

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## Chapter 2 - Thinking Like an Economist

1. Which statement best describes the way economists study the economy?
- Economists study the past, but do not try to predict the future.
  - Economists use a probabilistic approach based on correlations between economic events.
  - Economists devise theories, collect data, and then analyze the data to test the theories.
  - Economists use controlled experiments much the same way a biologist or physicist does.

ANSWER: c

2. Which are terms used by an economist?
- vector spaces and axioms
  - torts and venues
  - ego and cognitive dissonance
  - consumer surplus and deadweight loss

ANSWER: d

3. What is meant by scientific method?
- the use of modern electronic testing equipment to understand the world
  - the dispassionate development and testing of theories about how the world works
  - the use of controlled experiments in understanding the way the world works
  - finding evidence to support preconceived theories about how the world works

ANSWER: b

4. Who said, "The whole of science is nothing more than a refinement of everyday thinking"?
- Isaac Newton
  - Albert Einstein
  - John Nash
  - Stephen Hawking

ANSWER: b

5. What observation did Albert Einstein once make about science?
- "The whole of science is nothing more than a refinement of everyday thinking."
  - "The whole of science is nothing more than an interesting intellectual exercise."
  - "In order to understand what science is, one must simply look around themselves."
  - "In order to understand what science is, one must transcend everyday thinking."

ANSWER: a

6. Sir Isaac Newton developed the theory of gravity after observing an apple fall from a tree. What is this an example of?
- a controlled experiment used to develop scientific theory
  - being in the right place at the right time
  - a natural consequence
  - the interplay between observation and theory in science

ANSWER: d

7. What is a common thread between economics and other sciences, such as physics?
- Experiments are most often conducted in a lab.

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- b. Real-world observations often lead to theories.
- c. They deal with similar phenomena.
- d. They deal primarily with abstract concepts.

ANSWER: b

8. Why is the use of theory and observation more difficult in economics than in sciences, such as physics?
- a. It is difficult to evaluate an economic experiment.
  - b. It is difficult to devise an economic experiment.
  - c. It is difficult to actually perform an experiment in an economic system.
  - d. It is difficult to find participants for an economics experiment.

ANSWER: c

9. Because it is difficult for economists to use experiments to generate data, what must they generally do?
- a. do without data
  - b. use whatever data the world gives them
  - c. select a committee of economists to make up data for all economists to use
  - d. use hypothetical, computer-generated data

ANSWER: b

10. What happens when economists test theories?
- a. They must make do with whatever data the world gives them.
  - b. They can manipulate conditions easier than other scientific fields.
  - c. They can enlist the government's help to manipulate economic conditions.
  - d. They can achieve statistically valid results with much smaller sample sizes.

ANSWER: a

11. Which of the following is a difficulty economists face that some other scientists do not?
- a. Unlike other sciences, economic studies must include the largest economic player, the government.
  - b. Economists, unfortunately, receive less government funding than other scientists.
  - c. Corporations are reluctant to disclose necessary information for economic research.
  - d. Experiments are often difficult to conduct in economics.

ANSWER: d

12. Where do the most common data for testing economic theories come from?
- a. carefully controlled and conducted laboratory experiments
  - b. governments and large corporations
  - c. historical episodes of economic change
  - d. centrally planned economies

ANSWER: c

13. For economists, what are often used as substitutes for laboratory experiments?
- a. natural experiments offered by history
  - b. computer-generated experiments
  - c. studies conducted by other disciplines, such as sociologists

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d. well-constructed simulations

ANSWER: a

14. Why do economists make assumptions?

- a. to diminish the chance of wrong answers
- b. to make the world easier to understand
- c. because all scientists make assumptions
- d. to make certain that all necessary variables are included

ANSWER: b

15. What does the art of scientific thinking include?

- a. capability of eliminating invalid theories
- b. understanding every scientific field, including physics, biology, and economics
- c. deciding which assumptions to make
- d. being able to mathematically express natural forces

ANSWER: c

16. If an economist develops a theory about international trade based on the assumption that there are only two countries and two goods, what is most likely?

- a. The theory can be useful only in situations involving two countries and two goods.
- b. It is a total waste of time, since the actual world has many countries trading many goods.
- c. The theory can be useful in helping economists understand the complex world of international trade involving many countries and many goods.
- d. The theory can be useful in the classroom, but has no use in the real world.

ANSWER: c

17. Why are historical episodes valuable to economists?

- a. They allow economists to see how far the discipline has evolved.
- b. It is easier to obtain historical data than observe current trends.
- c. It is easier to evaluate a past situation than to predict a future situation.
- d. They allow economists to evaluate economic theories of the present.

ANSWER: d

18. What is a characteristic of a good theory?

- a. It is a widely accepted theory.
- b. It is a theory that starts from realistic assumptions.
- c. It is a theory that helps us understand how the world works.
- d. It is a theory based on original predictions.

ANSWER: c

19. What is the goal of theories?

- a. to provide an interesting, but not useful, framework of analysis
- b. to provoke stimulating debates in scientific journals
- c. to demonstrate that the developer of the theory is capable of logical thinking

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d. to help scientists understand how the world works

ANSWER: d

20. What do economists do when they attempt to simplify the real world and make it easier to understand?

- a. They make assumptions.
- b. They make uninformed judgments.
- c. They make predictions.
- d. They make evaluations.

ANSWER: a

21. What can good assumptions do?

- a. cause economists to leave out important variables that make their theories worthless
- b. simplify the complex world and make it easier to understand
- c. eliminate invalid causations
- d. allow economists to see the “big picture” instead of only small segments

ANSWER: b

22. How does a scientist make assumptions?

- a. A scientist chooses the assumptions that best prove a desired result.
- b. A scientist chooses the assumptions randomly so as not to appear biased.
- c. A scientist chooses the assumptions that would be most widely accepted.
- d. A scientist chooses the assumptions that best capture the essential features of the problem.

ANSWER: d

23. What makes a model compelling?

- a. its application
- b. its simplicity
- c. its predictions
- d. its assumptions

ANSWER: c

24. What happens when scientists make good assumptions?

- a. They greatly simplify the problem without substantially affecting the answer.
- b. They further complicate an already complicated subject.
- c. They can leave out necessary variables that may result in incorrect answers.
- d. They are capable of eliminating invalid causations.

ANSWER: a

25. Which of the following is an example of a product that experiences infrequent price changes?

- a. stocks on the Toronto Stock Exchange
- b. gasoline
- c. the newsstand price of magazines
- d. seasonal produce at the grocery store

ANSWER: c

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26. What have economists often observed while studying the effects of public policy changes?
- There is a difference between the long run and the short run.
  - Unemployment and inflation are directly related in the short run.
  - Stock prices are indirectly related to capital investment.
  - If the policy is well designed, it will always be effective.

ANSWER: a

27. When studying the effects of public policy changes, what do economists do?
- They often falsify results if the desired effect is not reached.
  - They may make different assumptions for the long run and the short run.
  - They attempt to consider only the direct effects and not the indirect effects.
  - They can immediately change policies if they are ineffective.

ANSWER: b

28. What do good economic models do?
- They often leave out important variables, causing serious errors.
  - They omit many details to allow us to see what is truly important.
  - They are designed to give a complete picture of a given relationship.
  - They leave economics to be interpreted in many ways by governments.

ANSWER: b

29. Why do economists use models?
- to learn how the economy works
  - to attract the attention of government officials
  - to make economics accessible to the public
  - to make sure that all of the details of the economy are included in their analysis

ANSWER: a

30. Which statement best describes economic models?
- They are based on unrealistic assumptions.
  - They accurately describe the reality.
  - They allow economists to learn how the economy works.
  - They include as many variables as possible.

ANSWER: c

31. How do economists begin building an economic model?
- by writing grants for government funding
  - by conducting controlled experiments in a lab
  - by making assumptions
  - by reviewing statistical forecasts

ANSWER: c

32. What is a model?

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- a. a theoretical abstraction with very little value
- b. a useful tool to only the ones who constructed it
- c. a realistic and carefully constructed theory
- d. a simplification of real life

ANSWER: d

33. Which statement does NOT illustrate a characteristic of an economic model?

- a. A model simplifies reality.
- b. A model can explain how the economy is organized.
- c. A model can assume away irrelevant details.
- d. A model's conclusions are unrelated to assumptions

ANSWER: d

34. What is NOT a common characteristic of economic models?

- a. They are often built using the tools of mathematics.
- b. They are useful to economists, but not to policymakers.
- c. They include only the important features of an economy.
- d. They are built using assumptions.

ANSWER: b

35. Which statement best describes economic models?

- a. Economic models attempt to mirror reality exactly.
- b. Economic models are useful, but should not be used for policymaking.
- c. Economic models omit many details to allow us to see what is truly important.
- d. Economic models cannot be used in the real world because they omit details.

ANSWER: c

36. What are the foundation stones from which economic models are built?

- a. economic policies
- b. legal systems
- c. assumptions
- d. statistical forecasts

ANSWER: c

37. What is a circular-flow diagram?

- a. a visual model of how the economy is organized
- b. a mathematical model of how the economy works
- c. a model that shows the effects of government and the central bank on the economy
- d. a visual model of the relationship between money, prices, and businesses

ANSWER: a

38. What does a circular-flow diagram do?

- a. It illustrates cost-benefit analysis.
- b. It explains how the economy is organized.

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- c. It shows the flow of trade in the world.
- d. It explains how banks circulate money in the economy.

ANSWER: b

39. What are factors of production?
- a. positive or negative changes in inventory
  - b. weather and social and political conditions that affect production
  - c. the physical relationships between economic inputs and outputs
  - d. inputs into the production process

ANSWER: d

40. In the simple circular-flow diagram, who are the decision makers?
- a. individuals and government
  - b. households and firms
  - c. households and government
  - d. households, individuals, and foreign nations

ANSWER: b

41. What do the two loops in the circular-flow diagram represent?
- a. the flow of goods and the flow of services
  - b. the flow of money and the flow of bonds
  - c. the flow of inputs and outputs and the flow of dollars
  - d. the flow of capital goods and the flow of consumer goods

ANSWER: c

42. In a circular-flow diagram, which flows are involved?
- a. Taxes flow from households to firms, and transfer payments flow from firms to households.
  - b. Income payments flow from firms to households, and sales revenue flows from households to firms.
  - c. Resources flow from firms to households, and goods and services flow from households to firms.
  - d. Inputs and outputs flow in the same direction as the flow of dollars, from firms to households.

