Chapter 1 Review

1. An expression is shown below.

$2\sqrt{11x}$

Which value of x makes the expression equivalent to $6\sqrt{11}$?

A. 3

B. 9

C. 16

D. 36

2. Simplify: $\frac{x^2 + 4x - 21}{4x - 12}; x \neq 3$

A. $x + 3$

B. $\frac{x + 7}{4}$

C. $x^2 - 9$

D. $\frac{x^2 + x - 21}{x - 3}$

3. Find the least common multiple (LCM) of $9a^3b^3c$ and $27a^2b^4c^4$.

A. $9a^2b^3c$

B. $3abc^3$

C. $27a^3b^4c^4$

D. $243a^5b^7c^5$

4. Factor completely: $x^2 - 2x - 48$

   A. $(x + 6)(x + 8)$

   B. $(x - 6)(x - 8)$

   C. $(x - 6)(x + 8)$

   D. $(x + 6)(x - 8)$

5. Prita is grocery shopping. She wants to buy a loaf of bread that costs \$5.29, ten apples that cost \$1.05 each, and three pounds of bananas that cost \$0.89 per pound. Which is the **best estimate** for the total cost of Prita's groceries?

   A. \$9

   B. \$17

   C. \$18

   D. \$20

6. Simplify: $|3^2 - 3\sqrt{16}|$

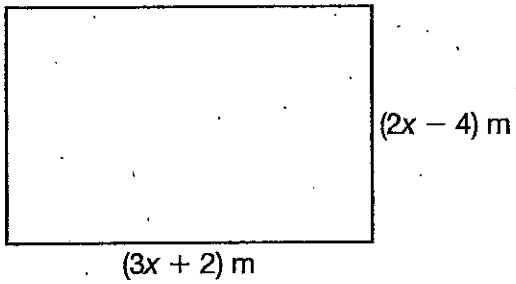
   A. -15

   B. -3

   C. 3

   D. 15

Use the figure below for questions 7 and 8.



7. What is the perimeter of the rectangle?

A. $(5x - 2)$ m

B. $(6x^2 - 8)$ m

C. $(10x - 4)$ m

D. $(6x^2 - 8x - 8)$ m

8. What is the area of the rectangle?

A. $(5x - 2)$ m^2

B. $(10x - 4)$ m^2

C. $(6x^2 - 8)$ m^2

D. $(6x^2 - 8x - 8)$ m^2

The number π is an irrational number that can be approximated in many ways. Below is a list of possible approximations of π.

$$3.14, \frac{22}{7}, \sqrt{2} + \sqrt{3}, \frac{201}{64}$$

Use this list of numbers for questions 9 and 10.

