The accompanying figure shows the weekly market for hamburgers at the Tasty Burger Palace. If the Palace sells 400hamburgers, producer surplus will equal:
   a) $650.
   b) $400.
   c) $510.
   d) $240.

9. The accompanying figure shows the weekly market for hamburgers at the Tasty Burger Palace. The maximum total surplus for the market for the Palace burgers is _____ and it occurs at a price equal to _____.

a) $550; $1.50
b) $640; $1.50
c) $1050; $2
d) Not enough information is provided to answer this question, since the maximum total surplus
e) could occur at a price that is not marked in the figure

10. If A is an inferior good and consumer income rises, the demand for A will

a) Increase, and thus the price and the quantity traded will increase
b) Increase, and thus the price will rise but the quantity traded will decrease
c) Decrease, and thus the price and the quantity traded will decrease
d) Decrease, and thus the price will fall but the quantity traded will increase
e) Decrease, and thus the price will rise; as a result the quantity traded will decrease

11. If A and B are substitute goods (in consumption) and the price of A increases, we will observe

a) An increase in the price and the quantity traded of B
b) A decrease in the price and the quantity traded of B
c) An increase in the price but a decrease in the quantity traded of B
d) A decrease in price but an increase in the quantity traded of B
e) None of the above

12. When the supply of good A decreases,

a) Both the price and quantity traded will increase
b) The price will increase but quantity traded will decrease
c) Both the price and quantity traded will decrease
d) The price will decrease but the quantity traded will increase
e) A surplus will result

13. Assume the market equilibrium price of rice is ¢5.00 per kilo. If the government does not allow rice farmers to charge more than ¢1.00 per kilo of rice,

a) the market equilibrium price will move from ¢5.00 to ¢1.00.

b) there will be a rice shortage.
c) there will be a rice surplus.
d) quantity demanded will equal quantity supplied.
e) None of the above

Use the following information to answer the next three (3) questions

Ama is willing to pay ¢5 for the first loaf of bread she purchases each week, ¢4.50 for the next one, ¢3.50 for the next, and so on. The current market price is V1 per loaf.

14. What is the consumers' surplus on the last loaf Ama buys?
    a) ¢1
    b) 50P
    c) ¢1.50
    d) zero

15. How much money will Ama spend?
    a) ¢9
    b) ¢1
    c) ¢6/
    d) ¢5

16. How many loaves will Ama buy?
    a) five
    b) one
    c) nine
    d) six

17. For a floor price to be binding or effective, it must be set
    a) below the equilibrium price.
    b) at a level such that there exists some unsatisfied demand.
    c) at the equilibrium price.
    d) above the equilibrium price.
    e) none of the above

18. Crude oil is a very important resource used in the production of gasoline. If the price of crude oil increases, we would expect
    a) The price of gasoline to rise due to an increase in demand
    b) The price of gasoline to fall due to an increase in demand
    c) The price of gasoline to rise due to a decrease in supply
    d) The quantity of gasoline to fall due to an increase in supply
    e) The quantity of gasoline to rise due to an increase in demand

19. A shortage will exist if
    a) The price is above equilibrium
    b) The price is below equilibrium
    c) There are not enough producers
    d) There are not enough consumers
    e) Demand falls

20. If demand increases and supply decreases, then
    a) The quantity traded will increase but the effect on the price is indeterminate
    b) The quantity traded will decreases but the effect on the price is indeterminate
    c) The price will fall but the effect on the quantity traded will be indeterminate
    d) The price will rise but the effect on the quantity traded will be indeterminate
    e) The effect on both price and quantity traded will be indeterminate

21. If demand decreases and supply increases then,
    a) The quantity traded will increase but the effect on the price is indeterminate
    b) The quantity traded will decreases but the effect on the price is indeterminate
    c) The price will fall but the effect on the quantity traded will be indeterminate
    d) The price will rise but the effect on the quantity traded will be indeterminate
    e) The effect on both price and quantity traded will be indeterminate

22. If nothing changes except that producers sell more of a good or service when the price increases, we know this is an example of the law of
    a) increasing profit.
    b) supply.
    c) demand.
    d) opportunity cost.
    e) reduced real income.

Use these equations for questions the next two questions.

$Qd = 80 - 3P$

$Qs = -20 + 2P$

23. What is the equilibrium price and quantity in the market?
    a) P = 20, Q = 20
    b) P = 12, Q = 44
    c) P = 100, Q = 20
    d) P = 40, Q = 20

24. Suppose the government imposes a tax of ¢5 per unit on suppliers. What is the new equilibrium price and quantity?
    a) P = 20, Q = 2
    b) P = 24, Q = 8
    c) P = 22, Q = 24
    d) P = 22, Q = 14
    e) P = 20, Q = 10

Use the following information for the next two questions.

Suppose the demand for light bulbs is $Qd = 120 - 2P - 4Pl + Y$ where Pl is the price of lamps and Y is income. Supply is defined by Qs = 30 + 3P. Initially, Y = ¢40 and Pl = ¢10.

25. What is the equilibrium price and quantity?
    a) P = 20, Q = 30
    b) P = 30, Q = 30
    c) P = 24, Q = 42
    d) P = 28, Q = 10
    e) P = 30, Q = 60

26. The difference between normal and inferior goods is that
    a) normal goods are of better quality than inferior goods.
    b) an increase in price will shift the demand curve for a normal good rightward and the demand curve for an inferior good leftward.

c) if the price of a normal good increases, individuals who buy it are poorer; with inferior goods, the opposite is true.
d) an inferior good is something that will not be demanded until quantities of the normal good have been exhausted.
e) an increase in income will shift the demand curve for a normal good rightward and the demand curve for an inferior good leftward.

27. A group of buyers and sellers with the potential to trade with each other is known as a(n)
a) trading bloc
b) Cartel
c) Market
d) Industry
e) Sector

28. The demand curve for dolls shows the quantity of dolls demanded
a) by suppliers of those dolls
b) by Ghanaian consumers
c) at the equilibrium price for dolls
d) at each level of income
e) at each possible price of dolls

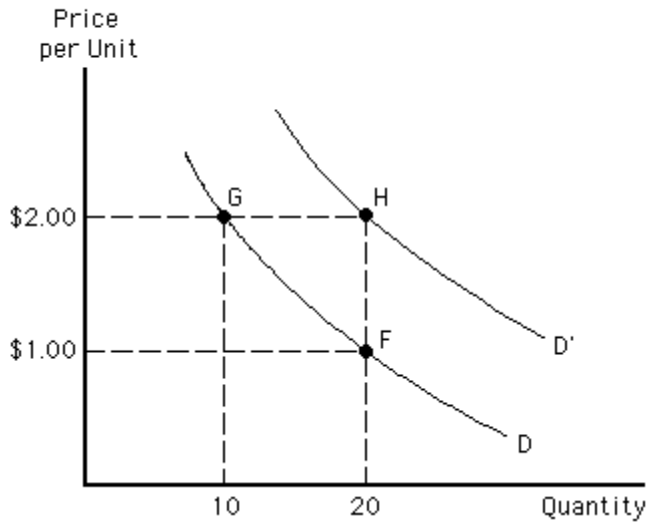
Price per CD (¢)	Qty demanded
10	5.0 million
11	3.5 million
12	2.8 million
13	2.3 million
14	2.0 million

29. The table above shows the market demand schedule for compact disks. If the price per disk rises from ¢10 to ¢12, the
a) demand will decrease by 2.2 million disks
b) quantity demanded will decrease by 2.2 million disks
c) supply will rise by 2.8 million disks
d) quantity demanded will decrease by 3.5 million disks
e) demand curve will shift to the left

30. What do supply and demand curves have in common?

a) They both usually slope upward.
b) They both show a relationship between quantity and price.
c) They both usually slope downward.
d) They can both shift in response to changes in income or wealth.
e) Neither of them is influenced by the size of the population.

Figure 3 - 2



31. Which of the following could explain a movement from point F to point G in the diagram above? Assume that the good represented is an inferior good.

a) all of the following are correct
b) an increase in buyers' incomes
c) a decrease in the expected future price of the good
d) an increase in the price of the good
e) an increase in the price of a complement

32. Which of the following would shift the demand curve for new college textbooks to the right?

a) an increase in the price of new college textbooks
b) a decrease in the price of new college textbooks
c) an increase in the price of used college textbooks
d) a decrease in the population of college students
e) a decrease in the wealth of college students

33. If the same company can produce either whole milk or skim milk, an increase in the profitability of whole milk results in a(n)
    a) decrease in the quantity supplied of whole milk
    b) increase in the supply of whole milk
    c) decrease in the supply of skim milk
    d) increase in the supply of skim milk
    e) decrease in the quantity supplied of skim milk

34. If an improvement in production technology causes a decrease in production costs, the result is a(n)
    a) decrease in quantity supplied
    b) increase in demand
    c) increase in supply
    d) improvement is working conditions
    e) increase in quantity supplied

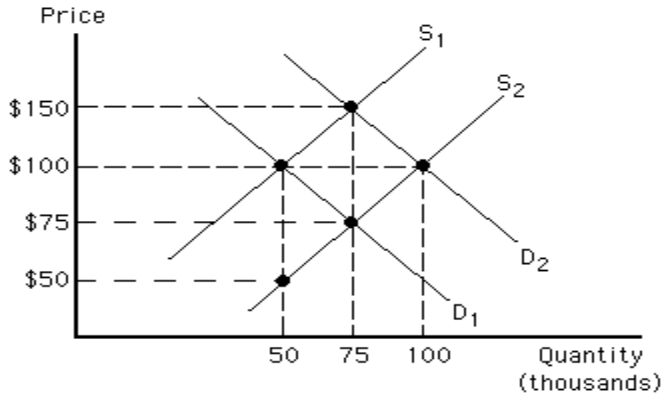
35. In a competitive market, excess demand for a good exists whenever
    a) the current price is below the equilibrium price
    b) resources are scarce
    c) the quantity supplied at the current price exceeds the quantity demanded
    d) sellers are subject to the constraints imposed by input prices and technology
    e) the current price is above the equilibrium price

36. Market equilibrium occurs at that price for which
    a) quantity supplied equals quantity demanded
    b) cost equals the wages to labor
    c) the surplus quantity drives increased demand
    d) quantity supplied exceeds quantity demanded
    e) quantity supplied is less than quantity demanded

37. If the supply of coffee falls due to bad weather conditions in coffee-exporting countries, then the
    a) price and quantity will rise
    b) price and quantity will fall
    c) price will fall and quantity will rise

d) price will rise and quantity will fall
e) quantity will fall, but price may rise or fall

Figure 3 - 11



38. In the figure above, suppose that initially the market is in equilibrium as defined by the demand and supply curves D1 and S1. Which price/quantity combination could result from a decrease in the wages paid to workers?
    a) $100 and 50,000
    b) $120 and 50,000
    c) $75 and 75,000
    d) $120 and 75,000
    e) $120 and 100,000

39. In the figure above, suppose that initially the market is in equilibrium as defined by the demand and supply curves D1 and S1. Which price/quantity combination could result from an increase in consumers' incomes coupled with an improvement in technology?
    a) $100 and 75,000
    b) $100 and 100,000
    c) $100 and 50,000
    d) $120 and 75,000
    e) $120 and 100,000

40. If the demand curve for desktop computers shifts rightward and at the same time the supply curve shifts leftward, then
    a) the equilibrium price definitely increases.

b) the equilibrium price definitely decreases.
c) the equilibrium quantity definitely increases.
d) the equilibrium quantity definitely decreases.

41. Consumers regard Dell computers and Gateway computers as substitutes. If the price of a Dell computer decreases,
    a) the demand for Dell computers will increase.
    b) the demand for Gateway computers will increase
    c) the demand for Gateway computers will decrease
    d) the supply of Dell computers will increase

42. The total surplus generated in a market is:
    a) the excess supply due to the imposition of a price floor.
    b) the surplus that exists when a good is not scarce, defined as the total amount (if any) by which
    c) quantity supplied exceeds quantity demanded at a zero price.
    d) the net benefit to consumers, defined as the excess of consumer surplus over producer surplus.
    e) the sum of consumer surplus and producer surplus.

43. If rice and maize are complements, and the price of maize rises, then we would expect to see:
    a) decrease in the demand for rice
    b) decrease in the quantity demanded for rice but no change in demand
    c) an increase in the quantity demanded for rice but no change in demand.
    d) an increase in the demand for rice.

44. If rice is an inferior good, then falling incomes will tend to:
    a) raise its price but lower its quantity
    b) put downward pressure on its price and quantity
    c) lower its price but raise its quantity
    d) put upward pressure on its price and quantity

Consider the market for peanuts. The market demand for peanuts is given by the following equation: $Q^D=7.5-P$. Market supply for peanuts is: $Q^S=P - 1/2$. Suppose the government levies an excise tax on producers of $2 per unit of peanuts sold.

45. What is the equilibrium quantity supplied and net price received by producers after the government implements this excise tax on peanuts?
    a) P=¢8, Q=3.5
    b) P=¢3.5, Q=4
    c) P=¢4, Q=3.5
    d) P=¢3, Q=2.5

46. A local grocery store orders 200 cases of Pepsi each week and sells them at a price of ¢6.00 per case. At the end of the first week, they have only sold 160 cases. What economic situation is the grocery store facing and what will have to happen to price in order for equilibrium to be attained?
    a) surplus; price will rise.
    b) surplus; price will fall.
    c) shortage; price will rise.
    d) shortage; price will fall.
    e) nothing since the market is in equilibrium.

47. Which of the following can lead to an increase in the supply for good X?
    a) a decrease in the number of sellers of good X.
    b) an increase in the price of inputs used to make good X.
    c) an increase in consumers' income, assuming good X is a normal.
    d) an improvement in technology used in production of good X.
    e) none of the above

48. An increase in the price of electricity will:
    a) increase the demand for kerosene heaters.
    b) increase the demand for light bulbs.
    c) increase the demand for stereos.
    d) increase the demand for TVs.

49. Which of the following events will cause an increase in the market demand for Guinness (a brand of beer)?
    a) A decrease in the price of Guinness.
    b) An increase in the price of Heineken (another brand of beer).
    c) An increase in the price of Planters peanuts (a complementary good).
    d) An increase in income, if Guinness is an inferior good.
    e) None of the above will cause an increase in demand.

50. A relative price is
    a) the ratio of one price to another.
    b) the difference between one price and another.
    c) the slope of the supply curve.
    d) the slope of the demand curve.

51. If the price of a candy bar is ¢1 and the price of a fast food meal is ¢5,
    a) the money price of a fast food meal is 1/5 of a candy bar.
    b) the money price of a candy bar is 1/5 of a fast food meal.
    c) the relative price of a fast food meal is 5 candy bars.
    d) the relative price of a candy bar is 5 fast food meals.

52. If the price of a hot dog is ¢2 and the price of a hamburger is ¢4,
    a) the money price of a hamburger is 2 hot dogs.
    b) the money price of a hot dog is 2 hamburgers.
    c) the relative price of a hot dog is 1/2 of a hamburger.
    d) the relative price of a hamburger is 1/2 of a hot dog.

53. The opportunity cost of good A in terms of good B is equal to the
    a) ratio of the price of good B to the price of good A.
    b) ratio of the price of good A to the price of good B.
    c) price of good A minus the price of good B.
    d) price of good B minus the price of good A.

54. The opportunity cost of a banana in terms of pineapples is
    a) the price of a banana minus the price of a pineapple.

b) the ratio of the slope of the supply curve for banana to the slope of the supply curve for pineapples.
c) the ratio of the slope of the demand curve for banana to the slope of the demand curve for pineapples.
d) the ratio of the price of a banana to the price of a pineapple.

55. Wants, as opposed to demands,
a) depend on the price.
b) are the goods the consumer plans to acquire.
c) are the unlimited desires of the consumer
d) are the goods the consumer has acquired

56. Demands differ from wants in that
a) wants require a plan to acquire a good but demands require no such plan.
b) demands are unlimited, whereas wants are limited by income.
c) wants imply a decision about which demands to satisfy, while demands involve no specific plan to acquire the good.
d) demands reflect a decision about which wants to satisfy and a plan to buy the good, while wants are unlimited and involve no specific plan to acquire the good.

57. Scarcity guarantees that
a) wants will exceed demands.
b) demands will be equal to wants.
c) demands will exceed wants.
d) most demands will be satisfied.

58. The quantity demanded is
a) the amount of a good that consumers plan to purchase at a particular price.
b) independent of the price of the good.
c) independent of consumers' buying plans.
d) always equal to the equilibrium quantity.

59. The law of demand states that, other things remaining the same, the higher the price of a good, the

a) smaller is the demand for the good.
b) smaller is the quantity of the good demanded.
c) larger is the quantity of the good demanded.
d) larger is the demand for the good.

60. The law of demand implies that, other things remaining the same,
a) as the demand for cheeseburgers increases, the price of a cheeseburger will fall.
b) as the price of a cheeseburger rises, the quantity of cheeseburgers demanded will decrease.
c) as income increases, the quantity of cheeseburgers demanded will increase.
d) as the price of a cheeseburger rises, the quantity of cheeseburgers demanded will increase.

61. The law of demand states that the quantity of a good demanded varies
a) inversely with its price.
b) directly with population.
c) directly with income.
d) inversely with the price of substitute goods.

62. Which of the following is consistent with the law of demand?
a) A decrease in the price of a gallon of milk causes a decrease in the quantity of milk demanded.
b) An increase in the price of a soda causes a decrease in the quantity of soda demanded.
c) An increase in the price of a tape causes an increase in the quantity of tapes demanded.
d) A decrease in the price of juice causes no change in the quantity of juice demanded

63. The law of demand implies that if nothing else changes, there is
a) a linear relationship between price of a good and the quantity demanded.
b) a positive relationship between the price of a good and the quantity demanded.

c) a negative relationship between the price of a good and the quantity demanded.
d) an exponential relationship between price of a good and the quantity demanded.

64. Which of the following influences people's buying plans and varies moving along a demand curve?
a) preferences
b) the price of the good
c) income
d) the prices of related goods

65. The law of demand states that
a) a decrease in the price of a good shifts the demand curve leftward.
b) other things remaining the same, the higher the price of a good, the smaller is the quantity demanded.
c) other thing remaining the same, the higher the price of a good, the larger is the quantity demanded.
d) an increase in the price of a good shifts the demand curve leftward.

66. The law of demand implies that demand curves
a) shift leftward whenever the price rises.
b) shift rightward whenever the price rises.
c) slope down.
d) slope up.

67. Each point on the demand curve reflects
a) the highest price consumers are willing and able to pay for that particular unit of a good.
b) the highest price sellers will accept for all units they are producing.
c) the lowest-cost technology available to produce a good.
d) all the wants of a given household.

68. A drop in the price of a compact disc shifts the demand curve for prerecorded tapes leftward. From that you know compact discs and prerecorded tapes are

a) normal goods.
b) substitutes.
c) inferior goods.
d) complements.

69. A substitute is a good
a) of higher quality than another good.
b) that is not used in place of another good.
c) that can be used in place of another good.
d) of lower quality than another good.

70. People buy more of good 1 when the price of good 2 rises. These goods are
a) normal goods.
b) complements.
c) substitutes.
d) inferior goods.

71. Which of the following pairs of goods are most likely substitutes?
a) compact discs and compact disc players
b) lettuce and salad dressing
c) cola and lemon lime soda
d) peanut butter and gasoline

72. The demand for a good increases when the price of a substitute _____ and also increases when the price of a complement _____.
a) falls; falls
b) rises; falls
c) rises; rises
d) falls; rises

73. A complement is a good
a) used in conjunction with another good.
b) used instead of another good.
c) of lower quality than another good.
d) of higher quality than another good.

74. Suppose people buy more of good 1 when the price of good 2 falls. These goods are
    a) substitutes.
    b) inferior.
    c) normal.
    d) complements.

75. As the opportunity cost of a good decreases, people buy
    a) more of that good but less of its complements.
    b) less of that good and also less of its complements.
    c) less of that good but more of its complements.
    d) more of that good and also more of its complements.

76. People come to expect that the price of a gallon of gasoline will rise next week. As a result,
    a) next week's supply of gasoline decreases.
    b) the price of a gallon of gasoline falls today.
    c) today's supply of gasoline increases.
    d) today's demand for gasoline increases.

77. The demand curve for a normal good shifts leftward if income_____ or the expected future price _____.
    a) decreases; falls
    b) increases; rises
    c) increases; falls
    d) decreases; rises

78. If income increases or the price of a complement falls,
    a) the supply curve of a normal good shifts leftward.
    b) the supply curve of a normal good shifts rightward.
    c) the demand curve for a normal good shifts rightward.
    d) the demand curve for a normal good shifts leftward.

79. If income decreases or the price of a complement rises,
    a) there is an upward movement along the demand curve for the good.
    b) there is a downward movement along the demand curve for the good.

c) the demand curve for a normal good shifts leftward.
d) the demand curve for a normal good shifts rightward.

80. Normal goods are those for which demand decreases as
a) the price of a substitute falls.
b) the price of a complement falls.
c) the good's own price rises.
d) income decreases.

81. A normal good is a good for which
a) there are very few complements.
b) demand decreases when income increases.
c) demand increases when income increases.
d) there are few substitutes.

82. Most goods
a) have vertical demand curves.
b) have vertical supply curves.
c) are normal goods.
d) are complements to each other.

83. A normal good is a good for which demand
a) increases when income increases.
b) decreases when population increases.
c) increases when population increases.
d) decreases when income increases.

84. Inferior goods are those for which demand increases as
a) income decreases.
b) income increases.
c) the price of a substitute rises.
d) the price of a substitute falls.

85. By definition, an inferior good is a

a) normal substitute good.
b) good for which demand decreases when its price rises.
c) want that is not expressed by demand.
d) good for which demand decreases when income increases.

86. If a good is an inferior good, then purchases of that good will decrease when
a) the demand for it increases.
b) population increases.
c) income increases.
d) the price of a substitute rises.

87. An inferior good is a good for which demand
a) increases when population increases.
b) decreases when income increases.
c) decreases when population increases.
d) increases when income increases.

88. When economists speak of preferences as influencing demand, they are referring to
a) the availability of a good to all income classes.
b) directly observable changes in prices and income.
c) the excess of wants over the available supplies.
d) an individual's attitudes toward goods and services.

89. In 2000 there were 200,000 gas grills demanded at a price of ¢500. In 2001 there were more than 200,000 gas grills demanded at the same price. This increase could be the result any of the following EXCEPT
a) an increase in the supply of gas grills.
b) an increase in population.
c) an increase in income if gas grills are a normal good.
d) a fall in the price of natural gas, a complement for a gas grill.

90. A change in the price of a good
a) shifts the good's demand curve but does not cause a movement along it.
b) does not shift the good's demand curve but does cause a movement along it.
c) shifts the good's demand curve and also causes a movement along it.

d) neither shifts the good's demand curve nor causes a movement along it.

91. A reduction in the price of a good
   a) does not shift the good's demand curve leftward but does decrease the quantity demanded.
   b) shifts the good's demand curve leftward but does not decrease the quantity demanded.
   c) shifts the good's demand curve leftward and also decreases the quantity demanded.
   d) neither shifts the good's demand curve leftward nor decreases the quantity demanded.

92. A decrease in quantity demanded caused by an increase in price is represented by a
   a) movement up and to the left along the demand curve.
   b) movement down and to the right along the demand curve.
   c) leftward shift of the demand curve.
   d) rightward shift of the demand curve.

93. A change in which of the following alters buying plans for cars but does NOT shift the demand curve for cars?
   a) a 10 percent decrease in the price of car insurance
   b) a 20 percent increase in the price of a car
   c) a 5 percent increase in people's income
   d) an increased preference for walking rather than driving

94. Which of the following would NOT shift the demand curve for turkey?
   a) a change in tastes for turkey
   b) a decrease in the price of ham
   c) an increase in income
   d) a change in the price of a turkey

95. When we say demand increases, we mean that there is a
   a) movement to the right along a demand curve.
   b) movement to the left along a demand curve.
   c) leftward shift of the demand curve.
   d) rightward shift of the demand curve.

96. In the figure above, which movement reflects an increase in demand?
   a) from point a to point e
   b) from point a to point c
   c) from point a to point b
   d) from point a to point d

97. In the figure above, which movement reflects a decrease in demand?
   a) from point a to point d
   b) from point a to point e
   c) from point a to point c
   d) from point a to point b

98. In the figure above, which movement reflects a decrease in quantity demanded but NOT a decrease in demand?
   a) from point a to point c
   b) from point a to point e
   c) from point a to point d
   d) from point a to point b

99. In the figure above, which movement reflects how consumers would react to an increase in the price of a non-fruit snack?
   a) from point a to point b

b) from point a to point d
c) from point a to point c
d) from point a to point e

100. In the figure above, which movement reflects an increase in the price of a substitute for fruit snacks?
a) from point a to point d
b) from point a to point e
c) from point a to point b
d) from point a to point c

101. In the figure above, which movement reflects an increase in the price of a complement for fruit snacks?
a) from point a to point b
b) from point a to point d
c) from point a to point e
d) from point a to point c

102. In the figure above, which movement reflects how consumers would react to an increase in the price of a fruit snack that is expected to occur in the future?
a) from point a to point b
b) from point a to point e
c) from point a to point c
d) from point a to point d

103. In the figure above, which movement reflects an increase in income if fruit snacks are an inferior good?
a) from point a to point d
b) from point a to point c
c) from point a to point b
d) from point a to point e

104. In the figure above, which movement reflects an increase in income if fruit snacks are a normal good?
a) from point a to point d

b) from point a to point e
c) from point a to point b
d) from point a to point c

105. In the figure above, which movement reflects a decrease in population?
a) from point a to point d
b) from point a to point c
c) from point a to point e
d) from point a to point b

106. The quantity supplied of a good is
a) equal to the difference between the quantity available and the quantity desired by all consumers and producers.
b) the same thing as the quantity demanded at each price.
c) the amount that the producers are planning to sell at a particular price during a given time period.
d) the amount the firm would sell if it faced no resource constraints.

107. The quantity supplied of a good or service is the quantity that a producer
a) actually sells at a particular price during a given time period.
b) should sell at a particular price during a given time period.
c) is willing to sell at a particular price during a given time period.
d) needs to sell at a particular price during a given time period.

108. A fall in the price of a good causes producers to reduce the quantity of the good they are willing to produce. This fact illustrates
a) a change in supply.
b) the law of demand.
c) the nature of an inferior good.
d) the law of supply.

109. Each point on a supply curve represents
a) the highest price sellers can get for each unit over time.
b) the lowest price buyers will accept per unit of the good.
c) the lowest price for which a supplier can profitably sell another unit.

d) the highest price buyers will pay for the good.

110. Because of increasing marginal cost, most supply curves
   a) are horizontal.
   b) have a negative slope.
   c) are vertical.
   d) have a positive slope.

111. A supply curve shows the relation between the quantity of a good supplied and
   a) the price of the good. Usually a supply curve has negative slope.
   b) income. Usually a supply curve has positive slope.
   c) income. Usually a supply curve has negative slope.
   d) the price of the good. Usually a supply curve has positive slope.

112. A supply curve differs from a supply schedule because a supply curve
   a) is a graph and the supply schedule is a table.
   b) holds the number of suppliers constant, whereas the supply schedule allows the number to vary.
   c) holds resource prices constant, whereas the supply schedule allows them to vary.
   d) represents one firm, whereas the supply schedule represents all firms in the market.

113. Which of the following is NOT held constant while moving along a supply curve?
   a) prices of resources used in production
   b) expected future prices
   c) the number of sellers
   d) the price of the good itself

114. If a producer can use resources to produce either good A or good B, then A and B are
   a) substitutes in consumption.

b) complements in consumption.
c) complements in production.
d) substitutes in production.

115. Good A and good B are substitutes in production. The demand for good A increases so that the price of good A rises. The increase in the price of good A shifts the
a) demand curve for good B rightward.
b) demand curve for good B leftward.
c) supply curve of good B rightward.
d) supply curve of good B leftward.

116. Blank tapes and prerecorded tapes are substitutes in production. An increase in the price of a blank tape will cause
a) a decrease in the supply of prerecorded tapes.
b) an increase in the quantity supplied of prerecorded tapes but not in the supply.
c) a decrease in the quantity supplied of prerecorded tapes but not in the supply.
d) an increase in the supply of prerecorded tapes.

117. Good A and good B are substitutes in production. The demand for good A decreases, which lowers the price of good A. The decrease in the price of good A
a) increases the demand for good B.
b) decreases the demand for good B.
c) increases the supply of good B.
d) decreases the supply of good B.

118. An increase in the number of fast-food restaurants
a) increases the demand for substitutes for fast-food meals.
b) raises the price of fast-food meals.
c) increases the supply of fast-food meals.
d) increases the demand for fast-food meals.

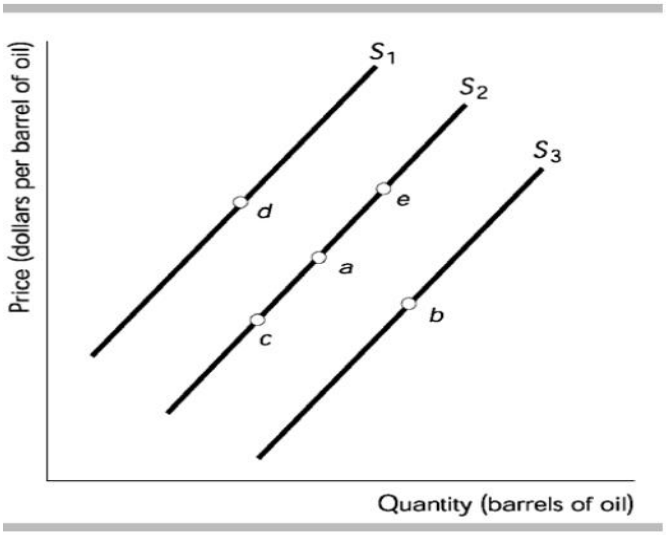
119. Over the past decade technological improvements that have lowered the cost of producing an automobile have increased
    a) the demand but not the supply of automobiles.
    b) both the supply and the demand for automobiles.
    c) the supply but not the demand for automobiles.
    d) neither the supply nor the demand for automobiles.

120. Which of the following will shift the supply curve for good X leftward?
    a) a situation in which quantity demanded exceeds quantity supplied
    b) an increase in the cost of the machinery used to produce X
    c) a decrease in the wages of workers employed to produce X
    d) a technological improvement in the production of X

121. Which of the following does NOT shift the supply curve?
    a) an increase in the price of the good
    b) a fall in the price of a substitute in production
    c) a decrease in the wages of labor used in production of the good
    d) a technological advance

122. If the price of a good changes but everything else influencing suppliers' planned sales remains constant, there is a
    a) rotation of the initial supply curve around the initial price.
    b) new supply curve that is to the right of the initial supply curve.
    c) new supply curve that is to the left of the initial supply curve.
    d) movement along the supply curve.

123. A decrease in the quantity supplied is represented by a
    a) rightward shift in the supply curve.
    b) movement down the supply curve.
    c) leftward shift in the supply curve.
    d) movement up the supply curve.



124. In the figure above, an increase in the supply of oil would result in a movement from
    a) point **a** to point **d**.
    b) point **a** to point **e**.
    c) point **a** to point **b**.
    d) point **a** to point **c**.

125. In the figure above, an increase in the quantity of oil supplied but NOT in the supply of oil is shown by a movement from
    a) point **a** to point **c**.
    b) point **a** to point **b**.
    c) point **a** to point **e**.
    d) point **a** to point **d**.

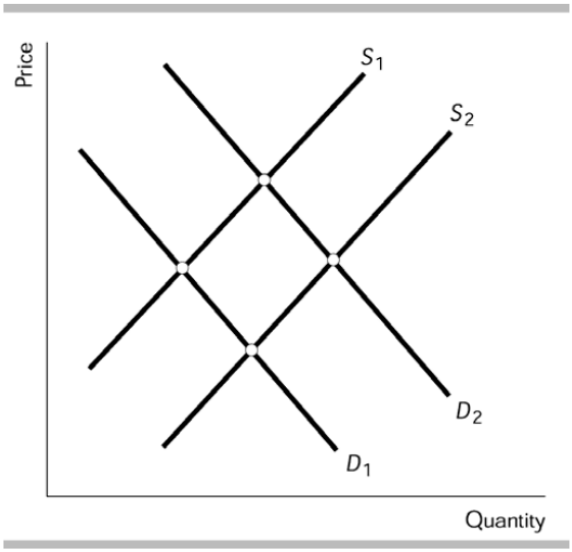
126. In the figure above, a decrease in the quantity of oil supplied but NOT in the supply of oil is shown by a movement from
    a) point **a** to point **e.**
    b) point **a** to point **d**.
    c) point **a** to point **b**.
    d) point **a** to point **c**.

