

Name: _____ Class: _____ Date: _____

Chapter 2

1. If she spends all her income on pens and notebooks, Wakako can afford either 9 pens and 10 notebooks or 3 pens and 12 notebooks per day. The price of a pen is 8 yen. How much is Wakako's daily income?
 - a. 313 yen
 - b. 317 yen
 - c. 309 yen
 - d. 303 yen
 - e. None of these is correct.

2. Juanita is fond of fish tacos and canned iced tea, which she buys at the same local shop. If she spends all her daily income on tacos and iced tea, Juanita can afford 6 tacos and 8 cans of iced tea per day, with nothing left over. Or she could use her entire budget to buy 4 tacos and 14 cans of iced tea per day. Iced tea costs \$2 per can. What is Juanita's daily income?
 - a. \$36
 - b. \$44
 - c. \$52
 - d. \$60
 - e. None of these is correct.

3. Alex lives on Lucky Charms cereal and chocolate bars. The price of Lucky Charms cereal is \$1 per box and the price of a chocolate bar is \$2. Harold allows himself to spend no more than \$11 a day on food. He also restricts his consumption to 6,500 calories per day. There are 1,500 calories in a box of Lucky Charms cereal and 500 calories in a chocolate bar. If he spends his entire money budget each day and consumes no more calories than his calorie limit, he can consume up to

- a. 3 boxes of Lucky Charms per day but no more.
 - b. 1 box of Lucky Charms per day but no more.
 - c. 4 chocolate bars per day but no more.
 - d. 4 boxes of Lucky Charms per day but no more.
 - e. None of these is correct.
4. Quincy lives on baby carrots and avocados. The price of baby carrots is \$1 per bag and the price of avocados is \$2 each. Quincy allows himself to spend no more than \$14 a day on food. He also restricts his consumption to 3,400 calories per day. There are 600 calories in a bag of baby carrots and 200 calories in an avocado. If he spends his entire money budget each day and consumes no more calories than his calorie limit, he can consume up to
- a. 2 bags of baby carrots per day but no more.
 - b. 3 bags of baby carrots per day but no more.
 - c. 4 bags of baby carrots per day but no more.
 - d. 5 bags of baby carrots per day but no more.
 - e. None of these is correct.
5. Navroz spends her entire budget and consumes 5 hamburgers and 13 candy bars. The price of each hamburger is twice the price of each candy bar. Her income doubles and the price of candy bars doubles, but the price of hamburgers stays the same. If she continues to buy 13 candy bars, what is the largest number of hamburgers she can afford?
- a. 10
 - b. 5
 - c. 12
 - d. 14
 - e. There is not enough information to say.

6. Jackie spends her entire budget and consumes 5 slices of cheesecake and 6 bottles of sparkling water. The price of each slice of cheesecake is twice the price of each bottle of water. Her income doubles and the price of the water doubles, but the price of each cheesecake slice stays the same. If she continues to buy 6 bottles of water, what is the largest number of slices of cheesecake she can afford?
- a. 12
 - b. 10
 - c. 14
 - d. 5
 - e. There is not enough information to say.
7. In year 1, the price of grapefruits was \$3, the price of tangelos was \$2, and income was \$90. In year 2, the price of grapefruits was \$9, the price of tangelos was \$6, and income was \$90. On a graph with x on the horizontal axis and y on the vertical, the new budget line is
- a. flatter than the old one and lies below it.
 - b. flatter than the old one and lies above it.
 - c. steeper than the old one and lies below it.
 - d. steeper than the old one and lies above it.
 - e. None of these is correct.
8. In year 1, the price of grapefruits was \$4, the price of tangelos was \$1, and income was \$70. In year 2, the price of grapefruits was \$9, the price of tangelos was \$2, and income was \$70. On a graph with x on the horizontal axis and y on the vertical, the new budget line is
- a. steeper than the old one and lies below it.
 - b. steeper than the old one and lies above it.

- c. flatter than the old one and lies below it.
- d. flatter than the old one and lies above it.
- e. None of these is correct.