9. Which is the correct ordering of these numbers from **least** to **greatest**?

   A. $\frac{201}{64}, \frac{22}{7}, 3.14, \sqrt{2} + \sqrt{3}$

   B. $3.14, \frac{201}{64}, \frac{22}{7}, \sqrt{2} + \sqrt{3}$

   C. $\sqrt{2} + \sqrt{3}, \frac{201}{64}, \frac{22}{7}, 3.14$

   D. $\frac{22}{7}, \sqrt{2} + \sqrt{3}, 3.14, \frac{201}{64}$

10. Between which two approximations does π belong?

   A. between $\sqrt{2} + \sqrt{3}$ and $\frac{201}{64}$

   B. between 3.14 and $\sqrt{2} + \sqrt{3}$

   C. between $\frac{22}{7}$ and 3.14

   D. between $\frac{201}{64}$ and $\frac{22}{7}$

11. Simplify: $\frac{\sqrt{18} + \sqrt{50}}{\sqrt{2}}$

A. $\sqrt{34}$

B. 8

C. $3 + 5\sqrt{2}$

D. 16

12. Factor completely: $x^2 - 3x + 2$

A. $(x + 2)(x - 1)$

B. $(x + 2)(x + 1)$

C. $(x - 2)(x - 1)$

B. $(x - 2)(x + 1)$

13. Simplify: $\sqrt{16 \cdot 27}$

A. 6

B. $6\sqrt{9}$

C. 12

D. $12\sqrt{3}$

14. Find the greatest common factor (GCF) of $2x^3y^4z^3$ and $8x^4y^5z$.

A. $2x^3y^4z$

B. $4xyz$

C. $8x^4y^5z^3$

D. $16x^7y^9z^4$

15. Simplify: $\frac{x^2 - 8x + 15}{(x^2 - 9)}; x \neq 3, -3$

A. $\frac{(x - 5)}{(x + 3)}$

B. $\frac{(x - 5)}{(x - 3)}$

C. $\frac{(x + 5)}{(x + 3)}$

D. $\frac{(x + 5)}{(x - 3)}$

16. A polynomial is shown below.

$$x^2 + 2x + (^-24)$$

A. Factor the polynomial.

B. Explain why the polynomial is **not** the difference of squares.

C. Use one of your factors from **Part A** to write a polynomial that is the difference of squares.

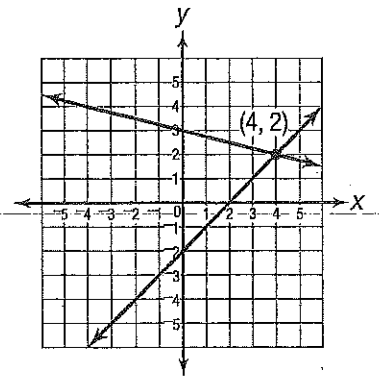
Chapter 2 Review

1. Consider the system of linear equations shown below.

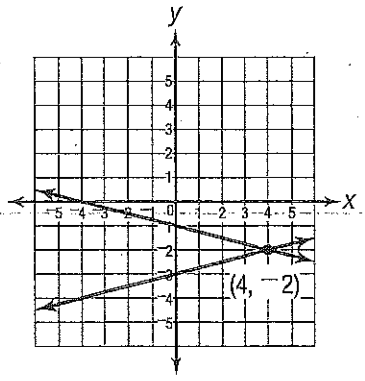
$$4y = x - 12$$
$$x + y = 2$$

Which is the graph and solution of this system?

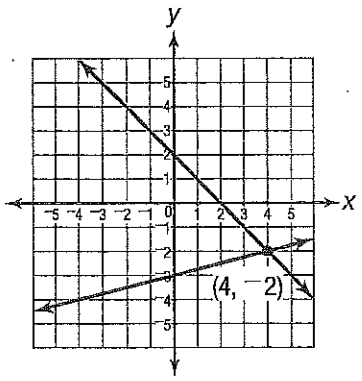
A.



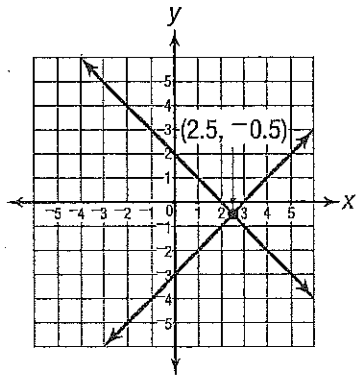
B.



C.



D.



2. Kalinda wants to build a rectangular pen for her goats. She has 400 feet of fencing, and she wants the length x of the pen to be at most 10 feet greater than the width y. This situation can be modeled by using the system of linear equations shown below.

$$2x + 2y \leq 400$$
$$x \leq y + 10$$

What is true about the solution of this problem?

A. The length is at most 105 feet, and the width is at most 95 feet.

B. If the length is 100 feet, the width must be between 90 and 100 feet.

C. The length is between 10 feet and 105 feet.

D. If the length is 90 feet, the width must be between 90 and 100 feet.

3. What is the solution set of $2 < |x + 3|$?

   A. $x > -1$

   B. $-5 < x < -1$

   C. $x < -5$ or $x > -1$

   D. $-5 < x$

4. Jordan is saving money for a \$300 bike. He has \$30 right now and plans to save \$10 per week. The amount of money he needs can be modeled by the linear equation $y = 270 - 10x$. One solution to this equation is (10, 170). What does the solution (10, 170) represent?

   A. After 10 weeks, Jordan will have saved \$170.

   B. After 10 weeks, Jordan will still need \$130.

   C. After 10 weeks, Jordan will have saved \$160.

   D. After 10 weeks, Jordan will still need \$170.

5. Jamaal solved an equation by following the steps shown below.

	Given: $2x + 4 = 5x - 11$
Step 1:	$2x - 2x + 4 = 5x - 2x - 11$
Step 2:	$4 = 3x - 11$
Step 3:	$4 + 11 = 3x - 11 + 11$
Step 4:	$15 = 3x$
Step 5:	$\frac{15}{3} = \frac{3x}{3}$
Step 6:	$5 = x$

   What property can be used to justify Step 5?

   A. the distributive property

   B. the associative property

   C. the addition property of equality

   D. the division property of equality

6. Morris spent \$94 on shorts and T-shirts. Shorts cost \$14 a pair and T-shirts cost \$8 each. Morris bought a total of 8 items. This situation can be modeled by the system of equations shown below.

$$x + y = 8$$

$$8x + 14y = 94$$

What is the solution of this system, and what does it mean?

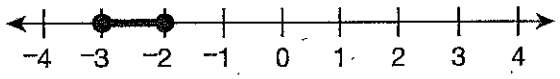
A. (3, 5); Morris bought 5 pairs of shorts and 3 T-shirts.

B. (3, 5); Morris bought 3 pairs of shorts and 5 T-shirts.

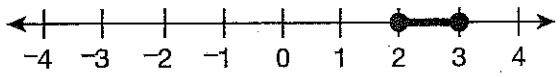
C. (5, 3); Morris bought 5 T-shirts and 3 pairs of shorts.