127. In the figure above, which movement could be caused by an increase in the wages of oil workers?
    a) point **a** to point **d**
    b) point **a** to point **b**

c) point **a** to point **c**
d) point **a** to point **e**

128. In the figure above, which movement could be caused by the development of a new, more efficient refining technology?
a) point a to point e
b) point a to point c
c) point a to point b
d) point a to point d

129. Which of the following causes an increase in the quantity supplied of good X but NOT in the supply of good X?
a) an increase in the price of X
b) an increase in the price of good Y, a complement in the production of X
c) an improvement in the technology for producing X
d) a reduction in the price of resources used to produce X



130. The figure above represents the market for ice cream. People become more concerned that eating ice cream causes them to gain weight, which they do not like. As a result, the
a) demand curve will not shift, and the supply curve shifts from S1to S2.
b) demand curve shifts from D1 to D2 and the supply curve shifts from S1 to S2.

c) demand curve shifts from D2 to D1 and the supply curve shifts from S2 to S1.
d) demand curve shifts from D2 to D1 and the supply curve will not shift.

131. The above figure represents the market for oil. Because of the development of a new deep sea drilling technology the
a) demand curve shifts from D1 to D2 and the supply curve shifts from S1to S2.
b) demand curve shifts from D1to D2 and the supply curve will not shift.
c) demand curve will not shift, and the supply curve shifts from S1 to S2.
d) demand curve will not shift, and the supply curve shifts from S2 to S1.

132. The above figure represents the market for oil. When terrorists blow up a major refinery the
a) demand curve for oil will not shift, and the supply curve for oil shifts from S2 to S1.
b) demand curve for oil shifts from D1to D2 and the supply curve for oil will not shift.
c) demand curve for oil shifts from D1to D2 and the supply curve for oil shifts from S2 to S1.
d) demand curve for oil will not shift, and the supply curve for oil shifts from S1to S2.

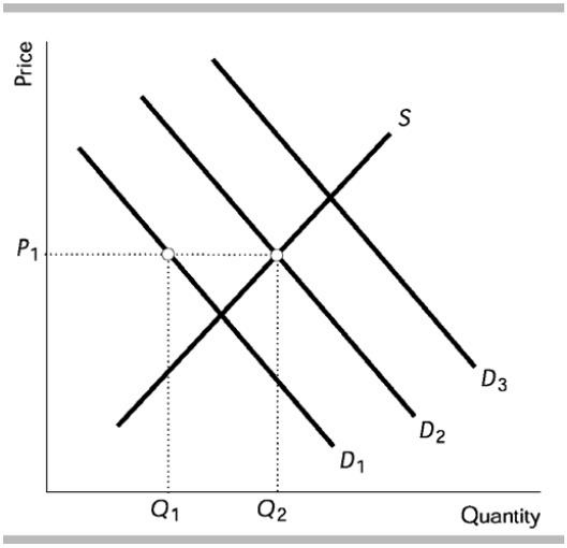
133. The above figure represents the market for bicycles. When there is a physical fitness craze the
a) demand curve for bicycles shifts from D1 to D2.
b) demand curve for bicycles shifts from D2 to D1.
c) supply curve of bicycles shifts from S1 to S2.
d) demand curve and the supply curve of bicycles do not shift.

134. The above figure represents the market for fried rice at fast food joints. If the price of rice rises and simultaneously people become concerned that fried rice can cause heart attacks
a) the demand curve for fried rice will shift from D2 to D1 and the supply curve of fried rice will shift from S2 to S1.

b) the demand curve for fried rice will shift from D2 to D1 and the supply curve of fried rice will not shift.
c) the demand curve for fried rice will not shift, and the supply curve of fried rice will shift from S1 to S2.
d) the demand curve for fried rice will shift from D2 to D1 and the supply curve of fried rice will shift from S1 to S2.

135. The interaction of supply and demand explains
a) both the prices and the quantities of goods and services.
b) the quantities of goods and services but not their prices.
c) the prices of goods and services but not their quantities.
d) neither the prices nor the quantities of goods and services.

136. When the quantity demanded equals quantity supplied
a) the government must be intervening in the market.
b) there is a shortage.
c) there is a surplus.
d) none of the above



137. In the above figure, if the demand curve is D2, then
a) an increase in price will cause the demand curve to shift to D3.
b) the equilibrium price will be P1and the equilibrium quantity will be Q2.

c) the equilibrium price will be P1and the equilibrium quantity will be Q1.
d) there will be a shortage equal to Q2- Q1.

138. When the price is below the equilibrium price, the quantity demanded
a) is less than the equilibrium quantity. The quantity supplied exceeds the equilibrium quantity.
b) exceeds the equilibrium quantity. The quantity supplied is less than the equilibrium quantity.
c) exceeds the equilibrium quantity. So does the quantity supplied.
d) is less than the equilibrium quantity. So is the quantity supplied.

139. A price below the equilibrium price results in
a) a further price fall.
b) a shortage.
c) excess supply.
d) a surplus.

140. Which of the following correctly describes how price adjustments eliminate a shortage?
a) As the price falls, the quantity demanded increases while the quantity supplied decreases.
b) As the price rises, the quantity demanded decreases while the quantity supplied increases.
c) As the price falls, the quantity demanded decreases while the quantity supplied increases.
d) As the price rises, the quantity demanded increases while the quantity supplied decreases.

141. A shortage causes the
a) supply curve to shift rightward.
b) price to rise.
c) price to fall.
d) demand curve to shift leftward.

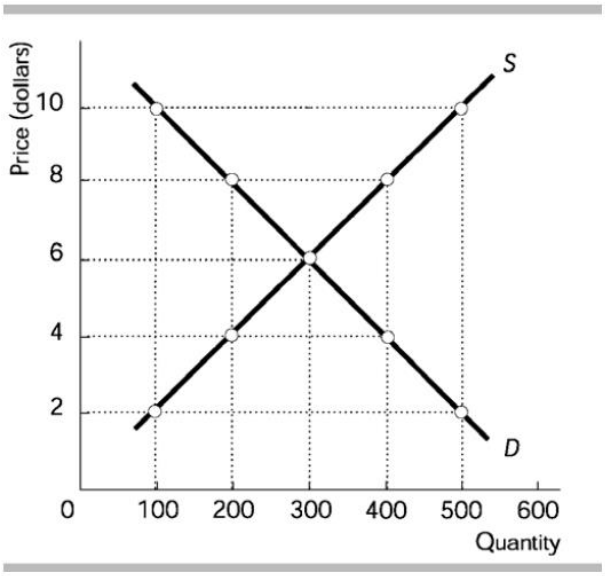
142. If the quantity demanded exceeds the quantity supplied, then there is

a) a shortage and the price is above the equilibrium price.
b) a surplus and the price is below the equilibrium price.
c) a shortage and the price is below the equilibrium price.
d) a surplus and the price is above the equilibrium price.

143. A surplus occurs when the price is
a) equal to the equilibrium price.
b) greater than the equilibrium price.
c) less than the equilibrium price.
d) None of the above because the existence of a surplus is independent of the price of the good.

144. If the quantity supplied exceeds the quantity demanded, then there is
a) a shortage and the price is below the equilibrium price.
b) a surplus and the price is below the equilibrium price.
c) a surplus and the price is above the equilibrium price.
d) a shortage and the price is above the equilibrium price.

145. The price of a good will fall if
a) the price of a complement falls.
b) there is a surplus at the current price.
c) the quantity demanded exceeds the quantity supplied.
d) the current price is less than the equilibrium price.



146. The equilibrium price in the above figure is
   a) $2.
   b) $8.
   c) $4.
   d) $6.

147. The equilibrium quantity in the above figure is
   a) 400 units.
   b) 300 units.
   c) 600 units.
   d) 200 units.

148. At a price of $10 in the above figure, there is
   a) a surplus of 400 units.
   b) a shortage of 200 units.
   c) a surplus of 200 units.
   d) a shortage of 400 units.

149. At a price of $4 in the above figure,
   a) there is a surplus of 200 units.
   b) the equilibrium quantity is 400 units.

c) the quantity supplied is 400 units.
d) there is a shortage of 200 units.

150. If the good in the above figure is a normal good and income rises, then the new equilibrium quantity
a) is more than 300 units.
b) is less than 300 units.
c) could be less than, equal to, or more than 300 units.
d) is 300 units.

151. The initial supply and demand curves for a good are illustrated in the above figure. If there are technological advances in the production of the good, then the new price for the good
a) is $6.
b) is more than $6.
c) could be less than, equal to, or more than $6.
d) is less than $6.

152. The initial supply and demand curves for a good are illustrated in the above figure. If there is a rise in the price of the resources used to produce the good, then the new price
a) is less than $6.
b) is more than $6.
c) could be less than, equal to, or more than $6.
d) is $6.

The Market for Maize						
Quantity Demanded (Millions of kilograms per year)			Price (cedis per kilogram)	Quantity Supplied (Millions of Kilograms per year)		
Case 1	Case 2	Case 3		Case A	Case B	Case C
15	10	5		1	2	3
12	8	4	2	2	4	6
9	6	3	3	3	6	9
6	3	2	4	4	8	12
3	2	1	5	5	10	15

153. Refer to the table above. Suppose that in normal years demand is represented by Case 2 and supply is represented by Case B. In a normal year the price of Maize will be
a) ¢3 per kilogram.
b) ¢4 per kilogram.
c) ¢2 per kilogram.
d) ¢1 per kilogram.

154. Refer to the table above. Suppose that in normal years demand is represented by Case 2 and supply is represented by Case B. In a normal year the equilibrium quantity of maize will be
a) 8 million kilograms.
b) 4 million kilograms.
c) 6 million kilograms.
d) 2 million kilograms.

155. Refer to the table above. Suppose that in normal years demand is represented by Case 2 and supply is represented by Case B. If there is a drought in the maize growing region then supply will _____ and demand will _____.
a) stay at case B; become case 3
b) stay at case B; become case 1
c) become case A; become case 1
d) become case A; stay at case 2

156. Refer to the table above. Suppose that in normal years demand is represented by Case 2 and supply is represented by Case B. If there is exceptionally good growing weather in the maize growing region then supply will _____ and demand will _____.
a) stay at case B; become case 1
b) become case C; stay at case 2
c) become case C; become case 3
d) become case C; become case 1

157. Refer to the table above. Suppose that in normal years demand is represented by Case 2 and supply is represented by Case B. If it is discovered that maize helps prevent aging then supply will _____ and demand will _____.
a) stay at case B; become case 1
b) become case C; stay at case 2
c) become case A; become case 1
d) become case C; become case 1

158. When the demand for a good decreases, its equilibrium price_____ and equilibrium quantity _____.
a) rises; decreases
b) falls; decreases
c) falls; increases
d) rises; increases

159. If good A is a normal good and income increases, the equilibrium price of A
a) and the equilibrium quantity will increase.
b) and the equilibrium quantity will decrease.
c) will rise and the equilibrium quantity will decrease.
d) will fall and the equilibrium quantity will increase.

160. The price of a gallon of milk falls. Which of the following is a possible cause?
a) a discovery that milk cause diabetes
b) a drought that reduces supplies of feed grains fed to cows that produce milk
c) an increase in the income of the average household, with milk being a normal good
d) a decrease in the price of oatmeal, a complement to milk

161. Assume that beef and pork are substitutes for consumers. There is a drought in the cattle grazing areas. The drought will cause the
a) supply curve for pork to shift rightward.
b) supply curve for pork to shift leftward.
c) demand curve for pork to shift leftward.
d) demand curve for pork to shift rightward.

162. An increase in demand combined with no change in supply causes
a) a decrease in demand because the supply curve does not shift.
b) the equilibrium price to fall.
c) a movement rightward along the demand curve.
d) the equilibrium price to rise.

163. Goods A and B are complementary goods (in consumption). The cost of a resource used in the production of A decreases. As a result,
a) the equilibrium price of B will fall and the equilibrium price of A will rise.
b) the equilibrium prices of both A and B will rise.
c) the equilibrium price of B will rise and the equilibrium price of A will fall.
d) the equilibrium prices of both A and B will fall.

164. When demand decreases and supply does not change, the equilibrium price
a) rises and the equilibrium quantity decreases.
b) rises and the equilibrium quantity increases.
c) falls and the equilibrium quantity increases.
d) falls and the equilibrium quantity decreases.

165. When supply decreases and demand does not change, the equilibrium quantity
a) decreases and the price rises.
b) increases and the price falls.
c) decreases and the price falls.
d) increases and the price rises.

166. Beef and leather belts are complements in production. If people's concern about health shifts the demand curve for beef leftward, the result in the market for leather belts will be a
a) lower equilibrium price for a leather belt because there is an increase in the supply of leather belts.
b) higher equilibrium price for a leather belt because there is a decrease in the supply of leather belts.
c) lower equilibrium price for a leather belt because there is a decrease in the supply of leather belts.
d) higher equilibrium price for a leather belt because there is an increase in the supply of leather belts.

167. You observe that the price of a good rises and the quantity decreases. These observations can be the result of
a) the supply curve shifting rightward.
b) the demand curve shifting rightward.
c) the demand curve shifting leftward.
d) the supply curve shifting leftward.

168. Leather belts and leather shoes are substitutes in production. If style changes increase the demand for leather belts, the supply curve of leather shoes will shift
a) rightward and the equilibrium price of leather shoes will fall.
b) leftward and the equilibrium price of leather shoes will rise.
c) leftward and the equilibrium price of leather shoes will fall.
d) rightward and the equilibrium price of leather shoes will rise.

169. If both demand and supply increase, what will be the effect on the equilibrium price and quantity?
a) The price will rise but the quantity could either increase, decrease, or remain the same.
b) The quantity will increase but the price could either rise, fall, or remain the same.
c) Both the price and the quantity will increase.
d) The price will fall but the quantity will increase.

170. If both the demand and supply increase, the equilibrium quantity
a) decreases and the price rises.
b) increases and the effect on price is indeterminate.
c) decreases and the effect on price is indeterminate.
d) increases and the price falls.

171. The price will rise and the equilibrium quantity might increase, decrease, or stay the same when the
a) demand and the supply of a good both increase.
b) demand and the supply of a good both decrease.
c) demand for a good decreases and the supply of it increases.

d) demand for a good increases and the supply of it decreases.

172. The price will fall and the equilibrium quantity might increase, decrease, or stay the same when the
a) demand for a good increases and the supply of it decreases.
b) demand and the supply of a good both decrease.
c) demand for a good decreases and the supply of it increases.
d) demand and the supply of a good both increase.

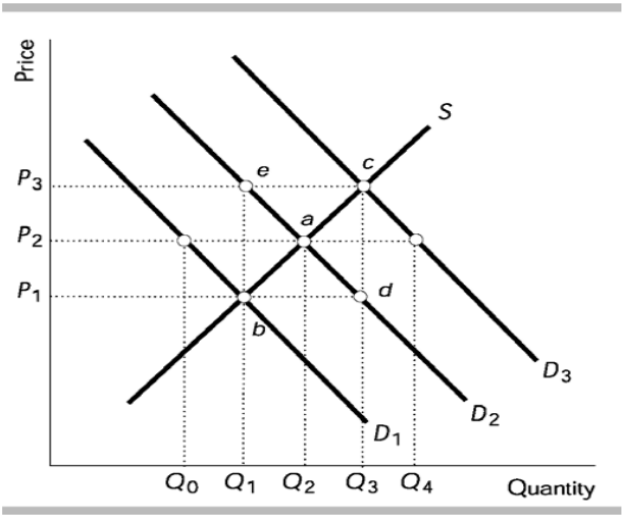
173. The equilibrium quantity will decrease and the price might rise, fall, or stay the same when the
a) demand and the supply of a good both decrease.
b) demand for a good increases and the supply of it decreases.
c) demand for a good decreases and the supply of it increases.
d) demand and the supply of a good both increase.

174. The equilibrium quantity of a good will increase and its equilibrium price might rise, fall, or stay the same when
a) its demand decreases and supply increases.
b) its demand increases and supply decreases.
c) its demand and supply both increase.
d) its demand and supply both decrease.

175. The price of compact disc players fell over the past decade because a combination of improving technology, rising incomes, and falling prices of compact discs caused the
a) demand curve for compact disc players to shift rightward faster than the supply curve of compact disc players shifted rightward.
b) supply curve of compact disc players to shift rightward faster than the demand curve for compact disc players shifted rightward.
c) demand curve for compact disc players to shift leftward and the supply curve of compact disc players to shift leftward.
d) supply curve of compact disc players to shift rightward and the demand curve for compact disc players to shift leftward.

176. Which of the following will always raise the equilibrium price?

a) an increase in demand combined with a decrease in supply
b) a decrease in both demand and supply
c) an increase in both demand and supply
d) a decrease in demand combined with an increase in supply



177. In the above figure, a change in quantity demanded with unchanged demand is represented by a movement from

a) point **a** to point **c**.
b) point **a** to point **e**.
c) point **a** to point **b**.
d) None of the above represent a change in the quantity demanded with an unchanged demand.

178. In the above figure, a change in quantity supplied with unchanged supply is represented by a movement from

a) point b to point e.
b) point b to point a.
c) point e to point c.
d) point a to point e.

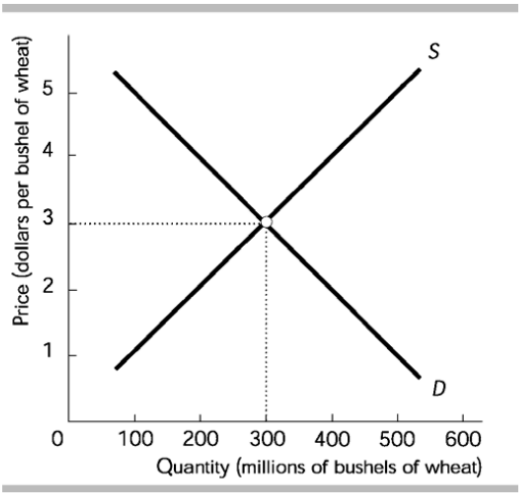
179. In the above figure, if D_2 is the demand curve, then a price of P_3 would result in
   a) a surplus of Q_3- Q_1.
   b) a shortage of Q_4- Q_3.
   c) a surplus of Q_4- Q_0.
   d) a shortage of Q_3- Q_1.

180. In the above figure, if D_2 is the original demand curve for a normal good and income decreases, which price and quantity may result?
   a) point c, with price P_3 and quantity Q_3
   b) point a, with price P_2 and quantity Q_2
   c) point b, with price P_1 and quantity Q_1
   d) point d, with price P_1 and quantity Q_1

181. In the above figure, if D_2 is the original demand curve and the price of a substitute in consumption rises, which price and quantity may result?
   a) point c, with price P_3 and quantity Q_3
   b) point d, with price P_1 and quantity Q_3
   c) point a, with price P_2 and quantity Q_2
   d) point b, with price P_1 and quantity Q_1

182. In the above figure, if D_2 is the original demand curve and consumers come to expect that the price of the good will rise in the future, which price and quantity may result?
   a) point a, with price P_2 and quantity Q_2
   b) point c, with price P_3 and quantity Q_3
   c) point d, with price P_1 and quantity Q_3
   d) point b, with price P_1 and quantity Q_1.

183. In the above figure, if D_2 is the original demand curve and the population falls, which price and quantity may result?
   a) point d, with price P_1 and quantity Q_3
   b) point c, with price P_3 and quantity Q_3
   c) point b, with price P_1 and quantity Q_1
   d) point a, with price P_2 and quantity Q_2



184. In the figure, the equilibrium price is initially$3 per bushel of wheat. If suppliers come to expect that the price of a bushel of wheat will rise in the future, but buyers do not, the current equilibrium price will
a) not change.
b) fall.
c) rise.
d) perhaps rise, fall, or stay the same, depending on whether there are more demanders or suppliers in the market.

185. In the figure, the equilibrium price is initially$3 per bushel of wheat. If buyers come to expect that the price of a bushel of wheat will rise in the future, but sellers do not, the current equilibrium price will
a) rise.
b) fall.
c) not change.
d) perhaps rise, fall, or stay the same, depending on whether there are more demanders or suppliers in the market.

186. Let Qd stand for the quantity demanded, Qs stand for the quantity supplied, and P stand for price. If Qd= 20 - 2P and Qs= 5 + 3P, then the equilibrium price is
a) ¢2.
b) ¢3.
c) ¢4.
d) ¢1.

187. Let Qd stand for the quantity demanded, Qs stand for the quantity supplied, and P stand for price. If Qd= 20 - 2P and Qs= 5 + 3P, then the equilibrium quantity is
a) 14.
b) 5.
c) 20.
d) 3.

188. A consumer might consider in-line skates and elbow-pads to be
a) unrelated goods.
b) substitutes.
c) products with upward sloping demand curves.
d) complements.

189. A decrease in the price of a game of bowling shifts the
a) demand curve for bowling balls rightward.
b) supply curve of bowling balls leftward.
c) supply curve of bowling balls rightward.
d) demand curve for bowling balls leftward.

190. If a decrease in the price of gasoline increases the demand for large cars, then
a) gasoline and large cars are complements in consumption.
b) large cars are an inferior good.
c) gasoline is an inferior good.
d) gasoline and large cars are substitutes in consumption.

191. Gruel is an inferior good. Hence, a decrease in people's incomes
a) shifts the supply curve of gruel leftward.
b) shifts the demand curve for gruel rightward.
c) shifts the demand curve for gruel leftward.
d) decreases the quantity of gruel supplied.

192. An unusually warm winter
a) shifts the supply curve of gloves leftward.

b) shifts the demand curve for gloves rightward.
c) shifts the demand curve for gloves leftward.
d) shifts the supply curve of gloves rightward.

193. A rise in the price of a good causes producers to supply more of the good. This statement illustrates
a) the nature of an inferior good.
b) the law of demand.
c) the law of supply.
d) a change in supply.

194. The price of jet fuel falls. This fall shifts the
a) supply curve of airplane trips rightward.
b) demand curve for airplane trips leftward.
c) demand curve for airplane trips rightward.
d) supply curve of airplane trips leftward.

195. If there is surplus of a good, then the quantity demanded _____ the quantity supplied and the price will _____.
a) is less than; rise
b) is less than; fall
c) is greater than; fall
d) is greater than; rise

196. *Banku* and *Kenkey* are substitutes for consumers. A fall in the price of *banku* _____ the quantity of *kenkey* and _____ the price of a *kenkey*.
a) Decreases; raises
b) Decreases; lowers
c) Increases; raises
d) Increases; lowers

197. How does an unusually warm raining season affect the equilibrium price and quantity of sweaters?
a) It lowers both the price and the quantity.
b) It raises both the price and the quantity.

c) It raises the price and decreases the quantity.
d) It lowers the price and increases the quantity.

198. You notice that the price and quantity of wheat both decrease. This observation can be the result of the
a) demand curve for wheat shifting leftward.
b) supply curve of wheat shifting rightward.
c) demand curve for wheat shifting rightward.
d) supply curve of wheat shifting leftward.

199. A technological improvement lowers the cost of producing cocoa. At the same time, consumers' preferences for cocoa increase. The equilibrium price of cocoa will
a) rise, fall, or stay the same, depending on the relative size of the shifts in the demand and supply curves.
b) remain the same.
c) fall.
d) rise.

200. Which of the following definitely causes a fall in the equilibrium price?
a) a decrease in both demand and supply
b) an increase in demand combined with a decrease in supply
c) a decrease in demand combined with an increase in supply
d) an increase in both demand and supply

201. CD players rise in price while pre-recorded audio tapes fall in price. The combined effect of these two changes is to create
a) a leftward shift of the demand curve for portable audio tape players, such as a Walkman.
b) a rightward shift of the demand curve for portable audio tape players, such as a Walkman.
c) a rightward shift of the supply curve for portable audio tape players, such as a Walkman.
d) a leftward shift of the supply curve of portable audio tape players, such as a Walkman.

202. Toyota company expects a recession to occur. Knowing that a car is a normal good, you predict that the demand for a Toyota corolla
   a) will increase.
   b) might increase or decrease.
   c) will decrease.
   d) will remain unchanged.

203. Wages for workers producing mobile phones and similar products will rise next year. Samsung asks you to predict the effect of this change in next year's market for GalaxyNote2. You predict that the major effect will be that the
   a) demand curve for a GalaxyNote2 will shift leftward.
   b) supply curve for a GalaxyNote2 will shift rightward.
   c) supply curve for a GalaxyNote2 will shift leftward.
   d) demand curve for a GalaxyNote2 will shift rightward.

204. Producers of Shoes are able to lower the wage rate that they pay to their workers. Nike Company asks you to predict the effect on their shoes. You predict that the
   a) quantity supplied will decrease.
   b) price will rise.
   c) supply curve will shift leftward.
   d) supply curve will shift rightward.

205. The wage rate paid by Tablet producers falls and at the same time the price of raw materials used in the production of Tablets rises. You predict that the supply curve of Tablets will
   a) surely shift leftward.
   b) surely become steeper.
   c) shift either leftward or rightward.
   d) surely shift rightward.

206. Walkmans play cassette tapes. Producers of Walkmans expect that a new technology for producing CD players will be available next year. Walkman Watch asks you to predict the effect of the new technology on the market for Walkmans. You predict that
   a) the demand curve for Walkmans will shift leftward and the price will fall.

b) the price will rise, and so will the quantity demanded.
c) the price will fall, and the quantity demanded will increase.
d) the demand curve for Walkmans will shift rightward and the price will rise.

207. Producers of Walkmans will be able to lower the wage rate that they pay to their workers. Walkman Watch asks you to predict the effects on the supply of Walkmans, and the price of a Walkman. You predict that the supply curve shifts
a) leftward, and the price is constant.
b) rightward, and the price falls.
c) leftward, and the price rises.
d) rightward, and the price is constant.

ELASTICITY

1. Which of the following cases will yield a measured price elasticity of demand of 5.0? A percent increase in the price results in a
a) 10% decrease in quantity demanded
b) 5% decrease in quantity demanded
c) 2 % decrease in quantity demanded
d) 50% decrease in quantity demanded
e) 0.5 % decrease in quantity demanded

2. For which of the following is demand likely to be most inelastic?
a) Diamonds
b) Insulin for a diabetic
c) Potatoes
d) Gasoline
e) Books

3. The price elasticity of demand along a linear demand curve
a) becomes numerically larger for larger quantities demanded.
b) becomes numerically smaller as the price is increased.
c) is constant.

d) becomes numerically greater as the price is increased.
e) None of the above

4. The quantity of a good demanded rises from 90 units to 110 units when the price falls from ¢1.20 to 80 pesewas per unit. The price elasticity of demand for this product approximates
   a) 0.5
   b) 1.0
   c) 2.0
   d) 4.0

5. If the total revenue of clothing manufacturers decreases when the price of clothing falls, the price elasticity of demand is
   a) unity (demand is unit elastic).
   b) greater than one (demand is elastic).
   c) less than one (demand is inelastic).
   d) not determinable from the information given.

6. Demand will be inelastic if
   a) an increase in price results in an increase in total revenue
   b) an increase in price results in a decrease in total revenue
   c) an increase in increase results in a decrease in total revenue
   d) an increase in income results in an increase in total revenue
   e) the good is a necessity

7. If the total revenue of clothing manufacturers decreases when the price of clothing falls, the price elasticity of demand is
   a) unity (demand is unit elastic).
   b) greater than one (demand is elastic).
   c) less than one (demand is inelastic).
   d) not determinable from the information given.

Use the information in the table below to answer questions 8 and 9.

Price ¢		Quantity demanded
8.00		2,000

7.00		4,000
6.00		6,000
5.00		8,000
4.00		10,000
3.00		12,000

8. Refer to the table above. If the price of the good is cut from ¢4.00 to ¢ 3.00
    a) Total revenue will increase
    b) Total revenue will remain constant
    c) We observe that demand is elastic in this range
    d) We observe that demand is elastic unit elastic in this range
    e) We observe that demand is inelastic in this range

9. Refer to the table above. The price elasticity of demand between ¢6.00 and ¢7.00 is
    a) 1.0
    b) 2.0
    c) 2.6
    d) 0.5
    e) 1.5

10. If the Petroleum Authority of a country argues that an increase in the supply of OPEC oil will decrease total oil sales revenue, then the Authority must believe that demand for oil is
    a) income inelastic
    b) income elastic
    c) price elastic
    d) price inelastic
    e) price unit elastic

Use these equations for questions the next five questions.

$Qd = 80 - 3P$

$Qs = -20 + 2P$

11. What is the own price elasticity of demand at the equilibrium?
    a) 3
    b) 6
    c) 1
    d) ½
    e) –2

Use the following information for questions the two questions. Suppose the demand for light bulbs is $Qd = 120 - 2P - 4Pl + Y$ where Pl is the price of lamps and Y is income. Supply is defined by Qs = − 30 + 3P. Initially, Y = ¢40 and Pl = ¢10.

12. What is the elasticity of supply at the equilibrium?
    a) 1
    b) 5
    c) ½
    d) 2
    e) 0

13. The price of a substitute for good X rises and we observe that the equilibrium price of good X rises, but quantity does not change. Which of these is consistent with this evidence?
    a) The demand curve is perfectly inelastic and the supply curve is upward sloping
    b) The supply curve is perfectly elastic and the demand curve is downward sloping.
    c) The supply curve is perfectly inelastic and the demand curve is downward sloping.
    d) Supply also increased.
    e) Nothing, this violates the law of demand.

14. A price elasticity of demand of 2 for a specific cola means that if the price increases 1 percent, the quantity demanded of the cola will decrease by 2 percent.
    a) True
    b) False

15. The price elasticity of demand is important to firms because
    a) it explains the relationship between income and demand for the goods they sell
    b) it shows how price changes affect total expenditures on the goods they sell
    c) the law of demand suggests that elasticity falls as total expenditures continuously rises
    d) it helps identify the equilibrium price and quantity in the market
    e) it relates price to supply

16. If the price elasticity of demand for Omo detergent is 3.0, then a
    a) 12 percent drop in price leads to a 36 percent rise in the quantity demanded
    b) 12 percent drop in price leads to a 4 percent rise in the quantity demanded
    c) $1,000 drop in price leads to a 3,000-unit rise in the quantity demanded
    d) $1,000 drop in price leads to a 333-unit rise in the quantity demanded
    e) 12 percent rise in price leads to a 36 percent rise in the quantity demanded

17. When calculating the price elasticity of demand, we assume that the price of the good changes while all other variables affecting
    a) demand except buyers' incomes remain constant
    b) demand except the population size remain constant
    c) demand and supply remain constant
    d) supply remain constant
    e) demand remain constant

18. If a 10 percent rise in the price of bananas leads to a 20 percent reduction in the quantity of bananas demanded, then the price elasticity of demand is 0.50.
    a) True
    b) False

19. Daniel's consumption of Aunty Memuna’s Waakye drops from 6 times per week to 4 times per week when the price rises from ¢9 to ¢11. His price elasticity of demand for Waakye equals
    a) 0.5
    b) 1
    c) 2

d) 0.08
e) 1.7

20. Suppose the demand for corn sold from one roadside stand in Bawku is elastic. This fact means that a 7 percent increase in the price charged by the owner of this stand would lead to
    a) a greater than 7 percent increase in the quantity demanded at this stand.
    b) a less than 7 percent increase in the quantity demanded at this stand.
    c) a greater than 7 percent decrease in the quantity demanded at this stand.
    d) a less than 7 percent decrease in the quantity demanded at this stand.

21. Each month Jacquelyn spends exactly ¢50 on ice cream regardless of the price. Jacquelyn's price elasticity of demand for ice cream is:
    a) zero.
    b) one.
    c) greater than one.
    d) less than one, but greater than zero.

22. Egg producers know that the elasticity of demand for eggs is 0.1. The hens went crazy and laid 5% more eggs than usual. To sell all those additional eggs, they will have to lower price by:
    a) 0.1%
    b) 1%
    c) 5%
    d) 50%

23. If demand is perfectly inelastic, the deadweight loss caused by a tax will be zero.
    a) True
    b) False

24. The demand for textbooks is price inelastic. Which of the following would explain this?
    a) Many alternative textbooks can be used as substitutes.
    b) Students have a lot of time to adjust to price changes.
    c) Textbook purchases consume a large portion of most students' income.
    d) The good is a necessity.