ANSWER: b

43. What is a characteristic of the circular-flow model?
- a. Firms are sellers in the resource market and the product market.
  - b. Firms are buyers in the product market.
  - c. Households are sellers in the resource market.
  - d. Households are buyers in the resource market.

ANSWER: c

44. In the circular-flow diagram, which flows are involved?
- a. Income from factors of production flows from firms to households.
  - b. Goods and services flow from households to firms.
  - c. Factors of production flow from firms to households.
  - d. Spending on goods and services flow from firms to households.

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ANSWER: a

45. What would NOT be considered a factor of production?

- a. labour
- b. land
- c. capital
- d. bonds

ANSWER: d

46. What is another name for goods and services produced by firms?

- a. factors of production
- b. outputs
- c. inputs
- d. resources

ANSWER: b

47. What is a characteristic of factors of production?

- a. They are used to produce goods and services.
- b. They are owned by firms.
- c. They are abundant in most economies.
- d. They are provided by both firms and households.

ANSWER: a

48. What is another term for factors of production?

- a. inputs
- b. outputs
- c. goods
- d. services

ANSWER: a

49. According to a simple circular-flow diagram, how many markets do households and firms interact in?

- a. one type of market
- b. two types of markets
- c. three types of markets
- d. four types of markets

ANSWER: b

50. What markets are depicted in the simple circular-flow diagram?

- a. the market for goods and services, the financial market, and the market for the factors of production
- b. the market for the factors of production and the financial market
- c. the market for goods and services and the financial market
- d. the market for goods and services and the market for factors of production

ANSWER: d



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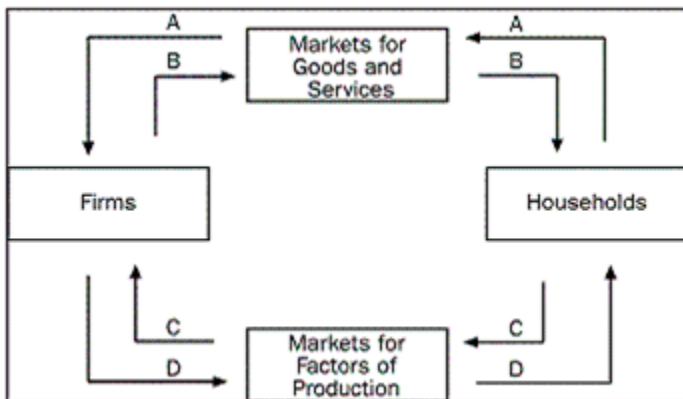
51. In the goods and services market, how do households and firms interact?
- They are both buyers.
  - Households are sellers and firms are buyers.
  - Households are buyers and firms are sellers.
  - They are both sellers.

ANSWER: c

52. In the factors of production market, how do households and firms interact?
- Households are sellers and firms are buyers.
  - Households are buyers and firms are sellers.
  - Households and firms are both buyers.
  - Households and firms are both sellers.

ANSWER: a

**Figure 2-1**



53. Refer to Figure 2-1. Which arrow shows the flow of goods and services?
- arrow A
  - arrow B
  - arrow C
  - arrow D

ANSWER: b

54. Refer to Figure 2-1. Which arrow shows the flow of spending by households?
- arrow A
  - arrow B
  - arrow C
  - arrow D

ANSWER: a

55. Refer to Figure 2-1. Which arrow shows the flow of the factors of production?
- arrow A
  - arrow B

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- c. arrow C
- d. arrow D

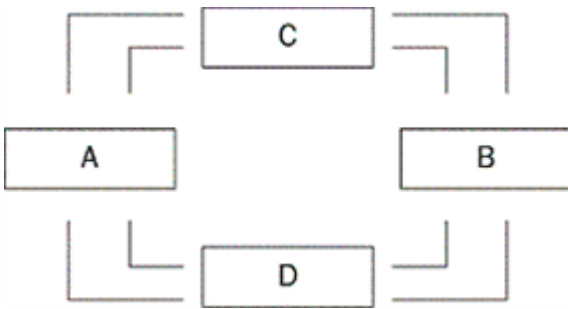
ANSWER: c

56. Refer to Figure 2-1. Which arrow shows the flow of income payments?

- a. arrow A
- b. arrow B
- c. arrow C
- d. arrow D

ANSWER: d

**Figure 2-2**



57. Refer to Figure 2-2. What do boxes A and B represent?

- a. firms and households
- b. government and the foreign sector
- c. the goods and services market and the factors of production market
- d. households and government

ANSWER: a

58. Refer to Figure 2-2. What do boxes C and D represent?

- a. households and firms
- b. the goods and services market and the factors of production market
- c. the goods and services market and the financial market
- d. government and foreign trade

ANSWER: b

59. Refer to Figure 2-2. What does the inner loop represent?

- a. the flow of inputs to firms and output to households
- b. the flow of output to firms and inputs to households
- c. the flow of spending to firms and factor payments to households
- d. the flow of spending to households and factor payments to firms

ANSWER: a

60. Refer to Figure 2-2. What does the outer loop represent?

- a. the flow of goods

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- b. the flow of spending
- c. the flow of factors of production
- d. the flow of exports

ANSWER: b

61. Refer to Figure 2-2. In which market are households sellers?

- a. Box A
- b. Box B
- c. Box C
- d. Box D

ANSWER: d

62. Refer to Figure 2-2. In which market are firms sellers?

- a. Box A
- b. Box B
- c. Box C
- d. Box D

ANSWER: c

63. Refer to Figure 2-2. Who owns the factors of production?

- a. Box A
- b. Box B
- c. Box C
- d. Box D

ANSWER: b

64. In the simple circular-flow diagram, in which market are households sellers?

- a. the factors of production market
- b. the goods and services market
- c. both the factors of production market and the goods and services market
- d. neither the factors of production market nor the goods and services market

ANSWER: a

65. In the simple circular-flow diagram, in which market are firms sellers?

- a. the goods and services market
- b. the factors of production market
- c. both the factors of production market and the goods and services market
- d. neither the factors of production market nor the goods and services market

ANSWER: a

66. In the simple circular-flow diagram, who owns the factors of production?

- a. the government
- b. firms
- c. households

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d. corporations

ANSWER: c

67. Which statement best characterizes the money held by households in the circular-flow diagram?

- a. It is earned from the sale of factors of production.
- b. It becomes profit to firms.
- c. It originates mainly from international trade.
- d. It is used to purchase factors of production.

ANSWER: a

68. What happens in the markets for factors of production?

- a. Households provide firms with labour, land, and capital.
- b. Households provide firms with savings for investment.
- c. Firms provide households with goods and services.
- d. The government provides firms with inputs for the production process.

ANSWER: a

69. What happens in the markets for goods and services?

- a. Households provide firms with savings for investment.
- b. Households provide firms with labour, land, and capital.
- c. Firms provide households with the output they produced.
- d. The government provides firms with inputs for the production process.

ANSWER: c

70. What are the four sectors in a more complex circular-flow diagram?

- a. households, government, financial markets, and international trade
- b. households, firms, government, and financial markets
- c. households, firms, financial markets, and international trade
- d. households, firms, government, and international trade

ANSWER: d

71. In economics, what does capital refer to?

- a. the finances necessary for firms to produce their products
- b. buildings and machines used in the production process
- c. the money households use to purchase necessities
- d. the value of stock market shares issued to investors

ANSWER: b

72. What revenue is received by firms from sales that is NOT used to pay for factors of production?

- a. rent
- b. wages
- c. profit
- d. interest

ANSWER: c

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73. What does a point on a country's production possibilities frontier represent?

- a. a combination of two goods that an economy will never be able to produce
- b. a combination of two goods that an economy can produce using all available resources and technology
- c. a combination of two goods that an economy can produce using some of its resources and technology
- d. a combination of two goods that an economy may be able to produce sometime in the future with additional resources and technology

ANSWER: b

74. Why are production possibilities frontiers usually bowed outward?

- a. The more resources a society uses to produce one good, the fewer resources it has available to produce another good.
- b. It reflects the fact that the opportunity cost of producing a good falls as more of the good is produced.
- c. It is because of the effects of technological change.
- d. Resources are specialized; that is, some are better at producing particular goods rather than other goods.

ANSWER: d

75. Why are production possibilities frontiers usually bowed outward?

- a. constant opportunity cost
- b. increasing opportunity cost
- c. decreasing opportunity cost
- d. increasing productivity

ANSWER: b

76. Suppose an economy produces two goods: food and machines. This economy always operates on its production possibilities frontier. Last year, it produced 45 units of food and 25 machines. This year, it is producing 50 units of food and 30 machines. Which of the following would NOT explain the increase in output?

- a. a reduction in unemployment
- b. an increase in the labour force
- c. an improvement in technology
- d. an increase in worker productivity

ANSWER: a

77. Suppose an economy produces two goods: food and machines. This economy always operates on its production possibilities frontier. Last year, it produced 65 units of food and 23 machines. This year, it is producing 72 units of food and 25 machines. Which of the following would NOT explain the increase in output?

- a. a reduction in unemployment
- b. an increase in the labour force
- c. an improvement in technology
- d. an increase in worker productivity

ANSWER: a

78. Suppose an economy produces two goods: food and machines. This economy always operates on its production possibilities frontier. Last year, it produced 91 units of food and 48 machines. This year, it is producing 95 units of food and 51 machines. Which of the following would NOT explain the increase in output?

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- a. a reduction in unemployment
- b. an increase in the labour force
- c. an improvement in technology
- d. an increase in worker productivity

ANSWER: a

79. The country of Econoland produces two goods: textbooks and widgets. Last year, it produced 200 textbooks and 500 widgets. This year, it produced 250 textbooks and 600 widgets. Given no other information, which of the following could NOT explain the change?