D. (5, 3); Morris bought 3 T-shirts and 5 pairs of shorts.

7. Choose the graph of the solution of $2 \leq x + 5 \leq 3$.

A.


B.


C.


D.


8. A skydiver jumps from an airplane and reaches terminal velocity when she is 12,000 feet above Earth's surface. At terminal velocity, she falls at a rate of 170 feet per second. Which equation models this situation, where h is the height in feet above Earth and t is the time in seconds after reaching terminal velocity?

A. $h = 170 - 12{,}000t$

B. $h = 170 + 12{,}000t$

C. $h = 12{,}000 - 170t$

D. $h = 12{,}000 + 170t$

9. Sanjay is two years less than three times his sister Nisha's age. The sum of their ages is 26. Which is a system of equations that models this situation, and what are Sanjay's and Nisha's ages?

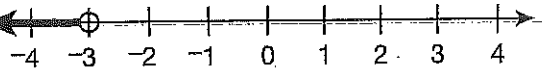
   A. $x + y = 26$; $x = 3y + 2$; Nisha is 6 and Sanjay is 20.

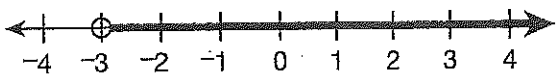
   B. $x + y = 26$; $x = 3y + 2$; Nisha is 20 and Sanjay is 6.

   C. $x + y = 26$; $x = 3y - 2$; Nisha is 7 and Sanjay is 19.

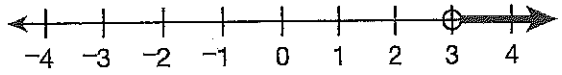
   D. $x + y = 26$; $x = 3y - 2$; Nisha is 19 and Sanjay is 7.

10. Which is the graph of the solution set of $x + 3 < 4x - 6$?

   A. 

   B. 

   C. 

   D. 

11. What is the solution of the system of equations shown below?

$$4y = 4x + 2$$

$$10 = 5x - 4y$$

   A. $\left(-\frac{8}{9}, \frac{25}{18}\right)$

   B. $\left(\frac{4}{3}, -\frac{5}{6}\right)$

   C. $\left(8, \frac{15}{2}\right)$

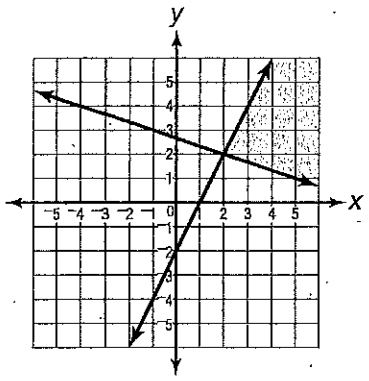
   D. $\left(12, \frac{25}{2}\right)$

12. Which graph shows the solution of the following system of linear inequalities?

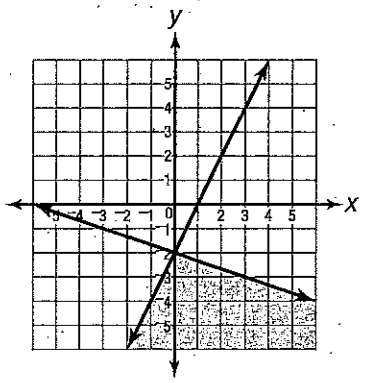
$$y \geq -\frac{1}{3}x + \frac{8}{3}$$

$$y \leq 2x - 2$$

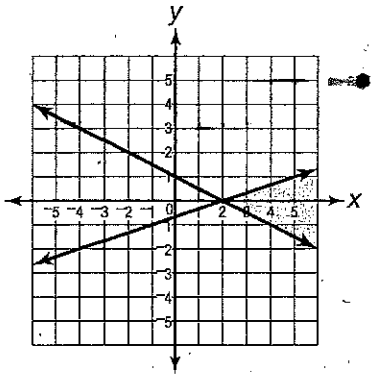
A.



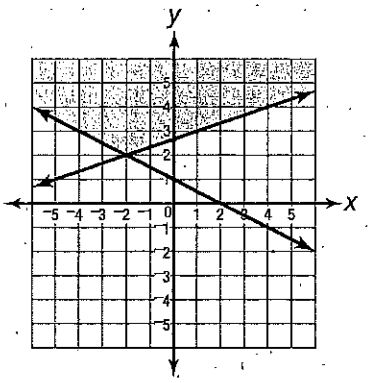
B.



C.



D.



13. A test consists of multiple-choice and short-answer questions. The total number of questions on the test is 40. The multiple-choice questions are worth 2 points each and the short-answer questions are worth 4 points each. The total possible number of points on the test is 100. This situation can be modeled by the system of equations shown below.

$$x + y = 40$$

$$4x + 2y = 100$$

What is the solution of this system, and what does it mean?