25. A major state university in recently raised tuition by12%. An economics professor at this university asked his students, “Due to the increase in tuition, how many of you will transfer to another university?” One student out of about 300 said that he or she would transfer. Based on this information, the price elasticity of demand for education at this university is:
    a) one.
    b) highly elastic.
    c) highly inelastic.
    d) zero.

26. A group of milk producers are trying to raise milk prices by 10%. If the price elasticity of demand for is 0.75, and the price elasticity of supply for milk is 0, then by how much should they reduce their milk production to obtain the 10% increase?
    a) 10%
    b) 7.5%
    c) 15%
    d) 13%

27. The publisher of an economics textbook finds that when the book's price is lowered from ¢70 to ¢60, sales rise from 10,000 to 15,000. The price elasticity of demand is:
    a) 500.
    b) 50%.
    c) 3.5.
    d) 2.6.

28. Sometimes airlines raise ticket prices as the flight departure date approaches in the hope of increasing revenue. The airlines raise their prices on the assumption that:
    a) consumer demand becomes more price elastic as departure time approaches.
    b) consumer demand becomes less price elastic as departure time approaches.
    c) consumers are not aware of airline prices.
    d) consumer demand is unrelated to prices.

29. Given the same price elasticity of supply, sellers would be able to pass along the largest portion of a 10% tax on which item?

a) pork with a price elasticity of demand of 0.73
b) chicken with a price elasticity of demand of 0.32
c) fish with a price elasticity of demand of 0.12
d) beef with a price elasticity of demand of 0.62

30. If sellers bear 1/3 of the tax burden and elasticity of demand is 2, what is the elasticity of supply?
    a) 3
    b) 4
    c) 2
    d) 1

31. Frank has estimated that for every 1% increase in the price of natural Christmas trees, the demand for artificial trees rises by 0.188%. From this information, one can conclude that:
    a) the income elasticity of demand for natural Christmas tress is less than one
    b) natural Christmas trees are luxuries
    c) natural and artificial Christmas trees are complements
    d) natural and artificial Christmas trees are substitutes

32. A perfectly elastic supply would:
    a) be horizontal
    b) be vertical
    c) intersect the two axes at the origin
    d) intersect the horizontal axis

33. A marketing student observes that when the price of ice cream rises by 10%, the quantity of ice cream a supplier is willing to sells rises by 5%. The student correctly concludes the elasticity of supply for ice cream is:
    a) 0.5
    b) 5
    c) 0.2
    d) 2

34. If the supply curve intersects vertical (price) axis, the supply curve has an elasticity:
    a) greater than one
    b) less than one

c) that is indeterminate
d) equal to one

Use the information below to answer the next three questions

The current price of a box of Kleenex tissues is ¢1.50 and you are using 6 boxes. Also the current price of a roll of Charmin toilet paper is ¢0.50 and you are using 6 rolls. When the price of a box of Kleenex goes up to ¢2.50, you now use 4 boxes of Kleenex tissues and 10 rolls of Charmin toilet paper.

35. Using the midpoint method (the arc elasticity method), what is the elasticity of demand for Kleenex when the price increases from ¢1.50 to ¢2.50?
    a) 0.8
    b) 2.5
    c) 0.5
    d) 0.333

36. Suppose your demand curve for Kleenex is linear. Using the point elasticity of demand formula, what is the price elasticity of demand for Kleenex at a price of ¢1.50?
    a) 0.3
    b) 0.5
    c) 1.2
    d) 0.333

37. Using the midpoint method (the arc elasticity method), what is the cross price elasticity of Charmin toilet paper when the price of Kleenex tissues goes from ¢1.50 to ¢2.50? Kleenex and Charmin, given the above information, are _____.
    a) -1.5; substitutes
    b) 1; substitutes
    c) -0.5; complements
    d) 1; complements

38. If the income elasticity of a good is negative, the good is a(n) _____.
    a) Complement

b) Substitute
c) Normal good
d) Inferior good

39. The price elasticity of demand is:
    a) the ratio of the percentage change in quantity demanded to the percentage change in price.
    b) the responsiveness of revenue to a change in quantity.
    c) the ratio of the change in quantity demanded divided by the change in price.
    d) the response of revenue to a change in price.

40. If demand is price elastic, then:
    a) a rise in price will raise total revenue.
    b) a fall in price will raise total revenue.
    c) a fall in price will lower the quantity demanded.
    d) a rise in price won't have any effect on total revenues.

41. Complementary goods have:
    a) the same elasticities of demand.
    b) very low price elasticities of demand.
    c) negative cross price elasticities of demand with respect to each other.
    d) positive income elasticities of demand.

42. The price elasticity of demand generally tends to be:
    a) smaller in the long run than in the short run.
    b) smaller in the short run than in the long run.
    c) larger in the short run than in the long run.
    d) unrelated to the length of time.

43. If the price elasticity of supply of maize is 0.60 and the price increases by 3 percent, then the quantity supplied of maize will rise by
    a) 0.60 percent.
    b) 0.20 percent
    c) 1.8 percent

d) 18 percent.

44. Suppose we know that the price elasticity of demand of good X is equal to -1.2. Then, if its price will increase by 5%, we can predict with certainty that
    a) quantity demanded of that good will increase.
    b) the revenue of the firm producing that good will increase by 6%.
    c) the revenue of the firm producing that good will decrease by 6%.
    d) the quantity demanded of that good will decrease by 6%.
    e) None of the above.

45. A 10% increase in the price of movie ticket at Silverbird cinemas leads to a 15% decrease in the number of tickets sold, indicating the demand for movie ticket at Silverbirds is:
    a) elastic.
    b) inelastic.
    c) unit elastic.
    d) Cannot tell from the information given.

46. If the cross-price elasticity between two commodities is 1.5,
    a) the two goods are luxury goods.
    b) the two goods are complements.
    c) the two goods are substitutes.
    d) the two goods are normal goods.

True/False/Uncertain.

For each of the following statements, say whether it is true, false, or uncertain and explain your answer.

47. It is reasonable to expect the cross price elasticity of demand for golf clubs and golf balls to be positive.

48. If the demand is perfectly elastic, then a shift in the supply curve does not affect the equilibrium price.

49. The demand curve for autos is more elastic than the demand curve for Fords.

Use the information below to answer the next three questions

Suppose you own a "Here Comes the Sun" hair salon and the demand curve for your services is downward sloping. Further, suppose that a new hair salon called "Sunny Delight" opens two blocks away from your salon.

Tell whether the following three statements are true, false or uncertain and explain your answer.

50. The demand curve for your services shifts to the right.

51. The demand for your services becomes more elastic.

52. The cross-price elasticity of the demand for your services with respect to the price charged by "Sunny Delight" is negative.

53. The slope of a demand curve depends on
    a) the units used to measure quantity but not the units used to measure price.
    b) the units used to measure price and the units used to measure quantity
    c) the units used to measure price but not the units used to measure quantity
    d) neither the units used to measure price nor the units used to measure quantity

54. The price elasticity of demand depends on
    a) the units used to measure price but not the units used to measure quantity
    b) the units used to measure price and the units used to measure quantity
    c) the units used to measure quantity but not the units used to measure price.
    d) neither the units used to measure price nor the units used to measure quantity.

55. The price elasticity of demand measures
    a) the slope of a budget curve.
    b) how often the price of a good changes.
    c) the responsiveness of the quantity demanded to changes in price.

d) how sensitive the quantity demanded is to changes in demand.

56. When the quantity of coal supplied is measured in kilograms instead of pounds, the demand for coal becomes
    a) more elastic.
    b) neither more nor less elastic.
    c) less elastic.
    d) undefined.

57. The price elasticity of demand equals
    a) the percentage change in the quantity demanded divided by the percentage change in the price.
    b) the change in the quantity demanded divided by the change in price.
    c) the percentage change in the price divided by the percentage change in the quantity demanded.
    d) the change in the price divided by the change in quantity demanded.

58. If a rightward shift of the supply curve leads to a 6 percent decrease in the price and a 5 percent increase in the quantity demanded, the price elasticity of demand is
    a) 0.83.
    b) 0.30.
    c) 0.60.
    d) 1.20.

59. A 10 percent increase in the quantity of spinach demanded results from a 20 percent decline in its price. The price elasticity of demand for spinach is
    a) 0.5.
    b) 20.0.
    c) 2.0.
    d) 10.0.

60. A 20 percent increase in the quantity of pizza demanded results from a 10 percent decline in its price. The price elasticity of demand for pizza is
    a) 2.0.
    b) 10.0.

c) 0.5.
d) 20.0.

61. Suppose a rise in the price of oranges from ¢5.50 to ¢6.50 per basket decreases the quantity demanded from 12,500 to 11,500 baskets. The price elasticity of demand is
    a) 0.5.
    b) 1000.0.
    c) 2.0.
    d) 1.0.

62. A fall in the price of lemons from ¢10.50 to ¢9.50 per bag increases the quantity demanded from 19,200 to 20,800 bags. The price elasticity of demand is
    a) 1.25.
    b) 1.20.
    c) 8.00.
    d) 0.80.

63. A fall in the price of cabbage from ¢10.50 to ¢9.50 per bag increases the quantity demanded from 18,800 to 21,200 bags. The price elasticity of demand is
    a) 1.20.
    b) 0.80.
    c) 8.00.
    d) 1.25.

64. Suppose that the quantity of soft drinks demanded declines from 103,000 bottles per week to 97,000 bottles per week as a consequence of a 10 percent increase in the price of soft drinks. The price elasticity of demand is
    a) 1.66.
    b) 6.00.
    c) 0.60.
    d) 1.40.

65. The price elasticity of demand is 5.0 if a 10 percent increase in the price results in a _____decrease in the quantity demanded.

a) 10 percent
b) 50 percent
c) 2 percent
d) 5 percent

66. A shift of the supply curve of oil reduces the price of oil from $75.50 a barrel to $60.50 a barrel and increases the quantity demanded from 39 million to 41 million barrels a day. The price elasticity of demand for oil is
    a) 2 million barrels a day per dollar.
    b) 0.25
    c) $1 per 2 million barrels a day
    d) 4.0

Use the information in the table below to answer the next three questions

Price (¢ per bag)	Quantity demanded (bags)
8	2000
7	4000
6	6000
5	8000
4	10000
3	12000

67. The table above gives the demand schedule for *bambara* beans. The price elasticity of demand between ¢6.00 and ¢7.00 per bushel is
    a) 1.0.
    b) 5.0.
    c) 2.0.
    d) 2.6.

68. If the price of *bambara* beans falls from ¢4.00 to ¢3.00 a bag, total revenue will
    a) increase because demand is elastic in this range.
    b) increase because demand is inelastic in this range.
    c) decrease because demand is inelastic in this range.
    d) decrease because demand is elastic in this range.

69. The demand curve for *bambara* beans is a straight line and so the elasticity of demand is
    a) lower at higher prices.
    b) higher at higher prices.
    c) 1 at all prices.
    d) the same at all prices but not 1.

Use the information in the table below to answer the next three questions

	Price (¢ per bag)	Quantity demanded(bags)
A	10	0
B	8	4
C	6	8
D	4	12
E	2	16

70. The table above gives the demand schedule for cassava. As you move from point A to point B, the price elasticity of demand equals
    a) 0.50.
    b) 0.11.
    c) 9.09.
    d) 0.22.

71. The table above gives the demand schedule for cassava. As you move from point C to point D, the price elasticity of demand is
    a) 3.00.
    b) elastic.
    c) 0.75.
    d) unit elastic.

72. The table above gives the demand schedule for cassava. Which of the following statements correctly describes the price elasticity of demand?
    a) The price elasticity of demand is larger at point A than at point B.
    b) The price elasticity of demand is constant because the slope is constant.
    c) The price elasticity of demand increases moving from point A to point B to point C to point D to point E.
    d) The price elasticity of demand is larger at point D than at point A.

73. If demand is price elastic,
    a) a 1 percent decrease in the price leads to an increase in the quantity demanded that exceeds 1percent.
    b) a 1 percent increase in the price leads to an increase in the quantity demanded that exceeds 1percent.
    c) the price is very sensitive to any shift of the supply curve.
    d) a 1 percent decrease in the price leads to a decrease in the quantity demanded that is less than 1 percent.

74. The price elasticity of demand can range between
    a) negative one and one.
    b) zero and infinity
    c) zero and one.
    d) negative infinity and infinity

75. Demand is perfectly inelastic when
    a) the good in question has perfect substitutes.
    b) shifts in the supply curve results in no change in price.
    c) shifts of the supply curve results in no change in quantity demanded.
    d) shifts of the supply curve results in no change in the total revenue from sales

76. If the price elasticity is between 0 and 1, demand is
    a) inelastic.
    b) elastic.
    c) perfectly elastic.
    d) unit elastic.

77. Demand is inelastic if
    a) a large change in quantity demanded results in a small change in price.
    b) the price elasticity of demand is greater than 1.
    c) the quantity demanded is very responsive to changes in price.
    d) the price elasticity of demand is less than 1.

78. A good with a vertical demand curve has a demand with
    a) infinite elasticity
    b) unit elasticity
    c) zero elasticity
    d) varying elasticity

79. When the price elasticity of demand for a good equals
    a) 0, the demand curve is horizontal.
    b) 1, the demand curve is vertical.
    c) 1, the demand curve is horizontal.
    d) 0, the demand curve is vertical.

80. A straight-line demand curve along which the price elasticity of demand equals 0 is one that
    a) forms a 45 degree angle with the vertical axis.
    b) is horizontal.
    c) is vertical.
    d) forms a 60 degree angle with the horizontal axis.

81. The demand for movies is unit elastic if
    a) any increase in the price leads to a 1 percent decrease in the quantity demanded.
    b) a 5 percent decrease in the price leads to an infinite increase in the quantity demanded.
    c) a 5 percent increase in the price leads to a 5 percent decrease in the quantity demanded.
    d) a 5 percent increase in the price leads to a 5 percent increase in total revenue.

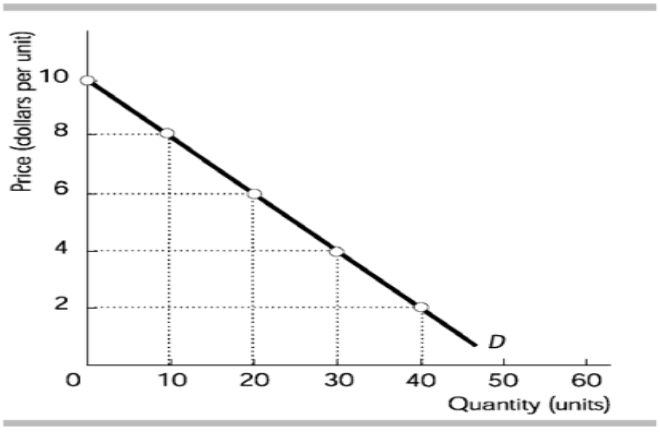
82. Unit elastic demand
    a) means that the ratio of a change in the quantity demanded to a change in the price equals 1.
    b) will be vertical.
    c) means that the ratio of a percentage change in the quantity demanded to a percentage change in the price equals 1.
    d) will be horizontal.

83. A good with a horizontal demand curve has a demand
    a) with an income elasticity of demand of 0.
    b) with a price elasticity of demand of infinity
    c) for which there are no substitute.
    d) with a price elasticity of demand of 0

84. On a linear demand curve that intersects both axes,
    a) the elasticity decreases as the price falls and quantity increases.
    b) the elasticity is less than 1.00 at all prices.
    c) the elasticity equals 1.00 at all prices.
    d) the elasticity exceeds 1.00 at all prices.

85. On a straight-line downward-sloping demand curve, the maximum elasticity of demand occurs
    a) where it intersects the supply curve.
    b) at its vertical intercept.
    c) at its horizontal intercept.
    d) at its midpoint.

86. A straight-line demand curve with negative slope intersects the horizontal axis at 100 tons per week. At the midpoint on the demand curve (corresponding to 50 tons per week) the price elasticity of demand is
    a) greater than 1.0.
    b) 0.5.
    c) 1.0.
    d) 0.



87. The figure above illustrates a linear demand curve. By comparing the price elasticity in the $2 to $4 price range with the elasticity in the $8 to $10 range, you can conclude that the elasticity is
    a) the same in both price ranges.
    b) greater in the $8 to $10 range when the price rises but greater in the $2 to $4 range when the price falls.
    c) greater in the $8 to $10 range.
    d) greater in the $2 to $4 range.

88. The figure above illustrates a linear demand curve. If the price falls from $8 to $6,
    a) the quantity demanded will increase by less than 20 percent.
    b) total revenue will remain unchanged.
    c) total revenue will increase.
    d) total revenue will decrease.

89. The figure above illustrates a linear demand curve. In the range from $8 to $6,
    a) the demand is unit elastic.
    b) the demand is price inelastic.
    c) the demand is price elastic.
    d) more information is needed to determine if the demand is price elastic, unit elastic, or inelastic.

90. The figure above illustrates a linear demand curve. If the price falls from $6 to $4,
    a) total revenue will decrease.
    b) total revenue will increase.
    c) quantity demanded will increase by more than 100 percent.

d) total revenue will remain unchanged.

91. The figure above illustrates a linear demand curve. In the price range from $8 to $6, demand is_____ and in the price range $4 to $2, demand is _____.
    a) elastic; inelastic
    b) inelastic; inelastic
    c) elastic; elastic
    d) inelastic; elastic

92. The figure above illustrates a linear demand curve. If the price rises from $6 to $8 demand is _____ and if the price falls from $8 to $6 demand is _____.
    a) inelastic; inelastic
    b) elastic; inelastic
    c) elastic; elastic
    d) inelastic ;elastic

93. The figure above illustrates a linear demand curve. In the price range from $8 to $6, demand is_____ and in the price range $4 to $2, demand is _____.
    a) elastic; inelastic
    b) inelastic; inelastic
    c) elastic; elastic
    d) inelastic; elastic

94. The figure above illustrates a linear demand curve. If the price rises from $6 to $8 demand is _____ and if the price falls from $8 to $6 demand is _____.
    a) inelastic; inelastic
    b) elastic; inelastic
    c) elastic; elastic
    d) inelastic; elastic

95. The demand curve in the figure above illustrates the demand for a product with
    a) zero price elasticity of demand at all prices.
    b) a price elasticity of demand that is different at all prices.
    c) unit price elasticity of demand at all prices.
    d) infinite price elasticity of demand.

96. A straight-line demand curve with negative slope intersects the horizontal axis at 200 tons per week. The point on the demand curve at which the price elasticity of demand is 1 corresponds to a quantity demanded
    a) that would be negative if a negative quantity demanded were possible.
    b) of 100 tons.
    c) of 0 tons.
    d) of 200 tons

97. Demand is inelastic if
    a) a leftward shift of the supply curve raises the total revenue.
    b) the good in question has close substitutes.
    c) the smaller angle between the vertical axis and the demand curve is less than 45 degrees.
    d) large shifts of the supply curve lead to only small changes in price.

98. Demand is unit elastic when
    a) a shift of the supply curve leads to no change in price.
    b) the slope of the demand curve is -1.
    c) a change in the price of the product leads to no change in the total revenue.
    d) a shift of the supply curve leads to an equal shift of the demand curve.

99. Producers' total revenue will decrease if
    a) the price rises and demand is inelastic.
    b) income increases and the good is a normal good.

c) the price rises and demand is elastic.
d) income falls and the good is an inferior good.

100. Producers' total revenue will increase if
a) income falls and the good is a normal good.
b) the price rises and demand is inelastic.
c) the price rises and demand is elastic.
d) income increases and the good is an inferior good.

101. If the demand for a good is unit elastic,
a) a 5 percent increase in price results in a 5 percent increase in total revenue.
b) the demand curve is a straight line with slope of -1.
c) a 5 percent increase in price results in a 5 percent decrease in total revenue.
d) a 5 percent increase in price does not change total revenue.

102. A shift of the supply curve of oil raises the price from ¢10 a barrel to ¢30 a barrel and reduces the quantity demanded from 40 million to 23 million barrels a day. You can conclude that the
a) supply of oil is elastic.
b) supply of oil is inelastic.
c) demand for oil is inelastic.
d) demand for oil is elastic.

103. A shift of the supply curve of oil raises the price from $10 a barrel to $15 a barrel and reduces the quantity demanded from 40 million to 15 million barrels a day. You can conclude that the
a) demand for oil is elastic.
b) supply of oil is elastic.
c) supply of oil is inelastic.
d) demand for oil is inelastic.

104. A leftward shift of the supply curve of cookies raises the price of a cookie from 10 cents to 20 cents and decreases the quantity demanded from 700,000 to 500,000. You can conclude that

a) the supply of cookies is elastic.
b) the supply of cookies is inelastic.
c) the demand for cookies is elastic.
d) the demand for cookies is inelastic

105. The demand for a good is elastic if
a) a decrease in its price results in a decrease in total revenue.
b) the good is a necessity
c) an increase in its price results in an increase in total revenue.
d) an increase in its price results in a decrease in total revenue.

106. If a price decrease results in your expenditure on a good decreasing, your demand must be
a) unit.
b) inelastic.
c) linear.
d) elastic.

107. An increase in subway fares in New York City will boost your expenditures on subway rides if
a) the supply of subway rides is elastic.
b) the supply of subway rides is inelastic.
c) your demand for subway rides is inelastic.
d) your demand for subway rides is elastic.

108. The more substitutes available for a product,
a) the larger is its income elasticity of demand.
b) the smaller is its income elasticity of demand.
c) the smaller is its price elasticity of demand.
d) the larger is its the price elasticity of demand.

109. Of the following, demand is likely to be the least elastic for
a) Toyota automobiles.
b) compact disc players.
c) Ford automobiles.

d) toothpicks.

110. Of the following, demand is likely to be the least elastic for
    a) pink grapefruit.
    b) iceberg lettuce.
    c) insulin for diabetics.
    d) diamonds.

111. The demand for food is most elastic in countries
    a) with low income levels.
    b) that are highly urbanized.
    c) with intermediate income levels.
    d) with high income levels.

112. The demand for Honda Accords is
    a) probably inelastic and less elastic than the demand for automobiles.
    b) probably elastic but less elastic than the demand for automobiles.
    c) probably elastic and more elastic than the demand for automobiles.
    d) probably inelastic but more elastic than the demand for automobiles.

113. The route from Dallas to Mexico City is served by more than one airline. The demand for tickets from American Airlines for that route is probably
    a) elastic and more elastic than the demand for all tickets for that route.
    b) inelastic and less elastic than the demand for all tickets for that route.
    c) elastic but less elastic than the demand for all tickets for that route.
    d) inelastic but more elastic than the demand for all tickets for that route

114. The elasticity of demand for Dell computers is probably
    a) elastic and smaller than the elasticity of demand for computers overall.
    b) inelastic and smaller than the elasticity of demand for computers overall.
    c) inelastic but larger than the elasticity of demand for computers overall.
    d) elastic and larger than the elasticity of demand for computers overall.

115. Aglets are the metal or plastic tips on shoelaces that make it easier to lace your shoes. The demand for aglets is probably
    a) perfectly elastic.
    b) inelastic.

c) elastic but not perfectly elastic.
d) unit elastic.

116. The cross elasticity of demand measures the responsiveness of the quantity demanded of a particular good to changes in the prices of
    a) its complements but not its substitutes.
    b) its substitutes but not its complements.
    c) its substitutes and its complements.
    d) neither its substitutes nor its complements.

117. If goods are complements, definitely their
    a) income elasticities are negative.
    b) income elasticities are positive.
    c) cross elasticities are positive.
    d) cross elasticities are negative.

118. If a rise in the price of good 1 decreases the quantity of good 2 demanded,
    a) the cross elasticity of demand is negative.
    b) good 1 is an inferior good.
    c) good 2 is an inferior good.
    d) the cross elasticity of demand is positive.

119. The cross elasticity of demand between apples and oranges is defined as
    a) the price elasticity of demand for apples divided by the price elasticity of demand for oranges.
    b) the change in the quantity of apples demanded divided by the change in the quantity of oranges demanded.
    c) the percentage change in the quantity of apples demanded divided by the percentage change in the price of oranges.
    d) the percentage change in the quantity of apples demanded divided by the percentage change in the quantity of oranges demanded.

120. If the cross elasticity of demand between goods A and B is positive,
    a) the demands for A and B are both price elastic.
    b) A and B are complements.

c) A and B are substitutes.
d) the demands for A and B are both price inelastic.

121. If the cross elasticity of demand between goods A and B is negative,
a) the demands for A and B are both price elastic.
b) A and B are complements.
c) the demands for A and B are both price inelastic.
d) A and B are substitutes.

122. The greater the substitutability between Northwest timber and Southeast timber, the _____ is the cross elasticity of demand between timber from the two regions and the _____ is the elasticity of demand for Northwest timber.
a) smaller; smaller
b) larger; smaller
c) smaller; larger
d) larger; larger

123. If goods A and B are complements,
a) the cross elasticity of demand between A and B is negative.
b) the cross elasticity of demand between A and B is positive.
c) their income elasticities of demand are both less than 1.
d) their income elasticities of demand are both greater than 1.

124. If a rise in the price of good B increases the quantity demanded of good A,
a) B is a substitute for A, but A is a complement to B.
b) A is a substitute for B, but B is a complement to A.
c) A and B are complements.
d) A and B are substitutes.

125. If a fall in the price of good A increases the quantity demanded of good B,
a) A and B are substitutes.
b) A and B are complements.
c) B is a substitute for A, but A is a complement to B.
d) A is a substitute for B, but B is a complement to A.

126. The cross elasticity of demand between Coca-Cola and Pepsi-Cola is
    a) positive, that is, Coke and Pepsi are complements.
    b) negative, that is, Coke and Pepsi are complements.
    c) positive, that is, Coke and Pepsi are substitutes.
    d) negative, that is, Coke and Pepsi are substitutes.

127. A rise in the price of good A will shift the
    a) supply curve of good B rightward if the cross elasticity of demand between A and B is positive.
    b) demand curve for good B rightward if the cross elasticity of demand between A and B is negative.
    c) demand curve for good B rightward if the cross elasticity of demand between A and B is positive.
    d) supply curve of good B rightward if the cross elasticity of demand between A and B is negative.

128. The income elasticity of demand is the percentage change in
    a) income divided by the percentage change in price.
    b) the quantity demanded divided by the percentage change in income.
    c) the price divided by the percentage change in income.
    d) income divided by the percentage change in quantity demanded.

129. Demand is income elastic if
    a) an increase in income will not affect the quantity demanded.
    b) a small percentage increase in income will result in a large percentage increase in quantity demanded.
    c) the good in question has close substitutes.
    d) a large percentage increase in income will result in a small percentage increase in quantity demanded.

130. The income elasticity of demand is high for
    a) shelter.
    b) luxuries.
    c) clothing.
    d) food.

131. To say that *yorke gari* is an inferior good means that the income elasticity
    a) is definitely greater than 1.
    b) is negative.
    c) is positive but could be greater than or less then (or equal to) 1.
    d) is definitely between 0 and 1.

132. An increase in Abigail's income decreases her demand for cassette tapes. For her, cassette tapes are
    a) a complement to any good.
    b) a normal good.
    c) an inferior good.
    d) a substitute good.

133. Goods whose income elasticities are negative are called
    a) superior goods.
    b) inferior goods.
    c) normal goods.
    d) complements.

134. A 10 percent increase in income has caused a 5 percent decrease in the quantity demanded. The income elasticity is
    a) 0.5.
    b) -2.0.
    c) 2.0.
    d) -0.5.

135. Sewoenam's income has just risen from ¢950 per week to ¢1,050 per week. As a result, she decides to increase the number of movies she attends each month by 5 percent. Her demand for movies is
    a) income inelastic.
    b) income elastic.
    c) represented by a vertical line.
    d) represented by a horizontal line.

136. Joojo's income has just risen from ¢940 per week to ¢1,060 per week. As a result, he decides to purchase 9 percent more *khebab* per week. The income elasticity of Joojo's demand for *khebab* is

a) 0.75.
b) 1.33.
c) 0.90.
d) 1.00.

137. Fafa's income has just risen from ¢940 per week to ¢1,060 per week. As a result, she decides to purchase 12 percent more dresses per week. The income elasticity of Fafa's demand for dresses is

a) 1.33.
b) 0.90.
c) 1.00.
d) 0.75.

138. A 10 percent increase in income causes the quantity of orange juice demanded to increase from 19,200 to 20,800 gallons. The income elasticity of demand for orange juice is

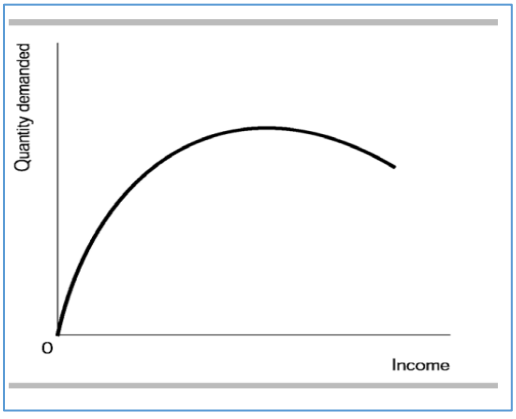
a) 0.8.
b) 1.2.
c) 1.0.
d) 0.5.

139. A 10 percent increase in income causes the quantity of apple juice demanded to increase from 18,800 to 21,200 gallons. The income elasticity of demand for apple juice is

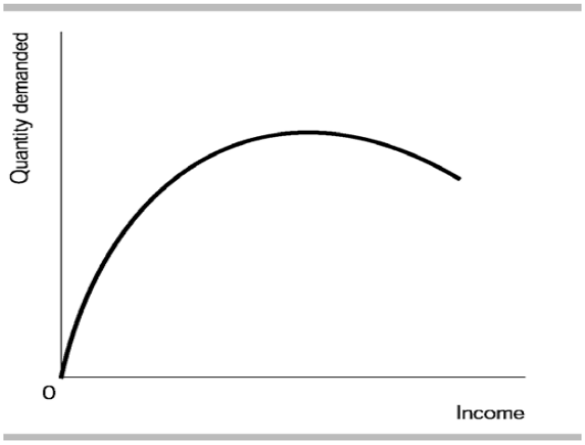
a) 0.5.
b) 1.0.
c) 1.2.
d) 0.8.

140. The above figure shows a good
    a) that is an inferior good over all income ranges.
    b) whose income elasticity is greater than 0 but less than 1.
    c) that is a normal good over some income ranges and an inferior good over other ranges.
    d) whose income elasticity always exceeds 1.0.

141. Of the following, which one is most likely to have a negative income elasticity of demand?
    a) shoes
    b) tennis balls
    c) inter-city bus travel
    d) frozen yogurt

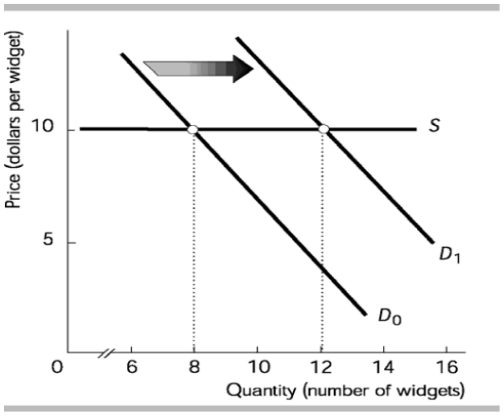


142. The above figure shows a good
    a) whose income elasticity is greater than 0 but less than 1.
    b) that is an inferior good over all income ranges.
    c) whose income elasticity always exceeds 1.0.
    d) that is a normal good over some income ranges and an inferior good over other ranges.



143. The above figure shows a good
    a) whose income elasticity always exceeds 1.0.
    b) whose income elasticity is greater than 0 but less than 1.
    c) that is an inferior good over all income ranges.
    d) that is a normal good over some income ranges and an inferior good over other ranges.

Use the information in the table below to answer the next three questions Use the information below to answer the next six questions



144. The increase in the demand for widgets, shown in the figure above, is caused by an increase in the price of McBoover devices. Therefore,
    a) widgets and McBoover devices are substitutes.
    b) widgets and McBoover devices are complements.
    c) McBoover devices are a normal good.
    d) widgets are a normal good.

145. The increase in the demand for widgets, shown in the figure above, is caused by a decrease in the price of McBoover devices. Therefore,
    a) widgets and McBoover devices are substitutes.
    b) widgets are a normal good.
    c) McBoover devices are a normal good.
    d) widgets and McBoover devices are complements.