- a. Econoland experienced a reduction in unemployment.
- b. Econoland experienced an improvement in widget-making technology.
- c. Econoland acquired more resources.
- d. Econoland experienced a high level of emigration out of the country.

ANSWER: d

80. The country of Econoland produces two goods: textbooks and widgets. Last year, it produced 300 textbooks and 600 widgets. This year, it produced 350 textbooks and 700 widgets. Given no other information, which of the following could NOT explain the change?

- a. Econoland experienced a reduction in unemployment.
- b. Econoland experienced an improvement in widget-making technology.
- c. Econoland acquired more resources.
- d. Econoland experienced a high level of emigration out of the country.

ANSWER: d

81. Suppose there are two countries, Freedonia and Sylvania, which have identical amounts of resources, identical technologies, and identical populations. Both produce two types of goods, consumer goods and capital goods, and they both always operate on their production possibilities frontiers. The only difference is that this year Freedonia chooses to produce relatively more consumer goods than Sylvania.

What will happen as a result?

- a. Freedonia will have a higher living standard this year but will grow slower than Sylvania.
- b. Freedonia will have a higher living standard this year and will grow faster than Sylvania.
- c. Sylvania will have a higher living standard this year but will grow slower than Freedonia.
- d. Sylvania will have a higher living standard this year and will grow faster than Freedonia.

ANSWER: a

82. Suppose there are two countries, Freedonia and Sylvania, which have identical amounts of resources, identical technologies, and identical populations. Both produce two types of goods, consumer goods and capital goods, and they both always operate on their production possibilities frontiers. The only difference is that this year Sylvania chooses to produce relatively more capital goods than Freedonia.

What will happen as a result?

- a. Freedonia will have a lower living standard this year and will grow slower than Sylvania.
- b. Freedonia will have a lower living standard this year but will grow faster than Sylvania.
- c. Sylvania will have a lower living standard this year and will grow slower than Freedonia.
- d. Sylvania will have a lower living standard this year but will grow faster than Freedonia.

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ANSWER: d

83. What is the production possibilities frontier?

- a. a map that shows the frontier beyond which technological innovation is unprofitable
- b. a map that shows areas of the world in which capitalist production is highest
- c. a graph that shows the various combinations of resources that can be used to produce a given level of output
- d. a graph that shows the various combinations of output the economy can possibly produce given the available resources and technology

ANSWER: d

84. In what region of the production possibilities frontier can an economy produce?

- a. An economy can produce only on the production possibilities frontier.
- b. An economy can produce at any point inside or outside the production possibilities frontier.
- c. An economy can produce at any point on or inside the production possibilities frontier, but not outside the frontier.
- d. An economy can produce at any point inside the production possibilities frontier, but not on or outside the frontier.

ANSWER: c

85. When is an economic outcome said to be efficient?

- a. if the economy is using all of the resources it has available
- b. if the economy is conserving its resources for the future
- c. if the economy is getting all it can from the scarce resources it has available
- d. if the economy is able to produce more than its current production without additional resources

ANSWER: c

86. When constructing a production possibilities frontier, which of the following is NOT an assumption?

- a. The economy produces more than two goods.
- b. All the economy's factors of production are being used.
- c. The economy has a fixed level of technology.
- d. The economy's available factors of production are fixed.

ANSWER: d

87. On a production possibilities frontier, when is production efficient?

- a. if the production point is on the frontier
- b. if the production point is outside the frontier
- c. if the production point is on or inside the frontier
- d. if the production point is inside the frontier

ANSWER: a

88. What does it mean if an economy is producing efficiently?

- a. There is no way to produce more of one good without producing less of the other.
- b. It is possible to produce more of both goods.
- c. It is possible to produce more of one good without producing less of the other.

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d. It is not possible to produce more of one good at any cost.

ANSWER: a

89. Which concept is NOT illustrated by the production possibilities frontier?

- a. efficiency
- b. opportunity cost
- c. equity
- d. tradeoffs

ANSWER: c

90. When a production possibilities frontier is linear, what does it show?

- a. a truer picture of real life than a bowed-out production possibilities frontier
- b. that resources are perfectly adaptable from the production of one good to another
- c. an example of increasing opportunity cost
- d. an example of decreasing opportunity cost

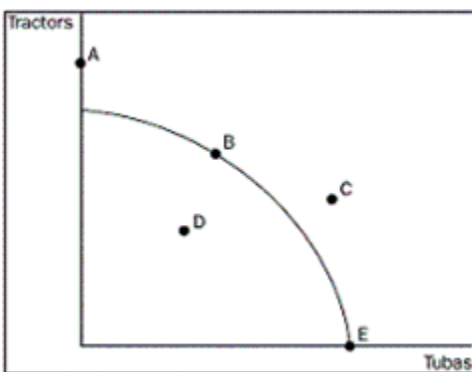
ANSWER: b

91. Suppose a nation is currently producing at a point inside its production possibilities frontier. What do we know?

- a. The nation is producing beyond its capacity, and inflation will occur.
- b. The nation is not using all available resources and is inefficient.
- c. The nation needs improved technology in order to produce an efficient combination of goods.
- d. There will be a large opportunity cost if the nation tries to increase production.

ANSWER: b

**Figure 2-3**



92. Refer to Figure 2-3. At which point or points can the economy produce?

- a. points B, D, and E
- b. points A, B, D, and E
- c. points D and C
- d. point D

ANSWER: a

93. Refer to Figure 2-3. Which point represents the maximum possible production of tubas?



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- a. point A
- b. point B
- c. point C
- d. point E

ANSWER: d

94. Refer to Figure 2-3. At which point or points can the economy NOT produce?

- a. point A
- b. point C
- c. points A and C
- d. points A, C, and D

ANSWER: c

95. Refer to Figure 2-3. Which point or points are efficient?

- a. points B and E
- b. points A, B, and E
- c. point C
- d. point D

ANSWER: a

96. Refer to Figure 2-3. Which point or points are inefficient?

- a. points A and C
- b. points B and C
- c. point C
- d. point D

ANSWER: d

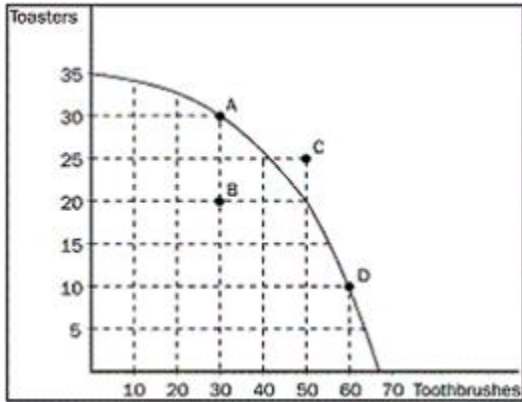
97. What is the opportunity cost of obtaining more of one good, as it relates to the production possibilities frontier?

- a. the amount of the other good that must be given up
- b. the market price of the additional amount produced
- c. the amount of resources that must be devoted to its production
- d. the number of dollars that must be spent to produce it

ANSWER: a

### Figure 2-4

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98. Refer to Figure 2-4. What is the opportunity cost to the economy of getting 30 additional toothbrushes by moving from point A to point D?

- a. 10 toasters
- b. 15 toasters
- c. 20 toasters
- d. 25 toasters

ANSWER: c

99. Refer to Figure 2-4. Suppose the economy is at point A. What is the opportunity cost of increasing the production of toothbrushes by 20 units?

- a. 10 toasters
- b. 20 toasters
- c. 30 toasters
- d. 40 toasters

ANSWER: a

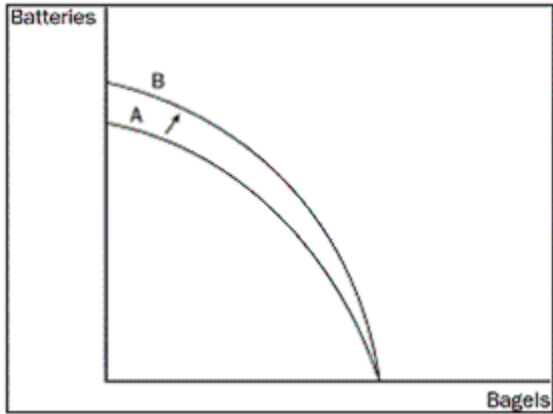
100. Refer to Figure 2-4. What is the opportunity cost in terms of toothbrushes of getting 10 additional toasters by moving from point B to point A?

- a. 0 toothbrushes
- b. 5 toothbrushes
- c. 10 toothbrushes
- d. 15 toothbrushes

ANSWER: a

### Figure 2-5

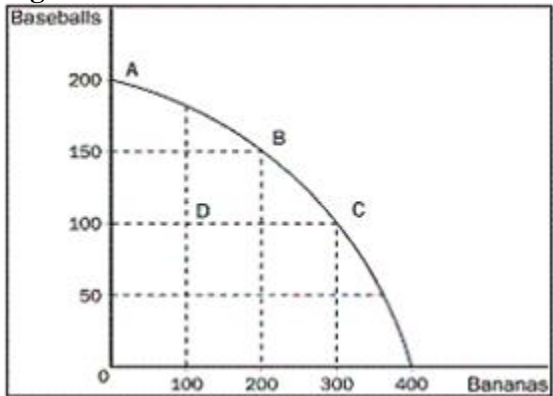
Chapter 2 - Thinking Like an Economist



101. Refer to Figure 2-5. What most likely caused the shift of the production possibilities frontier from A to B?
- technological improvement in the production of batteries
  - more labour available in the economy
  - a general technological breakthrough
  - more capital available in the economy

ANSWER: a

Figure 2-6



102. Refer to Figure 2-6. What is the opportunity cost to society of the movement from point A to point C?
- 50 baseballs
  - 100 baseballs
  - 100 bananas
  - 300 bananas

ANSWER: b

103. Refer to Figure 2-6. What is the opportunity cost to society of moving from point B to point D?
- 100 bananas and 100 baseballs
  - 50 bananas and 50 baseballs
  - 100 bananas and 50 baseballs
  - 50 bananas and 100 baseballs