9. If she spends her entire budget, Malaika can afford 74 strawberries and 9 bunches of kale. Or she can afford 14 strawberries and 21 bunches of kale. The price of strawberries is 17 cents each. What is the price of a bunch of kale?

- a. 95 cents
- b. 5 cents
- c. 22 cents
- d. 85 cents
- e. None of these is correct.

10. If she spends her entire budget, Joanna can afford 39 onions and 12 cucumbers. Or she can afford 24 onions and 17 cucumbers. The price of onions is 9 cents each. What is the price of one cucumber?

- a. 12 cents
- b. 37 cents
- c. 27 cents
- d. 3 cents
- e. None of these is correct.

11. Fatima thrives on two goods: almonds and raspberries. The cost of a bag of almonds is 40 Guinea francs each and the cost of a box of raspberries is 20 Guinea francs each. If her income is 320 Guinea francs, how many bags of almonds can she buy if she spends all her income on almonds?

- a. 6

- b. 8
- c. 16
- d. 11
- e. None of these is correct.

12. Paulina thrives on two goods: chocolate cake and blueberries. The cost of a slice of chocolate cake is 30 pesos each and the cost of a box of blueberries is 15 pesos each. If her income is 180 pesos, how many slices of cake can she buy if she spends all her income on cake?

- a. 9
- b. 12
- c. 4
- d. 6
- e. None of these is correct.

13. Siddhant spends his entire income on 8 bags of apples and 8 bunches of bananas. The price of apples is \$9 per bag, and his income is \$88. He can afford a commodity bundle with A bags of apples and B bunches of bananas that satisfies the budget equation

- a. $9A + 4B = 88$.
- b. $18A + 4B = 176$.
- c. $11A + 2B = 88$.
- d. $9A + 6B = 90$.
- e. None of these is correct.

14. Maximo spends his entire income on 9 bags of apples and 4 bunches of bananas. The price of apples is \$6 per bag and his income is \$90. He can afford a

commodity bundle with A bags of apples and B bunches of bananas that satisfies the budget equation

- a. $6A + 13B = 92$.
- b. $12A + 18B = 180$.
- c. $8A + 9B = 90$.
- d. $6A + 11B = 90$.
- e. None of these is correct.

15. Ja'Marr thrives on two goods: cauliflower and salmon. The cost of a head of cauliflower is \$4 and the cost of a slice of salmon is \$3. If Ja'Marr spent all his income on salmon, he could afford 12 slices of salmon per week. How many heads of cauliflower could he buy if he spent all his income on cauliflower?

- a. 36
- b. 48
- c. 9
- d. 16
- e. None of these is correct.

16. Suppose that the price of a bus fare triples, and so does the price of a rideshare (such as Uber or Lyft). At the same time, income doubles. On a graph where the budget line for bus fares and rideshares is drawn with bus fares on the horizontal axis and rideshares on the vertical axis, the

- a. budget line becomes steeper and shifts inward.
- b. budget line becomes flatter and shifts outward.
- c. budget line becomes flatter and shifts inward.
- d. new budget line is parallel to the old budget line and lies below it.
- e. None of these is correct.

17. Suppose that the price of a bus fare triples and the price of a rideshare (such as Uber or Lyft) doubles. At the same time, income triples. On a graph where the budget line for bus fares and rideshares is drawn with bus fares on the horizontal axis and rideshares on the vertical axis, the new budget line

- a. is flatter than the old one and lies below it.
- b. is flatter than the old one and lies above it.
- c. passes through the center of the old budget line.
- d. is steeper than the old one and lies below it.
- e. is steeper than the old one and lies above it.

18. While traveling abroad, Carolina spent all the money in her purse to buy 5 bowls of udon and 6 sushi rolls. Udon costs 8 units of the local currency per plate and Carolina had 82 units of currency in her purse. If u denotes the number of bowls of udon and s denotes the number of sushi rolls purchased, the set of commodity bundles she could afford with the money in her purse is described by the equation

- a. $8u + 6s = 82$.
- b. $6u + 8s = 82$.
- c. $8u + 7s = 82$.
- d. $5u + 6s = 82$.
- e. There is not enough information to determine the answer.