146. The increase in the demand for widgets, shown in the figure above, is caused by an increase in the price of McBoover devices from $9 to $11. Therefore, the cross-price elasticity for these two products is
    a) 0.5.
    b) -2.0.
    c) 2.0.
    d) -0.5.

147. The increase in the demand for widgets, shown in the figure above, is caused by a decrease in the price of McBoover devices from $11 to $9. Therefore, the cross-price elasticity for these two products is
    a) -2.0.
    b) 2.0.
    c) -0.5.
    d) 0.5.

148. The increase in the demand for widgets, shown in the figure above, is caused by an increase in average incomes. Therefore, widgets
    a) are a normal good.
    b) are elastically demanded.
    c) are an inferior good.
    d) are inelastically demanded.

149. The increase in the demand for widgets, shown in the figure above, is caused by an increase in average incomes from $28,500 per year to $31,500 per year. Therefore, the income elasticity of demand for widgets is
    a) 4.
    b) 3/4.
    c) 1/4.
    d) 4/3.

150. As income rises, the share of income spent on food in Ghana
    a) rises.
    b) remains constant at 15 percent.
    c) falls.
    d) remains constant at 33 percent.

151. The elasticity of supply measures the responsiveness of
    a) quantity supplied to changes in price.
    b) quantity demanded to changes in supply.
    c) quantity supplied to changes in income.
    d) quantity supplied to changes in demand.

152. The elasticity of supply measures the sensitivity of
    a) supply to changes in costs.
    b) quantity supplied to a change in price.
    c) price to changes in supply.
    d) quantity supplied to quantity demanded.

153. On most days the price of a rose is ¢1 and 80 roses are purchased. On Valentine's Day the demand increases so that the price of a rose rises to ¢2 and 320 roses are purchased. Therefore, the price elasticity of
    a) demand for roses is about 1.8.
    b) supply of roses is about 1.8.
    c) demand for roses is about 0.55.
    d) supply of roses is about 0.55.

154. Supply is elastic if

a) a 1 percent change in price causes a larger percentage change in quantity supplied.
b) the good in question is a normal good.
c) the slope of the supply curve is positive.
d) a 1 percent change in price causes a smaller percentage change in quantity supplied.

155. If a 1 percent decrease in the price of a basket of oranges results in a smaller percentage decrease in the quantity supplied,
a) supply is inelastic.
b) demand is inelastic.
c) demand is elastic.
d) supply is elastic.

156. If a 1 percent decrease in the price of a pound of squash results in a larger percentage decrease in the quantity supplied,
a) demand is inelastic.
b) demand is elastic.
c) supply is inelastic.
d) supply is elastic.

157. If at a given moment, no matter what the price, producers cannot change the quantity supplied, the momentary supply
a) has infinite elasticity.
b) has unit elasticity.
c) does not exist.
d) has zero elasticity.

158. If a rise in the price of oranges from ¢7 to ¢9 a basket, caused by a shift of the demand curve, increases the quantity of baskets supplied from 4,500 to 5,500 baskets, the
a) demand for oranges is elastic.
b) supply of oranges is elastic.
c) demand for oranges is inelastic.
d) supply of oranges is inelastic.

159. If a shift in the demand curve that raises the price of oranges from ¢7 to ¢9 a basket increases the quantity of oranges supplied from 4,000 baskets to 6,000 baskets, the
    a) supply of oranges is elastic.
    b) supply of oranges is inelastic.
    c) demand for oranges is inelastic.
    d) demand for oranges is elastic.

160. A rise in the price of cabbage from ¢14 to ¢18 per bushel, caused by a shift of the demand curve, increases the quantity supplied from 4,000 to 6,000 bushels. The elasticity of supply is
    a) 1.6.
    b) 1.0.
    c) 0.6.
    d) 0.8.

161. If a 5 percent increase in the price results in a 9 percent increase in quantity supplied, the elasticity of supply is
    a) 0.30.
    b) 0.55.
    c) 1.80.
    d) 1.20.

162. If a 5 percent increase in price results in a 3 percent increase in the quantity supplied, the elasticity of supply is
    a) 1.20.
    b) 0.60.
    c) 1.66.
    d) 0.30.

163. A vertical supply curve indicates an elasticity of supply that equals
    a) 0.
    b) infinity.
    c) 1.
    d) -1.

164. A horizontal supply curve indicates an elasticity of supply that equals
    a) 0.
    b) infinity.
    c) 1.
    d) -1.

165. Suppose a 10 percent increase in the price of textbooks decreases the quantity demanded by 20 percent. The elasticity of demand for textbooks is
    a) 0.2.
    b) 5.0.
    c) 10.0.
    d) 2.0.

166. The quantity of new cars increases by10 percent. If the price elasticity of demand for new cars is 1.25, the price of new cars will fall by
    a) 8 percent.
    b) 10 percent.
    c) 2.5 percent.
    d) 12.5 percent.

167. Suppose the price elasticity of demand for oil is 0.1. In order to lower the price of oil by 20 percent, the quantity of oil supplied must be increased by
    a) 20 percent.
    b) 2 percent.
    c) 0.2 percent.
    d) 200 percent.

168. Moving up (to the left) along a linear demand curve, the price elasticity of demand
    a) at first increases and then decreases.
    b) increases.
    c) decreases.
    d) does not change.

169. If the price elasticity of demand for a product equals 1, as its price rises the
    a) total revenue increases.

b) quantity demanded does not change.
c) total revenue does not change.
d) quantity demanded increases.

170. A rise in the price of a product lowers the total revenue from the product if the
a) good is an inferior product.
b) demand for the product is inelastic.
c) demand for the product is elastic.
d) income elasticity of demand exceeds 1.

171. If a 4 percent rise in the price of peanut butter lowers the total revenue received by the producers of peanut butter by 4 percent, the demand for peanut butter
a) is inelastic.
b) is elastic.
c) is unit elastic.
d) has an elasticity of 2.0.

172. A product is likely to have a price elasticity of demand that exceeds 1 when
a) its price falls.
b) it is a necessity.
c) it has close substitutes.
d) the percentage of income spent on it decreases.

173. Which of the following is likely to have the smallest price elasticity of demand?
a) a new Ford automobile
b) a new automobile
c) a new Ford Mustang
d) an automobile

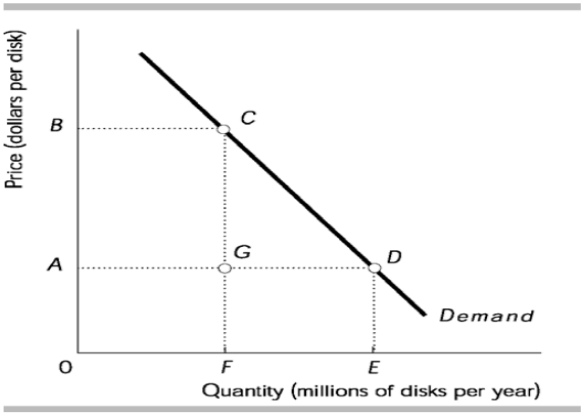
174. A 10 percent decrease in the price of a Pepsi decreases the demand for a Coca-Cola by 50 percent. The cross elasticity of demand between a Pepsi and Coca-Cola is
a) 5.
b) 10.

c) 0.20.
d) 50.

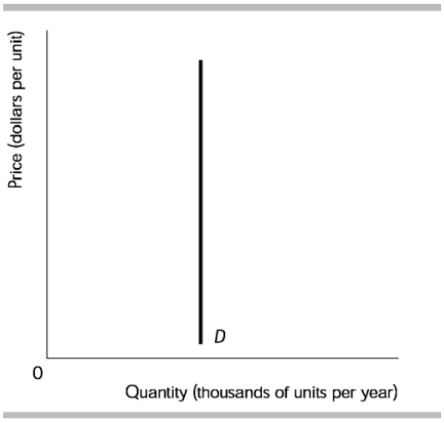
175. A fall in the price of X from ¢12 to ¢8 causes an increase in the quantity of Y demanded from 900 to 1,100 units. What is the cross elasticity of demand between X and Y?
a) 2
b) -0.5
c) -2
d) 0.5

176. A fall in the price of X from ¢12 to ¢8 causes an increase in the quantity of Y demanded from 900 to 1,100 units. X and Y are
a) complements.
b) normal goods.
c) substitutes.
d) inferior goods.

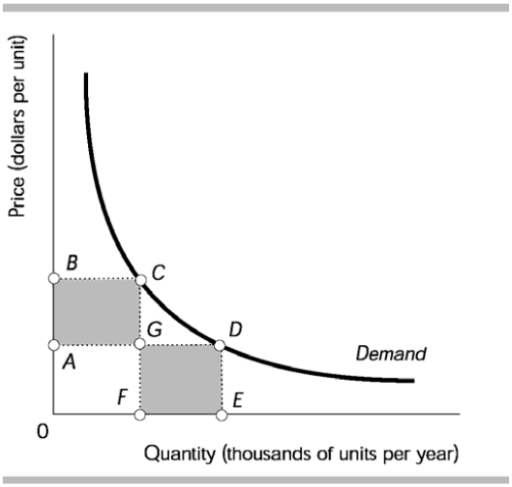
177. A 10 percent decrease in income decreases the quantity demanded of mobile phones by 3 percent. The income elasticity of demand mobile phones is
a) 10.0.
b) 3.3.
c) -0.3.
d) 0.3



178. In the figure above, when the price of a disk is $B, total revenue is shown in the graph by area
    a) FCDE.
    b) ADE0.
    c) AGF0.
    d) BCF0.

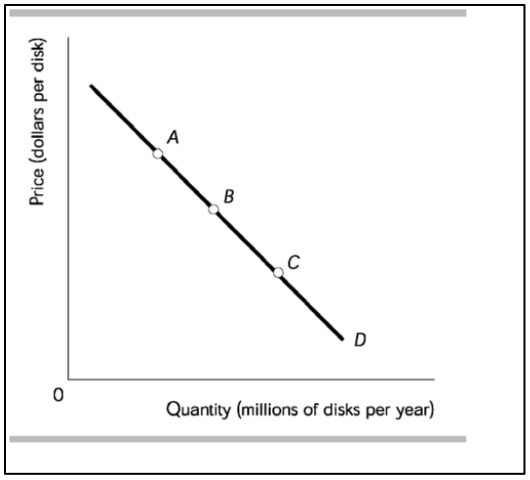


179. The above figure illustrates the demand curve for a good. The good has
    a) many substitutes.
    b) no substitutes.
    c) only one substitute.
    d) only a few substitutes.



180. The elasticity of demand along the demand curve shown in the above figure is constant and equal to 1. Thus,

a) area 0BCFequals area 0AGF.
b) area 0BCFequals area 0ADE.
c) area 0BCFequals area FGDE.
d) area ABCG equals area 0AGF.



181. The above figure shows a linear (straight-line) demand curve. Start at point A and then moving to point Band then point C, the price elasticity of demand
    a) increases.
    b) increases and then decreases.
    c) decreases and then increases.
    d) decreases.

CONSUMER CHOICE THEORY

1. The utility-maximizing rule can be stated in words in the following way: A person will maximize utility when the _____ is equalized across products.
    a) marginal utility per cedi spent
    b) total utility per cedi spent
    c) marginal utility
    d) total utility

2. Which of the following is not consistent with assumptions economists make about consumer preferences?
    a) Pat enjoys his second ice cream cone less than his first.
    b) Chris enjoys her second ice cream cone more than her second candy bar.

c) Steve enjoys two ice cream cones more than one.
d) Jane enjoys two ice cream cones more than Tomas enjoys one ice cream cone.
e) Tim enjoys an ice cream cone more than a candy bar.

3. The principle of diminishing marginal utility implies that total utility falls as consumption rises above a certain level.
    a) True
    b) False

4. Let MU_A and MU_B stand for the marginal utility of goods A and B, respectively. Let P_A and P_B stand for the price of goods A and B respectively. Which statement must hold for consumer equilibrium?
    a) $MU_A = MU_B$
    b) $MU_A = MU_B$ and $P_A = P_B$
    c) $MU_A/MU_B = P_B/P_A$
    d) $MU_A/MU_B = P_A/P_B$
    e) $MU_APA = MU_BPB$

5. Salim can consume apples and oranges. He likes them equally well and currently is in consumer equilibrium. Now the price of oranges goes up while his income remains the same. What will happen to his consumption?
    a) Consumption of oranges increases, consumption of apples decreases
    b) Consumption of oranges increases, consumption of apples increases
    c) Consumption of oranges decreases, consumption of apples decreases
    d) Consumption of oranges decreases, consumption of apples increases
    e) We cannot tell; it depends on Salim's utility levels

6. The concept of diminishing marginal utility is that increases in the consumption of a good lead to
    a) a decrease in total utility.
    b) a decrease in marginal utility.
    c) an increase in marginal utility.
    d) no change in marginal utility.

7. Given a fixed level of spending, you will maximize utility when:

a) the marginal satisfactions are maximized
b) the ratios of marginal utilities to their prices are equal
c) the total satisfaction from both goods is maximized regardless of cost
d) the ratios of the total utilities to their prices are equal.

Suppose Paul has chosen a combination of two goods, A and B such that marginal utility per cedi spent for good A (MUa/Pa) is 0.6 and the marginal utility per cedi spent for good B (MU_b /P_b) is

8. To increase utility with the same amount of money, Paul should
    a) increase the number of B consumed and decrease the number of A consumed
    b) do nothing. He cannot increase total utility.
    c) increase the number of A consumed and decrease the number of B consumed.
    d) increase the number of both A and B consumed.

9. The principle of diminishing marginal utility says that as you consume more of an item, beyond some point, the:
    a) additional units of consumption will yield more units of utility than the previous units.
    b) additional units of consumption will yield fewer additional units of utility than the previous units.
    c) price of additional units of consumption will be less than the price of the previous unit.
    d) total satisfaction will decrease

10. Clement is maximizing utility by consuming 3 colas at ¢2 apiece and 4 sausages at ¢3 apiece. The last cola gave him 200 units of utility. How many units of utility did the last sausage give him?
    a) 300
    b) 10
    c) 600
    d) 133.33

Use the following information to answer the next TWO (2) questions.

Selorm likes both baseball bats and baseball gloves. The table below describes the utility he

receives from his consumption of specific numbers of bats and gloves.

Number of Bats	Total Utility from Bats	Number of Gloves	Total Utility from Gloves
1	100	1	50
2	150	2	90
3	170	3	110
4	180	4	120

11. Suppose the price of a baseball bat is ¢40. If Babe Ruth's optimal bundle is 3 bats and 1 glove, what is the price of a glove?
    a) ¢70
    b) ¢30
    c) ¢10
    d) ¢100

12. The price of a helmet is ¢54, and the price of a bat is still ¢40. If Babe's optimal consumption bundle includes 3 bats, 1 glove, and 2 helmets, what is the marginal utility of that second helmet?
    a) 108 utils
    b) 54 utils
    c) 27 utils
    d) Not enough information is provided to answer this question.

13. A util represents a unit of measurement for the:
    a) Way a consumer will respond to change in price.
    b) Way a producer will respond to change in price.
    c) Cedis a consumer spends on a good.
    d) Profit a firm makes from producing a good.
    e) Happiness a person obtains form consuming a good.

14. Utility refers to the:
    a) Satisfaction a consumer expects to receive from a good or service.
    b) Usefulness of the product consumed.
    c) Relationship of demand to the supply of a product.

d) Satisfaction a consumer experiences after a good or service is purchased.
e) Ability of a good or service to have value in the marketplace.

15. Consumers tend to maximize:
a) Total utility.
b) Consumer surplus.
c) Marginal utility.
d) Marginal utility per dollar.
e) Money holdings.

16. Marginal utility (MU) equals:
a) PQ/TU.
b) $\Delta TU/\Delta Q$.
c) P/Q.
d) Q/TU.
e) TU/P.

17. Marginal utility is the change in:
a) Total utility when an extra unity of output is consumed.
b) Average utility when an extra unity of output is consumed.
c) Total utility when an extra unit of output is produced.
d) Marginal utility when an extra unit of output is consumed.
e) Marginal utility when an extra unity of output is produced.

18. Utility theory assumes that marginal utility:
a) Is zero as long as the individual derives utility form the product.
b) Is constant as long as the individual derives satisfaction from the product.
c) Increases as an individual consumes more of a product.
d) Decreases as an individual consumes more of a product.
e) Is constant as long as the individual derives utility from the product.

19. If total utility is falling, marginal utility is:
a) Positive, but declining.
b) Zero.
c) Positive.

d) Negative.
e) Either positive or negative.

20. Marginal utility is defined as:
    a) The number of hours a consumer would be willing to work to receive a certain product.
    b) A comparison of the utility a good provides with the price of that good.
    c) The extra satisfaction the consumer receives form an extra $1 of income.
    d) The total level of satisfaction a consumer receives upon the consumption of a certain number of goods.
    e) The extra satisfaction a person derives from consuming an additional unity of a good.

21. As consumption of a good increases, the extra satisfaction received from consuming an additional unit of the good decreases. This statement is known as the law of:
    a) Diminishing marginal utility.
    b) Total utility.
    c) Demand.
    d) Increasing costs.
    e) Diminishing marginal returns.

22. If the price of a product rises, consumers buy less of the good because the:
    a) MU/P of the good falls below the MU/P of other goods.
    b) MU/P of the good rises above the MU/P of other goods.
    c) Marginal utility of the good diminishes.
    d) Total utility of the good diminishes.
    e) Marginal utility of the good rises.

23. According to the law of diminishing marginal utility, the marginal utility curve is _____.
    a) upward sloping.
    b) downward sloping.
    c) vertical flat.
    d) flat.

24. Consumers would continue to rearrange their consumption of two goods until:
    a) The marginal utility per cedi's worth of the two goods is the same for the last dollar spent on each good.
    b) The same amount of each is purchased.
    c) The prices of the two goods are equal for the last cedi spent on each good.
    d) Marginal utility is the same for each good for the last cedi spend on each good.

25. According to the utility model of consumer demand, the demand curve is downward sloping because of the law of:
    a) Consumer equilibrium.
    b) Diminishing utility maximization.
    c) Diminishing marginal utility.
    d) Diminishing consumer equilibrium.

26. Suppose a consumer wants to obtain the highest possible satisfaction from goods purchased on a fixed budget. Which of the following must be equal for all goods?
    a) Average utility.
    b) Marginal utility per dollar.
    c) Total utility.
    d) Marginal utility.

27. If a good A has a marginal utility of 30 and a price of ¢5, and good B has a marginal utility of 10 and a price of ¢2, then:
    a) Goods A and B are of equal value to this consumer.
    b) Goods A and B should both be purchased.
    c) Good A is a better buy than good B.
    d) Good B is a better buy than good A.
    e) Neither good A nor B is worth the money.

28. If a consumer is spending all of his/her income in a manner where MUa/Pa = MUb/Pb, then the consumer:
    a) Should increase the consumption of B and decrease the consumption of A.
    b) Should increase the consumption of both A and B.
    c) Should increase the consumption of A and decrease the consumption of B.
    d) Is maximizing his/her utility.

29. If a consumer is spending all of his/her income in a manner where MUa/Pa is greater than MUb/Pb, then the consumer:
    a) Should spend more money on both goods.
    b) Should increase the purchases of A and decrease the purchases of B.
    c) Is maximizing his/her utility.
    d) Should increase his/her purchases of B and decrease the purchases of A.
    e) Should spend less money on both goods.

30. When the price of a good falls, consumers may increase the quantity consumed because they have greater total purchasing power. This statement describes the:
    a) Consumer equilibrium effect.
    b) Price effect.
    c) Substitution effect.
    d) Income effect.

31. As long as the principle of diminishing marginal utility is operating, any increased consumption of a good
    a) lowers total utility.
    b) produces negative total utility.
    c) lowers marginal utility and, therefore, total utility.
    d) lowers marginal utility, but may raise total utility.

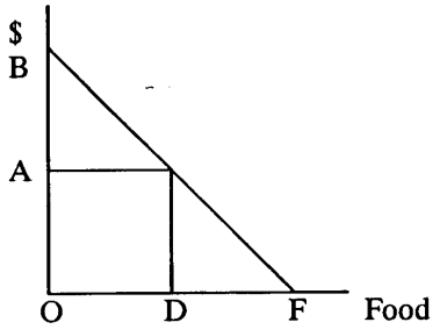
32. Among all the combinations of goods attainable by a consumer, the one that maximizes total utility is the one that
    a) maximizes the marginal utilities per dollar of each good.
    b) maximizes the marginal utilities per pound (or other physical unit) of each good.
    c) equates the marginal utilities per dollar of each good.
    d) equates the marginal utilities per pound (or other physical unit) of each good.

33. Which of the following is a correct representation of the budget constraint in a world with only food and shelter, where M = income, Pf = price of food, Ps = shelter price, S =the quantity of shelter, and F =the quantity of food.
    a) M = Pf (S) + Ps (F)
    b) F =M/Ps –Pf /Ps(S)
    c) S =M/Ps –Ps /Pf (F)
    d) F =M(Ps) + Pf /Ps (S)

e) None of the above is correct.

34. All points on or below a budget constraint
    a) are attainable with the given income.
    b) are equally desirable.
    c) represent market basket combinations that exhaust the income available.
    d) are described, in part, by a, b and c above.

35. For the graph of the budget line shown below, which statement is true?
    a) The vertical intercept represents all the money available for purchases.
    b) The distance AB shows the amount of money spent on OD amount of food.
    c) The distance AO shows the amount of money left over after purchasing OD amount of food.
    d) All of the above are true.
    e) None of the above is true.



36. As long as all prices remain constant, an increase in money income results in
    a) an increase in the slope of the budget line.
    b) a decrease in the slope of the budget line.
    c) an increase in the intercept of the budget line.
    d) a decrease in the intercept of the budget line.
    e) both(a)and (c).

37. Cardinal utility theory assumes that consumers can
    a) rank baskets of goods as to their preference.
    b) determine the number of utils that can be derived from consuming all goods.
    c) determine the marginal rate of substitution between goods.

d) avoid the law of diminishing marginal utility.
e) all of the above.

38. In spending all his or her income, the consumer chooses the market basket that maximizes his or her utility. Which of the following statements will be correct?

I. The marginal utility is the same for each commodity.
II. The marginal utility per dollar spent is the same for each commodity.
III. The marginal utility of each commodity is proportional to its price.

a) I only.
b) II only.
c) I and II only.
d) II and III only.
e) I, II, and III

39. A consumer buys only jelly beans and wrinkle remover and the more of anyone he buys, the lower the marginal utility of that good. In spending all his income, his marginal utility of a kilogram of jellybeans is 12 and his marginal utility of a jar of wrinkle remover is 15.The price of jelly beans is ¢8 per kilogram and the price of wrinkle remover is ¢11 per jar. For maximum satisfaction, this consumer should

a) buy more wrinkle remover and fewer jellybeans.
b) by less wrinkle remover and more jellybeans.
c) buy more wrinkle remover and the same quantity of jellybeans.
d) buy the same quantity of wrinkle remover and more jellybeans.
e) remain where he is, since his present position is the best attainable one.

40. Which of the following is true, according to the law of diminishing marginal utility?

a) The marginal utility of Diana's second Coke is greater than the marginal utility of her third biscuit, other things constant.
b) The marginal utility of Diana's second Coke is greater than the marginal utility of Kwame's third biscuit, other things constant.
c) The marginal utility of Diana's second Coke is greater than the marginal utility of her third Coke, other things constant.
d) The total utility of two Cokes is greater than the total utility of three Cokes, other things constant.
e) The marginal utility of Diane's second Coke is greater than the marginal utility of Kwame's third Coke, other things constant.

41. Kwabena derives utility from consuming oranges and pineapples as described in the table below. Oranges cost 50 pesewas each and pineapples costs ¢1 each. What will be the combination that Kwabena chooses in consumer equilibrium if he has an income of ¢4.50?

Oranges		Pineapples	
Quantity	Utility	Quantity	Utility
1	40	1	100
2	75	2	180
3	105	3	240
4	130	4	280
5	150	5	300

a) 5 oranges and 2 pineapples
b) 4 oranges and 4 pineapples
c) 1 orange and 4 pineapples
d) 3 oranges and 3 pineapples
e) 7 oranges and 1 pineapple

MONOPOLY, PERFECT COMPETITION AND COST CONCEPT

1. Which of the following is most likely to be an implicit cost of production?
   a) property taxes on a building owned by the firm
   b) transportation costs paid to a trucking supplier
   c) rental payments for a building utilized by the company and rented from another party
   d) interest income foregone on funds invested in the firm by the owners

2. Which of the following is most likely to be an implicit cost of production?
   a) the "competitive rate" salary the owner of the business pays herself for services provided
   b) the property taxes on a building owned by the firm
   c) the rental income foregone because the business owns its building
   d) the interest paid on outstanding loans of the business

3. When an economist says a firm is earning zero economic profit, this implies that the firm
   a) will be forced out of business in the near future unless market conditions change.

b) is earning a zero rate of return on its assets.
c) is earning as high a rate of return now as could be earned in other industries.
d) has an accounting profit of zero.

4. The difference between zero accounting profit and zero economic profit is that
   a) economists include opportunity cost in zero economic profit, while accountants do not include opportunity cost in zero accounting profit.
   b) economists do not include opportunity cost in zero economic profit, while accountants do include opportunity cost in zero accounting profit.
   c) economists include opportunity cost in zero accounting profit, while accountants do not include opportunity cost in zero economic profit.
   d) economists do not include opportunity cost in zero accounting profit, while accountants do include opportunity cost in zero economic profit.

5. Sally leaves her ¢34,000 secretarial position and invests her savings of ¢15,000 (on which she was earning 6 percent interest) to start her own agency. After expenses, her net income was ¢38,900. Her economic profit was
   a) ¢4,900.
   b) ¢4,000.
   c) ¢38,900.
   d) zero.
   e) ¢10,100

6. If fixed cost at quantity (Q) = 100 is ¢130, then
   a) fixed cost at Q = 0 is ¢0.
   b) fixed cost at Q = 0 is less than ¢130.
   c) fixed cost at Q = 200 is ¢260.
   d) fixed cost at Q = 200 is ¢130.
   e) it is impossible to calculate fixed costs at any other quantity.

Use the table below to answer the following question.

Units of Output	Total Fixed Cost (¢)	Total Variable Cost (¢)
1	1,000	1,200
2	1,000	2,400
3	1,000	3,600

4	1,000	5,000
5	1,000	6,600

7. What is the average total cost at an output level of four units?
   a) ¢1,200
   b) ¢1,400
   c) ¢1,500
   d) ¢2,000

Use the table below to answer the following question.

Units of Output	Total Fixed Cost (¢)	Total Variable Cost (¢)
1	150	25
2	150	48
3	150	70
4	150	100

8. What is the marginal cost of producing the third unit of output?
   a) ¢22
   b) ¢23.33
   c) ¢73.33
   d) This cannot be determined from the data.

9. Total revenue minus both explicit and implicit costs is called
   a) accounting profit.
   b) economic profit.
   c) average total cost.
   d) None of the above is correct.

10. For a large firm that produces and sells automobiles, which of the following costs would be a variable cost?
   a) the unemployment insurance premium that the firm pays to the state of Missouri that is calculated based on the number of worker-hours that the firm uses
   b) the cost of the steel that is used in producing automobiles
   c) the cost of the electricity of running the machines on the factory floor

d) All of the above are correct.

11. Which of the following expressions is correct?
    a) marginal cost = (change in quantity of output)/(change in total cost)
    b) average total cost = (total cost)/(quantity of output)
    c) total cost = variable cost + marginal cost
    d) average variable cost = (quantity of output)/(total variable cost)

Scenario 13-7

Farmer Kwashie is a watermelons farmer. If Kwashie plants no seeds on his farm, he gets no harvest. If he plants 1 bag of seeds, he gets 30 watermelons. If he plants 2 bags of seeds, he gets 50 watermelons. If he plants 3 bags of seeds he gets 60 watermelons. A bag of seeds costs ¢100, and the costs of seeds are his only costs.

12. Refer to Scenario 13-7. Which of the following statements is(are) true of Farmer Kwashie 's marginal cost?
    I. His marginal cost curve is U-shaped.
    II. His marginal cost decreases with increased watermelon output.
    III. His marginal cost reflects diminishing marginal product

    a) (II) only
    b) (III) only
    c) (I) and (III) only
    d) (I) and (II) only

13. The minimum points of the average variable cost and average total cost curves occur where
    a) the marginal cost curve lies below the average variable cost and average total cost curves.
    b) the marginal cost curve intersects those curves.
    c) the average variable cost and average total cost curves intersect.
    d) the slope of total cost is the smallest.

14. In the long run Firm A incurs total costs of ¢1,200 when output is 30 units and ¢1,400 when output is 40 units. Firm A exhibits

a) diseconomies of scale because total cost is rising as output rises.
b) diseconomies of scale because average total cost is rising as output rises.
c) economies of scale because total cost is rising as output rises.
d) economies of scale because average total cost is falling as output rises.

15. Diseconomies of scale occur when
a) average fixed costs are falling.
b) average fixed costs are constant.
c) long-run average total costs rise as output increases.
d) long-run average total costs fall as output increase

16. Which of the following is not a characteristic of a perfectly competitive market?
a) Buyers and sellers are price takers.
b) Each firm sells a virtually identical product.
c) Free entry is limited.
d) Each firm chooses an output level that maximizes profits

17. A profit-maximizing firm will shut down in the short run when
a) price is less than average variable cost.
b) price is less than average total cost.
c) average revenue is greater than marginal cost.
d) average revenue is greater than average fixed cost

18. In the long run, all of a firm's costs are variable. In this case the exit criterion for a profit -maximizing firm is to shut down if
a) price is less than average total cost.
b) price is greater than average total cost.
c) average revenue is greater than average fixed cost.
d) average revenue is greater than marginal cost.

19. In the long run, each firm in a competitive industry earns
a) zero accounting profits.
b) zero economic profits.
c) positive economic profits.
d) Both a and b are correct.

20. Which of the following is not an example of a barrier to entry?
    a) Mighty Mitch‟s Mining Company owns a unique plot of land in Tanzania, under which lies the only large deposit of Tanzanite in the world.
    b) A college student starts a part-time tutoring business.
    c) A novelist obtains a copyright for her new book.
    d) A taxi cab driver in New York City obtains a license to legally provide transportation in New York City.

21. Drug companies are allowed to be monopolists in the drugs they discover in order to
    a) allow drug companies to charge a price that is equal to their marginal cost.
    b) discourage new firms from entering the drug market.
    c) encourage research.
    d) allow the government to earn patent revenue

22. For a monopolist, when does marginal revenue exceed average revenue?
    a) never
    b) when output is less than the profit-maximizing level of output
    c) when output is greater than the profit-maximizing level of output
    d) for all levels of output greater than zero

23. Suppose a firm has a monopoly on the sale of Ipads and faces a downward-sloping demand curve. When selling the 100^{th} Ipad, the firm will always receive
    a) less marginal revenue on the 100^{th} Ipad than it received on the 99^{th} Ipads.
    b) more average revenue on the 100^{th} Ipad than it received on the 99^{th} Ipads.
    c) more total revenue on the 100 Ipad than it received on the first 99 Ipads.
    d) a lower average cost per unit at 100 units output than at 99 units of output.

24. For a monopoly,
    a) average revenue exceeds marginal revenue.
    b) average revenue equals marginal revenue.
    c) average revenue is less than marginal revenue.
    d) price equals marginal revenue.
25. After the patent runs out on a brand name drug, generic drugs enter the market. What happens next in the market?
    a) Price increases, and total surplus decreases.

b) Price decreases, and total surplus decreases.
c) Price decreases, and total surplus increases.
d) Price increases, and total surplus increases.