ANSWER: c

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104. Refer to Figure 2-6. What was the most likely cause of the movement from point C to point D?
- unemployment
  - a decrease in society's preference for bananas
  - a decrease in society's preference for playing baseball
  - a shift to a longer working day

ANSWER: a

105. Refer to Figure 2-6. If this economy put all available resources into the production of bananas, how many could it produce?
- 200
  - 300
  - 400
  - 600

ANSWER: c

106. How can the production possibilities frontiers shift outward?
- if government increases the amount of money in the economy
  - if there is an increase in technology
  - if resources can be moved from the production of one good to another
  - if opportunity costs are reduced

ANSWER: b

107. When is the production possibilities frontier bowed outward?
- if resources are not perfectly adaptable
  - if the amount of resources increases
  - if the level of technology increases
  - if opportunity costs are constant

ANSWER: a

108. When a production possibilities frontier shifts outward, what concept is being demonstrated?
- tradeoffs
  - efficiency
  - economic growth
  - opportunity cost

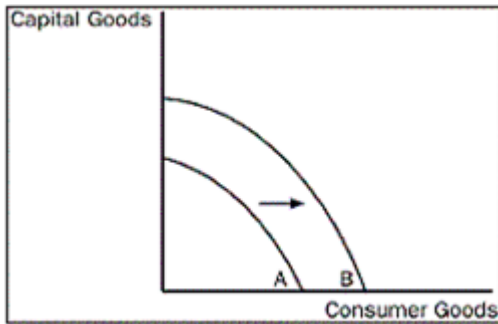
ANSWER: c

109. When an economy is operating inside its production possibilities frontier, what do we know?
- There are unused resources or inefficiencies in the economy.
  - The economy is operating with efficiency.
  - Moving to a point on its production possibilities frontier would illustrate economic growth.
  - To produce more of one good, the economy would have to give up some of the other good.

ANSWER: a

### Figure 2-7

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110. Refer to Figure 2-7. What would most likely have caused the production possibilities frontier to shift outward from A to B?

- a. an increase in resources necessary to produce capital goods
- b. an improvement in the technology of producing consumer goods
- c. an increase in the overall level of technology in the economy
- d. an increase in opportunity cost

ANSWER: c

111. Refer to Figure 2-7. Which of the following would best describe the movement from frontier A to B?

- a. society's preference for consumer and capital goods has changed
- b. economic growth
- c. a more equitable distribution of income
- d. an improvement in the allocation of resources

ANSWER: b

112. What would unemployment cause an economy to do?

- a. produce inside its production possibilities frontier
- b. produce on its production possibilities frontier
- c. produce outside its production possibilities frontier
- d. shift its production possibilities frontier inwards

ANSWER: a

**Table 2-1**

Production Possibilities for Toyland

Dolls	Fire Trucks
400	0
300	200
200	350
100	450
0	500

113. Refer to Table 2-1. What is the opportunity cost to Toyland of increasing the production of dolls from 200 to 300?

- a. 50 fire trucks
- b. 100 fire trucks
- c. 150 fire trucks

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d. 200 fire trucks

ANSWER: c

114. Refer to Table 2-1. What is the opportunity cost to Toyland of increasing the production of dolls from 300 to 400?

- a. 50 fire trucks
- b. 100 fire trucks
- c. 150 fire trucks
- d. 200 fire trucks

ANSWER: d

115. Refer to Table 2-1. What is the opportunity cost to Toyland of increasing the production of dolls from 100 to 200?

- a. 50 fire trucks
- b. 100 fire trucks
- c. 150 fire trucks
- d. 200 fire trucks

ANSWER: b

116. Refer to Table 2-1. What is the opportunity cost to Toyland of increasing the production of dolls from 0 to 100?

- a. 50 fire trucks
- b. 100 fire trucks
- c. 150 fire trucks
- d. 200 fire trucks

ANSWER: a

117. Refer to Table 2-1. What is the opportunity cost to Toyland of increasing the production of fire trucks from 0 to 200?

- a. 50 dolls
- b. 100 dolls
- c. 150 dolls
- d. 200 dolls

ANSWER: b

118. Refer to Table 2-1. What is the opportunity cost to Toyland of increasing the production of fire trucks from 450 to 500?

- a. 50 dolls
- b. 100 dolls
- c. 150 dolls
- d. 200 dolls

ANSWER: b

119. Refer to Table 2-1. How does the opportunity cost of producing an additional 100 dolls change as more dolls are produced?

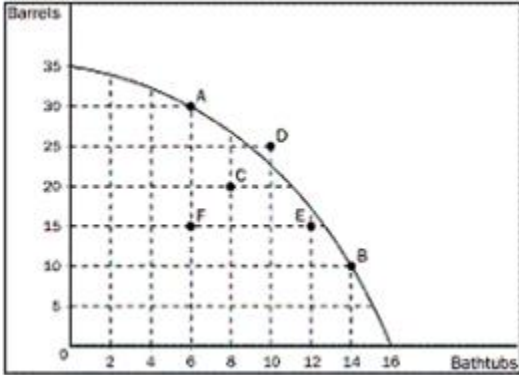
- a. It is constant and equal to 50 fire trucks.
- b. It is constant and equal to 100 fire trucks.
- c. It decreases as more dolls are produced.

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d. It increases as more dolls are produced.

ANSWER: d

Figure 2-8



120. Refer to Figure 2-8. What would be an efficient combination of bathtubs and barrels?

- a. 15 barrels and 12 bathtubs
- b. 20 barrels and 8 bathtubs
- c. 25 barrels and 10 bathtubs
- d. 30 barrels and 6 bathtubs

ANSWER: d

121. Refer to Figure 2-8. What is the opportunity cost of moving from point A to point B?

- a. 8 bathtubs
- b. 20 barrels
- c. the difference between the 8 bathtubs you get and the 20 barrels you give up
- d. the difference between the 20 barrels you get and the 8 bathtubs you give up

ANSWER: b

122. Refer to Figure 2-8. If this economy puts all of its resources into the production of bathtubs, how many could it produce?

- a. 0 barrels and 16 bathtubs
- b. 12 barrels and 35 bathtubs
- c. 20 barrels and 12 bathtubs
- d. 35 barrels and 0 bathtubs

ANSWER: a

123. Refer to Figure 2-8. Which combination is NOT possible for this economy to produce?

- a. 10 barrels and 14 bathtubs
- b. 20 barrels and 8 bathtubs
- c. 25 barrels and 10 bathtubs
- d. 30 barrels and 6 bathtubs

ANSWER: c

124. Refer to Figure 2-8. What would happen if this economy moved from point C to point E?

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- a. It still would not be producing efficiently.
- b. There would be no gain in either bathtubs or barrels.
- c. It would be producing more barrels and more bathtubs than at point C.
- d. It is not possible for this economy to move from point C to point E without additional resources.

ANSWER: a

125. What two broad subfields is the field of economics traditionally divided into?

- a. national economics and international economics
- b. consumer economics and producer economics
- c. private sector economics and public sector economics
- d. microeconomics and macroeconomics

ANSWER: d

126. What does microeconomics study?

- a. the behaviour of consumers
- b. how individual households and firms make decisions
- c. how government affects the economy
- d. how the economy as a whole works

ANSWER: b

127. What does macroeconomics study?

- a. individual decision makers
- b. economic history
- c. economy-wide phenomena
- d. how firms maximize profit

ANSWER: c

128. What would be considered a topic of study in macroeconomics?

- a. the impact of agricultural price support programs in the dairy industry
- b. the effect on Canadian steel producers due to an import quota imposed on foreign steel
- c. the effect of an increase in the price of imported oil on the Canadian inflation rate
- d. the effect of an increase in the price of imported coffee beans on the Canadian coffee industry

ANSWER: c

129. What might a microeconomist NOT study?

- a. the effects of rent control on housing in Toronto
- b. how a college student makes financial decisions
- c. how tariffs on shoes affects the shoe industry
- d. the effect on the economy when interest rates change

ANSWER: d

130. What would a macroeconomist NOT study?

- a. the impact of changes in beef prices on the consumption of chicken
- b. the effect of changes in tax rates on GDP



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- c. the impact of monetary policy on the rate of inflation
- d. the effect of interest rate policy on the rate of economic growth

ANSWER: a

131. What are economists who try to explain economic phenomena considered?

- a. scientists
- b. policy advisors
- c. statisticians
- d. teachers

ANSWER: a

132. What are economists who try to improve the world considered?

- a. mathematicians
- b. policy advisors
- c. scientists
- d. politicians

ANSWER: b

133. What are the roles of economists when trying to explain or to improve the world?

- a. In trying to explain the world, economists are policy advisers; in trying to improve the world, they are scientists.
- b. In trying to explain the world, economists are mathematicians; in trying to improve the world, they are policymakers.
- c. In trying to explain the world, economists are mathematicians; in trying to improve the world, they are scientists.
- d. In trying to explain the world, economists are scientists; in trying to improve the world, they are policy advisers.

ANSWER: d

134. For economists, what are the two types of statements about the world?

- a. positive statements and false statements
- b. true statements and false statements
- c. true statements and normative statements
- d. positive statements and normative statements

ANSWER: d

135. How do economists view positive statements?

- a. affirmative, justifying existing economic policy
- b. optimistic, putting the best possible interpretation on things
- c. descriptive, making a claim about how the world is
- d. prescriptive, making a claim about how the world ought to be

ANSWER: c

136. How do economists view normative statements?

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- a. descriptive, making a claim about how the world is
- b. as false statements about the normal condition of the world
- c. prescriptive, making a claim about how the world ought to be
- d. as statements that establish production goals for the economy

ANSWER: c

137. Which of the following is an example of a positive statement?

- a. Higher interest rates should lead to increased savings
- b. If welfare payments increase, the world will be a better place.
- c. Inflation is more harmful to the economy than unemployment.
- d. The benefits to the economy of improved equity are greater than the costs of reduced efficiency.

ANSWER: a

138. What does a normative statement describe?

- a. how the world was in the past
- b. how the world is
- c. how the world will be in the future
- d. how the world ought to be

ANSWER: d

139. Which of the following is an example of a normative statement?

- a. If the price of a product decreases, quantity demanded increases.
- b. Reducing speed limits to 40km/hr would reduce accidents involving pedestrians.
- c. Students who take public transit to school are more concerned about the environment.
- d. An increase in minimum wages will increase unemployment.