19. Shivam consumes only apple pie and oatmeal. A slice of apple pie costs him \$1 and oatmeal costs \$2 per serving. A slice of apple pie has 850 calories and a serving of oatmeal has 200 calories. Shivam never spends more than \$20 a day on food and he always consumes at least 8,000 calories per day. Which of the following is necessarily true?

- a. Shivam consumes at least 9 slices of apple pie a day.
- b. Shivam never consumes more than 6 servings of oatmeal a day.

- c. Shivam never consumes positive amounts of both goods.
- d. Shivam consumes only apple pie.
- e. None of these is correct.

20. Laszlo consumes only turnips and collard greens. When the price of turnips was 9 crowns per sack and the price of collard greens was 5 crowns per bunch, he spent his entire income to buy 5 sacks of turnips and 10 bunches of collard greens per month. Now the government subsidizes turnips. Market prices haven't changed, but consumers get a subsidy of 5 crowns for every sack of turnips consumed. To pay for this subsidy, the government introduced an income tax. Lars pays an income tax of 20 crowns per month. If s is the number of sacks of turnips and c is the number of bunches of collard greens, what is Lars's new budget equation?

- a. $9s + 5b = 100$
- b. $14s + 5b = 95$
- c. $4s + 5b = 95$
- d. $4s + 5b = 75$
- e. $14s + 5b = 120$

21. If you spent your entire income, you could afford either 3 jugs of milk and 9 bags of flour or 9 jugs of milk and 3 bags of flour. If you spent your entire income on milk, how many jugs of milk could you buy?

- a. 21
- b. 16
- c. 12
- d. There is not enough information to determine the number of x .
- e. None of these is correct.

22. If you spent your entire income, you could afford either 6 jugs of milk and 13 bags of flour or 13 jugs of milk and 6 bags of flour. If you spent your entire income on milk, how many jugs of milk could you buy?

- a. 19
- b. 32
- c. 24
- d. There is not enough information to determine the number of x .
- e. None of these is correct.

23. Which of the following factors affects Darcy's current monthly budget line for goods x and y ?

- a. the amount of money Darcy spent on good x and good y last month
- b. the current price of good x
- c. next month's price of good y
- d. Darcy's preferences between good x and good y
- e. the number of people Darcy is shopping for

24. Your budget constraint for the two goods S and R is $12A + 4B = I$, where I is your income. You are currently consuming more than 27 units of R . To get 3 more units of S , how many units of R would you have to give up?

- a. 0.33
- b. 0.11
- c. 3
- d. 9
- e. None of these is correct.

25. Your budget constraint for the two goods S and R is $8A + 4B = I$, where I is your income. You are currently consuming more than 18 units of R . To get 3 more units of S , how many units of R would you have to give up?

- a. 6
- b. 0.50
- c. 0.17
- d. 2
- e. None of these is correct.

26. Young Santi loves Reese's Peanut Butter Cups and hates broccoli. To induce him to eat enough broccoli and to restrain him from eating too many Reese's Cups, his dad pays him 10 cents for every serving of broccoli he eats. The only way he can get Reese's Cups is to buy them at the corner store, where Reese's Cups cost 5 cents each. Besides what he earns from eating broccoli, Santi gets an allowance of 10 cents per week. If Santi consumes only broccoli and Reese's Cups and if his consumption bundles are graphed with servings of broccoli on the horizontal axis and Reese's Cups on the vertical axis, then Santi's budget line has a slope

- a. of 2.
- b. of less than -2 .
- c. of -2 .
- d. of $1/2$.
- e. greater than 2.