26. Splitting up a monopoly is often justified on the grounds that
a) consumers prefer dealing with small firms.
b) small firms have lower costs.
c) competition is inherently efficient.
d) nationalization is a less-preferred option

Table 13-4
Gallo Cork Factory

Number of Workers	Number of Machines	Output (corks produced per hour)	Marginal Product of Labor	Cost of Workers	Cost of Machines	Total Cost
1	2	5				
2	2	10				
3	2	20				
4	2	35				
5	2	55				
6	2	70				
7	2	80				

27. Refer to Table 13-4. Assume Gallo's currently employs 2 workers. What is the marginal product of labor when Gallo's adds a 3rd worker?
a) 5 corks per hour
b) 10 corks per hour
c) 20 corks per hour
d) 25 corks per hour

Table 13-10
Jimmy's Gigaplots Factory

Quantity of gigaplots	Fixed Cost	Variable Cost	Total Cost	Average Fixed Cost	Average Variable Cost	Average Total Cost	Marginal Cost
1		$13	$38				
2		$28					
3			$70				
4		$64					
5			$110				
6		$108					
7		$133					
8			$185				

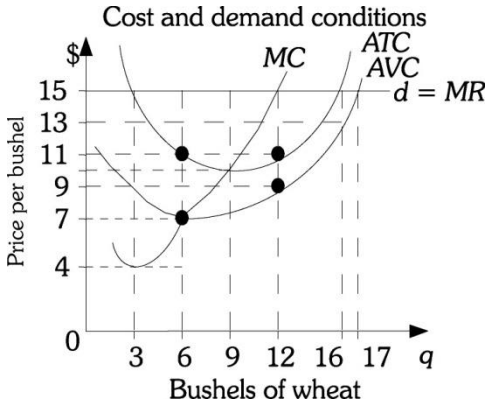
28. Refer to Table 13-10. What is the average fixed cost of producing 8 gigaplots at Jimmy's Gigaplot factory?
    a) $2.12
    b) $3.13
    c) $20.00
    d) $24.37

Table 13-11

Quantity	Price
0	GH13
1	GH13
2	GH13
3	GH13
4	GH13
5	GH13
6	GH13
7	GH13
8	GH13
9	GH13

29. Refer to Table 13-11. Over what range of output is Marginal revenue declining?
    a) 1 to 6
    b) 3 to 7
    c) 7 to 9
    d) None: Marginal revenue is constant over the entire range of output

30. If this farmer is maximizing profits, his total costs will be



a) 132
b) 11
c) 66
d) 90

Scenario 15-6

An airline knows that there are two types of travelers: business travelers and vacationers. For a particular flight, there are 100 business travelers who will pay ¢600 for a ticket while there are 50 vacationers who will pay ¢300 for a ticket. There are 150 seats available on the plane. Suppose the cost to the airline of providing the flight is ¢20,000, which includes the cost of the pilots, flight attendants, fuel, etc.

31. Refer to Scenario 15-6. How much profit will the airline earn if it sets the price of a ticket at ¢600?
a) -¢5,000
b) ¢15,000
c) ¢40,000
d) ¢60,000

32. Refer to Scenario 15-6. How much profit will the airline earn if it sets the price of a ticket at ¢300?
a) -¢15,000
b) -¢5,000
c) ¢25,000
d) ¢45,000

33. In a perfectly competitive market, which of the following statements is a reason that a firm would exit the market in the short run?
    a) Marginal cost exceeds price at the profit maximizing quantity.
    b) Average variable cost is less than marginal revenue at the profit maximizing quantity.
    c) Minimum average total cost is greater than price.
    d) Minimum average variable cost is greater than price.

34. A firm is producing at an output level such that the firm's average total cost is greater than its marginal cost. If this firm produces one additional unit of output, how will its average total cost change?
    a) The firm's average total cost will increase.
    b) The firm's average total cost will decrease.
    c) The firm's average total cost will stay the same.
    d) The direction of change in the firm's average total cost is indeterminate.

35. The market for balls is perfectly competitive. In the long run, each firm is producing 100 balls and selling them for ¢2 each. What is the marginal cost of producing the 100^{th} ball for a firm in this industry?
    a) ¢2
    b) ¢200
    c) ¢1
    d) ¢0.02

36. A perfectly competitive firm's shutdown price occurs where
    a) marginal cost is at its minimum value.
    b) the gap between average variable cost and marginal cost is largest.
    c) average total cost attains its minimum value.
    d) marginal cost equals average variable cost.

*Use the following information to answer the next **THREE (3)** questions.*

Assume the potato chip industry is perfectly competitive and that the market price is initially ¢5 for a bag of potato chips. The table below provides information about the costs of a representative firm, Firm A, in the potato chip industry.

Number of Workers	Bags of Chips	Total cost(¢)
0	0	20

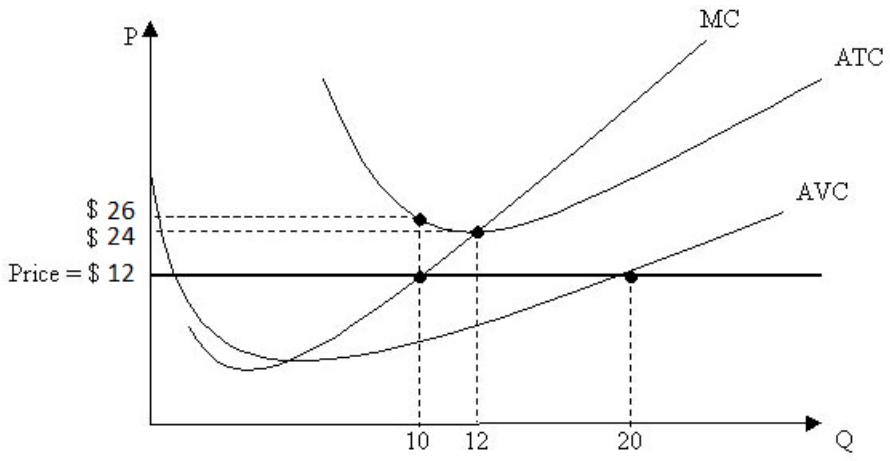
1	2	26
2	5	30
3	7	38
4	8	43
5	9	50

37. Assume Firm A picks a quantity to maximize their profits. What will Firm A's profits equal at this quantity?
    a) -¢30
    b) -¢3
    c) ¢5
    d) ¢50

38. Which of the following statements is true for Firm A given the above information? (Hint: think about fixed costs.) Holding everything else constant,
    a) Firm A should shut down immediately.
    b) Firm A should produce in the short run but exit the market in the long run.
    c) Firm A should produce in the short run and in the long run.
    d) Firm A should not produce in the short run but should produce in the long run.

39. Suppose that a number of potato chip-producing firms leave the industry in the long run and this exiting of firms causes the market price to increase to $7. Assume that Firm A has not yet made a decision about exiting the industry when this price change occurs. Which of the following statements is true?
    a) Firm A should shut down immediately.
    b) Firm A should produce in the short run but exit the market in the long run.
    c) Firm A should produce in the short run and in the long run.
    d) Firm A should not produce in the short run but should produce in the long run.

*Use the following graph of a representative firm in a perfectly competitive industry to answer the next **THREE (3)** questions*



40. Based on the graph above, what quantity will the firm choose to produce if the market price is $12 per unit?
    a) 10 units
    b) 12 units
    c) 20 units
    d) There is not enough information to determine the quantity.

41. Based on the graph above, what is the total cost for the firm in the short run?
    a) $24
    b) $26
    c) $260
    d) $288

42. Based on the graph above, what can we say about the long run?
    a) In the long run firms that remain in the industry will produce 12 units of output.
    b) In the long-run all firms in the industry will earn positive economic profits.
    c) In the long run, we can anticipate that the market price will fall and that will enable producers in this industry to sell more output and thereby enhance their revenue.
    d) In the long run the price in the market will be greater than the marginal revenue.

43. Which of the following statements is true?
    a) In the long run it is possible for a firm to experience both diminishing returns to an input as well as returns to scale.
    b) In the long run a firm that experiences decreasing returns to scale as output increases will find that its average total cost over this range of output is increasing as output increases.

c) In the long run a firm that has increasing average costs of production as output increases is a firm that experiences increasing returns to scale over this range of output.
d) The long run occurs when all inputs in a productive process are variable and the long run is always measured as a period of time that is five years or longer.

44. In a perfectly competitive industry, a firm will produce a positive quantity in the short run as long as price is greater than ____. In the long run, a firm will remain in the industry as long as price is greater than or equal to _____.
a) Average variable cost; average total cost.
b) Marginal cost; average variable cost.
c) Average variable cost; average fixed cost.
d) Average total cost; average variable cost.

45. If 1 piece of land, 7workers, and 3 tons of fertilizer yield 1,000 tubers of yam, while 1piece of land, 7 workers, and 4 tons of fertilizer yield 1,300 tubers of yam,
a) the average product of labor equals 1,150 tubers of yam.
b) the marginal product of labor cannot be calculated.
c) the average product of fertilizer equals 1,150 tubers of yam.
d) the marginal product of fertilizer cannot be calculated.

46. The marginal rate of technical substitution is
a) the rate at which a producer is able to exchange, without affecting the quantity of output produced, a little bit of one input for a little bit of another input.
b) the rate at which a producer is able to exchange, without affecting the total cost of inputs, a little bit of one input for a little bit of another input.
c) the rate at which a producer is able to exchange, without affecting the total inputs used, a little bit of one output for a little bit of another output.
d) a measure of the ease or difficulty with which a producer can substitute one technique of production for another.

47. If a simultaneous and equal percentage decrease in the use of all physical inputs leads to a larger percentage decrease in physical output, a firm's production function is said to exhibit
a) decreasing returns to scale.
b) constant returns to scale.
c) increasing returns to scale.

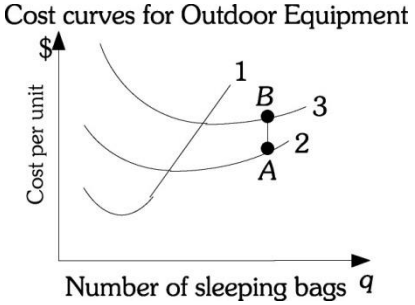
d) diseconomies of scale.

48. If a firm triples all inputs, and output triples as well, the firm is subject to
    a) constant returns to scale.
    b) increasing returns to scale.
    c) economies of scale.
    d) both(b)and(c).

49. For a given short-run production function,
    a) technology is assumed to change as capital stock changes.
    b) technology is assumed to change as the labor input changes.
    c) technology is considered to be constant for a given production function relationship.
    d) technology is assumed to change positively until diminishing returns set in and then it changes in the other direction.

50. Which is a true statement?
    a) Decreasing returns to scale and diminishing returns to production are two ways of stating the same thing.
    b) Increasing returns to scale is a short-run concept, and diminishing returns to production is a long-run concept.
    c) Constant returns to scale is a short-run concept, and decreasing returns to scale is a long-run concept.
    d) All the above are true.
    e) None of the above is true

51. Curve 3, in the diagram below, is Outdoor Equipment's



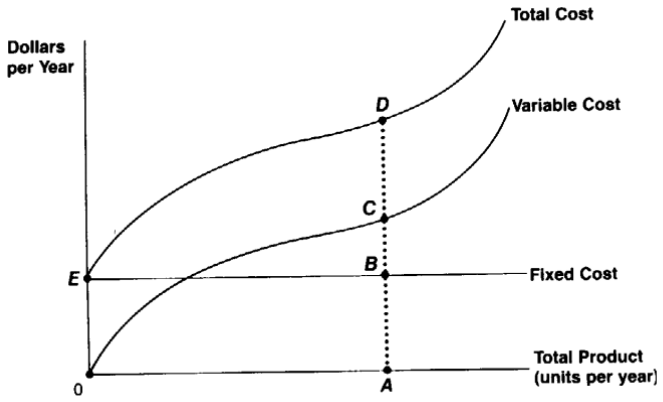
a) average fixed cost curve
b) marginal cost curve
c) average variable cost curve
d) average total cost curve

52. Suppose a firm is using two inputs, labor and capital. What will happen if the price of labour falls?
    a) The firm's average cost curve will shift downward.
    b) The firm's marginal cost curve will shift downward.
    c) To produce an unchanged output, the firm would use more labor.
    d) All of the above.

53. In the short run, a firm's fixed cost
    a) is zero.
    b) cannot be escaped.
    c) can be escaped only by cutting production to zero.
    d) is not correctly described by any of the above.

54. When average total cost rises from ¢10 to ¢30 as total production rises from 100 to 300units, average variable cost
    a) cannot be calculated.
    b) equals $10.
    c) equals $20.
    d) equals $30.

Use the graph below to answer the next four (4) questions



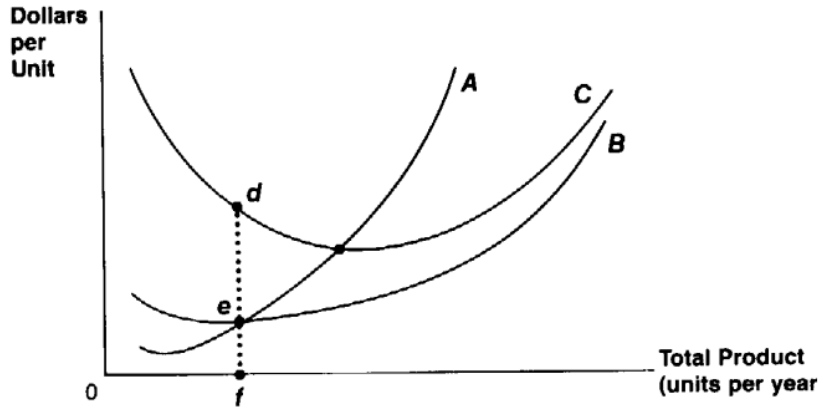
55. When total product equals 0A,
    a) variable cost equals BC.
    b) average variable cost equals BC divided by 0A.
    c) fixed cost equals CD.
    d) all of the above are true.

56. When total product equals 0A, the associated marginal cost
    a) cannot be determined from this graph.
    b) exceeds average total cost.
    c) equals DA divided by 0A.
    d) equals the slope of the variable-cost curve at C.

57. According to this graph,
    a) marginal cost is positive at all levels or output.
    b) marginal cost is falling whenever total product rises.
    c) marginal cost exceeds average total cost at all levels of output.
    d) all of the above are true

58. According to this graph,
    a) average total cost exceeds marginal cost at all levels of output.
    b) average total cost exceeds average variable cost at all levels of output.
    c) average fixed cost is the same at all levels of output.
    d) average fixed cost exceeds average variable cost when total product equals 0A

Use the graph below to answer the next three (3) questions.



59. Line B represents

a) marginal cost.
b) average variable cost.
c) average fixed cost.
d) average total cost.

60. The vertical difference, at any level of output, between lines B and C represents
a) marginal cost.
b) average variable cost.
c) average total cost.
d) average fixed cost.

61. When output equals 0f,
a) total cost equals 0f times fe.
b) fixed cost equals 0f times fe.
c) total variable cost equals 0f times fe.
d) marginal cost equals ed.

62. At the point where a straight line from the origin is tangent to the variable-cost curve
a) marginal cost equals average total cost.
b) marginal cost equals average fixed cost.
c) marginal cost equals average variable cost.
d) average total cost is minimized.

63. Operating profit is
a) TVC - TFC
b) TR - TC
c) TR - TVC
d) TR - TFC

64. A firm's long-run average-total-cost line is
a) identical to its long-run marginal-cost line.
b) also its long-run supply curve.
c) infact the average-total-cost curve of the optimal plant.
d) tangent to all the curves of short-run average total cost.

65. Average fixed cost
    a) is U-shaped.
    b) declines over the entire output range.
    c) is a long-run concept only.
    d) is influenced by diminishing returns to production.
    e) is described by none of the above.

66. If average total cost is 100 for a given output and marginal cost is 70,we then know that average fixed cost is
    a) 30.
    b) 170.
    c) 70.
    d) not possible to determine with the information given.

67. If average fixed cost is 40 and average variable cost is 80 for a given output, we then know that average total cost is
    a) 40.
    b) 120.
    c) 80.
    d) not possible to determine with the information given.

68. The output where diminishing returns to production begin is also the output where
    a) marginal cost is at a minimum.
    b) average total cost is at a minimum.
    c) average variable cost is at a minimum.
    d) marginal and average cost intersect.

69. Which of the following statements about marginal cost is incorrect?
    a) A U-shaped marginal cost curve implies the existence of diminishing returns over all ranges of output.
    b) When marginal cost equals average cost, average cost is at its minimum.
    c) In the short run, the shape of the marginal cost curve is due to the law of diminishing marginal returns.
    d) When marginal cost is falling, total cost is rising.
70. Which of the following statements about the relationship between marginal cost and average cost is correct?

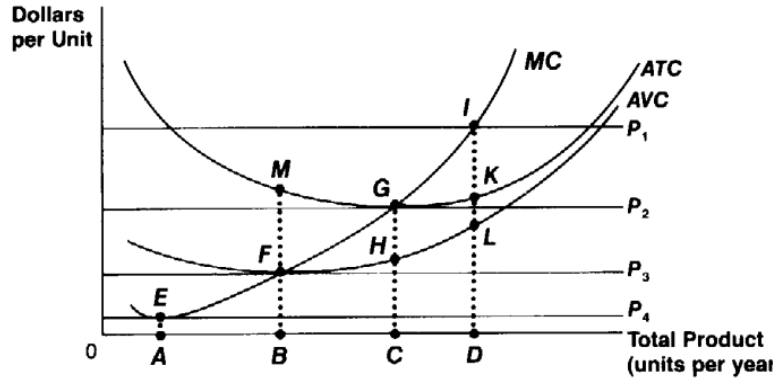
a) When MC is falling, AC is falling.
b) AC equals MC and MC's lowest point.
c) When MC exceeds AC, AC must be rising.
d) When AC exceeds MC, MC must be rising.

71. The slope of the total variable cost curve equals
a) average variable cost.
b) marginal cost.
c) average cost.
d) marginal physical product.

72. In the short run, diminishing marginal returns are implied by
a) rising marginal cost.
b) rising average cost.
c) rising average variable cost.
d) all of the above

73. A firm operating in a perfect market maximizes its profit by adjusting
a) its output price until it exceeds average total cost as much as possible.
b) its output price until it exceeds marginal cost as much as possible.
c) its output until its marginal cost equals output price.
d) its output until its average total cost is minimized.

Use the graph below to answer the next three (3) questions.



74. Assuming this firm maximizes profit, it will

a) produce 0A at a price of P_4 .
b) produce 0D at a price of P_1 .
c) incur a total cost of GC times 0C at point I.
d) do all the above.

75. Assuming this firm maximizes profit, it will
a) procure 0A regardless of price.
b) produce 0A only at price of P_4
c) make a zero profit at price P_2 (output 0C).
d) make a profit of KL times 0D at price P .

76. Assuming this firm maximizes profit, it will
a) incur total fixed cost of KL at a price of P_1 .
b) incur total variable cost of HC at a price of P_2 .
c) supply varying quantities in the short run, depending on the price–quantities that one can read off on line EI.
d) make a loss of FM times 0B at price P_3 .

77. In the short run, no firm operates with a loss, unless
a) variable cost equals fixed cost.
b) variable cost falls short of fixed cost.
c) total revenue covers variable costs.
d) total revenue covers fixed cost.

78. For a firm operating in a perfect market, its short-run supply is identical with the rising arm of
a) its marginal-cost curve.
b) its average-fixed-cost curve.
c) its average-total-cost curve.
d) none of the above.

79. A good's short-run supply curve is shifted to the right by
a) a fall in the good's price.
b) a rise in the prices of inputs used to make the good.
c) an improvement in the technology of making the good.

d) none of the above.

80. Being a price taker in a market means that the seller
    a) charges each consumer the maximum that's he will be able to pay for the product.
    b) has no choice but to charge the equilibrium price that results from the market supply and demand curves.
    c) takes her price from her average total cost curve.
    d) sells her products at different prices to different customers.

81. The statement that marginal cost = marginal revenue leads to profit maximization or loss minimization is true
    a) all the time.
    b) only in the long run.
    c) only if marginal cost is rising at the point of equality.
    d) only if average total cost is falling at the point of equality.

82. In perfect competition, when economic profits exist in the short run, they are very tenuous because
    a) costs will inevitably increase and eliminate profit.
    b) price will fall because market supply will increase.
    c) firms are driven to increase output in the short run to the point where average total cost will equal price.
    d) firms are driven in the short run to reduce output until average total cost equals price.

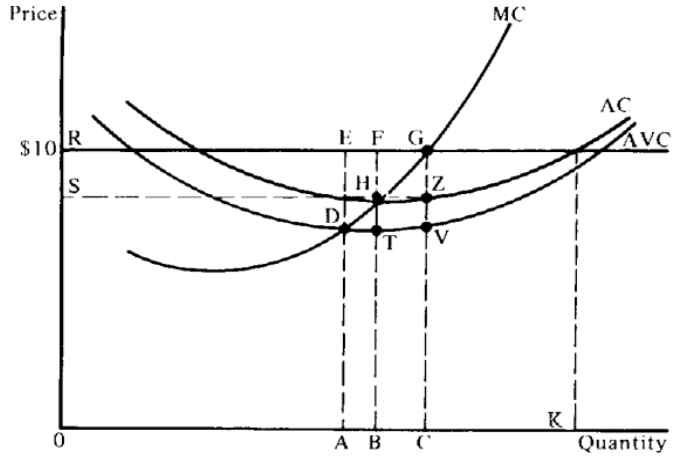
83. When a profit-maximizing firm is at its short-run optimum point,
    a) the average cost of the product is at its lowest possible point whether a profit is being made or not.
    b) the firm will be shut down if its price is less than the average fixed cost.
    c) the profit per unit of output will be at its maximum possible level.
    d) all the above will be true.
    e) none of the above will be true.

84. If a firm is producing where its short run MC= price and the long run MC is less that long run AC, then it would do better in the long run by

a) increasing output with its existing plant until long run MC equals price.
b) increasing plant size until long run MC and short run MC are identical and equal to price.
c) decreasing plant size until long run AC, short run AC, and price are equal.
d) doing nothing because it is already at the long-run profit maximizing point.

85. The competitive firm maximizes its profit by operating where
a) average costs are at a minimum.
b) total revenue is at a maximum.
c) profit per unit is at a maximum.
d) marginal cost equals price.

Use the graph below to answer the next five (5) questions



86. Assume price is $10.The profit maximizing level of output for the firm is
a) 0A where marginal cost just covers AVC.
b) 0Bwhereaverage profit per unit is the greatest.
c) 0C where marginal cost equals the$10 price.
d) 0K where average cost equals avenge revenue and the firm earns a normal rate of return.

87. At the profit maximizing level of output, when price is $10,
a) the firm X is earning economic profit.
b) profits per unit are the greatest.

c) average variable cost equals ZC.
d) all of the above.

88. At output level 0C, profit per unit is equal to
a) GZ.
b) ZV.
c) ED.
d) GC.

89. At output level 0C, total profits equal
a) FHSR.
b) OSZC.
c) GZSR.
d) ORGC.

90. At output level 0C, average fixed cost is equal to
a) ZV.
b) GZ.
c) ED.
d) VC.

91. For a competitive firm the demand curve
a) is horizontal
b) coincides with the marginal revenue curve.
c) coincides with the average revenue curve.
d) all of the above.

92. In the short run, if price falls, the firm will respond by
a) shutting down.
b) equating average variable cost to marginal revenue.
c) reducing output along its marginal cost curve as long as marginal revenue exceeds average variable cost.
d) none of the above.

93. In the short run, a competitive firm's supply curve is
    a) its average variable cost curve to the right of the marginal cost curve.
    b) its marginal cost curve above the average variable cost curve.
    c) its marginal cost curves above its average cost curve.
    d) the horizontal summation of the marginal cost curves

94. Along the long-run supply curve, all of the following can vary except
    a) the level of profits.
    b) the number of firms in the industry.
    c) input prices.
    d) the level of input usage.

95. The short-run supply curve for a competitive industry is derived by
    a) horizontally summing the marginal cost curves for each firm in the industry.
    b) horizontally summing the average variable cost curves for each firm in the industry.
    c) vertically summing the marginal cost curves for each firm in the industry.
    d) none of the above.

96. Generally, supply is
    a) more elastic in the long run than in the short run.
    b) more elastic in the short run than in the long run.
    c) more elastic the more firms in the industry.
    d) more elastic the lower the input prices.

97. Perfect competition is an industry with
    a) a few firms producing identical goods.
    b) many firms producing goods that differ somewhat.
    c) a few firms producing goods that differ somewhat in quality.
    d) many firms producing identical goods.

98. In a perfectly competitive industry, there are
    a) many buyers and many sellers.
    b) many sellers, but there might be only one or two buyers.
    c) many buyers, but there might be only one or two sellers.
    d) one firm that sets the price for the others to follow.

99. In perfect competition, the product of a single firm
    a) is sold to different customers at different prices.
    b) has many perfect complements produced by other firms.
    c) has many perfect substitutes produced by other firms.
    d) is sold under many differing brand names.

100. In perfect competition, restrictions on entry into an industry
    a) do not exist.
    b) apply to labor but not to capital.
    c) apply to both capital and labor.
    d) apply to capital but not to labor.

101. In perfect competition,
    a) there are significant restrictions on entry.
    b) each firm can influence the price of the good.
    c) there are few buyers.
    d) all firms in the market sell their product at the same price.

102. The price elasticity of demand for any particular perfectly competitive firm's output is
    a) less than 1.
    b) equal to zero.
    c) infinite.
    d) 1.

103. The demand for wheat from farm A is perfectly elastic because wheat from farm A is a(n)
    a) perfect complement to wheat from farm B.
    b) perfect substitute for wheat from farm B.
    c) normal good.
    d) inferior good.

104. In perfect competition, the elasticity of demand for the product of a single firm is
    a) 0.
    b) infinite.
    c) 1.
    d) between 0 and 1.

105. In perfect competition, the elasticity of demand for the product of a single firm is
    a) infinite, because many other firms produce identical products.
    b) zero, because many other firms produce identical products.
    c) zero, because the firm produces \a unique product.
    d) infinite, because the firm produces a unique product.

106. In perfect competition, an individual firm
    a) has a price elasticity of supply equal to one.
    b) faces unitary elasticity of demand.
    c) has a price elasticity of supply equal to infinity.
    d) faces infinitely elastic demand.

107. If Steve's Apple Orchard, Inc. is a perfectly competitive firm, the demand for Steve's apples has
    a) elasticity equal to the price of apples.
    b) unitary elasticity.
    c) infinite elasticity.
    d) zero elasticity.

108. In a perfectly competitive industry, the price elasticity of demand for the market demand is _____ and the price elasticity of demand for an individual firm's demand is _____.
    a) infinite; less than infinite
    b) infinite; infinite
    c) less than infinite; less than infinite
    d) less than infinite; infinite

109. A perfectly competitive firm's demand curve is
    a) perfectly inelastic.

b) the same as the market demand curve.
c) downward sloping.
d) the same as the firm's marginal revenue curve.

110. The market for fish is perfectly competitive. So, the price elasticity of demand for fish from a single fishery
    a) is sometimes greater than and sometimes less than the elasticity of demand for fish overall.
    b) is greater than the elasticity of demand for fish overall.
    c) is less than the elasticity of demand for fish overall.
    d) equals the elasticity of demand for fish overall.

111. In perfect competition, the price of the product is determined where the industry
    a) elasticity of supply equals the industry elasticity of demand.
    b) supply curve and industry demand curve intersect.
    c) fixed cost is zero.
    d) average variable cost equals the industry average total cost.

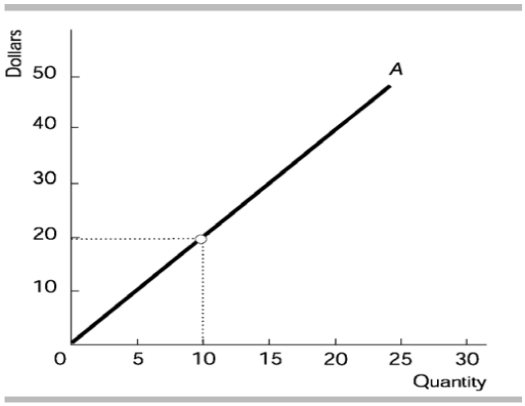
112. Economists assume that a perfectly competitive firm's objective is to maximize its
    a) revenue.
    b) economic profit.
    c) output price.
    d) quantity sold.

113. Total economic profit is
    a) total revenue minus total opportunity cost.
    b) marginal revenue minus marginal cost.
    c) total revenue divided by total cost.
    d) marginal revenue divided by marginal cost.

114. The economic profit of a perfectly competitive firm
    a) is less than its total revenue.
    b) is greater than its total revenue.
    c) equals its total revenue.

d) is less than its total revenue if its supply curve is inelastic and is greater than its total revenue if its supply curve is elastic.

115. In perfect competition, a firm that maximizes its economic profit will sell its good
    a) below the market price.
    b) above the market price.
    c) below the market price if its supply curve is inelastic and above the market price if its supply curve is elastic.
    d) at the market price.



116. The above figure shows a firm's total revenue line. The firm must be in a market with
    a) monopolistic competition.
    b) monopoly.
    c) perfect competition.
    d) oligopoly.

117. For a perfectly competitive firm, curve A in the above figure is the firm's
    a) average fixed cost curve.
    b) average variable cost curve.
    c) total revenue curve.
    d) total fixed cost curve.

118. The figure above portrays a total revenue curve for a perfectly competitive firm. Curve A is straight because the firm
    a) has perfect information.

b) wants to maximize its profits.
c) is a price taker.
d) faces constant returns to scale.

119. The figure above portrays a total revenue curve for a perfectly competitive firm. The firm's marginal revenue from selling a unit of output
    a) equals $1.00.
    b) equals $2.00.
    c) equals $0.50.
    d) cannot be determined.

120. The figure above portrays a total revenue curve for a perfectly competitive firm. The price of the product in this industry
    a) equals $1.00.
    b) equals $2.00.
    c) equals $0.50.
    d) cannot be determined.

121. In the above figure showing a perfectly competitive firm's total revenue line, the firm's marginal revenue
    a) does not change as output increases.
    b) falls as output increases.
    c) rises as output increases.
    d) cannot be determined.

Quantity	Price (¢)
5	15
6	15
7	15

122. In the above table, if the firm sells 5 units of output, its total revenue is
    a) ¢30.
    b) ¢15.
    c) ¢75.
    d) ¢90.

123. In the above table, if the quantity sold by the firm rises from 5 to 6, its marginal revenue is
    a) ¢15.
    b) ¢75.
    c) ¢90.
    d) ¢30.

124. In the above table, if the quantity sold by the firm rises from 6 to 7, its marginal revenue is
    a) ¢90.
    b) ¢30.
    c) ¢105.
    d) ¢15.

125. In perfect competition, the marginal revenue of an individual firm
    a) equals the price of the product.
    b) is positive but less than the price of the product.
    c) exceeds the price of the product.
    d) is zero.

126. In the case of a perfectly competitive firm, the
    a) firm's marginal revenue exceeds the price of the product.
    b) change in the firm's total revenue equals the price of the product multiplied by the change in quantity sold.
    c) firm's marginal revenue is less than average revenue.
    d) price of the product falls sharply when the quantity the firm sells doubles.

127. In perfect competition, the firm's marginal revenue curve
    a) cuts its demand curve from above, going from left to right.
    b) always lies below its demand curve.
    c) cuts its demand curve from below, going from left to right.
    d) is the same as its demand curve.

128. At a firm's break-even point, definitely its
    a) marginal revenue equals its average fixed cost.

b) marginal revenue equals its average variable cost.
c) total revenue equals its total opportunity cost.
d) marginal revenue exceeds its marginal cost.

129. When Nyamekye's Sweaters Inc. makes exactly zero economic profit, Nyamekye, the owner,
    a) makes an income equal to his best alternative forgone income.
    b) will boost output.
    c) will shut down in the short run.
    d) is taking a loss.

130. The break-even point is defined as occurring at an output rate at which
    a) total cost is minimized.
    b) total revenue equals total opportunity cost.
    c) economic profit is maximized.
    d) marginal revenue equals marginal cost.

Output	Total Revenue (¢)	Total Cost (¢)
0	0	25
1	30	49
2	60	69
3	90	91
4	120	117
5	150	147
6	180	180

131. In the above table, the price of the product is
    a) ¢30.
    b) ¢150.
    c) ¢147.
    d) ¢180.

132. In the above table, the firm
    a) must be in a perfectly competitive industry, because its marginal revenue is constant.

b) cannot be in a perfectly competitive industry, because its short-run economic profits are greater than zero.
c) cannot be in a perfectly competitive industry, because its long-run economic profits are greater than zero.
d) must be in a perfectly competitive industry, because its marginal cost curve eventually rises.