ANSWER: c

140. What type of statement is “When the price of gasoline goes up, more people choose to take public transit”?

- a. a positive economic statement
- b. a statement made by the Harper administration
- c. a normative economic statement
- d. a welfare statement

ANSWER: a

141. What do economists from the Department of Finance provide?

- a. the annual Economic Report of the Prime Minister
- b. the Senate with the annual budget
- c. enforcement of the competition laws
- d. advice on tax policy to the Prime Minister

ANSWER: d

142. When economists are speaking as policy advisors, which statements are they more likely to use?

- a. normative statements
- b. positive statements

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- c. objective statements
- d. descriptive statements

ANSWER: a

143. What does evaluating a positive statement involve?

- a. evaluating values as well as facts
- b. examining evidence
- c. evaluating the correctness of the statement
- d. consideration of the government's policy goals

ANSWER: b

144. Which of the following is NOT a positive statement?

- a. Lower oil prices will result in higher unemployment.
- b. Equity is more important than efficiency.
- c. Trade restrictions lower our standard of living.
- d. If a nation wants to avoid inflation, it should not print too much money.

ANSWER: b

145. Two economists, Adam and Joan, are discussing the possibility of substantially reforming the current federal tax system. Adam thinks the current system is fine, but Joan is in favour of reform. Which statement is the least likely explanation for the disagreement?

- a. Adam is a positive economist, and Joan is a normative economist.
- b. Adam and Joan have different positive views about the effect of changing the tax system.
- c. Adam and Joan have different values, and so they have different normative views about policy.
- d. Adam is better off under the current system, and Joan would be better off if the reforms were implemented.

ANSWER: a

146. When do you know an economist has crossed the line from scientist to policy adviser?

- a. when he explains just the facts
- b. when he makes positive statements
- c. when he makes normative statements
- d. when he cannot reach a conclusion

ANSWER: c

147. What do economists at Industry Canada do?

- a. assess temporary foreign worker programs
- b. give advice to overseas development projects
- c. help design and enforce Canada's competition laws
- d. decide which industries should be protected

ANSWER: d

148. What do economists at the Canadian International Development Agency do?

- a. give advice on overseas development projects
- b. collect data to help other economists

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- c. help formulate labour market policies
- d. assess temporary foreign worker programs

ANSWER: a

149. What do economists at the Bank of Canada do?

- a. analyze data on labour markets
- b. help negotiate trade agreements
- c. analyze macroeconomic developments
- d. enforce competition laws

ANSWER: c

150. In which department do economists help enforce competition laws?

- a. Environment Canada
- b. Industry Canada
- c. Ministry of Finance
- d. Canadian International Development Agency

ANSWER: b

151. Economists outside the government also offer policy advice. Which institution does NOT publish reports by economists?

- a. C.D. Howe Institute
- b. Fraser Institute
- c. Institute for Research on Public Policy
- d. H.M. Holmes Institute

ANSWER: d

152. What do economists at Foreign Affairs Canada and International Trade Canada do?

- a. help negotiate trade agreements with other countries
- b. offer advice on overseas economic development projects
- c. analyze financial markets
- d. compile databases on the economy

ANSWER: a

153. What do the duties of the economists employed by Human Resources and Skill Development Canada include?

- a. advising Parliament
- b. designing tax policy
- c. writing the annual Economic Report
- d. studying the relationship between average wages and gender

ANSWER: d

154. Who designs tax policy?

- a. Ministry of Finance
- b. Bank of Canada
- c. Industry Canada

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d. Department of Justice

ANSWER: a

155. What is a duty of Human Resources Canada?

- a. to analyze data on workers
- b. to design tax policy
- c. to enforce the country's antitrust laws
- d. to advise the Prime Minister

ANSWER: a

156. What does The Bank of Canada do?

- a. designs tax policy
- b. enforces the country's antitrust laws
- c. sets the country's monetary policy
- d. analyzes the data on workers

ANSWER: c

157. What does Human Resources Canada do?

- a. enforces the country's antitrust laws
- b. analyzes economic developments in Canada
- c. sets the country's monetary policy
- d. helps formulate labour market policies

ANSWER: d

158. What famous economist said, "The ideas of economists and political philosophers ... are more powerful than is commonly understood"?

- a. Gregory Mankiw
- b. John Maynard Keynes
- c. Paul Krugman
- d. David Ricardo

ANSWER: b

159. What are the two basic reasons why economists often appear to give conflicting advice to policymakers?

- a. differences in opinions and education
- b. differences in scientific judgments and values
- c. differences in scientific judgments and education
- d. differences in opinions and values

ANSWER: b

160. Why did George Bernard Shaw, among others, criticize economists?

- a. because they have too much influence over government decisions
- b. because many ideas are too theoretical and therefore do not work in "real life"
- c. because they tend to speak a different language, causing most people to not understand them
- d. because they seem to give conflicting advice to policymakers

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ANSWER: d

161. What are tariffs and quotas?
- policies that restrict trade among nations
  - instruments implemented to increase trade efficiency
  - measures of trade surpluses or deficits
  - policies meant to improve the well-being of consumers

ANSWER: a

162. What did a survey that asked the opinion of academic, business, and government economists on ten propositions about economic policy find?
- The respondents were almost equally divided on the propositions.
  - The respondents favoured the propositions by a slight margin.
  - The respondents disagreed with the propositions by a slight margin.
  - There was overwhelming endorsement of the propositions among the respondents.

ANSWER: d

163. What do almost all economists agree on about rent control?
- It improves the availability and quality of housing.
  - It allows the market for housing to work more efficiently.
  - It adversely affects the availability and quality of housing.
  - It is a very inexpensive way to help the most needy members of society.

ANSWER: c

164. Which statement is the best explanation for why policies such as rent control and import quotas persist in spite of the fact that experts are united in their opposition to such policies?
- Economists have not yet convinced the general public that the policies are undesirable.
  - Economists are simply wrong about the economic impact of these policies.
  - Economists have different values than do most people.
  - Economists are usually of a different political party than are lawmakers.

ANSWER: a

165. What are the three propositions about which most economists agree most often (in order from first to third)?
- rent control, tariffs and quotas, and floating exchange rates
  - tariffs and quotas, floating exchange rates, and fiscal policy
  - rent control, fiscal policy, and tariffs and quotas
  - fiscal policy, rent control, and floating exchange rates

ANSWER: a

166. What is the single most important purpose of your textbook?
- to teach you about the effects of the government's economic policies
  - to teach you the language of economics
  - to teach you the economist's way of thinking
  - to teach you how to make good consumer choices

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ANSWER: c

167. How would any economist who says all policy decisions are easy be best described?
- a. They must understand the relationship between a market economy and the government.
  - b. They must be a qualified policy adviser.
  - c. They have a Ph.D. in economics.
  - d. They cannot be trusted.

ANSWER: d

168. What did John Maynard Keynes believe the ideas of economists to be?
- a. generally incorrect
  - b. powerful
  - c. unrealistic ideals
  - d. empty promises

ANSWER: b

169. How did John Maynard Keynes refer to economics?
- a. as an easy subject at which very few excel
  - b. as an easy subject, but not as easy as philosophy or the pure sciences
  - c. as an easy subject, which very few can enjoy
  - d. as an easy subject, which deals primarily with common sense

ANSWER: a

170. How did the great economist John Maynard Keynes explain his comment that although economics is an easy subject compared with the higher branches of philosophy or pure science, it is a subject at which few excel?
- a. Most people who study economics are not very bright.
  - b. Good economists must possess a rare combination of gifts.
  - c. Economics is actually quite boring; hence, people tend to lose interest in it.
  - d. Good thinkers become frustrated with economics because it is not logical or relevant.

ANSWER: b

171. Which of the following is a one-variable graph?
- a. a demand curve
  - b. a production possibilities curve
  - c. a circular-flow diagram
  - d. a bar graph

ANSWER: d

172. In a pie chart, what does each “slice” of the pie represent?
- a. a specific percentage of the total pie
  - b. an equal share of the total pie
  - c. the amount of the pie each of the two variables represents
  - d. a different variable

ANSWER: a

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173. Why are graphs such as bar graphs limited?

- a. They can only show variables that are positively related.
- b. They are extremely difficult to understand.
- c. They cannot show relationships between variables.
- d. They provide information on no more than two variables.

ANSWER: c

174. In order to provide information on two variables, what must an economist use?

- a. a bar graph
- b. a pie chart
- c. the coordinate system
- d. a time-series graph

ANSWER: c

175. What is a type of graph that can be used to display the relationship between two variables?

- a. a pie chart
- b. a bar graph
- c. a time-series graph
- d. the coordinate system

ANSWER: d

176. What is a coordinate system used for?

- a. to show the flow of income and products in an economic system
- b. to organize labour and other resources in the production process
- c. to allow economists to show two variables on a single graph
- d. to teach economists how to draw graphs consistently

ANSWER: c

177. What is an ordered pair?

- a. the process of checking calculations twice before placing them on a graph
- b. two numbers that can be represented by a single point on a graph
- c. two numbers that are represented by side-by-side points on a graph
- d. two points on a graph that are equal distances from the origin

ANSWER: b

178. What is the first number in an ordered pair?

- a. the y-coordinate
- b. the x-coordinate
- c. either x or y, depending on the quadrant
- d. not useful to know, since most graphs in economics use p and q, not x and y

ANSWER: b

179. What is the ordered pair that represents the origin on a graph?



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- a. (1, 1)
- b. (0, 0)
- c. (0, 1)
- d. (1, 0)

ANSWER: b

180. What is the x-coordinate?

- a. the first number of an ordered pair, which represents the point's horizontal location
- b. the second number of an ordered pair, which represents the point's horizontal location
- c. the first number of an ordered pair, which represents the point's vertical location
- d. the second number of an ordered pair, which represents the point's vertical location

ANSWER: a

181. What is the y-coordinate?

- a. the first number of an ordered pair, which represents the point's horizontal location
- b. the second number of an ordered pair, which represents the point's horizontal location
- c. the first number of an ordered pair, which represents the point's vertical location
- d. the second number of an ordered pair, which represents the point's vertical location

ANSWER: d

182. What does the x-coordinate give?

- a. the diagonal location of the point
- b. the vertical location of the point
- c. the horizontal location of the point
- d. the quadrant location of the point

ANSWER: c

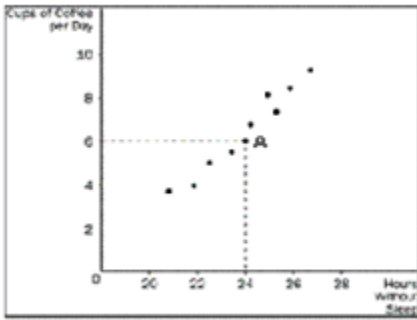
183. What is the point where both x and y are zero called?