27. Because the Stephaneks' household income of \$2,600 per month is near the U.S. poverty line, the family qualifies for the U.S. government's Supplemental Nutrition Assistance Program (SNAP). Every month, the Stephaneks receive \$835 that they can spend only on food. If x represents total money spent on food and y represents total money spent on everything else, which equation or set of equations correctly describes the Stephaneks' monthly budget constraint?

- a. $x + y = \$1,765$

b. $x + y = \$3,435$

c. For $x \leq \$835$, $y = \$2,600$. For $x > \$835$, $y = \$2,600 - x$.

d. For $x \leq \$835$, $y = \$2,600$. For $x > \$835$, $y = \$3,435 - x$.

e. For $x \leq \$1,765$, $y = \$3,435$. For $x > \$1,765$, $y = \$3,435 - x$.

28. Youngjae must pay \$6 each for paperback books, B . If Youngjae is paid \$24 for every lawn he mows, L , and if his relatives send him an allowance of \$48, then his budget line is described by the equation

a. $6B = 24L$.

b. $6B + 24L = 48$.

c. $6B - 24L = 48$.

d. $6B = 48 - L$.

e. None of these is correct.

29. Youngjae must pay \$6 each for paperback books, B . If Youngjae is paid \$24 for every lawn he mows, L , and if his relatives send him an allowance of \$96, then his budget line is described by the equation

a. $6B = 24L$.

b. $6B + 24L = 96$.

c. $6B = 96 - L$.

d. $6B - 24L = 96$.

e. None of these is correct.

30. If you have an income of \$40 to spend, commodity 1 costs \$4 per unit, and commodity 2 costs \$8 per unit, then the equation for your budget line can be written

a. $x_1/4 + x_2/8 = 40$.

b. $(x_1 + x_2)/12 = 40$.

c. $x_1 + 2x_2 = 10$.

d. $5x_1 + 9x_2 = 41$.

e. $12(x_1 + x_2) = 40$.

31.If you have an income of \$40 to spend, commodity 1 costs \$2 per unit, and commodity 2 costs \$10 per unit, then the equation for your budget line can be written

a. $x_1 + 5x_2 = 20$.

b. $x_1/2 + x_2/10 = 40$.

c. $(x_1 + x_2)/12 = 40$.

d. $3x_1 + 11x_2 = 41$.

e. $12(x_1 + x_2) = 40$.

32.If you could exactly afford either 4 jugs of maple syrup and 24 boxes of pancake mix or 9 jugs of maple syrup and 4 boxes of pancake mix, then spent all your income on pancake mix, how many boxes of pancake mix could you buy?

a. 40

b. 20

c. 60

d. 13

e. None of these is correct.

33.If you could exactly afford either 5 jugs of maple syrup and 21 boxes of pancake mix or 9 jugs of maple syrup and 5 boxes of pancake mix, then spent all your income on pancake mix, how many boxes of pancake mix could you buy?

a. 57

- b. 14
- c. 25
- d. 41
- e. None of these is correct.

34. Özlem used to consume 100 units of X and 50 units of Y when the price of X was \$2 and the price of Y was \$4. If the price of X rose to \$4 and the price of Y rose to \$9, how much would Özlem's income have to rise so that she could still afford her original bundle?

- a. \$700
- b. \$450
- c. \$350
- d. \$1,050
- e. None of these is correct.

35. Özlem used to consume 100 units of X and 50 units of Y when the price of X was \$2 and the price of Y was \$4. If the price of X rose to \$3 and the price of Y rose to \$8, how much would Özlem's income have to rise so that she could still afford her original bundle?

- a. \$750
- b. \$250
- c. \$300
- d. \$500
- e. None of these is correct.

36. This weekend, Clovis has time to read 20 pages of a Jane Austen novel and 15 pages of a physiology textbook. Alternatively, he could read 15 pages of Austen and 25 pages of physiology. Which of these equations describes all combinations

of pages of Jane Austen, A , and physiology, P , that Clovis could read over the weekend?