133. In the above table, the marginal revenue from the fourth unit of output is
a) ¢180.
b) ¢147.
c) ¢150
d) ¢30.

134. In the above table, if the firm produces 2 units of output, it will make an economic
a) loss of ¢60.
b) profit of ¢60.
c) loss of ¢9.
d) profit of ¢9

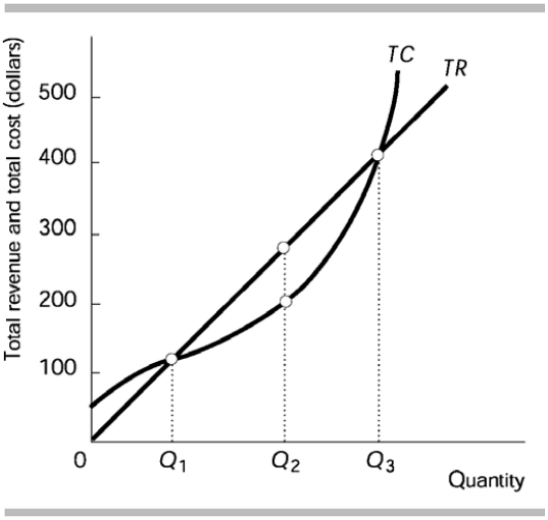
Output (balloons per hour)	Total cost (cedis per hour)
0	4
1	7
2	8
3	12.50
4	17.20
5	22
6	29

135. In the above table, the firm's total fixed cost of production is
a) ¢29.00.
b) ¢4.00.
c) ¢3.00.
d) ¢7.00.

136. In the above table, the average fixed cost at 4 units of output is
a) ¢4.80.

b) ¢4.70.
c) ¢1.00.
d) ¢4.50.

137. In the above table, the average variable cost at 2 units of output is
a) ¢4.00.
b) ¢2.00.
c) ¢1.00.
d) ¢4.80.

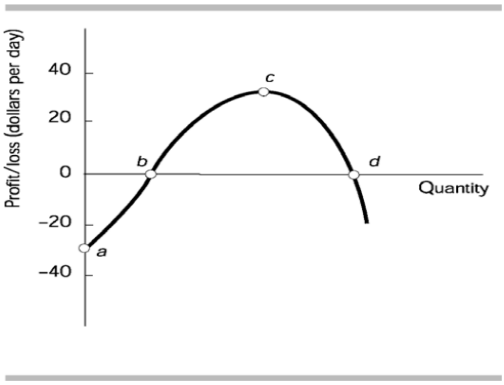


138. In the above figure, by increasing its output from Q1 to Q2, the firm
a) increases its profit.
b) increases its marginal revenue.
c) reduces its marginal revenue.
d) decreases its profit.

139. In the above figure, by increasing its output from Q2 to Q3, the firm
a) increases its marginal revenue.
b) reduces its marginal revenue.
c) decreases its profit.
d) increases its profit.

140. The above figure illustrates a firm's total revenue and total cost curves. Which one of the following statements is FALSE?
    a) At output Q1the firm makes zero economic profit.
    b) At an output above Q3the firm incurs an economic loss.
    c) Economic profit is the vertical distance between the total revenue curve and the total cost curve.
    d) At output Q2 the firm incurs an economic loss.

141. The feature of the above figure that indicates that the firm is a perfectly competitive firm is the
    a) fact that the total cost and total revenue curves are farthest apart at output is Q2.
    b) shape of the total revenue curve.
    c) fact that the total cost and total revenue curves cross twice.
    d) shape of the total cost curve.



142. In the above figure, the firm is making an economic loss at
    a) point a.
    b) points band d.
    c) points a, b,and d.
    d) point c.

143. In the above figure, the firm is breaking even at points
    a) a and d.
    b) b and d.
    c) C) c and d.

d) a and c.

144. In the above figure, when the firm produces output corresponding to point c, the firm's marginal cost
    a) is less than its marginal revenue.
    b) equals its average revenue.
    c) exceeds its marginal revenue.
    d) equals its marginal revenue.

145. For a perfectly competitive firm, in a diagram with quantity on the horizontal axis and both total revenue and total cost on the vertical axis, the firm's _____ is a straight line _____.
    a) total cost curve; through the origin
    b) total revenue curve; with zero slope
    c) total cost curve; with zero slope
    d) total revenue curve; through the origin

146. A perfectly competitive firm maximizes its profit by producing the output at which its marginal cost equals its
    a) average variable cost.
    b) marginal revenue.
    c) average total cost.
    d) average fixed cost.

147. For a firm in perfect competition, a diagram shows quantity on the horizontal axis and both the firm's marginal cost (MC) and its marginal revenue (MR) on the vertical axis. The firm's profit-maximizing quantity occurs at the point where the
    a) MC curve intersects the MR curve from above, going from left to right.
    b) slope of the MC curve is zero.
    c) MC curve intersects the MR curve from below, going from left to right.
    d) MC and MR curves are parallel.

148. A firm will expand the amount of output it produces as long as its
    a) average total revenue exceeds its average variable cost.
    b) marginal revenue exceeds its marginal cost.

c) marginal cost exceeds its marginal revenue.
d) average total revenue exceeds its average total cost.

149. A perfectly competitive firm is producing at the point where its marginal cost equals its marginal revenue. If the firm boosts its output, its total revenue will _____ and its profit will _____.
    a) fall; fall
    b) fall; rise
    c) rise; rise
    d) rise; fall

150. A perfectly competitive firm is producing at the point where its marginal cost equals its marginal revenue. If the firm boosts its output, its revenue will
    a) rise and its total variable cost will rise, but not by as much.
    b) fall but its total variable cost will rise.
    c) fall and its total variable cost will fall, but not by as much.
    d) rise and its total variable cost will rise even more.

151. A perfectly competitive firm's marginal revenue exceeds its marginal cost at its current output. To increase its profit, the firm will
    a) increase its output.
    b) raise its price.
    c) decrease its output.
    d) lower its price.

152. A perfectly competitive firm's marginal cost exceeds its marginal revenue at its current output. To increase its profit, the firm will
    a) increase its output.
    b) raise its price.
    c) lower its price.
    d) decrease its output.

153. A perfectly competitive firm is producing more than the profit-maximizing amount of its product. You can conclude that its
    a) marginal revenue is less than the price of the product.

b) total cost exceeds its total revenue.
c) average total cost exceeds the price of the product.
d) marginal cost exceeds the price of the product.

154. The costs incurred even when no output is produced are called
a) fixed costs.
b) external costs.
c) variable costs.
d) marginal costs.

155. A firm's shutdown point is the quantity and price at which the firm's total revenue just equals its
a) marginal cost.
b) total variable cost.
c) total cost.
d) total fixed cost.

156. It definitely pays a firm to shut down if the price of its product is
a) below its minimum average variable cost.
b) above its maximum variable cost.
c) above its minimum average variable cost.
d) below its minimum total cost.

157. The owners definitely will shut down a perfectly competitive firm if the price of its good falls below its minimum
a) average marginal cost.
b) wage rate.
c) average variable cost.
d) average total cost.

158. A firm that shuts down and produces no output incurs a loss equal to its
a) marginal costs.
b) total fixed costs.
c) total variable costs.
d) marginal revenue.

159. By producing less, a firm can reduce
    a) its variable costs but not its fixed costs.
    b) its fixed costs and its variable costs.
    c) its fixed costs but not its variable costs.
    d) neither its variable costs nor its fixed costs.

160. The shutdown point occurs at the level of output for which the _____ is at its minimum.
    a) marginal cost
    b) total cost
    c) average fixed cost
    d) average variable cost

161. A competitive firm is more likely to shut down during a recession, when the demand for its product declines, than during an economic expansion, because during the recession it might be unable to cover its
    a) external costs.
    b) depreciation due to machinery becoming obsolete.
    c) variable costs.
    d) fixed costs.

162. If the price of its product falls below the minimum point on the AVC curve, the best a perfectly competitive firm can do is to
    a) shut down and incur a loss equal to its total variable cost.
    b) shut down and incur a loss equal to its total fixed cost.
    c) keep producing and incur a loss equal to its total variable cost.
    d) keep producing and incur a loss equal to its total fixed cost.

163. If the price of its product just equals the average variable cost of production for a competitive firm,
    a) total revenue equals total variable cost and the firm's loss equals total fixed cost.
    b) total revenue equals total fixed cost and the firm's loss equals total variable cost.
    c) total variable cost equals total fixed cost.
    d) total fixed cost is zero.

Output (tons of rice per year)	Total cost (¢ per ton)
0	¢1000
1	¢1200
2	¢1600
3	¢2200
4	¢3000
5	¢4000

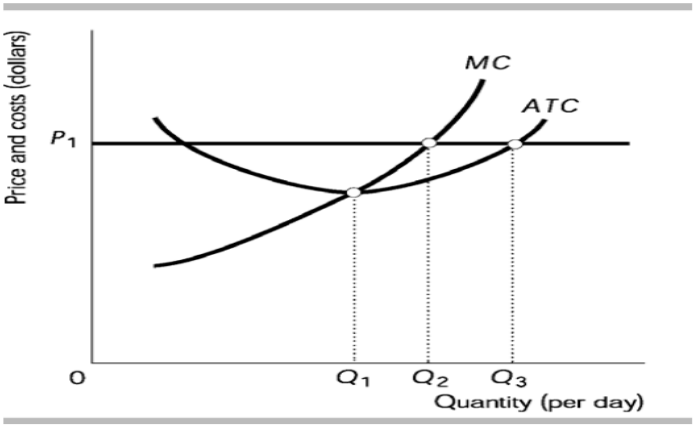
164. Based on the table above which shows Serwa's costs, if rice sells for ¢600 a ton, Serwa's profit-maximizing output is
    a) less than one ton.
    b) between one and two tons.
    c) between two and three tons.
    d) between three and four tons.

165. Based on the table above which shows Serwa's costs, if rice sells for ¢600 a ton, Serwa will
    a) stay open because he earns an economic profit.
    b) stay open because the price is above his minimum average variable cost.
    c) shut down because the price is below his minimum average variable cost.
    d) shut down because he incurs an economic loss.

166. Based on the table above which shows Serwa's costs, if rice sells for ¢600 a ton, Serwa
    a) earns an economic profit, but should shut down in the short run.
    b) incurs an economic loss, but should stay open in the short run.
    c) incurs an economic loss and should shut down in the short run.
    d) earns an economic profit and should stay open in the short run.

167. Based on the table above which shows Serwa's costs, if Serwa shuts down in the short run, his total cost will be
    a) ¢1,200.
    b) ¢4,000.
    c) ¢1,000.
    d) ¢0.

168. Based on the table above which shows Serwa's costs, if Serwa shuts down in the short run, his economic loss will be
    a) ¢1,000.
    b) ¢1,200.
    c) ¢0.
    d) ¢4,000.



169. In the above figure, if the price is P_1, the firm will produce
    a) where ATC equals P_1.
    b) where MC equals P_1.
    c) nothing.
    d) where MC equals ATC.

170. In the above figure, if the price is P_1, the firm maximizes its profit by producing
    a) where ATC equals P_1.
    b) nothing.
    c) where MC equals P_1.
    d) where MC equals ATC.

171. In the above figure, if the firm increases its output from Q_1 to Q_2, it will
    a) increase its profit.
    b) reduce its marginal revenue.
    c) decrease its profit.
    d) increase its marginal revenue.

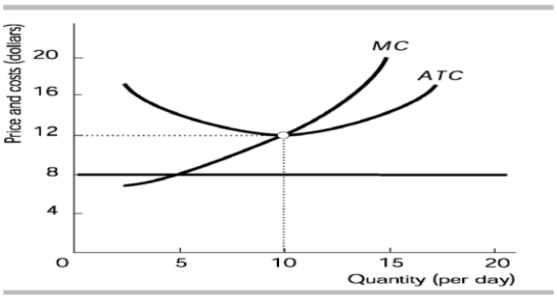
172. In the above figure, if the firm increases its output from Q_2 to Q_1, it will
    a) reduce its marginal revenue.
    b) increase its profit.
    c) increase its marginal revenue.
    d) decrease its profit.

173. In the above figure, if the price is P_1, the firm is
    a) incurring an economic loss.
    b) shut down.
    c) breaking even.
    d) making an economic profit.

174. In the above figure, if the firm produced Q1, the firm's economic profit is _____ than if it produced Q_2 and _____ than if it produced Q_3.
    a) more; less
    b) less; more
    c) more; more
    d) less; less

175. In the above figure, if the firm produced Q_3,the firm's economic profit is _____ than if it produced $Q_1$and _____ than if it produced Q_2.
    a) more; less
    b) more; more
    c) less; more
    d) less; less

176. A perfectly competitive firm will have an economic profit of zero if, at its profit-maximizing output, its marginal revenue equals its
    a) marginal cost.
    b) average variable cost.
    c) average total cost.
    d) average fixed cost.



177. The figure above shows short-run cost curves for a perfectly competitive firm. If the price of the product is $8, in the short run the firm will
    a) incur an economic loss.
    b) earn an economic profit.
    c) earn a normal profit.
    d) None of the above answers is correct because more information is needed to determine the firm's profit or loss.

178. The figure above shows short-run cost curves for a perfectly competitive firm. If the price of the product is $8 and the firm does not shut down, the firm's output in the short run
    a) will be 0.
    b) will be 10 or higher.
    c) will be between 0 and 10.
    d) cannot be determined without more information.

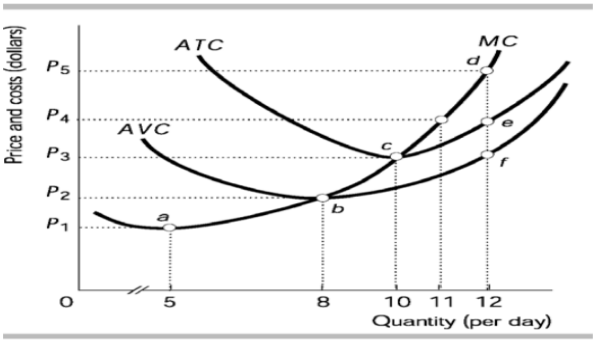
179. The short-run supply curve for a perfectly competitive firm is its
    a) marginal cost curve above the horizontal axis.
    b) average cost curve above the horizontal axis.
    c) average cost curve above its shutdown point.
    d) marginal cost curve above its shutdown point

180. The short-run supply curve for a perfectly competitive firm is its marginal cost curve
    a) below its shutdown point.
    b) above the horizontal axis.
    c) everywhere.
    d) above its shutdown point.

181. The short-run supply curve for a perfectly competitive firm is its marginal cost curve above the minimum point on the
    a) average variable cost curve.
    b) demand curve.
    c) average total cost curve.
    d) average fixed cost curve.

182. A perfectly competitive firm's supply curve is made up of its marginal cost curve at all points above its minimum
    a) average variable cost curve.
    b) average total cost curve.
    c) average fixed cost curve.
    d) price.

183. The firm's supply curve is its
    a) marginal cost curve, at all points above the minimum average fixed cost curve.
    b) marginal revenue curve, at all points above the minimum average total cost curve.
    c) marginal cost curve, at all points above the minimum average variable cost curve.
    d) marginal revenue curve, at all points above the minimum average revenue curve.



184. The figure above represents a firm in a perfectly competitive market. The firm will shut down if price falls below
    a) P_2.
    b) P_1.
    c) P_3.

d) P_4.

185. The figure above represents a firm in a perfectly competitive market. If the firm does not shut down, the least amount of output that it will produce is
    a) 10 units.
    b) 8 units.
    c) 5 units.
    d) less than 5 units.

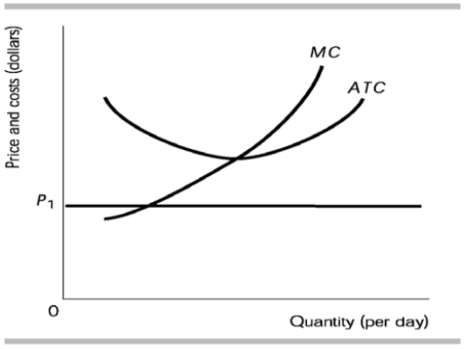
186. The figure above represents a firm in a perfectly competitive market. If the price rises from P_3 to P_4 then output will increase by
    a) 3 units.
    b) 0 units.
    c) 1 unit.
    d) 2 units.

187. The figure above represents a firm in a perfectly competitive market. The firm's supply curve is the curved line linking
    a) point c to point e and continuing on past point e along the ATC curve.
    b) point b to point f and stopping at point f.
    c) point a to point c and stopping at point c.
    d) point b to point d and continuing on past point d along the MC curve.

188. In a perfectly competitive industry, the industry supply curve is the sum of the
    a) average total cost curves of all the individual firms.
    b) supply curves of all the individual firms.
    c) average variable cost curves of all the individual firms.
    d) average fixed cost curves of all the individual firms.

189. If there are 1,000 pineapple farms, all perfectly competitive, an increase in the price of fertilizer used for growing pineapple will
    a) have no effect on the total quantity of pineapples supplied, because each farm's supply curve is a vertical line.
    b) reduce the total quantity of pineapples supplied, because each farm's supply curve is a horizontal line and will shift upward.
    c) have no effect on the total quantity of pineapples supplied, because no farm has enough market power to raise the price.

d) decrease the total quantity of pineapples supplied, because each farm's supply curve shifts leftward.



190. In the above figure, if the price is P_1, the firm is
    a) earning a normal profit.
    b) incurring an economic loss.
    c) earning enough revenue to pay all of its opportunity costs.
    d) making an economic profit.

191. Suppose the cost curves in the above figure apply to all firms in the industry. Then, if the initial price is P_1, in the long run the market
    a) supply will decrease.
    b) supply will increase.
    c) demand will decrease.
    d) demand will increase.

192. Suppose the cost curves in the above figure apply to all firms in the industry. If the initial price is P_1, firms are
    a) making an economic profit and some firms will leave the industry.
    b) incurring an economic loss and some firms will leave the industry.
    c) making an economic profit and some firms will enter the industry.
    d) incurring an economic loss and some firms will enter the industry.

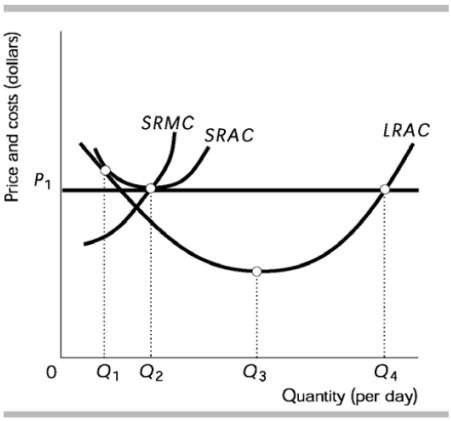
193. New reports indicate that eating carrots helps people remain healthy. The news shifts the demand curve for carrots rightward. In response, new farms enter the carrots industry. During the period in which the new farms are entering, the price of a carrot _____ and the profit of each existing firm _____.

a) falls; rises
b) rises; falls
c) rises; rises
d) falls; falls

194. If firms exit an industry, the
    a) profits of the remaining firms decrease.
    b) industry supply curve shifts leftward.
    c) price of the product falls.
    d) output of the industry increases.

195. As firms leave an industry because they are incurring an economic loss, the economic loss of each remaining firm
    a) increases and the price of the product rises.
    b) decreases and the price of the product falls.
    c) decreases and the price of the product rises.
    d) increases and the price of the product falls.

196. In a perfectly competitive industry, a permanent decrease in demand initially brings a lower price, economic
    a) profit, and entry into the industry.
    b) profit, and exit from the industry.
    c) loss, and entry into the industry.
    d) loss, and exit from the industry.



197. In the above figure, the firm's initial average total cost curve is SRAC with an initial marginal cost curve of SRMC. The price of the product is P_1. In the short run the firm will produce output equal to the amount
    a) Q_2.
    b) Q_1.
    c) Q_4.
    d) Q_3.

198. In the above figure, the firm's initial average total cost curve is SRAC. If the price is P_1, in the long run the firm will
    a) retain the same plant size.
    b) expand its plant size.
    c) exit the industry.
    d) reduce its plant size.

199. In the above figure when the firm has reached its long-run equilibrium position, it will produce output equal to the amount

    a) Q_4.
    b) Q_3.
    c) Q_2.
    d) Q_1.

200. If the cost curves shown in the above figure apply to all firms in the industry and the initial price is P_1, in the long run the price will be
    a) greater than P_1.
    b) zero.
    c) equal to P_1.
    d) less than P_1.

201. In a perfectly competitive industry, a permanent increase in demand initially brings a higher price, economic
    a) profit, and entry into the industry.
    b) profit, and exit from the industry.
    c) loss, and entry into the industry.
    d) loss, and exit from the industry.

202. In the long run, fixed costs are
    a) zero and variable costs are zero.
    b) zero and variable costs are positive.
    c) positive and variable costs are positive.
    d) positive and variable costs are zero.

203. In the long run, the economic profits of a firm in a perfectly competitive industry
    a) will equal zero.
    b) will be below zero.
    c) will be above zero.
    d) can be above, below, or equal to zero.

204. Assuming long-run external diseconomies exist, when demand increases in a perfectly competitive market, in the long run, the price of the product
    a) falls below the initial price (before the increase in demand)and the quantity decreases.
    b) equals the initial price (before the increase in demand) and the quantity increases.
    c) equals the initial price (before the increase in demand) and the quantity decreases.
    d) rises above the initial price (before the increase in demand) and the quantity increases.

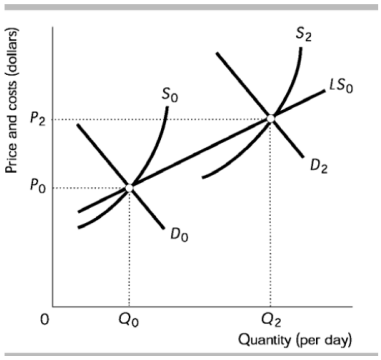
205. Assuming long-run external economies exist, when demand increases in a perfectly competitive market, in the long run, the price of the product
    a) rises above the initial price (before the increase in demand)and the quantity increases.
    b) equals the initial price (before the increase in demand) and the quantity increases.
    c) falls below the initial price (before the increase in demand) and the quantity increases.
    d) equals the initial price (before the increase in demand) and the quantity decreases.

206. In a perfectly competitive market, if there are no external economies or diseconomies, an increase in demand
    a) raises average cost in the long run.
    b) lowers the price in the long run.
    c) leaves the price the same in the long run.
    d) raises the price in the long run.

207. If there are external economies, as demand increases,
    a) output decreases in the long run.
    b) the price falls in the long run.
    c) the price rises in the long run.
    d) firms exit from the industry in the long run.

208. External economies are factors beyond the control of an individual firm that _____ as the total industry output increases.
    a) raise its marginal revenue
    b) raise its costs
    c) lower its costs
    d) lower its profit

209. A long-run supply curve for a perfectly competitive industry can slope upward because of
    a) external economies.
    b) economic profit.
    c) external diseconomies.
    d) diminishing marginal returns.



210. In the above figure, the industry short-run supply curve shifts from S_0 to S_2 as the
    a) wage rate falls.
    b) number of firms increases.
    c) external economies rise.
    d) number of firms decreases.

211. The curve LS_O in the above figure is the long-run supply curve of a perfectly competitive industry. As the demand curve shifts rightward, the industry exhibits
    a) external economies.
    b) neither external economies nor external diseconomies.
    c) external diseconomies.
    d) technological advancement.

212. Congestion of airports and airspace causes the airline industry to experience external
    a) diseconomies and have a long-run supply curve with positive slope.
    b) economies and have a long-run supply curve with positive slope.
    c) diseconomies and have a long-run supply curve with negative slope.
    d) economies and have a long-run supply curve with negative slope.

213. Assuming long-run external economies exist, when demand increases in a perfectly competitive market, in the long run the average total cost curve for a typical firm
    a) shifts upward.
    b) shifts downward.
    c) is no longer U-shaped.
    d) stays the same.

214. If the slope of the long-run supply curve for a perfectly competitive industry is positive, the industry experiences
    a) internal economies.
    b) external economies.
    c) external diseconomies.
    d) internal diseconomies.

215. If the slope of the long-run supply curve for a perfectly competitive industry is negative, the industry experiences
    a) external economies.
    b) external diseconomies.
    c) internal diseconomies.
    d) internal economies.

216. The gains from trade that go to households are called

a) consumer surplus.
b) income.
c) profits.
d) producer surplus.

217. Among the obstacles to the efficient allocation of resources are all of the following EXCEPT
    a) competition.
    b) monopoly.
    c) external benefits.
    d) external costs.

218. An example of an external cost is
    a) the damage created by a tornado.
    b) pollution.
    c) the price that a consumer pays for a new car.
    d) the price that a firm pays for a consultant's advice.

219. Which of the following characterizes a perfectly competitive industry?
    a) Each firm produces a product slightly different from that of its competitors.
    b) The industry demand curve is vertical.
    c) The demand for each individual firm is perfectly elastic.
    d) Each firm sets a different price.

220. Paul runs a shop that sells printers. Paul is a perfect competitor and can sell each printer for a price of ¢300. The marginal cost of selling one printer a day is ¢200; the marginal cost of selling a second printer is ¢250; and the marginal cost of selling a third printer is ¢350. To maximize his profit, Paul should sell
    a) two printers a day.
    b) more than three printers a day.
    c) three printers a day.
    d) one printer a day.

221. Because of a decrease in the wage rate it must pay, a perfectly competitive firm's marginal costs decrease but its demand curve stays the same. As a result, the firm

a) decreases the amount of output it produces and lowers its price.
b) increases the amount of output it produces and lowers it price.
c) increases the amount of output it produces and does not change its price.
d) decreases the amount of output it produces and raises its price.

222. For prices above the minimum average variable cost, a perfectly competitive firm's supply curve is
    a) the same as its average variable cost curve.
    b) horizontal at the market price.
    c) the same as its marginal cost curve.
    d) vertical at zero output.

223. A perfectly competitive firm is definitely earning an economic profit when
    a) P> ATC.
    b) P> AVC.
    c) P< ATC.
    d) MR< MC.

224. In the short run, a perfectly competitive firm can
    a) earn a normal profit.
    b) incur an economic loss.
    c) earn an economic profit.
    d) earn an economic profit, earn a normal profit, or incur an economic loss.

225. Suppose firms in a perfectly competitive industry are suffering an economic loss. Over time,
    a) some firms leave the industry, so the price falls and the economic loss decreases.
    b) some firms leave the industry, so the price rises and the economic loss decreases.
    c) other firms enter the industry, so the price falls and the economic loss decreases.
    d) other firms enter the industry, so the price rises and the economic loss decreases.

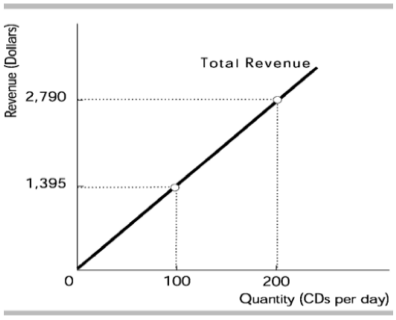
226. As firms enter a perfectly competitive industry,
    a) the price falls and the existing firms' economic profits do not change.
    b) the price falls and the existing firms' economic profits decrease.
    c) the price falls and the existing firms' economic losses do not change.
    d) the price rises and the existing firms' economic profits decrease.

227. In the long run, a perfectly competitive firm can
    a) earn an economic profit, earn a normal profit, or incur an economic loss.
    b) earn an economic profit.
    c) incur an economic loss.
    d) earn a normal profit.

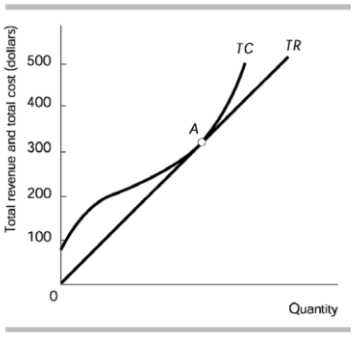
228. The demand for a product produced in a perfectly competitive market permanently increases. In the short run the price
    a) rises and each firm produces less output.
    b) does not change because each firm produces more output.
    c) rises and each firm produces more output.
    d) does not change as new firms enter the industry.

229. If there are external diseconomies in an industry, in the long run, after a permanent increase in demand, the price
    a) will be the same as it was initially before the increase in demand.
    b) will be lower than it was initially before the increase in demand.
    c) maybe higher or lower than it was initially before the increase in demand, depending on whether or not the firms are earning an economic profit.
    d) will be higher than it was initially before the increase in demand.

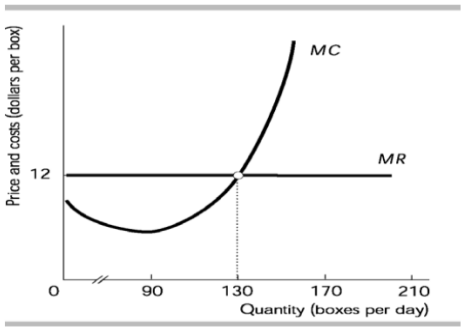
230. To which of the following situations does the term "external diseconomies" apply?
    a) Increases in an industry's output reduce the costs of the firms in an industry.
    b) The firm's ATC curve slopes upward as the firm produces more output.
    c) The firm's MC curve falls as more output is produced.
    d) Increases in an industry's output raise the costs of the firms in an industry.



231. The above figure shows the total revenue curve for Dizzy Discs. The demand curve for CD's sold by Dizzy Discs
    a) has positive slope.
    b) has negative slope.
    c) is horizontal.
    d) is vertical.

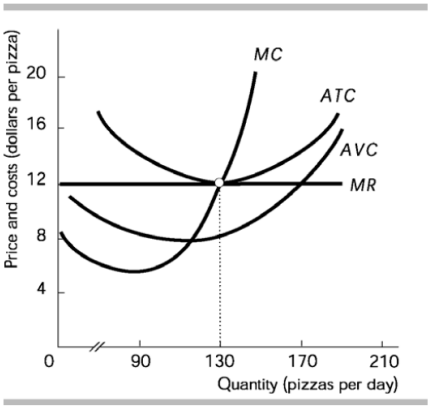


232. In the figure above, a firm is operating at point A on the graph. At point A, the firm's average cost curve
    a) is horizontal.
    b) has negative slope.
    c) is vertical.
    d) has positive slope.



233. Carol's Candies is producing 150 boxes of candy a day. Carol's marginal revenue and marginal cost curves are shown in the figure above. To increase her profit, Carol should
    a) decrease output to increase profit.
    b) maintain the current level of output to maximize profit.
    c) increase output to increase profit.

d) Not enough information is given to determine if Carol should increase, decrease, or not change her level of output.



234. Joe's Shiny Shoes is a firm that operates in a perfectly competitive market. The figure above shows Joe's cost and revenue curves. If the number of firms in the shoe market decreases, Joe will
    a) decrease his production.
    b) have an MR curve with positive slope.
    c) have an MR curve with negative slope.
    d) increase his production.

235. Unregulated monopolies
    a) cannot change the market quantity.
    b) can influence the market quantity and price.
    c) cannot incorporate.
    d) take the market price as given.

236. The following are key features of a monopoly EXCEPT
    a) diseconomies of scale.
    b) no close substitutes.
    c) influence over price.
    d) barriers to entry.

237. Which of the following statements about a monopoly is FALSE?
    a) A monopoly is the only supplier of the good.

b) Monopolies have no barriers to entry or exit.
c) The good produced by a monopoly has no close substitutes.
d) None of the above; that is, all of the above answers are true statements about a monopoly.

238. Which of the following is LEAST likely to be a monopoly?
a) the sole owner of an occupational license
b) a pharmaceutical company with a patent on a drug
c) a store in a large shopping mall
d) the holder of a public franchise

239. A public franchise is
a) an exclusive right granted to an inventor of a product.
b) a government issued license required to practice a profession.
c) a unique source of raw materials.
d) an exclusive right granted to a firm to supply a good or service.

240. Public franchises create monopolies by restricting
a) entry.
b) demand.
c) prices.
d) profit.

241. A patent grants
a) a guarantee of quality to consumers.
b) an exclusive right to an inventor of a product.
c) the right to practice a profession.
d) control over a unique source or supply of raw materials.

242. Patents create monopolies by restricting
a) prices.
b) profit.
c) entry.
d) demand.

243. Patents are _____ barriers to entry and public franchises are _____ barriers to entry.
    a) legal; legal
    b) legal; natural
    c) natural; natural
    d) natural; legal

244. A defining characteristic of a natural monopoly is that
    a) it exists because of legal barriers to entry.
    b) it has no close substitutes.
    c) its average total cost curve slopes downward as it intersects the demand curve.
    d) its demand curve slopes downward.

245. An industry in which one firm can supply the entire market at a lower price than two or more firms can is called a
    a) legal monopoly.
    b) single-price monopoly.
    c) natural monopoly.
    d) price-discriminating monopoly.

246. Which of the following is true of a natural monopoly?
    a) The firm can supply the entire market at a lower cost than could two or more firms.
    b) Its average total cost curve slopes upward as it intersects the demand curve.
    c) The firm is not protected by any barrier to entry.
    d) Economies of scale exist to only a very low level of output.