- a. the origin
- b. the null
- c. the zero coordinate
- d. the tangency

ANSWER: a

### Figure 2-9

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184. Refer to Figure 2-9. What is this type of graph known as?

- a. a time-series graph
- b. a bar graph
- c. a scatterplot graph
- d. a pie chart

ANSWER: c

185. Refer to Figure 2-9. What is the correct designation of point A?

- a. (6, 0)
- b. (0, 24)
- c. (6, 24)
- d. (24, 6)

ANSWER: d

186. Refer to Figure 2-9. What do cups of coffee per day and the hours that someone can go without sleep have?

- a. a positive correlation
- b. a negative correlation
- c. a random correlation
- d. no correlation

ANSWER: a

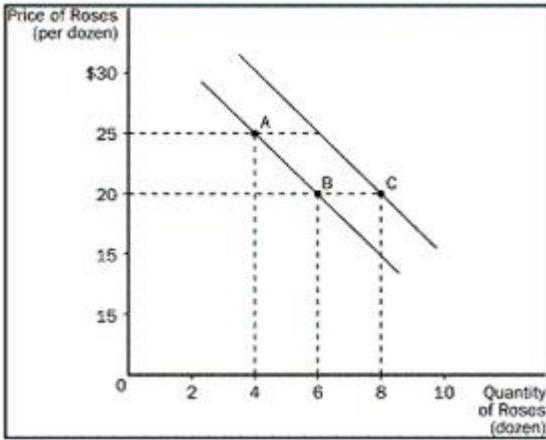
187. Refer to Figure 2-9. What would you say about the relationship between coffee and hours without sleep?

- a. The less coffee a person drinks per day, the more time he can go without sleep.
- b. There is no relationship between how much coffee per day a person drinks and how long they can go without sleep.
- c. The more coffee a person drinks per day, the longer he can go without sleep.
- d. The relationship between cups of coffee per day and time without sleep is too unpredictable to consider.

ANSWER: c

### Figure 2-10

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188. Refer to Figure 2-10 . What are the curves shown?

- a. supply curves
- b. demand curves
- c. preference curves
- d. income-consumption curves

ANSWER: b

189. Refer to Figure 2-10. What is the movement from point A to point B?

- a. a shift of the curve
- b. a change in consumer tastes
- c. a movement along the curve
- d. a change in consumer income

ANSWER: c

190. Refer to Figure 2-10. What is the movement from point B to point C?

- a. a shift of the curve
- b. a change in price
- c. a movement along the curve
- d. a change in costs to the firm

ANSWER: a

191. Refer to Figure 2-10. What is the slope of the curve between point A and point B?

- a.  $5/2$
- b.  $2/5$
- c.  $-2/5$
- d.  $-5/2$

ANSWER: d

192. Refer to Figure 2-10. What could have caused the movement from point B to point C?

- a. inflation
- b. a change in income
- c. a change in the price of roses

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d. a change in the cost of producing roses

ANSWER: b

193. Refer to Figure 2-10. How are the price of roses and the quantity of roses related?

- a. directly related, and therefore moving in the same direction
- b. directly related, and therefore moving in opposite directions
- c. inversely related, and therefore moving in opposite directions
- d. independent of each other

ANSWER: c

194. What happens when two variables have a negative correlation?

- a. They tend to move in opposite directions.
- b. They tend to move in the same direction.
- c. One variable will move while the other remains constant.
- d. The movement of the two variables is unpredictable.

ANSWER: a

195. What does a demand curve show?

- a. the relationship between income and quantity demanded
- b. the relationship between price and income
- c. the relationship between price and quantity demanded
- d. the relationship among income, price, and quantity demanded

ANSWER: c

196. What does a relatively steep demand curve mean?

- a. quantity demand will adjust slightly to a price change
- b. quantity demand will adjust greatly to a price change
- c. quantity demand will not adjust to a price change
- d. the change in quantity demand will exactly equal a change in price

ANSWER: a

197. If Jake chooses to buy fewer pizzas per month at each price, what will happen to his demand curve?

- a. It will shift inward.
- b. It will shift outward.
- c. It will not shift, but he will move along his demand curve from left to right.
- d. It will not shift, but he will move along his demand curve from right to left.

ANSWER: a

198. What happens when a relevant variable that is not named on either axis changes?

- a. There will be a movement along the curve.
- b. The curve may or may not change depending on how the variables are related.
- c. The curve will be unaffected since only the variables on the axis affect the curve.
- d. The curve will shift.

ANSWER: d

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199. What happens when a variable on an axis of a graph changes?

- a. The curve will not shift.
- b. The curve will shift.
- c. The curve may or may not change depending on how the variables are related.
- d. The curve will shift if the variable is on the vertical axis, but not on the horizontal axis.

ANSWER: a

200. How is the slope of a straight line calculated?

- a. rise divided by run
- b. run divided by rise
- c. the average of rise and run
- d. rise plus run

ANSWER: a

201. How is the slope of a line calculated?

- a. change in x/change in y
- b. change in y/change in x
- c. x/y
- d. x + y

ANSWER: b

202. What will the slope of a fairly flat upward-sloping line be?

- a. a small positive number
- b. a large positive number
- c. a small negative number
- d. a large negative number

ANSWER: a

203. Which statement about slope is NOT correct?

- a. Slope explains how much one variable responds to changes in another variable.
- b. Slope can be computed by  $\Delta x$  divided by  $\Delta y$ .
- c. Slope is positive if the two variables are moving in the same direction.
- d. Slope does not change if the line is linear.

ANSWER: b

204. Which of the following is NOT a problem associated with graphing in economics?

- a. omitted variables
- b. holding everything else constant
- c. reverse causality
- d. the ability to show a relationship between two variables

ANSWER: d

205. Bill has noticed that increases in unemployment insurance claims are associated with recessions, and therefore

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advocates limits on unemployment insurance so as to prevent recessions. Martha has noticed that most drug addicts once attended schools, and therefore advocates getting rid of schools so as to prevent drug addiction. What do we know about the reasoning of Bill and Martha?

- a. The reasoning of both Bill and Martha suffers from the omitted variable problem.
- b. The reasoning of both Bill and Martha suffers from the reverse causality problem.
- c. Bill's reasoning suffers from the reverse causality problem, and Martha's reasoning suffers from the omitted variable problem.
- d. Martha's reasoning suffers from the reverse causality problem, and Bill's reasoning suffers from the omitted variable problem.

ANSWER: c

206. The country of Econoland produces two goods: textbooks and widgets. Last year, it produced at a point inside its production possibilities frontier and currently it is operating at a point on the (same) production possibilities frontier. Which statement best explains the change?

- a. Econoland was originally experiencing unemployment but is now employing all its resources.
- b. Econoland experienced an improvement in widget-making technology.
- c. Econoland acquired more resources.
- d. Econoland experienced a high level of emigration out of the country.

ANSWER: a

207. While the scientific method is applicable to studying natural sciences, it is not useful in studying an economic system.

- a. True
- b. False

ANSWER: False

208. Since natural experiments offered by history cannot be used in economics, carefully constructed laboratory experiments must be used.

- a. True
- b. False

ANSWER: False

209. An economic model can accurately explain how the economy is organized because it is designed to include every feature of the real world.

- a. True
- b. False

ANSWER: False

210. All scientific models, including economic models, simplify reality in order to improve our understanding of it.

- a. True
- b. False

ANSWER: True

211. A circular-flow diagram is a visual model of how an economy is organized.

- a. True
- b. False

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ANSWER: True

212. In a simple circular-flow diagram, firms own the factors of production and use them to produce goods and services.

- a. True
- b. False

ANSWER: False

213. In a simple circular-flow diagram, the two types of markets in which households and firms interact are the markets for goods and services and the markets for factors of production.

- a. True
- b. False

ANSWER: True

214. In the markets for goods and services, as in the markets for the factors of production, households are buyers and firms are sellers.

- a. True
- b. False

ANSWER: False

215. In a circular-flow diagram, one loop shows the flow of real goods, services, and factors of production, and the other loop shows the corresponding flow of dollars.

- a. True
- b. False

ANSWER: True

216. A production possibilities frontier is a graph that shows the various combinations of outputs the economy can possibly produce given its factors of production and technology.

- a. True
- b. False

ANSWER: True

217. An economy can produce at any point on or outside the production possibilities frontier, but it cannot produce at points inside the frontier.

- a. True
- b. False

ANSWER: False

218. An efficient outcome in economics is one in which the economy is conserving the largest possible amount of resources, while still meeting the needs of society.