- a. $A + P = 35$
- b. $A/2 + P = 20$
- c. $A + P = 40$
- d. $2A + P = 55$
- e. $A + 2P = 50$

37. This weekend, Nouri has time to read 20 pages of accounting and 15 pages of psychology. Alternatively, he could read 10 pages of accounting and 20 pages of psychology. Which of these equations describes all combinations of pages of accounting, A , and psychology, P , that Nouri could read over the weekend?

- a. $A/2 + P = 25$
- b. $A + P = 35$
- c. $A + P = 30$
- d. $2A + P = 55$
- e. $A + 2P = 45$

38. Ads in a cosmetology magazine are read by 300 hairstylists and 1,000 makeup artists. Ads in a hair trends magazine are read by 250 hairstylists and 300 makeup artists. If Jamaal had \$3,000 to spend on advertising, the price of ads in the cosmetology were \$500, and the price of ads in the hair trends magazine were \$250, then the combinations of hairstylists and makeup artists he could reach with his advertising budget would be represented by the integer values along a line segment that runs between the two points

- a. (3, 000, 3, 600) and (1, 800, 6, 000).
- b. (3, 600, 4, 200) and (1, 800, 7, 200).
- c. (0, 3, 600) and (1, 800, 0).
- d. (3, 600, 0) and (0, 7, 200).

e. (2, 400, 0) and (0, 6, 000).

39. Ads in a cosmetology magazine are read by 300 hairstylists and 1,000 makeup artists. Ads in a hair trends magazine are read by 250 hairstylists and 300 makeup artists. If Jamaal had \$3,750 to spend on advertising, the price of ads in the cosmetology magazine were \$500, and the price of ads in the hair trends magazine were \$250, then the combinations of hairstylists and makeup artists he could reach with his advertising budget would be represented by the integer values along a line segment that runs between the two points

- a. (4, 500, 0) and (0, 9, 000).
- b. (3, 750, 4, 500) and (2, 250, 7, 500).
- c. (0, 4, 500) and (2, 250, 0).
- d. (4, 500, 5, 250) and (2, 250, 9, 000).
- e. (3, 000, 0) and (0, 7, 500).

40. In the economy of Mungo, there is a third person called Ike. Ike has a red income of 92 rcus and a blue income of 20 bcus. (Recall that red prices are 2 rcus [red currency units] per unit of ambrosia and 6 rcus per unit of bubble gum. Blue prices are 1 bcu [blue currency unit] per unit of ambrosia and 1 bcu per unit of bubble gum. You must pay twice for what you buy, once in red currency and once in blue currency.) If Ike spends all his blue income but not all his red income, then he consumes

- a. at least 13 units of bubble gum.
- b. at least 7 units of ambrosia.
- c. exactly twice as much bubble gum as ambrosia.
- d. at least 17 units of bubble gum.
- e. equal amounts of ambrosia and bubble gum.

41. In the economy of Mungo, there is a third person called Ike. Ike has a red income of 94 rcus and a blue income of 25 bcus. (Recall that red prices are 2 rcus [red

currency units] per unit of ambrosia and 6 rcus per unit of bubble gum. Blue prices are 1 bcu [blue currency unit] per unit of ambrosia and 1 bcu per unit of bubble gum. You must pay twice for what you buy, once in red currency and once in blue currency.) If Ike spends all his blue income but not all his red income, then he consumes

- a. at least 14 units of ambrosia.
- b. at least 11 units of bubble gum.
- c. exactly twice as much bubble gum as ambrosia.
- d. at least 15 units of bubble gum.
- e. equal amounts of ambrosia and bubble gum.

42. Camilla consumes only two goods: ginger biscuits and peppermint tea. Each cup of tea costs 1 British pound. Each tin of biscuits costs 4 pounds but comes with a complimentary cup of tea, courtesy of the biscuit shop. If we draw Camilla's budget set with cups of tea plotted on the horizontal axis and tins of biscuits on the vertical axis, then her budget set will be bounded by two line segments with slopes

- a. zero and -1 .
- b. -4 and infinity.
- c. $-1/3$ and -1 .
- d. zero and $-1/3$.
- e. 4 and -3 .