247. A market in which competition and entry are restricted by the granting of a public franchise, government license, patent, or copyright is called a
    a) price-discriminating monopoly.
    b) single-price monopoly.
    c) natural monopoly.
    d) legal monopoly.

248. A single-price monopoly charges the same price
    a) even if the demand curve shifts.
    b) to all customers.
    c) even if its cost curves shift.
    d) and the price equals the firm's marginal revenue.

249. All of the following are examples of price discrimination EXCEPT
    a) lower ticket prices for matinee performances.
    b) buy-one-get-one-free offers.
    c) "early bird specials" at a restaurant.
    d) "buy now, pay later" payment options.

250. Total revenue equals
    a) total cost minus profit.
    b) price times quantity sold.
    c) marginal revenue times quantity sold.
    d) the area between the demand curve and the marginal revenue curve.

251. For a monopoly, the industry demand curve is the firm's
    a) profit function.
    b) marginal revenue curve.
    c) supply curve.
    d) demand curve.

252. Monopolists
    a) face downward sloping demand curves.
    b) are price takers.
    c) have no short-run fixed costs.
    d) maximize revenue, not profits.

253. The marginal revenue curve for a single-price monopoly
    a) lies below its demand curve.
    b) is horizontal.
    c) lies above its demand curve.

d) coincides with its demand curve.

254. For a single-price monopoly, marginal revenue is _____ when demand is elastic and is _____ when demand is inelastic.
    a) negative; positive
    b) positive; positive
    c) positive; negative
    d) negative; negative

255. If the price elasticity of demand is greater than 1, a monopoly's
    a) marginal revenue is zero.
    b) total revenue decreases when the firm lowers its price.
    c) marginal revenue is negative.
    d) total revenue increases when the firm lowers its price.

256. If the price elasticity of demand is less than 1, a monopoly's
    a) marginal revenue is undefined.
    b) total revenue decreases when the firm lowers its price.
    c) total revenue increases when the firm lowers its price.
    d) marginal revenue is zero.

257. If the demand for its product is elastic, a monopoly's
    a) total revenue is unchanged when the firm lowers its price.
    b) total revenue decreases when the firm lowers its price.
    c) marginal revenue is zero.
    d) marginal revenue is positive.

258. If the demand for its product is inelastic, a monopoly's
    a) marginal revenue is negative.
    b) total revenue is unchanged when the firm lowers its price.
    c) total revenue increases when the firm lowers its price.
    d) marginal revenue is equal to zero.

259. A monopoly firm expands its output and lowers its price. The firm finds that its total revenue falls. Hence, the firm is producing in the

a) inelastic range of its supply curve.
b) elastic range of its supply curve.
c) elastic range of its demand curve.
d) inelastic range of its demand curve.

Use the table below to answer the next two (2) questions.

Units of Output	Total Fixed Cost (¢	Total Variable Cost (¢)
1	1,000	1,200
2	1,000	2,400
3	1,000	3,600
4	1,000	5,000
5	1,000	6,600

260. What is the average total cost at an output level of four units?

a) ¢1,200
b) ¢1,400
c) ¢1,500
d) ¢2,000

261. What is the marginal cost of producing the third unit of output?

a) ¢1,200
b) ¢1,400
c) ¢1,500
d) ¢2,000

Use the information in the table below to answer the next question.

Price ¢	Quantity demanded
8.00	2,000
7.00	4,000
6.00	6,000
5.00	8,000
4.00	10,000
3.00	12,000

262. If the price of the good is cut from ¢4.00 to ¢3.00
a) Total revenue will increase
b) Total revenue will remain constant

c) We observe that demand is elastic in this range
d) We observe that demand is unit elastic in this range
e) We observe that demand is inelastic in this range

263. When average total cost rises from $10 to $30 as total production rises from 100 to 300 units, average variable cost
a) cannot be calculated.
b) equals $10.
c) equals $20.
d) equals $30.

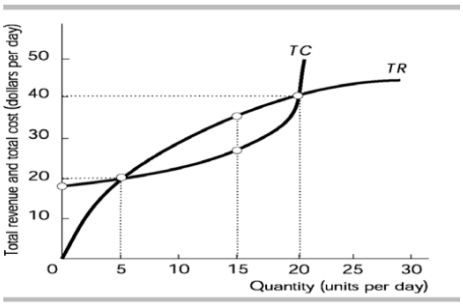
264. Which of the following is a short-run adjustment?
a) Toyota builds an automobile plant in Ghana.
b) Faced with increasing enrolment, University of Ghana builds a new School of Economics building.
c) Because of staggering losses, three insurance companies exit the industry.
d) Stanbic Bank hires two new tellers to meet increased demand for customer services.
e) Shaveco enters the razor blade market with a new product, produced in the U.S.

265. Patents stimulate investment
a) by giving inventors the incentive to incur the initial costs of developing new products.
b) by giving tax breaks to inventors.
c) by guaranteeing a profit from new products.
d) by lowering interest rates.
e) through direct payments from government to cover the initial costs of research and development.

266. The long-run average cost curve is the locus of
a) the least-cost segments of the short-run average total cost curves for each output level.
b) the least-cost segments of the short-run average total cost curves for each output level only where there are diseconomies of scale.
c) the least-cost segments of the short-run average total cost curves for each output level only where there are economies of scale.
d) the least-cost segments of the short-run average total cost curves for each output level only where there are constant average costs.
e) the minimum points of the short-run average total cost curves

267. An unregulated monopoly will
    a) produce in the elastic range of its demand curve.
    b) flood the market with goods to deter entry.
    c) produce only where marginal revenue is zero.
    d) produce in the inelastic range of its demand curve.

268. An unregulated monopoly finds that its marginal cost exceeds its marginal revenue. In order to increase its profit, the firm will
    a) lower its price and increase its output.
    b) raise its price and increase its output.
    c) raise its price and decrease its output.
    d) continue to produce this level of output because any change will lower its profit.



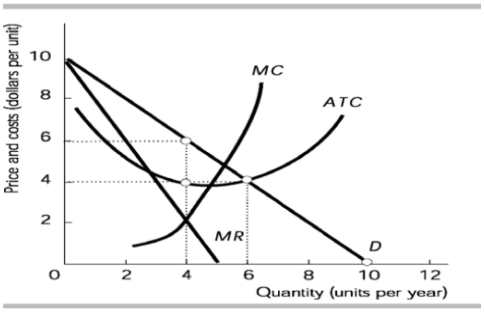
269. The figure above shows a monopoly's total revenue and total cost curves. The monopoly's economic profit is positive if it produces between
    a) 0 and 20 units.
    b) 5 and 20 units.
    c) 0 and 15 units.
    d) 0 and 5 units.

270. The figure above shows a monopoly's total revenue and total cost curves. The monopoly's economic profit is zero if it produces
    a) 15 units of output.
    b) 5 or 20 units of output.
    c) 0 units of output.
    d) none of the above

271. The figure above shows a monopoly's total revenue and total cost curves. The monopoly's economic profit is maximized when it produces
    a) 5 units of output.
    b) 20 units of output.
    c) 0 units of output.
    d) 15 units of output.

272. The figure above shows a monopoly's total revenue and total cost curves. The monopoly's marginal revenue equals its marginal cost when it produces
    a) 5 units of output.
    b) 15 units of output.
    c) 20 units of output.
    d) 0 units of output.

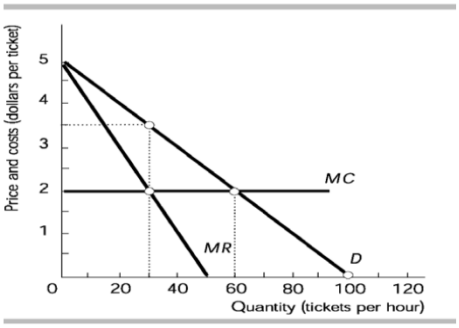
273. The monopoly with the TR and TC curves shown in the figure above will produce
    a) 5 units of output.
    b) 20 units of output.
    c) 15 units of output.
    d) 0 units of output.



274. For the unregulated, single-price monopoly shown in the figure above, when its profit is maximized, output will be
    a) 4 units per year and the price will be $6.
    b) 6 units per year and the price will be $4.
    c) 4 units per year and the price will be $4.
    d) None of the above answers is correct.

275. The unregulated, single-price monopoly shown in the figure above will produce where its demand
    a) equals its ATC curve.
    b) is inelastic.
    c) is elastic.
    d) equals its MC curve.

276. The unregulated, single-price monopoly shown in the figure above has a total economic profit of
    a) $4.
    b) $16.
    c) $24.
    d) $8.



277. The unregulated, single-price monopoly shown in the figure above will sell
    a) 50 tickets.
    b) 30 tickets.
    c) less than 30 tickets.
    d) 100 tickets.

278. An unregulated, single-price monopoly is shown in the figure above. If fixed cost is $20, the monopoly's total costs when it is maximizing its profit will be
    a) $30.
    b) $40.
    c) $140.
    d) $80

279. An unregulated, single-price monopoly is shown in the figure above. If fixed cost is $20, the monopoly's total economic profit when it is maximizing its profit will be
    a) $0.
    b) $50.
    c) negative.
    d) $25.

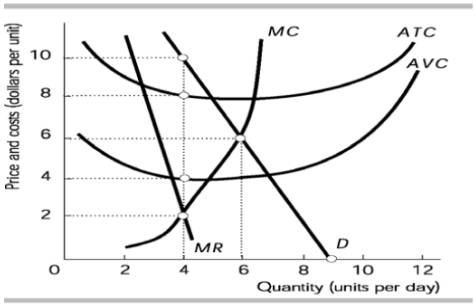
280. The monopoly illustrated in the figure above is unregulated and charges a single price. The deadweight loss created by the monopoly is
    a) $90.00.
    b) $0.
    c) $22.50.
    d) $45.00.

281. Unregulated monopolies can often earn an economic profit in the long run because
    a) they have high costs.
    b) barriers to entry prevent competing firms from entering the market.
    c) they receive government subsidies.
    d) the risks of running a monopoly are high.

282. Compared to a single-price monopoly, a perfectly competitive industry produces
    a) more output and has a higher price.
    b) more output and has a lower price.
    c) less output and has a higher price.
    d) less output and has a lower price

283. Which of the following statements is true?
    a) A perfectly competitive industry produces more output and charges the same price as a single-price monopoly.
    b) A perfectly competitive industry produces less output but charges a lower price than a single-price monopoly.
    c) A perfectly competitive industry produces less output and charges the same price as a single-price monopoly.
    d) A perfectly competitive industry produces more output and charges a lower price than a single-price monopoly.

284. The fundamental reason a single-price monopoly creates a deadweight loss is that it
    a) restricts output.
    b) raises variable cost.
    c) raises fixed cost.
    d) reduces the elasticity of demand.



285. The unregulated, single-price monopolist illustrated in the figure above has a total revenue of
    a) $8.00 per day.
    b) $36.00 per day.
    c) $16.00 per day.
    d) $40.00 per day.

286. The unregulated, single-price monopolist illustrated in the figure above has a total cost of
    a) $16.00 per day.
    b) $40.00 per day.
    c) $32.00 per day.
    d) $8.00 per day.

287. The unregulated, single-price monopolist illustrated in the figure above earns an economic profit of
    a) $8.00 per day.
    b) zero.
    c) $10.00 per day.
    d) $40.00 per day.

288. The unregulated, single-price monopolist illustrated in the figure above will produce

a) 6 units per day.
b) 9 units per day.
c) 0 units per day.
d) 4 units per day.

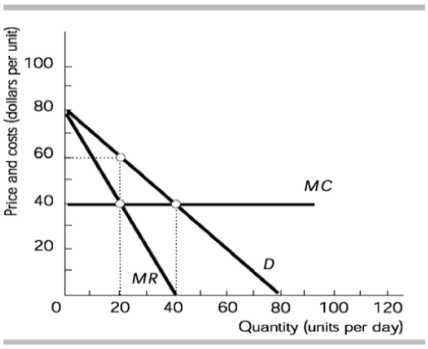
289. In the figure above, compared to a perfectly competitive industry with the same costs, a single-price, unregulated monopoly will decrease production by
    a) 2 units per day.
    b) 4 units per day.
    c) 6 units per day.
    d) zero.

290. The unregulated, single-price monopolist illustrated in the figure above will set a price of
    a) $6.00 per unit.
    b) $8.00 per unit.
    c) $10.00 per unit.
    d) $2.00 per unit.

291. In the figure above, compared to a perfectly competitive industry with the same costs, a single-price, unregulated monopoly will raise the price by
    a) $8.00 per unit.
    b) $6.00 per unit.
    c) $4.00 per unit.
    d) $2.00 per unit.

292. In the figure above, the deadweight loss created if the industry changes from perfectly competitive to a single-price, unregulated monopoly is
    a) zero.
    b) $36.00 per day.
    c) $8.00 per day.
    d) $24.00 per day.

293. In the figure above, the redistribution from the consumers to the producer if the firm is a single-price, unregulated monopoly rather than a perfectly competitive industry is
    a) $16.00 per day.
    b) $32.00 per day.
    c) $8.00 per day.
    d) zero.



294. In the figure above, the single-price, unregulated monopoly produces
    a) less than 20 units per day.
    b) 40 or more units per day.
    c) 20 units per day.
    d) between 20 and 40 units per day.

295. If the industry in the above figure was perfectly competitive, the level of output would
    a) exceed the single-price monopoly level of output by20 units.
    b) be less than the single-price monopoly level of output.
    c) be the same as the single-price monopoly level of output.
    d) exceed the single-price monopoly level of output by 60 units.

296. In the figure above, the efficient amount of output is
    a) 40 units.
    b) 60 units.
    c) 20 units.
    d) 80 units.

297. The output produced by the single-price, unregulated monopoly in the above figure is
    a) efficient because marginal costs equals marginal revenue.
    b) efficient because profit is maximized.
    c) inefficient because too little is produced.
    d) inefficient because too much is produced.

298. In the figure above, the single-price, unregulated monopoly sets a price of
    a) $40 per unit.
    b) $60 per unit.
    c) $80 per unit.
    d) $0 per unit.

299. Consumer surplus is
    a) equal to the price minus the marginal cost.
    b) less in the case of a single-price monopoly than in the case of a perfectly competitive industry.
    c) zero for a single-price monopolist.
    d) positive in the case of a monopolist practicing perfect price discrimination.

300. In comparison with a perfect competition, a single-price monopolist with the same costs
    a) generates a larger consumer surplus and a larger economic profit.
    b) generates a smaller consumer surplus but a larger economic profit.
    c) generates a larger consumer surplus and a smaller economic profit.
    d) generates a smaller consumer surplus and a smaller economic profit.

301. Compared to a competitive industry, a monopoly transfers
    a) consumer surplus to producers.
    b) producer surplus to consumers.
    c) deadweight loss away from producers to consumers.
    d) deadweight loss away from consumers to producers.

302. Any attempt to capture a consumer surplus, a producer surplus, or an economic profit is called

a) efficiency gain.
b) profit-maximizing.
c) rent-seeking.
d) price discriminating.

303. Efforts by a firm to obtain a monopoly
a) are called price taking.
b) are called price discrimination.
c) raise consumer surplus.
d) are called rent seeking.

304. Activity aimed at creating artificial barriers to entry to a particular market
a) improves competition.
b) is rent seeking.
c) has no social cost.
d) improves the economy's efficiency.

305. Rent seeking is devoted to the creation of
a) more elastic demand.
b) monopolies.
c) human capital.
d) competitive industries.

306. Rent seeking through lobbying
a) results in perfectly competitive industries.
b) uses up resources.
c) results in perfect price discrimination.
d) reduces deadweight loss.

307. The value of resources devoted to rent seeking will
a) reduce consumer surplus.
b) equal the monopoly's economic profits.
c) raise output to an efficient level.
d) reduce deadweight loss.

308. Price discrimination
    a) is more likely for services than for goods that can be stored.
    b) is common in perfectly competitive markets.
    c) is illegal because it always violates antitrust laws.
    d) works only if all groups of demanders have the same price elasticity of demand for the product.

309. A price discriminating monopolist charges lower prices to customers with
    a) higher average willingness-to-pay.
    b) lower average willingness-to-pay.
    c) lower supply elasticities.
    d) higher supply elasticities.

310. Monopolists are able to practice price discrimination because
    a) they have constant marginal cost.
    b) of differing price elasticities of supply.
    c) they have constant average cost.
    d) of differing average willingness-to-pay among consumers.

311. The more perfectly a monopoly can price discriminate, the
    a) smaller its output and the higher its profits.
    b) larger its output and the higher its profits.
    c) larger its output and the lower its profits.
    d) smaller its output and the lower its profits.

312. Which of the following occurs with both perfectly price discriminating and single-price monopolies?
    a) The level of output is inefficient.
    b) Deadweight loss is created.
    c) There is a redistribution of consumer surplus to the monopoly.
    d) All consumer surplus goes to the monopoly.

313. In the case of a perfectly price-discriminating monopoly, there is no
    a) transfer of consumer surplus to the producer.

b) deadweight loss.
c) long-run economic profit.
d) short-run economic profit.

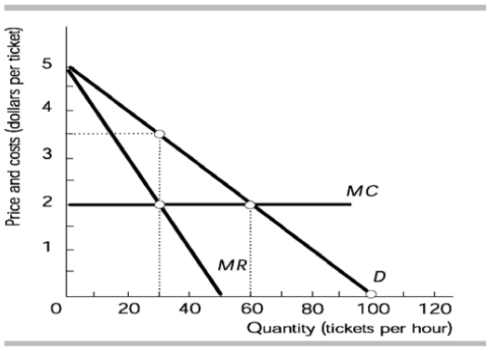
Demand Schedule facing a perfectly price Discriminating firm

Price(¢)	Quantity sold
8	0
7	1
6	2
5	3
4	4
3	5
2	6
1	7

314. Using the demand schedule in the above table, if the firm's marginal cost is constant at ¢3.00, output for a perfect price discriminating monopolist is
    a) 2 units.
    b) 4 units.
    c) 5 units.
    d) 3 units.

315. Using the demand schedule in the above table, the marginal revenue for the perfectly price discriminating monopolist from the sale of the third unit of output is
    a) ¢6.
    b) ¢5.
    c) ¢4.
    d) ¢3.

316. Using the demand schedule in the table above, the total revenue a perfectly price discriminating monopolist receives from selling 5 units of output is
    a) ¢18.
    b) ¢5.
    c) ¢15.
    d) ¢25



317. If the monopoly illustrated in the figure above could engage in perfect price discrimination, then each buyer would pay
    a) $2.00.
    b) $3.50.
    c) $3.00.
    d) a different price.

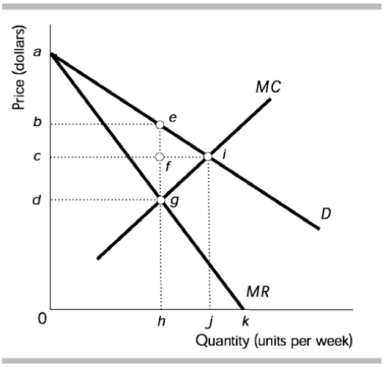
318. If the monopoly illustrated in the figure above could engage in perfect price discrimination, then the lowest ticket price would be
    a) $3.50.
    b) $3.00.
    c) $1.00.
    d) $2.00.

319. If the monopoly illustrated in the figure above could engage in perfect price discrimination, then it would sell
    a) 60 tickets.
    b) 50 tickets.
    c) 30 tickets.
    d) 100 tickets.

320. If the monopoly illustrated in the figure above could engage in perfect price discrimination, then total revenue collected by the firm would be
    a) $110.
    b) $210.
    c) $120.
    d) $310.

321. In the figure above, what is the loss of consumer surplus if the firm is a perfectly price-discriminating monopoly instead of a perfectly competitive industry?
    a) $22.50
    b) $90.00
    c) $0
    d) $45.00

322. If the monopoly illustrated in the figure above could engage in perfect price discrimination, the deadweight loss would be
    a) $22.50.
    b) $250.00.
    c) $0.
    d) $90.00



323. In the figure above, the elasticity of demand facing the monopoly equals one when it produces _____ output.
    a) k
    b) h
    c) j
    d) none of the above

324. In the figure above, a single-price unregulated monopoly will set price
    a) a.
    b) b.
    c) c.
    d) d.

325. In the figure above, a single-price unregulated monopoly will produce at output
    a) k.
    b) j.
    c) h.
    d) none of the above

326. In the figure above, the transfer of consumer surplus from consumers to the producer caused by production under a single-price monopoly instead of perfect competition is the area of
    a) trapezoid beic.
    b) rectangle begd.
    c) rectangle befc.
    d) triangle abe.

327. In the figure above, consumer surplus at the price that maximizes the profit for an unregulated, single-price monopolist is the area of
    a) triangle eig.
    b) triangle abe.
    c) rectangle 0hgd.
    d) rectangle 0heb.

328. In the figure above, the deadweight loss from production under a single-price monopoly instead of perfect competition is the area of
    a) triangle aic.
    b) triangle aeb.
    c) triangle eig.
    d) triangle eif.

329. In the figure above, a perfectly price-discriminating monopoly will maximize profit by producing at output
    a) h.
    b) k.
    c) j.
    d) none of the above

330. In the figure above, the total revenue of a perfectly price-discriminating monopolist at the profit-maximizing output is equal to the area of
    a) 0dgh.
    b) 0beij.
    c) aci.
    d) 0aij.

331. When an increase in a firm's output of a good or service brings a decrease in the average total cost of producing it, the firm is experiencing
    a) diseconomies of scale.
    b) economies of scale.
    c) economies of scope.
    d) diminishing returns.

332. Economies of scope arise when
    a) an increase in output causes average total cost to fall.
    b) doubling inputs causes output to more than double.
    c) high profit allows a company to undertake research and development.
    d) an increase in the range of goods produced causes average total cost to fall.

333. When an increase in the range of goods produced brings a decrease in the average total cost of production, the firm is experiencing
    a) diminishing returns.
    b) economies of scale.
    c) economies of scope.
    d) diseconomies of scale.

334. Which of the following is NOT a possible gain to society from a monopoly?
    a) The monopoly may induce innovation.
    b) The monopoly may achieve economies of scope.
    c) The monopoly may create rent seeking.
    d) The monopoly may achieve economies of scale.

335. Which of the following statements regarding a marginal-cost pricing rule is incorrect?

a) It is efficient.
b) It allows the firm to earn a normal profit.
c) It maximizes total surplus in a regulated industry.
d) It sets price equal to marginal cost.

336. Which of the following statements regarding average-cost pricing rule is incorrect?
a) The firm earns a normal profit.
b) It is efficient.
c) More output is produced than if the firm maximized profit.
d) It sets price equal to average total cost.

337. In a small town, Marilyn's Christmas Tree Lot has a monopoly on sales of Christmas trees. In order to increase her sales from 100 trees to 101 trees, she must drop the price of all of her trees from ¢20 to ¢19. What is the marginal revenue?
a) ¢20
b) ¢19
c) negative ¢81
d) ¢2000

338. A single-price monopoly
a) eliminates all the consumer surplus.
b) charges all consumers the lowest price that they want to pay for each unit purchased.
c) produces less output than it would if it could discriminate.
d) creates a smaller deadweight loss than it would if it could discriminate.

339. Because of a decrease in labor costs, a monopoly finds that its marginal cost and average total cost have decreased. The monopoly will
a) raise its price and decrease the quantity it produces.
b) raise its price and increase the quantity it produces.
c) lower its price and increase the quantity it produces.
d) lower its price and decrease the quantity it produces.

340. If a monopoly is producing at an output level at which marginal revenue exceeds marginal cost, in order to increase its profit it will

a) raise its price and decrease its output.
b) lower its price and increase its output.
c) raise its price and increase its output.
d) lower its price and decrease its output.

341. Compared to a single-price monopoly, the output of a perfectly competitive industry with the same costs
    a) is more than the monopoly's output.
    b) is less than the monopoly's output.
    c) could be more than, less than, or equal to the monopoly's output.
    d) is the same as the monopoly's output.

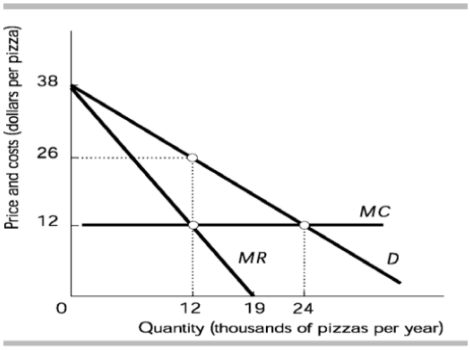
342. Compared to a single-price monopoly, the price charged by a competitive industry with the same costs
    a) could be higher than, lower than, or the same as the monopoly's price.
    b) is higher than the monopoly's price.
    c) is the same as the monopoly's price.
    d) is lower than the monopoly's price.

343. If a perfectly competitive industry becomes a monopoly and the costs do not change, which of the following allocation of costs and benefits applies?
    a) The producer and society benefit, but consumers are harmed.
    b) The producer and society are harmed, but consumers benefit.
    c) The producer is harmed, but consumers and society benefit.
    d) The producer benefits, but consumers and society are harmed.

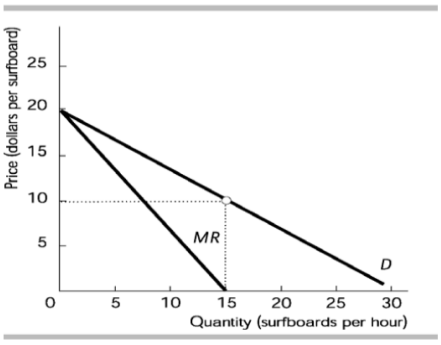
344. Consumer surplus is largest for
    a) a single-price monopoly.
    b) a perfectly competitive industry.
    c) any price-discriminating monopoly.
    d) a perfectly price-discriminating monopoly.

345. Which of the following maybe a gain to society from monopoly?
    a) Monopolies may be able to generate economies of scale.
    b) Monopolies may earn an economic profit in the long run.

c) Monopolies maybe able to price discriminate, thereby boosting consumer surplus.
d) Monopolists do not waste resources trying to innovate.



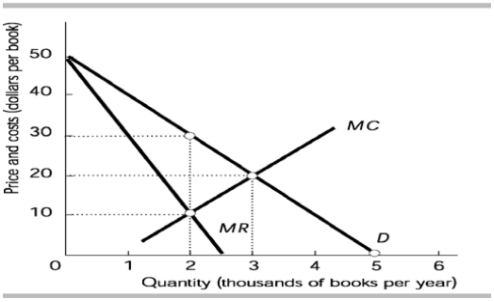
346. La Bella Pizza is the only pizza place on Pepper Island. The figure above shows La Bella Pizza's demand curve, marginal revenue curve, and marginal cost curve. At La Bella Pizza's profit-maximizing output, its annual total revenue is
a) $312,000.
b) $624,000.
c) $168,000.
d) $336,000.



347. The figure above shows the demand curve facing Sue's Surfboards, the sole renter of surfboards on Big Wave Island. Sue's Surfboards currently rents 15 surfboards an hour. Sue's total revenue from the 15 surfboards is
a) $10.
b) $225.
c) $300.
d) $150

348. Sue's Surfboards is the sole renter of surfboards on Big Wave Island. Sue's demand and marginal revenue curves are illustrated in the figure above. The change in the total revenue from renting the 15th surfboard is
    a) $20.
    b) $0.
    c) $10.
    d) $15.

349. The figure above shows the demand and marginal revenue curves facing Sue's Surfboards, the sole renter of surfboards on Big Wave Island. If Sue is renting 25 surfboards an hour so that the marginal revenue is negative, then Sue's Surfboards
    a) must face a unit elastic demand for surfboard rentals.
    b) can increase its profit by increasing the number of rentals.
    c) must face an elastic demand for surfboard rentals.
    d) must face an inelastic demand for surfboard rentals.



350. Bob's Books is the only bookstore in town. The figure above shows the demand curve for books and Bob's Books' marginal revenue curve and marginal cost curve. Bob's Books maximizes its profit and sets the price of a book equal to _____ and has total annual revenue of _____.
    a) $20, $60,000
    b) $30; $60,000
    c) $10; $40,000
    d) $40; $40,000

351. Which of the following is a defining characteristic of a perfectly competitive industry?
    a) advertisements by well known celebrities
    b) persistent economic profits in the long run

c) higher prices being charged for certain name brands
d) no restrictions on entry into the industry

352. Which of the following is true regarding perfect competition?

I. The firms are price takers.
II. Marginal revenue equals the price of the product.
III. Established firms have no advantage over new firms.

a) II and III
b) I only
c) I and II
d) I, II and III

353. Which of the following is NOT an assumption of perfect competition?

a) Firms compete by making their product different from products produced by other firms.
b) Sellers and buyers are well informed about prices.
c) Established firms have no advantage over new firms.
d) There are no restrictions on entry into the industry.

354. Perfect competition implies that

a) all firms are price takers.
b) there are many firms in the industry.
c) all firms are producing the same identical product.
d) All of the above answers are correct.

355. A perfectly competitive industry is characterized by

a) firms that are price setters.
b) high barriers to entry.
c) easy entry into the industry.
d) firms facing a downward sloping demand curve.

356. Perfect competition exists in an industry if

a) there are many firms producing a similar product, each of which may have unique features.

b) the firm is always at the break-even point where it is earning only a normal profit.
c) the firm chooses price to maximize profit.
d) there are many firms producing an identical product.

357. An industry is perfectly competitive if
a) there are many firms in it, each selling an identical product.
b) there are many firms in it, each selling a slightly different product.
c) each firm in it can influence the price of its product.
d) there are few firms in the industry.

358. Which of the following is NOT an assumption of perfect competition?
a) fixed prices
b) many buyers
c) no restrictions on entry into the industry
d) There are many firms, each selling an identical product.

359. Which of the following is NOT a defining characteristic of perfectly competitive industries?
a) consumer knowledge about prices charged by each firm
b) many buyers and sellers
c) unrestricted entry and exit
d) higher prices being charged for certain name brands.

360. Which of the following is NOT a characteristic of a perfectly competitive industry?
a) Each firm takes price as given, determined by the equilibrium of industry supply and industry demand.
b) There are no restrictions on entry into the industry.
c) Each firm produces a slightly differentiated product.
d) There are many firms.

361. An example of a perfectly competitive industry is
a) GSM operators
b) the National Football League.
c) the market for French impressionists' paintings.

d) the market for corn in Turkey.

362. An example of a perfectly competitive firm is
    a) a big city newspaper.
    b) a U.S. automobile producer.
    c) the local cable TV company.
    d) a corn farmer in Ghana.

363. The difference between a firm's total revenue and its total opportunity cost is the firm's
    a) marginal revenue.
    b) normal profit.
    c) marginal profit.
    d) economic profit.

364. In a perfectly competitive industry
    a) each firm is a price taker.
    b) each firm sets its own price so that it is different from the prices of its competitors.
    c) earning an economic profit is certain.
    d) consumers band together to demand the lowest price possible.

365. If a firm is in a perfectly competitive industry, then
    a) the demand for its product is perfectly elastic.
    b) it cannot survive in the long run.
    c) it cannot earn an economic profit in the short run.
    d) it will have no fixed costs in the short run.

366. When a firm is considered to be a "price taker" that means that it
    a) can charge any price that it wants to charge, that is, "take" any price it wants.
    b) will accept ("take") the lowest price that its customers offer.
    c) cannot influence the market price of the good that it sells.
    d) pays a fixed price for all of its inputs.

367. Individual firms in perfectly competitive industries are price takers because
    a) each individual firm is too small to affect the market price.
    b) firms decide together on the best prices to charge.
    c) buyers set prices.
    d) the government sets all prices.

368. In perfect competition,
    a) the market demand for the good is not perfectly elastic but the demand for the output of one firm is perfectly elastic.
    b) both the market demand for the good and the demand for the output of one firm are perfectly elastic.
    c) the market demand for the good is perfectly elastic but the demand for the output of one firm is not perfectly elastic.
    d) neither the market demand for the good nor the demand for the output of one firm is perfectly elastic.

369. In a perfectly competitive market,
    a) an economic profit is certain.
    b) consumers are persuaded by advertising.
    c) each firm takes the good's price as given to it by the market.
    d) each firm sets its own price so that it is different from its competitors.

370. Price taking behavior exists in
    a) automobile markets where consumers have to take the price set by the dealer.
    b) perfectly competitive markets.
    c) markets with a monopolist, where consumers have to take price as it is given to them by the monopolist.
    d) Both answers B and C are correct.