A. (10, 30); There are 10 multiple-choice questions and 30 short-answer questions.

B. (10, 30); There are 10 short-answer questions and 30 multiple-choice questions.

C. (30, 10); There are 30 multiple-choice questions and 10 short-answer questions.

D. (30, 10); There are 30 short-answer questions and 10 multiple-choice questions.

14. Petra wants to save at least \$800 for her vacation. She has \$320 and will save the same amount each week for the next 10 weeks. This situation can be modeled by the inequality $320 + 10x \geq 800$. Which statement about her savings is true?

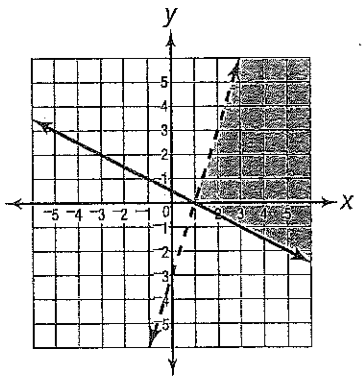
A. Petra will need to save at most \$48 per week for the next 10 weeks to achieve her goal.

B. Petra will need to save at least \$48 per week for the next 10 weeks to achieve her goal.

C. Petra will need to save at most \$112 per week for the next 10 weeks to achieve her goal.

D. Petra will need to save at least \$112 per week for the next 10 weeks to achieve her goal.

15. Consider the graph shown below.



Which is the system of linear inequalities that corresponds to this graph?

A. $y \leq -\frac{1}{2}x + \frac{1}{2}$
$y > 3x - 3$

B. $y \geq -\frac{1}{2}x + \frac{1}{2}$
$y < 3x - 3$

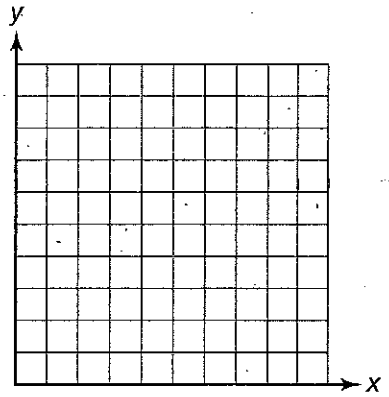
C. $y > -\frac{1}{2}x + \frac{1}{2}$
$y \leq 3x - 3$

D. $y < -\frac{1}{2}x + \frac{1}{2}$
$y \geq 3x - 3$

16. Mr. Krasa shipped a box of math textbooks and novels to a colleague. Each math book weighed 2.5 pounds, and each novel weighed 1.25 pounds. There were a total of 18 books, with a total weight of 31.25 pounds.

A. Write a system of equations that models this scenario. Identify your variables.

B. Graph your system of equations on the coordinate grid. Let the horizontal axis represent the number of math books and let the vertical axis represent the number of novels.



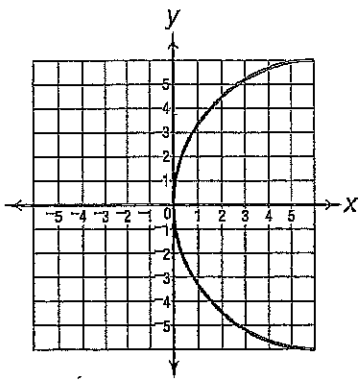
C. Describe two ways you can find the number of each type of book that Mr. Krasa shipped.

D. How many of each type of book was in the shipment?

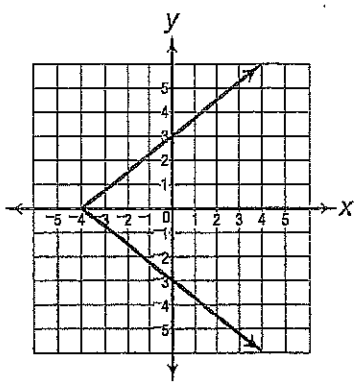
Chapter 3 Review

1. Which graph represents a function?

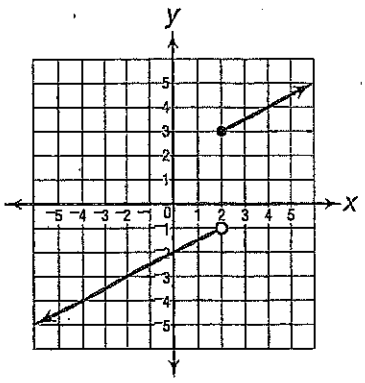
A.



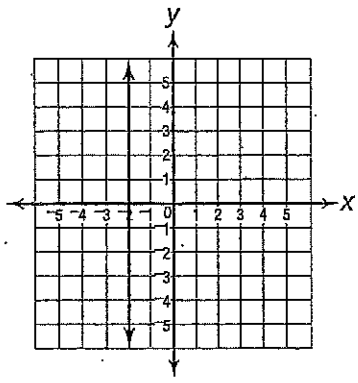
B.



C.



D.