43. Suppose there are two goods, the prices of both goods are positive, and a consumer's income is also positive. If the consumer's income doubles and the price of each good triples, the

- a. consumer's budget line gets steeper and shifts inward.
- b. slope of the consumer's budget line does not change but the budget line shifts outward away from the origin.
- c. consumer's budget line gets steeper and shifts outward.

- d. slope of the consumer's budget line does not change but the budget line shifts inward toward the origin.
- e. consumer's budget line gets flatter and shifts inward.

44. Thomas consumes coconuts (C) and daiquiris (D). His budget line was described by the equation $D = 20 - 2C$. Later, his budget line could be described by the equation $D = 10 - C$. The change between the earlier budget line and the later could be explained by the fact that

- a. the price of coconuts and Thomas's income both increased.
- b. the price of coconuts increased and Thomas's income decreased.
- c. the price of coconuts decreased and Thomas's income increased.
- d. the price of coconuts and Thomas's income both decreased.
- e. Thomas's utility for daiquiris decreased.

45. If there are two goods with positive prices and the price of one good is reduced, while income and other prices remain constant, then the size of the budget set is reduced.

- a. True
- b. False

46. If good 1 is measured on the horizontal axis, good 2 is measured on the vertical axis, and the price of good 1 is p_1 and the price of good 2 is p_2 , then the slope of the budget line is $-p_2/p_1$.

- a. True
- b. False

47. If all prices are doubled and money income is left the same, the budget set does not change because relative prices do not change.

- a. True
- b. False

48.If there are two goods and if one good has a negative price and the other has a positive price, then the slope of the budget line will be positive.

- a. True
- b. False

49.If all prices double and income triples, then the budget line will become steeper.

- a. True
- b. False

50.If good 1 is on the horizontal axis and good 2 is on the vertical axis, then an increase in the price of good 1 will not change the horizontal intercept of the budget line.

- a. True
- b. False

51.If there are two goods and the price of one good rises while the other price stays the same, then the slope of the budget line must change.

- a. True
- b. False

52.There are two goods. You know how much of good 1 a consumer can afford if spending all income on good 1. If you knew the ratio of the prices of the two goods, then you could draw the consumer's budget line without any more information.

- a. True
- b. False

53.A consumer prefers more to less of every good. The person's income rises, and the price of one of the goods falls while other prices stay constant. These changes must have made the consumer better off.

- a. True

b. False

54. There are three goods. The price of good 1 is -1 , the price of good 2 is $+1$, and the price of good 3 is $+2$. It is physically possible for a consumer to consume any commodity bundle with nonnegative amounts of each good. A consumer who has an income of 10 could afford to consume some commodity bundles that include 5 units of good 1 and 6 units of good 2.

a. True

b. False

55. A decrease in income pivots the budget line around the bundle initially consumed.

a. True

b. False

56. A budget constraint consisting simply of a perfectly vertical line or a perfectly horizontal line is impossible.

a. True

b. False

57. Perry lives on avocados and beans. The price of avocados is \$10, the price of beans is \$5, and his income is \$40. Show Perry's budget line on a graph with avocados on the horizontal axis and beans on the vertical axis. Label the point where the budget line hits the horizontal axis *A* and the point where the budget line hits the vertical axis *B*. Next to these labels, write down the number of avocados purchased at *A* and the number of beans purchased at *B*. Draw another budget line showing what Perry's budget would be if his income doubled, the price of avocados doubled, and the price of beans stayed the same. Label the point where this line hits the vertical axis *C* and the point where it hits the horizontal axis *D*. Next to these labels, write the number of avocados at *C* and the number of beans at *D*.