- a. True
- b. False

ANSWER: False

219. An economy is being efficient if it is impossible to produce more of one good without producing less of another.

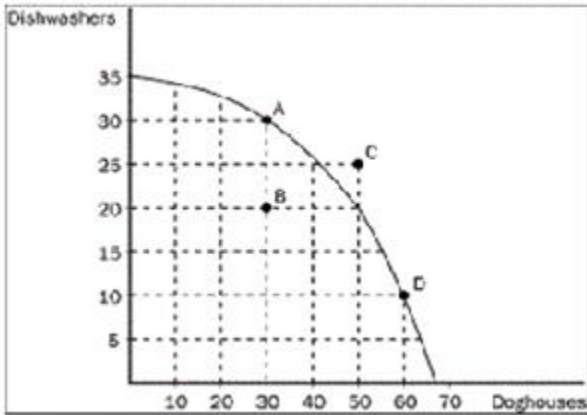
- a. True

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b. False

ANSWER: True

**Figure 2-11**



220. Refer to Figure 2-11. Points A, B, and D represent feasible or attainable outcomes for society.

a. True

b. False

ANSWER: True

221. Refer to Figure 2-11. The opportunity cost to the economy of moving from point A to point B is 10 dishwashers.

a. True

b. False

ANSWER: True

222. Refer to Figure 2-11. The opportunity cost of more doghouses increases as more doghouses are produced.

a. True

b. False

ANSWER: True

223. The tradeoff between the production of different goods can change because of technological improvement over time.

a. True

b. False

ANSWER: True

224. Economic growth causes a production possibilities frontier to shift outward.

a. True

b. False

ANSWER: True

225. The field of economics is divided into two subfields: microeconomics and macroeconomics.

a. True

b. False



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ANSWER: True

226. Normative statements describe how the world is, while positive statements prescribe how the world should be.

- a. True
- b. False

ANSWER: False

227. “Society would be better if the welfare system were abolished” is a normative statement, not a positive statement.

- a. True
- b. False

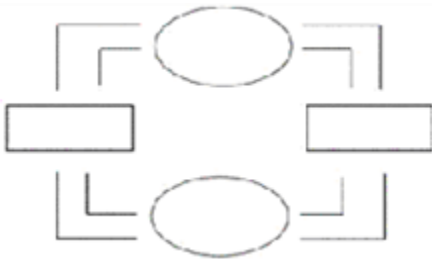
ANSWER: True

228. When economists are trying to explain the world they are acting as scientists, and when they are trying to improve it, they are policymakers.

- a. True
- b. False

ANSWER: True

229. Using this outline, draw a circular-flow diagram representing the interactions between households and firms in a simple economy. Explain briefly the various parts of the diagram.



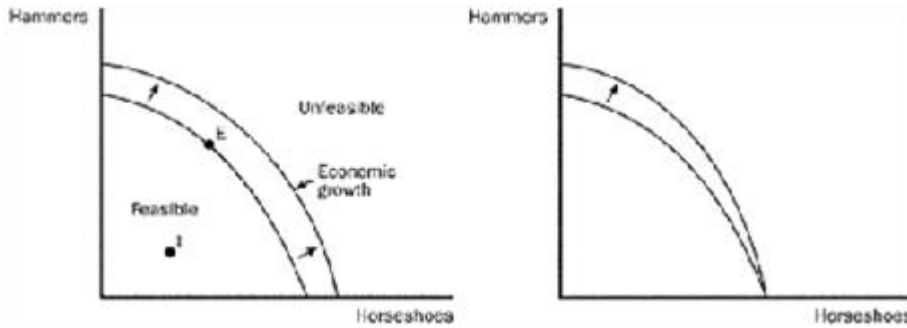
ANSWER: This diagram should duplicate the essential characteristics of the diagram in the text, with an explanation of the meaning of each flow and each market. It is important that the student understands that the inner loop represents the flow of real goods and services and that the outer loop represents the corresponding flow of payments.

230. Draw a production possibilities frontier showing increasing opportunity cost for hammers and horseshoes.

- a. On the graph, identify the area of feasible outcomes and the area of unfeasible outcomes.
- b. On the graph, label a point that is efficient as point E and a point that is inefficient as point I.
- c. On the graph, illustrate the effect of the discovery of a new vein of iron ore, a resource needed to make both horseshoes and hammers, on this economy.
- d. On a separate graph for hammers and horseshoes, illustrate the effect a new computerized assembly line in the production of hammers would have.

ANSWER: The graph on the left answers a, b and c. The graph on the right answers d.

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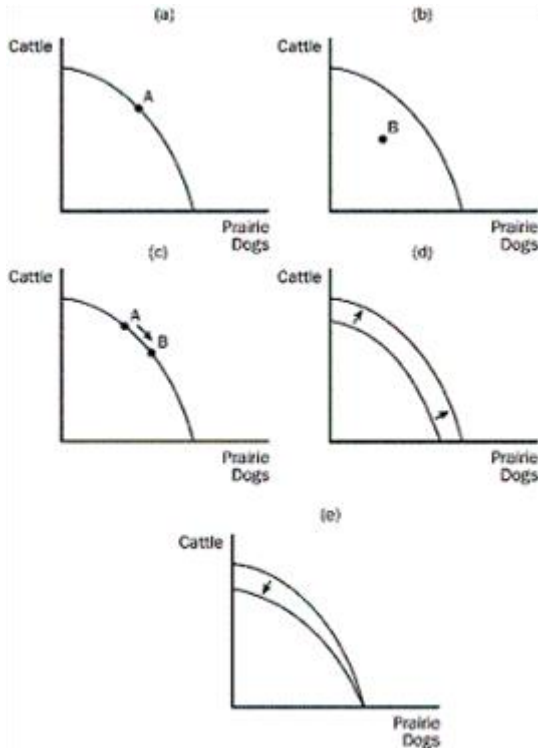


231. The prairie dog has always been considered a problem for Canadian cattle ranchers. They dig holes that cattle and horses can step in, and they eat grass necessary for cattle. Recently, ranchers have discovered that there is a demand for prairie dogs as pets. In some areas, prairie dogs can sell for as high as \$150. Cattlemen are now fencing off prairie dog towns on their land so these towns will not be disturbed by their cattle.

Draw a production possibilities frontier demonstrating a rancher's production option between cattle production and prairie dog production, showing increasing opportunity cost and what would happen in each of the following situations (using a separate graph for each situation):

- The outcome is efficient, with ranchers choosing to produce equal numbers of cattle and prairie dogs.
- As a protest against the government introducing the grey wolf back into the wild in their province, ranchers decide not to use 25% of the available grassland for grazing.
- The price of prairie dogs increases to \$200 each, so ranchers decide to allot additional land for prairie dogs.
- The government grants new leases to ranchers, giving them 10,000 new hectares of grassland each for grazing.
- A drought destroys most of the available grass for grazing of cattle, but not prairie dogs since they also eat plant roots.

ANSWER:



232. Identify each of the following topics as being part of microeconomics or macroeconomics:

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- the impact of a change in consumer income on the purchase of vacation properties
- the effect of a change in the price of eggs on the consumption of bacon
- the impact of a war in the Middle East on the rate of inflation in Canada
- factors influencing the rate of economic growth
- factors influencing the demand for cellphones
- the impact of tax policy on national saving
- the effect of pollution taxes on the Canadian coal industry
- the degree of competition in the airline industry
- the effect of an increase in the money supply on interest rates
- the impact of deregulation on the financial industry

ANSWER: a, b, e, g, h, and j are microeconomic topics. c, d, f, and i are macroeconomic topics.

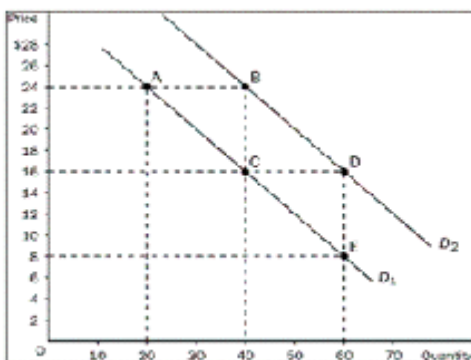
233. Which of the following statements are positive and which are normative?

- The minimum wage creates unemployment among young and unskilled workers.
- The minimum wage rates should be increased.
- If the price of a product in a market decreases, other things equal, quantity supplied will increase.
- A little bit of inflation is worse for society than a little bit of unemployment.
- The price of bonds is inversely related to the interest rate.
- If consumer income increases, other things equal, the demand for automobiles will increase.
- The Canadian income distribution is not equitable.
- Canadian workers deserve more liberal unemployment benefits.
- If the money supply increases, interest rates will fall.
- Students who study more are better students.

ANSWER: a, c, e, f, and i are positive statements. b, d, g, h, and j are normative statements.

234. Use the following demand curve to answer the following questions:

- How would point A be represented as an ordered pair?
- What type of curve is this?
- Does this curve show a positive or negative correlation between price and quantity?
- Compute the slope of D1 between points A and C.
- What is the slope of D1 between points C and E? Why would you NOT have to calculate this answer?
- What is it called if we move from D1 to D2?
- How do you know that the slope of D2 is the same as the slope of D1?



- ANSWER:
- (20, 24)
  - a demand curve
  - a negative correlation between price and quantity
  - $-8/20$  or  $-2/5$
  - $-2/5$ ; because the slope of a straight line is constant
  - an increase in demand

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g. because the two lines are parallel

235. All people use models in their everyday lives, and I am no exception in this regard. While meteorologists use extremely complex weather forecasting models, my model is much simpler. My model predicts that if it is cold in the morning, it will be cold in the afternoon.

- a. Why do I need such a silly model, instead of using more reliable forecasts that are easily and freely available?
- b. What is the main assumption of my model?
- c. How did I choose the assumption underlying my model?
- d. Is my assumption (and, therefore, my model) realistic?
- e. Is my model useful?
- f. How can I improve the predictions of my model?
- g. What is your model of weather forecasting when deciding what to wear for the day?
- h. What other simple models of weather forecasting can you imagine?