2. Which function is represented by the table of values shown below?

x	-2	-1	2	4
y	-8.5	-5	5.5	12.5

A. $y = \frac{2}{7}x - \frac{111}{14}$

B. $y = \frac{7}{2}x - \frac{17}{2}$

C. $y = \frac{2}{7}x - \frac{33}{7}$

D. $y = \frac{7}{2}x - \frac{3}{2}$

3. The table below represents a linear function.

x	1	3	4	8
y	4.5	3.5	b	1

What is the missing value, b?

A. 1.5

B. 2

C. 2.5

D. 3

4. What is the range of the relation shown below?

$$(2, -1), (4, -2), (0, 0), (3, 7), (4, 6)$$

A. $\{2, -1, 4, -2, 0\}$

B. $\{0, 2, 3, 4\}$

C. $\{0, 3, 7, 4, 6\}$

D. $\{-2, -1, 0, 6, 7\}$

5. Hamid buys a bus pass for \$10 and then pays \$0.25 each time he rides the bus. Which equation shows the relationship between the number of times that Hamid rides the bus, b, and his total spending, c?

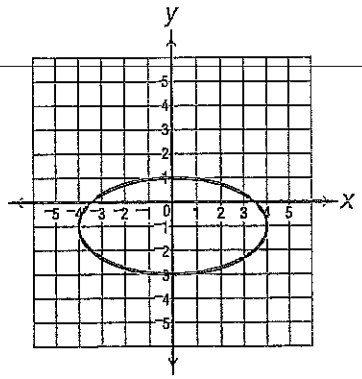
A. $c = 0.25b$

B. $c = 0.25b + 10$

C. $c = 10b$

D. $c = 10b + 0.25$

6. A relation is graphed on the coordinate grid shown below.



What is the domain of this relation?

A. $-4 \leq x \leq 4$

B. $\{-4, -3, -2, -1, 0, 1, 2, 3, 4\}$

C. $-3 \leq y \leq 1$

D. $\{-3, 2, 1, 0, 1\}$

7. The table below shows values of y as a function of x.

x	-2	-1	0	1	2
y	$-\frac{2}{3}$	$-\frac{1}{3}$	0	$\frac{1}{3}$	$\frac{2}{3}$

Which linear equation describes the relationship between x and y?

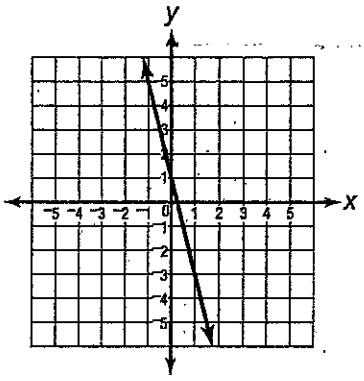
A. $y = \frac{1}{3}x$

B. $y = 3x$

C. $y = -\frac{1}{3}x$

D. $y = -3x$

8. Which equation describes the graph shown below?



A. $y = 4x + 1$

B. $y + 4x = 1$

C. $4y = x + 4$

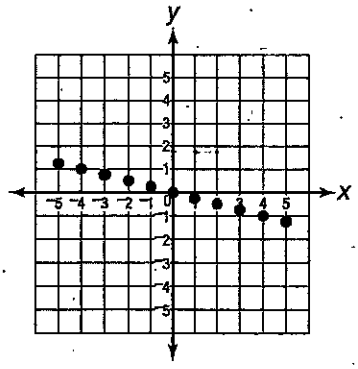
D. $4y + x = 4$

9. The table below shows points on the graph of a linear function.

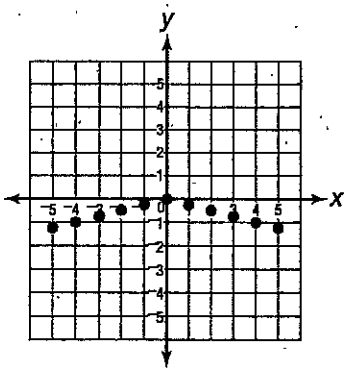
x	1	2	3	4	5
y	$-\frac{1}{4}$	$-\frac{1}{2}$	$-\frac{3}{4}$	-1	$-\frac{5}{4}$

Which graph matches the table?

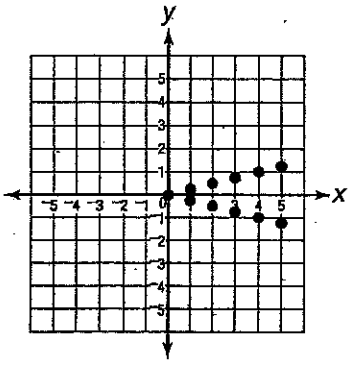
A.