58. Brenda likes hot dogs and Coca-Cola. Hot dogs cost \$1 each and Cokes cost \$0.50 per bottle. There is a special promotion for Coke that will last for one month. If Brenda sends in the bottle caps from the Cokes she drinks during the

next month, she will get a refund of \$0.20 for every bottle cap beyond the first 12 she returns. For example, if she returns 25 bottle caps, she will get back $\$2.60 = \$0.20 (25 - 12)$. Brenda has \$40 to spend on hot dogs and Coke during the next month. Draw her budget line with Coke on the horizontal axis and hot dogs on the vertical axis. Find the points where the budget line hits the axes and the point where it has a kink. At each of these three points, write down the quantities of each good consumed.

59. Kumiko is studying economics and political science. She can read 30 pages of political science per hour but only 5 pages of economics per hour. This week she has a 50-page assignment in economics and a 150-page assignment in political science. Because of sorority rush, she cannot devote more than 10 hours to studying these subjects this week. She realizes she cannot complete all her assignments but is determined to complete at least 30 pages of her economics reading. Draw a graph with pages of economics on the horizontal axis and pages of political science on the vertical axis. On this graph, show the possibilities that are consistent with the constraints that Kumiko has imposed on herself. (She is allowed to read ahead in either subject.) Label key points on your graph with their numerical values.

60. Ed Igeh and his family live in a city with many private swim clubs and one public school. The Igehs are thinking of sending their only child to private school because they would like a school that has more teachers and other resources per student than the local public school. The Igehs must pay taxes to support local public schools whether their child goes to private school or not. There is such a variety of private schools that the Igehs can get just about any level of inputs per student by choosing the appropriate private school. Tuition in the private schools equals expenditure per student. Draw a diagram to show the Igehs' budget constraint. Put expenditures per student in the child's school on the horizontal axis and other goods on the vertical.

61. Delia, a single mother of two children, earns \$2,300 per month. Her family qualifies for the U.S. government's Supplemental Nutrition Assistance Program (SNAP). Every month, Delia receives \$835 she can spend only on food. Draw a graph of Delia's budget constraint, with food on the horizontal axis (measured in dollars spent) and Delia's other monthly purchases on the vertical axis (also measured in dollars spent).

Answer Key

Chapter 2

1. Answer: E
2. Answer: C
3. Answer: A
4. Answer: C
5. Answer: A
6. Answer: B
7. Answer: E
8. Answer: A
9. Answer: D
10. Answer: C
11. Answer: B
12. Answer: D
13. Answer: B
14. Answer: B
15. Answer: C
16. Answer: D
17. Answer: E
18. Answer: C
19. Answer: B
20. Answer: D

21. Answer: C

22. Answer: A

23. Answer: B

24. Answer: D

25. Answer: A

26. Answer: A

27. Answer: D

28. Answer: C

29. Answer: D

30. Answer: C

31. Answer: A

32. Answer: A

33. Answer: D

34. Answer: B

35. Answer: C

36. Answer: D

37. Answer: A

38. Answer: A

39. Answer: B

40. Answer: D

41. Answer: A

42. Answer: D

43. Answer: D

44. Answer: B

45. Answer: B

46. Answer: B

47. Answer: B

48. Answer: A

49. Answer: B

50. Answer: B

51. Answer: A

52. Answer: A

53. Answer: A

54. Answer: A

55. Answer: B

56. Answer: B

57. Answer: At *A* there
are 4
avocados
and at *B*
there are 8
units of
beans. At *C*
there are 4
avocados
and at *D*
there are 16
units of
beans.

58. Answer: The budget
line runs from
(0, 40) on the
vertical axis

to a kink
point (12, 34)
and from (12,
34) to about
(125.3, 0).

59. Answer: Anything in
the triangle
bounded by
(0, 300), (30,
120), and
(30, 0)
satisfies
these
constraints.

60. Answer: One point is
(x , d), where
 x is
expenditures
per pupil in
public school
and d is
disposable
income. The
rest of the
budget is a
line with
slope -1 from
($2s$, $d - x$) to
the x axis.

61. Answer: The graph
begins at (0,
2300) on the
vertical axis,
runs
horizontally
to the point
(835, 2300),
and from
there runs
downward
with a slope
of -1 to the
point (3135,
0) on the

horizontal
axis.