**ANSWER:**

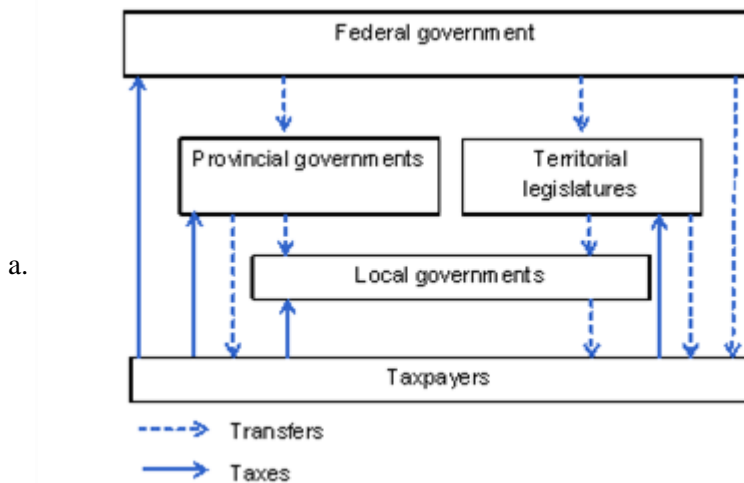
- a. People think in models. Even when I know the “official” weather forecast of the day, I use some kind of a rudimentary model to decide whether to trust the forecast. Another reason for which I need my model is that I may not have access to more informed forecasts. And yet another reason is that I need very short-term forecasts, such as is it going to rain over the next half an hour? Can I go out to run in the park?
- b. The main assumption of my model is that the weather is stable over the day.
- c. The assumption underlying my model is based on past experience concerning how fast the weather changes in the area.
- d. My model is not very realistic, because the weather sometimes changes quickly.
- e. Absolutely. If I had no model, I wouldn’t be able to make up my mind as to how to dress. Every decision people make is based on some model, even when people are not fully aware of that.
- f. One way is to gather more information about the current outside temperature and atmospheric pressure. Another way would be to look out the window to see how other people are dressed. This last method is indeed very valuable, since it uses the power of collective wisdom.
- g. Different people have different models. For instance, some people carry an umbrella all the time, implicitly assuming that rain is always possible.
- h. Other model could assume that the weather is going to be this afternoon the same as yesterday afternoon; yet somebody else may assume that the weather is the same all month: hot and dry in July and August, warm and rainy in September, etc.

236. This is an exercise in model building, based on the idea that one better understands the concept of models when faced with the task of making them.

- a. Construct a block diagram showing how different levels of governments interact with taxpayers and with each other in a federal state like Canada. Indicate with arrows what they exchange with each other. Identify the main elements of your model.
- b. Describe your model in a few sentences.
- c. What makes your description to be a model, instead of an accurate picture of the Canadian economy?
- d. What purpose can your model serve, or is there anything that this model helped you understand?

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ANSWER:



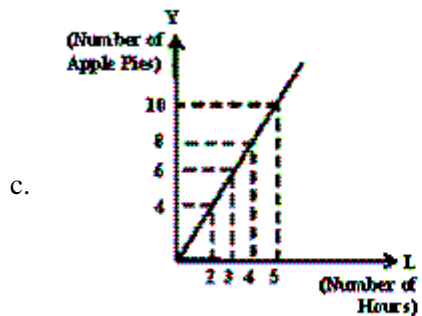
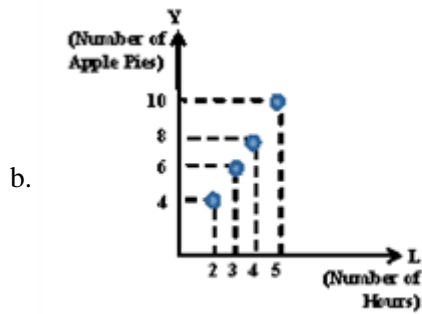
- b. A federal state has mainly three levels of government: federal, provincial, and local. Taxpayers, according to the model illustrated at point a, pay taxes directly to each level of government and receive transfers from each level of government. (This structure may be different for other federal structures.)
- c. This is a very simplified model. It does not say, for instance, how much taxes people pay to various levels of government or how much of the tax revenue is paid back to taxpayers. The model also omits to show what governments provide other than transfers.
- d. The model can be useful in describing the structure of a federal state, in particular showing how taxes and transfers move between taxpayers and various levels of government. The model needs to be more complex for other purposes, such as analysis.

237. The purpose of this exercise is to acquaint you with some simple mathematical relationships and how they translate into graphs. Economic models can come under the form of equations such as  $Y=F(L)$ , where  $Y$  is sometimes called the “dependent variable” and  $L$  is the “independent variable.”  $F$ , called “function,” tells us what the precise relationship between  $Y$  and  $L$  is. Theoretical relationships (models) are those that can be described by an equation like this. When equations are sufficiently simple, they can be put under the form of a curve in a graph. Consider the equation  $Y=2 \times L$ , where  $Y$  is the number of apple pies that Jonathan can cook in  $L$  hours. This equation describes the process of producing apple pies.

- How many pies does Jonathan cook in 2, 3, 4, and 5 hours?
- Draw a vertical axis and label it  $Y$ ; draw a horizontal axis and label it  $L$ . Show on this graph the four pairs  $(L, Y)$  you determined in part a.
- Draw a line connecting your four points and extend it to the left until it reaches the vertical axis.
- Identify a few assumptions that underlie your apple pie production model.
- Are your assumptions realistic?
- Can you identify a few limitations of your model?
- What could you use this model for?

ANSWER: a. We use the equation to calculate the number of pies corresponding to various numbers of hours of work:  $Y=2 \times 2 = 4$ , when  $L=2$ . Similarly, we can find  $Y=6$  for 3 hours,  $Y=8$  for 4 hours, and  $Y=10$  when Jonathan works 5 hours.

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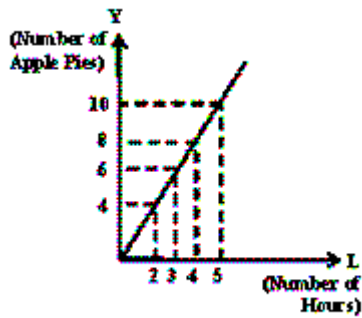
- d. An important assumption of this model is that Jonathan never gets tired, even after a few hours of work: he is able to produce the same number of apple pies in the 5th hour as in the first. Another assumption is that Jonathan needs no preparation time: At the end of the first ten minutes, he must have produced already  $2/6=1/3$  of a finished pie.
- e. The assumptions are realistic as long as we do not ask Jonathan how many pies he has produced after ten minutes or if we do not make Jonathan work many extra hours.
- f. The conditions mentioned in the answer to point e are also the limitations of the model. In general, we should not try to use the model to predict the number of apple pies in unusual circumstances.
- g. The model can be used to predict, under normal circumstances, how many apple pies can be produced in a certain number of hours, and what the cost of that production would be.

238. The purpose of this exercise is to show you how a mathematical (economic) model can be adjusted to better represent an economic phenomenon. Consider the equation  $Y=2 \times L$ , where Y is the number of apple pies that Jonathan can cook in L hours. This equation describes the process of producing apple pies.

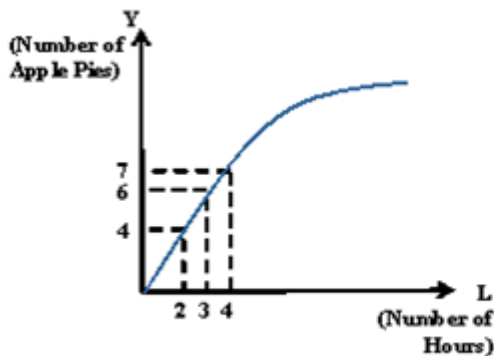
- a. In a graph, draw the line described by the equation  $Y=2 \times L$ . What is the slope of this line? What does the slope represent? Note that the slope is the same for the first, second, and all subsequent hours. In other words, the slope is constant. Why is the constant slope of the line a limitation of your model?
- b. How should the slope change for higher values of L, the number of hours worked, to account for the fact that the worker might get tired?
- c. How could you modify the model to capture the change in slope you identified in part b?

ANSWER:

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- a. The slope of the curve can be calculated by the ratio  $\Delta Y / \Delta L$ , where the symbol  $\Delta$  represents a small change. For instance, if L changes from 4 to 5,  $\Delta L = 5 - 4 = 1$ ; the corresponding change in Y is an increase from 8 to 10. Thus, the slope =  $\Delta Y / \Delta L = (10 - 8) / (5 - 4) = 2$ . The slope shows by how much Y changes when L increases by one unit. In our example, the slope shows how many pies Jonathan produces in an extra hour. Constant slope suggests that Jonathan doesn't ever get tired. He produces in the late hours of the workday as much as in the first hours. This may be a limitation of the model.
- b. A more realistic model should imply that Jonathan produces fewer pies per hour after a few hours of work than at the beginning of the workday. Since the number of apple pies per hour is the slope, we want the slope to become smaller at larger values of L. In other words, we want the curve to go up at larger Ls, but at a lower and lower rate.
- c. The following graph represents such a modified curve that better represents our situation. The curve becomes flatter at larger values of L.



239. This exercise will show you how different theories (models) can lead to very different courses of action. Suppose we ask the following question: Does income inequality promote economic growth and society's overall prosperity? Suppose two economists come up with the following theories (models):  
 Economist A believes that wealth accumulation in just a few hands increases savings because consumption is necessarily limited. Higher savings, in turn, allow investing in new production facilities that increase the country's overall income and everybody is better off. So, Economist A advocates a non-equalitarian society.

Economist B thinks that a very unequal distribution of wealth will increase capacities of production beyond the purchasing power of an essentially poor mass of consumers. For a while, consumers will increase their consumption, and prosperity, by borrowing from the rich, but eventually they will not be able to repay their debts and the economy will collapse for lack of demand. At that point, investing in new production facilities becomes unnecessary. In conclusion, Economist B thinks that extreme income inequality is counterproductive.

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

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- a. What are the policy implications of the two theories? (In other words, does it matter which theory is correct?)
- b. How would a scientist determine which theory is correct?
- c. Under what conditions would each of the two models be correct? Could one use both models under different circumstances?

**ANSWER:**

- a. The two theories have very different implications for policymaking. If policymakers believe the first theory, they advocate low corporate taxes, large corporations, little employment protection measures, and unregulated economies. If theory B is believed to be true, policymakers advocate a very progressive income tax system, so that an important part of large incomes is redistributed to the poor.
- b. The scientific method would try to compare economies that are similar in all respects except for income inequality, and see which of them fares better in terms of social prosperity, however one would like to measure it.
- c. The first model might be correct at relatively low levels of inequality, and the second would be correct when inequality reaches extreme levels. The question is: How low is “low” inequality, and what level could be dubbed “extreme”? It is hard to tell, unfortunately.