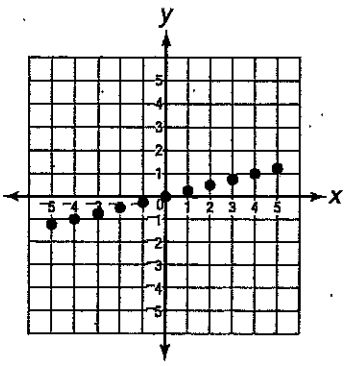
B.



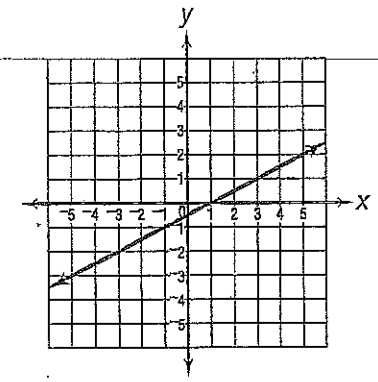
C.



D.



10. Which table of values corresponds to the function graphed on the coordinate grid?



A.

x	−4	−2	0	5
y	−3.5	−2.5	−1.5	2

B.

x	−5	−3	1	4
y	−3	−2	−1	2

C.

x	−4	−2	0	2
y	−2.5	−1.5	−0.5	0.5

D.

x	−1	1	3	5
y	−1.5	0	0.5	2

11. What are the domain and range of the relation shown in the table below?

x	4	5	9	12
y	2	3	7	11

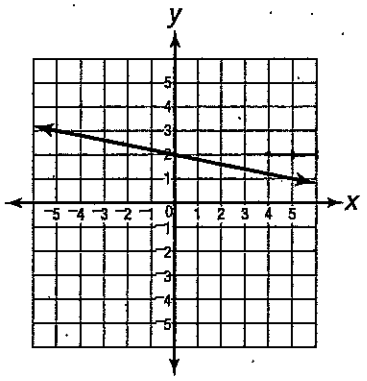
A. Domain: **all** real numbers; Range: **all** real numbers

B. Domain: {4, 5, 9, 12}; Range: {2, 3, 7, 11}

C. Domain: {2, 3, 7, 11}; Range: {4, 5, 9, 12}

D. Domain: {4, 2, 5, 3}; Range: {9, 7, 12, 11}

12. Which function is represented by the graph shown below?



A. $y = -5x + 2$

B. $y = -\frac{5}{2}x + 2$

C. $y = -\frac{2}{5}x + 2$

D. $y = -\frac{1}{5}x + 2$

13. The manager of a bike shop rents bicycles. The manager charges for the bicycle plus an hourly fee. The cost (c), in dollars, to rent a bicycle for any number of hours (h) is described by the function $c = 2h + 10$. Which statement is true?

A. The cost to rent a bicycle for 7 hours is $37.

B. The cost to rent a bicycle for 6 hours is $22.

C. It costs $2 to rent the bicycle and a $10 fee per hour.

D. It costs $2 to rent the bicycle and a $12 fee per hour.

14. Which relation is **not** a function?

A. {(2, 3), (2, 4), (2, 5), (2, 6)}

B. {(1, 2), (2; 2), (3, 2), (4, 2)}

C. {(0, 0), (1, 1), (2, 2), (3, 3)}

D. {(1, 1), (2, 4), (3, 9), (4, 16)}

15. The gas tank in John's car holds 15 gallons of gas. His car's average gas mileage is 20 miles per gallon. If John starts a trip with 15 gallons of gas in his car, which equation represents the relationship between the distance driven (x) and the gallons of gas (y) in the car?

A. $y = 20x - 15$

B. $y = \frac{1}{20}x - 15$

C. $y = -\frac{1}{20}x + 15$

D. $y = -20x + 15$

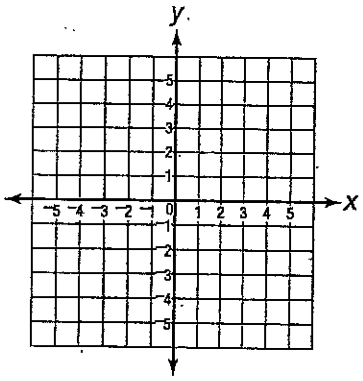
16. A relation is described as follows: each output value (y) is the product of the input value (x) and 2.

A. Complete the table for this relation.

x	-2	-1	0	1
y				

B. Is the relation a function? Explain.

C. Graph this relation on the coordinate grid, not only for the values in the table, but for **all** values in the domain that correspond to the points on this grid.



D. Write an equation that represents this relation.

Chapter 4 Review

1. Judith did an experiment to measure the rate of water evaporation. She put a bucket of water in the garden and checked its weight at the beginning of each week. Her results are shown on the scatter plot below.

Which equation most closely matches the line of best fit for these data?