371. In a perfectly competitive industry, which of the following determines the market price?
    a) market demand and a firm's supply
    b) market demand and market supply
    c) a firm's demand and supply

d) market supply and a firm's demand

372. Because each perfectly competitive firm sells a product identical to that of the other firms,
    a) each firm can expect to earn some economic profit.
    b) each firm's output is a perfect substitute for the output of any other firm.
    c) the demand for each firm's product is perfectly inelastic.
    d) each firm will try to cut prices to increase its market share.

373. The assumption that a perfectly competitive industry has many sellers, each selling an identical product, leads to the conclusion that
    a) firms are price takers.
    b) there are many buyers.
    c) consumers get to see a variety of outputs.
    d) the economic profit will be positive in the long run.

374. In perfect competition
    a) demand for the good or service can be small relative to the minimum efficient scale of a single producer as long as the goods or services are not identical.
    b) demand for the good or service is small relative to the minimum efficient scale of a single producer.
    c) demand for the good or service is large relative to the minimum efficient scale of a single producer.
    d) the size of demand for the good or service relative to the minimum efficient scale of a single producer does not affect competition.

375. If the minimum efficient scale of a firm is small relative to the demand for the good, then
    a) many small firms can enter the market.
    b) several large firms will enter the market thereby reducing competition.
    c) firms have a minimum efficiency and could do better by producing more.
    d) there will be no economic profits for any small firms, so no new firms will enter.

376. In perfect competition, an individual firm sets

a) determines the quantity it sells in the marketplace but has no influence over its price.
b) sets the price but does not determine the quantity it sells in the marketplace.
c) the price and determines the quantity it sells in the marketplace.
d) can not affect its price nor determine the quantity it sells in the marketplace.

377. In a perfectly competitive industry, the demand for a single firm's product is
a) inelastic, but not perfectly inelastic.
b) as elastic as the market demand.
c) perfectly inelastic.
d) perfectly elastic.

378. Perfectly competitive firms have a total revenue curve that is
a) upward sloping with a decreasing slope.
b) upward sloping with a constant slope.
c) downward sloping with a constant slope.
d) upward sloping with an increasing slope.

379. For a perfectly competitive firm, price is the same as
a) marginal revenue.
b) total revenue.
c) average variable cost.
d) Both answers A and B are correct.

380. The marginal revenue curve for perfectly competitive firms is
a) a downward sloping curve.
b) an upward sloping curve.
c) a horizontal line.
d) None of the above answers is correct.

381. A perfectly competitive firm's marginal revenue
a) increases as the firm produces more output.
b) decreases as the firm produces more output.
c) equals the market price of its product.
d) is less than the market price of its product.

382. Because the demand for a perfectly competitive firm's product is perfectly elastic, marginal revenue is equal to
    a) the price of the product.
    b) negative one.
    c) zero.
    d) one.

383. Which of the following is always true for a perfectly competitive firm?
    a) P=ATC
    b) P=MR
    c) P=AVC
    d) MR=ATC

384. A perfectly competitive firm can _____ in the short run.
    a) determine what quantity to produce
    b) enter or exit an industry
    c) change its plant size
    d) determine the market price

385. In the short run, a perfectly competitive firm will decide
    a) both the price and the quantity produced.
    b) only the quantity produced because the price is taken as given.
    c) to enter or exit an industry.
    d) only its price because the quantity produced is fixed by its plant size.

386. If a firm has a fixed plant and equipment stock, and it is deciding on its best output level, the firm must be
    a) in the short-run.
    b) at the shutdown point.
    c) in the business cycle.
    d) in the long-run.

387. Which of the following is NOT a decision firms must make in the short run?
    a) whether to enter or leave an industry

b) what quantity to produce
c) whether to produce or shut down
d) None of the above answers is correct because all are decisions firms must make in the short run.

388. A perfectly competitive firm maximizes its economic profit if it produces so that
a) total revenue=total cost.
b) marginal revenue=marginal cost.
c) average total cost=average variable cost.
d) average revenue=average total cost.

389. A perfectly competitive firm maximizes its profit by
a) cutting wages.
b) setting its price so that it exceeds the marginal revenue.
c) choosing the right level of output.
d) manipulating demand.

390. When marginal revenue equals marginal cost, a perfectly competitive firm is
a) determining the price it will set.
b) maximizing its profit.
c) maximizing its revenues.
d) establishing its shutdown point.

391. As long as it does not shut down, a perfectly competitive firm earns the maximum profit possible as long as it operates so that
a) its price exceeds its marginal revenue.
b) its price exceeds its average total cost.
c) its marginal revenue equals its marginal cost.
d) market demand is inelastic.

Qty (Cups of Koko per day)	Total cost (¢)
0	8
1	10

2	10.5
3	13.5
4	17
5	21
6	27
7	35
8	45

392. The above table shows the per day total cost for Lorlornyo Company. Each cup of *koko* is priced at ¢5.0 and Lorlornyo Company is a perfectly competitive firm. At which of the following output levels is the economic profit maximized?
    a) 8
    b) 5
    c) 0
    d) 2

393. The above table shows the per day total cost for Lorlornyo Company. Each cup of *koko* is priced at ¢5.0 and Lorlornyo Company is a perfectly competitive firm. Between which two output levels does Lorlornyo Company earn an economic profit?
    a) 1 and 8
    b) 3 and 6
    c) 2 and 7
    d) 0 and 8

Qty (dozens of sea shells per day)	Total variable cost (¢)
200	60
201	61
202	62.50
203	64
204	66
205	68.50
206	72

394. Sue's Sea Shells by the Sea Shore is a perfectly competitive firm selling sea shells at the market price of ¢2/dozen. Sue's Sea Shells by the Sea Shore has fixed costs of

¢40/day and a daily variable cost schedule in the table above. The profit-maximizing level of output for Sue's Sea Shells by the Sea Shore is

a) 206 dozen sea shells by the sea shore per day.
b) 204 dozen sea shells by the sea shore per day.
c) 205 dozen sea shells by the sea shore per day.
d) 202 dozen sea shells by the sea shore per day.

395. Sue's Sea Shells by the Sea Shore is a perfectly competitive firm selling sea shells at the market price of ¢2/dozen. Sue's Sea Shells by the Sea Shore has fixed costs of ¢40/day and a daily variable cost schedule in the table above. The maximum profit attainable by Sue's Sea Shells by the Sea Shore is

a) ¢302.50 per day.
b) ¢262.00 per day.
c) ¢302.00 per day.
d) ¢262.50 per day.

396. Sue's Sea Shells by the Sea Shore is a perfectly competitive firm selling sea shells at the market price of ¢2/dozen. Sue's Sea Shells by the Sea Shore has fixed costs of ¢40/day and a daily variable cost schedule in the table above. Based on this information, we can expect the number of firms in the sea shell market to

a) increase.
b) remain constant.
c) decrease.
d) It is impossible to say.

397. For a perfectly competitive firm, as its output increases its marginal revenue _____ and its marginal cost _____.

a) changes; does not change
b) does not change; changes
c) changes; changes
d) does not change; does not change

398. If a perfectly competitive firm finds that it is producing an amount of output such that MR>MC and P>AVC, it will

a) leave the industry.
b) decrease its output.

c) not change its behavior.
d) increase its output.

399. If marginal revenue exceeds marginal cost, to increase its profit the firm will
    a) decrease its output.
    b) shut down.
    c) increase its output.
    d) keep its output the same.

400. If the price exceeds the average variable cost, by producing the level of output such that marginal revenue equals marginal cost, the firm ensures that
    a) it will survive in the long run.
    b) it will not suffer any losses.
    c) it will earn the largest profit possible.
    d) it will earn economic profits.

401. In a perfectly competitive market, if a firm finds it is producing at a level of output such that its marginal cost exceeds its price, it will
    a) increase its output to increase its profit.
    b) decrease its output to increase its profit.
    c) immediately shut down for the short run.
    d) be maximizing profits.

402. Lety's Car Washing bay is a perfectly competitive firm that currently washes 40 cars a week. Lety's short-run marginal cost is lower than the price she charges. Lety will increase her profit if she
    a) washes more than 40 cars a week.
    b) washes fewer than 40 cars a week.
    c) charges a lower price.
    d) charges a higher price.

403. Iddisah's Lawn Care Services is a perfectly competitive firm that currently mows 22 lawns a week. Iddisah's short-run marginal cost is higher than the price he charges and increasing. Bob will increase his profit if he
    a) moves more than 22 lawns a week.

b) charges a lower price.
c) moves fewer than 22 lawns a week.
d) charges a higher price.

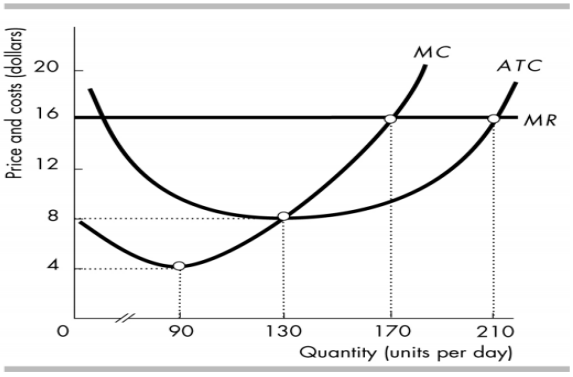
Quantities (kilos of kelewele)	Total revenue (¢)	Total cost (¢)
1	15	13
2	30	24
3	45	39
4	60	58
5	75	81

404. The table above gives the total revenue and total cost for a perfectly competitive firm producing *kelewele*. If the firm increases its output from 2 kilograms of *kelewele* to 3 kilograms, the marginal revenue is _____ per kilogram of *kelewele*.
    a) ¢11
    b) ¢45
    c) ¢15
    d) ¢30

405. The table above gives the total revenue and total cost for a perfectly competitive firm producing *kelewele*. If the firm increases its output from 2 kilograms of *kelewele* to 3 kilograms, the marginal cost is _____ per kilogram of *kelewele*.
    a) ¢24
    b) ¢39
    c) ¢11
    d) ¢15

406. The table above gives the total revenue and total cost for a perfectly competitive firm producing *kelewele*. If the firm is producing 1 kilogram of *kelewele*, to maximize its profit it will
    a) decrease its output.
    b) increase its output.
    c) shut down.
    d) continue producing 1 kilogram of *kelewele*.

407. The table above gives the total revenue and total cost for a perfectly competitive firm producing *kelewele*. If the firm is producing 4 kilograms of *kelewele*, to maximize its profit it will
    a) decrease its output.
    b) increase its output.
    c) shut down.
    d) continue producing 4 kilograms of *kelewele*.



408. The figure above depicts the marginal revenue and costs of a perfectly competitive firm. The firm's profit is maximized when the firm produces
    a) 210 units of output.
    b) 90 units of output.
    c) 170 units of output.
    d) 130 units of output.

409. The figure above depicts the marginal revenue and costs of a perfectly competitive firm. When the firm produces 170 units,
    a) total revenue equals total cost.
    b) marginal revenue equals marginal cost.
    c) total revenue is less than total cost.
    d) marginal cost is less than marginal revenue.

410. The figure above depicts the marginal revenue and costs of a perfectly competitive firm. The marginal cost of the last unit produced
    a) $16 per unit.
    b) $4 per unit.
    c) $8 per unit.

d) None of the above answers is correct.

411. The figure above depicts the marginal revenue and costs of a perfectly competitive firm. The price the firm charges is
    a) $8 per unit.
    b) $4 per unit.
    c) $16 per unit.
    d) None of the above answers is correct.

412. The figure above depicts the marginal revenue and costs of a perfectly competitive firm. When 170 units are produced, the
    a) firm's total costs are less than $2,720.
    b) firm is earning an economic profit.
    c) firm has total revenue of $2,720.
    d) All of the above are true.

413. The figure above depicts the marginal revenue and costs of a perfectly competitive firm. When 170 units are produced, the firm
    a) would incur an economic loss.
    b) has total costs less than $2,720.
    c) would definitely shut down.
    d) would increase its price.

Quantity	Total Fixed cost (¢)	Total variable cost (¢)
0	500	0
1	500	100
2	500	180
3	500	220
4	500	300
5	500	390
6	500	500
7	500	640
8	500	800

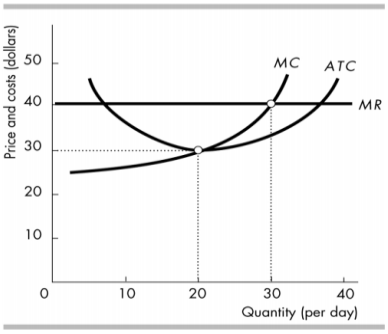
9	500	1000
10	500	1250

414. The table above shows some of the costs for a perfectly competitive firm. The firm will produce 9 units of output if the price per unit is
    a) ¢500.
    b) ¢1750.
    c) ¢300.
    d) ¢200.

415. The table above shows some of the costs for a perfectly competitive firm. If the price is $160 per unit, how many units of output will the firm produce?
    a) 10
    b) 9
    c) more than 10
    d) 8

416. In the short run, a perfectly competitive firm
    a) will always earn an economic profit.
    b) might not earn an economic profit.
    c) will be in equilibrium only when its economic profit is positive.
    d) chooses its optimal plant size.

417. In the short run, a perfectly competitive firm will earn an economic profit as long as
    a) P>AFC.
    b) P>ATC.
    c) it maximizes its profit.
    d) P>AVC.



418. The figure above shows a perfectly competitive firm. To maximize its profit, the firm will
    a) produce 20 units of output and the price will be $40 each.
    b) produce 20 units of output and the price will be $30 each.
    c) produce 30 units of output and the price will be $40 each.
    d) produce 30 units of output and the price will be $30 each.

419. The figure above shows a perfectly competitive firm. The firm's total revenue is
    a) $1200.
    b) $600.
    c) $900.
    d) unable to be determined without more information.

420. The figure above shows a perfectly competitive firm. The firm's economic profit
    a) is $300.
    b) is more than $300.
    c) is less than $300.
    d) The premise of the question is wrong because the firm is incurring an economic loss.

421. The figure above shows a perfectly competitive firm. The figure shows a firm
    a) in the short run.
    b) at its shutdown point.
    c) in the long run.
    d) Both answers A and C are correct.

422. The figure above shows a perfectly competitive firm. In the short run, the firm will shut down if the price is
    a) above $40.
    b) below $40.
    c) below $30.
    d) More information is needed to answer the question.

423. A firm's shutdown point is the output and price at which the firm just covers its
    a) total variable cost.
    b) total fixed cost.
    c) marginal cost.
    d) total cost.

424. A perfectly competitive firm will shut down in the short run when the price is less than
    a) average variable cost.
    b) marginal cost.
    c) average fixed cost.
    d) average total cost.

425. If a perfectly competitive firm decides to shut down in the short run, its loss will equal its
    a) minimum average variable cost, AVC.
    b) total fixed cost, TFC.
    c) average total cost, ATC.
    d) total variable cost, TVC.

426. At its shutdown point, a perfectly competitive firm earns total revenue that
    a) exceeds its total cost.
    b) generates a normal profit.
    c) exceeds its total variable cost.
    d) just equals its total variable cost.

427. In the short run, a perfectly competitive firm NEVER
    a) earns a normal profit.
    b) produces where MR=MC.

c) earns an economic profit.
d) incurs a loss greater than its total fixed costs.

428. In the short run, a perfectly competitive firm might
    a) set its price above marginal revenue.
    b) set its price above marginal cost.
    c) adjust the size of its fixed inputs.
    d) operate even though it is incurring an economic loss.

Quantity (pizzas per hour)	Total cost (¢ per hour)
0	10
1	18
2	30
3	48
4	70
5	98
6	120

429. Bonjour's Pizza is a perfectly competitive firm. The firm's costs are shown in the table above. If the market price is ¢15, what is Bonjour's profit-maximizing output?
    a) 3 pizzas per hour
    b) 2 pizzas per hour
    c) 0 pizzas per hour
    d) 4 pizzas per hour

430. Bonjour's Pizza is a perfectly competitive firm. The firm's costs are shown in the table above. If the market price is ¢20, what is Bonjour's profit-maximizing output?
    a) 2 pizzas per hour
    b) 0 pizzas per hour
    c) 3 pizzas per hour
    d) 4 pizzas per hour

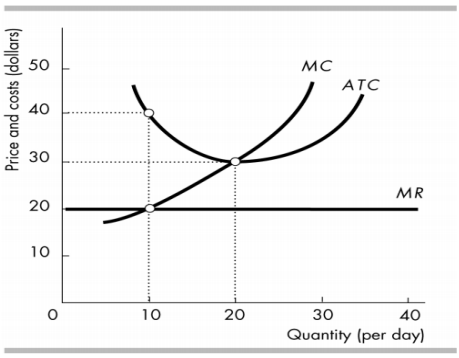
431. Giuseppe's Pizza is a perfectly competitive firm. The firm's costs are shown in the table above. If the market price is ¢15, how much economic profit does the firm make?
    a) ¢30
    b) ¢0
    c) - ¢10
    d) - ¢15

432. Bonjour's Pizza is a perfectly competitive firm. The firm's costs are shown in the table above. If the market price is ¢20, how much economic profit does the firm make?
    a) -$20
    b) -$10
    c) $12
    d) $0

433. Bonjour's Pizza is a perfectly competitive firm. The firm's costs are shown in the table above. If the market price is ¢15, the firm will
    a) leave the industry in the long run.
    b) stay in the industry in the long run.
    c) make an economic profit.
    d) shut down. Answer:

434. Bonjour's Pizza is a perfectly competitive firm. The firm's costs are shown in the table above. If the market price is ¢22, the firm will
    a) shut down.
    b) incur an economic loss.
    c) stay in the industry in the long run.
    d) leave the industry in the long run.

435. Bonjour's Pizza is a perfectly competitive firm. The firm's costs are shown in the table above. The firm's shutdown point is
    a) ¢8.
    b) ¢12.
    c) ¢17.
    d) ¢2.



436. The figure above shows a perfectly competitive firm. In the short run, the firm will shut down
    a) only if the AVC of producing 10 units is less than $20.
    b) only if the AVC curve reaches its minimum before 10 units are produced.
    c) only if the AVC of producing 10 units is more than $20.
    d) always.

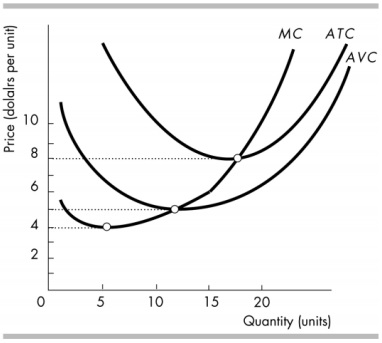
437. The figure above shows a perfectly competitive firm. The firm is operating; that is, the firm has not shut down. The firm is
    a) earning an economic profit of $200.
    b) incurring an economic loss of $600.
    c) earning a normal profit.
    d) incurring a economic loss of $200.

438. The figure above shows a perfectly competitive firm. The firm is operating; that is, it has not shut down. The firm produces
    a) 20 units of output and incurs an economic loss.
    b) 20 units of output and earns a normal profit.
    c) 10 units of output and incurs an economic loss.
    d) 10 units of output and earns a normal profit.

439. Which of the following statements is TRUE?
    a) The presence of positive economic profit in a perfectly competitive industry is consistent with the characteristics of a long-run competitive equilibrium.

b) If a profit-maximizing firm in a perfectly competitive industry is incurring an economic loss, then it must be producing at a level of output where price is greater than average total cost.
c) If a profit-maximizing firm in a perfectly competitive industry is earning positive economic profit, then it must be producing at a level of output where price is greater than average total cost.
d) When firms in a perfectly competitive industry earn economic losses, some will exit in the long run, thereby shifting the industry supply curve rightward.

440. A perfectly competitive firm is earning an economic profit when
a) the price is greater than the minimum of its average total cost.
b) its total revenue is greater than its total cost.
c) the price is greater than the minimum of its average variable cost.
d) Both answers A and B are correct. Answer: D

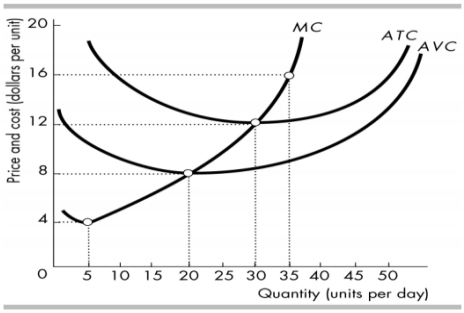


441. In the above figure, at a price of $6, a perfectly competitive firm would produce _____ and it would _____.
a) 0; earn an economic profit
b) some output; incur an economic loss
c) 0; not incur an economic loss or earn an economic profit
d) 0; incur an economic loss

442. The short-run market supply curve for a perfectly competitive industry is obtained by summing
a) each firm's MC curve that lies below the AVC curve.
b) the part of each firm's MC curve that lies above its AVC curve.
c) each firm's AVC curve that lies below the MC curve.

d) the part of each firm's AVC curve that lies above its MC curve.

443. The short-run supply curve for a perfectly competitive firm is equal to the
    a) marginal cost curve for prices greater than average variable cost.
    b) marginal cost curve at all prices.
    c) marginal cost curve for prices greater than average total cost.
    d) marginal cost curve for prices less than average variable cost.



444. In the above figure, the perfectly competitive firm's shutdown point is at a price of
    a) $16 per unit.
    b) $12 per unit.
    c) $4 per unit.
    d) $8 per unit.

445. In the above figure, if the price is $16 per unit, how many units will a profit maximizing perfectly competitive firm produce?
    a) 20
    b) 30
    c) 0
    d) 35

446. In the above figure, if the price is $12 per unit, how many units will a profit maximizing perfectly competitive firm produce?
    a) 20
    b) 0
    c) 35
    d) 30

447. In the above figure, if the price is $8 per unit, how many units will a profit maximizing perfectly competitive firm produce?
    a) 20
    b) 35
    c) 5
    d) 30

448. In the above figure, if the price is $4 per unit, how many units will a profit maximizing perfectly competitive firm produce?
    a) 30
    b) 5
    c) 0
    d) 20

449. In the above figure, if the price is $16 per unit, the profit maximizing perfectly competitive firm will
    a) shut down.
    b) earn an economic profit.
    c) earn a normal profit.
    d) incur an economic loss but continue to operate.

450. The above figure shows the cost curves for a perfectly competitive firm. If all firms in the industry have the same cost curves and the price equals $16 per unit,
    a) over time, the price will fall as new firms enter the industry.
    b) over time, firms will leave this industry.
    c) the industry is in its long-run equilibrium.
    d) the firm is earning zero economic profit.

ANSWERS (INTRODUCTION)

1. C	6. E	11. A	16. A
2. A	7. C	12. A	17. B
3. B	8. C	13. B	18. A
4. C	9. A	14. B	19. B
5. A	10. B	15. A	20. C

21. A
22. B
23. E
24. A
25. C
26. B
27. E
28. C
29. D
30. C
31. D
32. C
33. E
34. A
35. D
36. D
37. A
38. E
39. D
40. B
41. D
42. B
43. B
44. C
45. E
46. A
47. B
48. C
49. D
50. B
51. E
52. D
53. A
54. B
55. A
56. A
57. A
58. B
59. B
60. D
61. D
62. E
63. B
64. D
65. E
66. D
67. D
68. D
69. A
70. B
71. C
72. B
73. D

ANSWERS (DEMAND AND SUPPLY ANALYSIS)

1.	E	25.	C	49.	B	73.	A
2.	C	26.	E	50.	A	74.	D
3.	B	27.	B	51.	C	75.	D
4.	C	28.	D	52.	C	76.	D
5.	B	29.	C	53.	B	77.	A
6.	B	30.	C	54.	D	78.	C
7.	C	31.	C	55.	C	79.	C
8.	A	32.	A	56.	D	80.	D
9.	B	33.	A	57.	A	81.	C
10.	B	34.	D	58.	A	82.	C
11.	D	35.	C	59.	B	83.	A
12.	B	36.	B	60.	B	84.	A
13.	B	37.	A	61.	A	85.	D
14.	D	38.	C	62.	B	86.	C
15.	C	39.	D	63.	C	87.	B
16.	B	40.	A	64.	B	88.	D
17.	D	41.	D	65.	B	89.	A
18.	A	42.	C	66.	C	90.	B
19.	B	43.	D	67.	A	91.	A
20.	A	44.	B	68.	B	92.	A
21.	D	45.	D	69.	C	93.	B
22.	B	46.	B	70.	C	94.	D
23.	E	47.	D	71.	C	95.	D
24.	B	48.	A	72.	B	96.	D

97.	C	125.	C	153.	A	181.	A
98.	B	126.	C	154.	C	182.	B
99.	B	127.	D	155.	D	183.	C
100.	A	128.	A	156.	B	184.	C
101.	D	129.	C	157.	A	185.	A
102.	D	130.	D	158.	B	186.	B
103.	B	131.	C	159.	A	187.	A
104.	A	132.	A	160.	A	188.	D
105.	B	133.	A	161.	D	189.	A
106.	C	134.	A	162.	D	190.	A
107.	C	135.	A	163.	C	191.	B
108.	D	136.	D	164.	D	192.	C
109.	C	137.	B	165.	A	193.	C
110.	D	138.	B	166.	B	194.	A
111.	D	139.	B	167.	D	195.	B
112.	A	140.	B	168.	B	196.	B
113.	D	141.	B	169.	B	197.	A
114.	D	142.	C	170.	B	198.	A
115.	D	143.	B	171.	D	199.	A
116.	A	144.	C	172.	C	200.	A
117.	C	145.	B	173.	A	201.	B
118.	C	146.	D	174.	C	202.	C
119.	C	147.	B	175.	B	203.	C
120.	B	148.	A	176.	A	204.	D
121.	A	149.	D	177.	B	205.	C
122.	D	150.	A	178.	B	206.	A
123.	B	151.	D	179.	A	207.	B
124.	A	152.	B	180.	C		

ANSWERS (ELASTICITY)

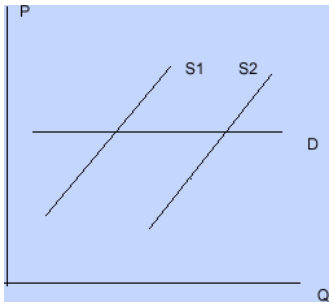
1.B	7. C	13. C	19. C
2. A	8. E	14. A	20. D
3. D	9. B	15. B	21. B
4. A	10. D	16. A	22. D
5. C	11. A	17. E	23. A
6. A	12. C	18. B	24. D

25. C	31. D	37. B	43. C
26. B	32. A	38. D	44. D
27. D	33. A	39. A	45. A
28. B	34. A	40. B	46. C
29. C	35. A	41. C	
30. B	36. B	42. B	

47. *Golf clubs and golf balls are complementary goods. This means that, as the price of golf clubs increases (a positive change), the consumption of golf balls decreases (a negative change). Cross price elasticity of demand is equal to the ratio of these changes and will be negative. The statement is false.*

48.

True, because a perfectly elastic demand curve is horizontal. Therefore, no matter what the shift is the equilibrium price will always remain the same. (See graph.)



49. *False. A Ford can be substituted by a different model. It is not as easy to find a substitute for a car in general. The more substitutes a good has, the more elastic is the demand for that good. Therefore, demand for Fords is more elastic.*

50. *This new salon is a substitute for your services. After it has appeared, your consumers have more choice, and some of them will start using the new salon. So the demand for your services will decrease, or shift to the left.*
The statement is false.

51. *One of the factors determining the price elasticity of demand for the good is the number of substitutes. More substitutes - more elastic demand.*
The statement is true.

52. *These two goods (services) are substitutes. The cross-price elasticity of substitutes is positive, since as the price of one of them increases, the demand for (and therefore the consumption of) the other one increases, too.*
The statement is false.

53. B	74. B	95. B	116. C
54. D	75. C	96. B	117. D
55. C	76. A	97. A	118. A
56. B	77. D	98. C	119. C
57. A	78. C	99. C	120. C
58. A	79. D	100. B	121. B
59. A	80. C	101. D	122. D
60. A	81. C	102. C	123. A
61. A	82. C	103. A	124. D
62. D	83. B	104. D	125. B
63. A	84. A	105. D	126. C
64. C	85. B	106. B	127. C
65. B	86. C	107. C	128. B
66. B	87. C	108. D	129. B
67. D	88. C	109. D	131. B
68. C	89. C	110. C	132. C
69. B	90. D	111. A	133. B
70. C	91. A	112. C	134. D
71. D	92. C	113. A	135. A
72. A	93. A	114. D	130. B
73. A	94. C	115. B	136. A

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

ANSWERS (CONSUMER THEORY)

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

i. D

MONOPOLY, PERFECT COMPETITION AND COST CONCEPT

1. D
2. C
3. C
4. A
5. B
6. D
7. C
8. A
9. B
10. D
11. B
12. B
13. B
14. D
15. C
16. C
17. A
18. A
19. B
20. B
21. C
22. A
23. A
24. A
25. C
26. C
27. B
28. B
29. B
30. A
31. C
32. C
33. D
34. B
35. A
36. D
37. B
38. B
39. C
40. A
41. C
42. A
43. B
44. A
45. B
46. A
47. C
48. A
49. C
50. E
51. D
52. D
53. B
54. A
55. C
56. D
57. A
58. B
59. B
60. D
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63. C
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65. B
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67. B
68. A
69. A
70. C
71. B
72. A
73. C
74. B
75. C
76. D
77. C
78. D
79. C
80. B
81. C
82. B
83. E
84. B
85. D
86. C
87. A
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89. C
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91. D
92. C
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117. C
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144. D
145. D
146. B
147. C
148. B
149. D
150. D
151. A
152. D
153. D
154. A
155. B
156. A
157. C
158. B
159. A
160. D
161. C
162. B
163. A
164. C
165. B
166. B
167. C
168. A
169. B
170. C
171. A
172. D

173.	D	216.	A	259.	D	302.	C
174.	B	217.	A	260.	C	303.	D
175.	D	218.	B	261.	A	304.	B
176.	C	219.	C	262.	E	305.	B
177.	A	220.	A	263.	A	306.	B
178.	C	221.	C	264.	D	307.	B
179.	D	222.	C	265.	A	308.	A
180.	D	223.	A	266.	A	309.	B
181.	A	224.	D	267.	C	310.	D
182.	A	225.	B	268.	B	311.	B
183.	C	226.	B	269.	B	312.	C
184.	A	227.	D	270.	D	313.	B
185.	B	228.	C	271.	B	314.	C
186.	C	229.	D	272.	B	315.	B
187.	D	230.	D	273.	C	316.	D
188.	B	231.	C	274.	A	317.	D
189.	D	232.	A	275.	C	318.	D
190.	B	233.	A	276.	D	319.	A
191.	A	234.	D	277.	B	320.	B
192.	B	235.	B	278.	D	321.	B
193.	D	236.	A	279.	D	322.	C
194.	B	237.	B	280.	C	323.	A
195.	C	238.	C	281.	B	324.	B
196.	D	239.	D	282.	B	325.	C
197.	A	240.	A	283.	D	326.	C
198.	B	241.	B	284.	A	327.	B
199.	B	242.	C	285.	D	328.	C
200.	D	243.	A	286.	C	329.	C
201.	A	244.	C	287.	A	330.	D
202.	B	245.	C	288.	D	331.	B
203.	A	246.	A	289.	A	332.	D
204.	D	247.	D	290.	C	333.	C
205.	C	248.	B	291.	C	334.	C
206.	C	249.	D	292.	C	335.	B
207.	B	250.	B	293.	A	336.	B
208.	C	251.	D	294.	C	337.	C
209.	C	252.	A	295.	A	338.	C
210.	B	253.	A	296.	A	339.	C
211.	C	254.	C	297.	C	340.	B
212.	A	255.	D	298.	B	341.	A
213.	B	256.	B	299.	B	342.	D
214.	C	257.	D	300.	B	343.	D
215.	A	258.	A	301.	A	344.	B

345. A
346. A
347. D
348. B
349. D
350. B
351. D
352. D
353. A
354. D
355. C
356. D
357. A
358. A
359. D
360. C
361. D
362. D
363. D
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365. A
366. C
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417. B
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420. C
421. A
422. D
423. A
424. A
425. B
426. D
427. D
428. D
429. B
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433. B
434. C
435. A
436. C
437. D
438. C
439. C
440. D
441. B
442. B
443. A
444. D
445. D
446. D
447. A
448. C
449. B
450. A