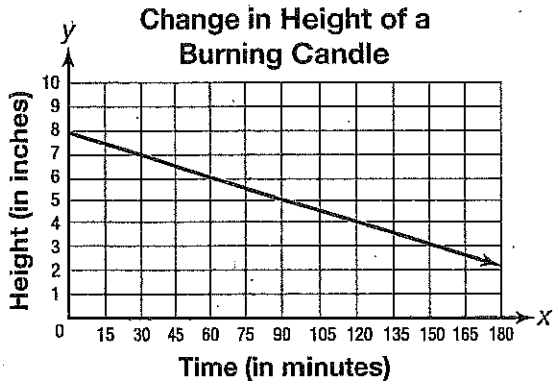
A. $y = 8x + 136$

B. $y = {-}8x + 145$

C. $y = x + 136$

D. $y = {-}x + 145$

2. The height of a burning candle during the time it is lit is shown in the graph below.



What is the y-intercept of the line, and what does it represent?

A. $-\frac{1}{30}$; It represents the rate at which the height of the candle is decreasing.

B. $\frac{1}{30}$; It represents the time it takes for the candle height to decrease to 2 inches.

C. 2; It represents the final height of the candle.

D. 8; It represents the initial height of the candle.

3. Which table of values shows a constant rate of change?

A.

x	2	5	11	12
y	10	19	37	41

B.

x	1	3	5	7
y	10	19	28	37

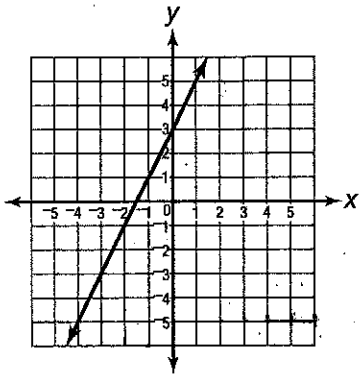
C.

x	1	2	4	8
y	2	8	9	10

D.

x	4	6	10	11
y	0	0.5	1.5	2.0

4. A line is shown graphed below.



Which equation represents this line?

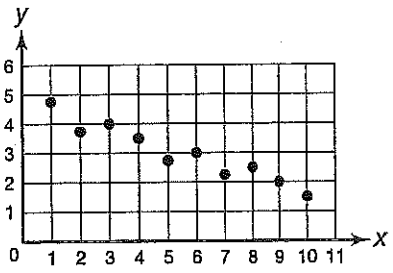
A. $-x + 2y = 1.5$

B. $-\frac{1}{2}x + y = 3$

C. $2x - y = -3$

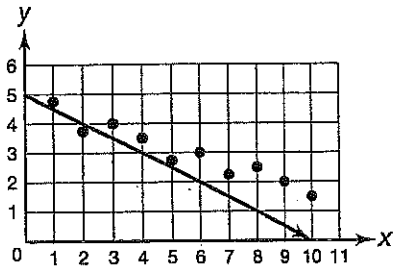
D. $3x - 1.5y = 0$

5. A scientist collected data shown in the scatter plot below.

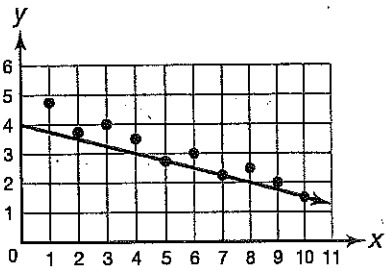


Which line is the best fit for modeling this data?

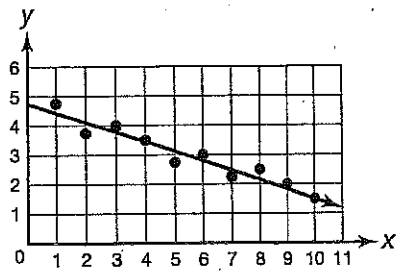
A.



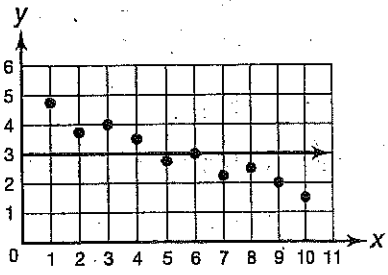
B.



C.



D.



6. Water from a pipe fills a tank at a constant rate. After 10 minutes, there are 30 gallons of water in the tank. After 25 minutes, there are 48 gallons in the tank. What is the rate at which the tank is being filled?

A. 1.2 gallons per minute

B. 1.92 gallons per minute

C. 3.0 gallons per minute

D. 18 gallons per minute

7. What is the slope of the line represented by the equation $3y + 5x = 9$?

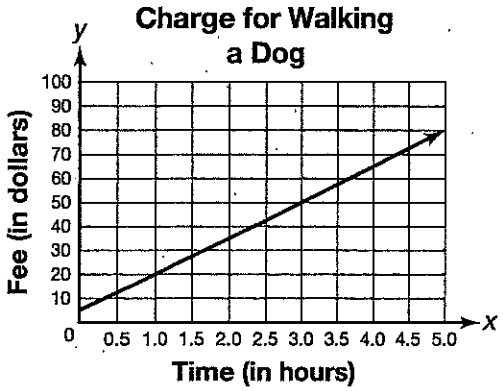
A. $-\frac{3}{5}$

B. $-\frac{5}{3}$

C. $\frac{3}{5}$

D. 5

8. Tania charges a flat fee plus a certain amount per hour to walk a dog, as shown in the graph below.



What is Tania's hourly rate?

A. $5 B. $15

C. $10 D. $20

9. When the dependent variable (y-value) decreases as the independent variable (x-value) increases, which statement describes the rate of change?

A. The rate of change is positive.

B. The rate of change is negative.

C. The rate of change is zero.

D. The rate of change is undefined.

10. Which is the equation of a line that passes through the points (4, 5) and $(^{-}2, {}^{-}3)$?

A. $y = \frac{1}{3}x + \frac{11}{3}$ B. $y = x + 1$

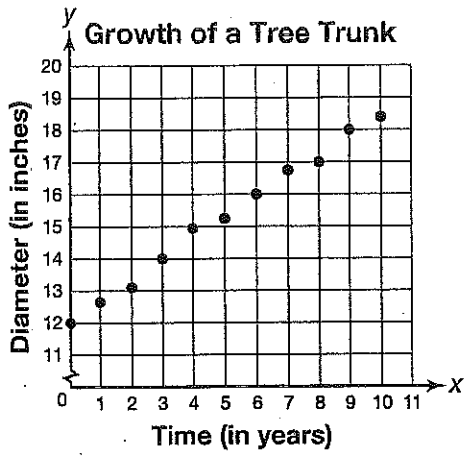
C. $y = \frac{4}{3}x - \frac{1}{3}$ D. $y = 4x - 11$

11. Kayla is walking along a road with a steady incline. At 1:00 P.M. she is at an altitude of 250 feet. A quarter of an hour later, she is at an altitude of 330 feet. What is her rate of increase in altitude for this time interval?

A. 20 ft/h B. 80 ft/h

C. 320 ft/h D. 1,320 ft/h

12. The diameter of a particular tree at 4.5 feet above the ground was measured over the course of several years, and the results are given in the scatter plot shown below.



Which equation best models the data?

A. $y = 0.65x + 12$ B. $y = 1.5x + 12$

C. $y = 0.65x + 15$ D. $y = 15$

13. Snow is falling at a constant rate of 0.5 inch per hour. After 6 hours, how much snow has fallen?

A. 0.5 inch B. 3 inches

C. 6 inches D. 12 inches

14. A fast-growing stalactite grows at a rate of 3 mm per year. If its height was 20 cm when it was first measured, which is the best linear model for the height of the stalactite as a function of time, where h is in cm and t is in years?

A. $h = 20t + 3$ B. $h = 3t + 20$

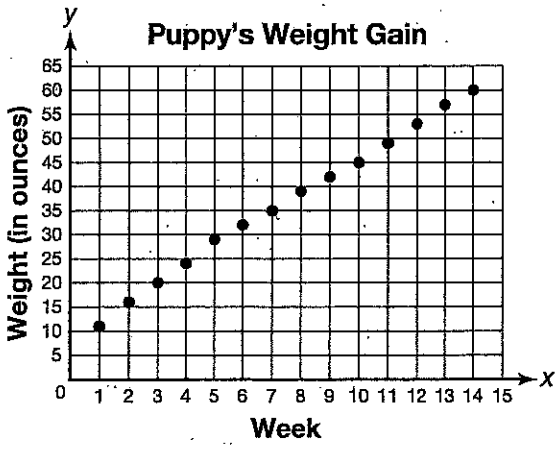
C. $h = 20t + 0.3$ D. $h = 0.3t + 20$

15. At 6 A.M., the temperature outside Sandy's house was 36°F. At 1 P.M., the temperature was 52°F. What is the average rate of change of temperature, to the nearest tenth, during this time interval?

A. 2.3° per hour B. 3.2° per hour

C. 7.4° per hour D. 10.4° per hour

16. Kapeni recorded the weight of his new puppy every week for 14 weeks, and he plotted the data on the scatter plot shown below.



A. Draw a line that best fits the data.

B. Write the equation for the line you drew, rounding any numbers to one decimal place.

_____

C. What is the slope of the line of best fit?

_____

D. What is the *y*-intercept of the line of best fit?

_____

Chapter 5 Review

1. Andrew has a box filled with baseball caps. He has 3 blue, 1 green, and 2 black caps. He randomly chooses one cap from the box for himself. Then he picks a second cap out of the box, also randomly, for his little brother to wear.

   What is the probability that Andrew picked a black cap followed by a green cap?

   A. $\frac{1}{18}$ B. $\frac{1}{15}$

   C. $\frac{1}{9}$ D. $\frac{8}{15}$

2. Coach Sanders measured the heights, in meters, of all the members of the girls' basketball team. The results are shown in the table.

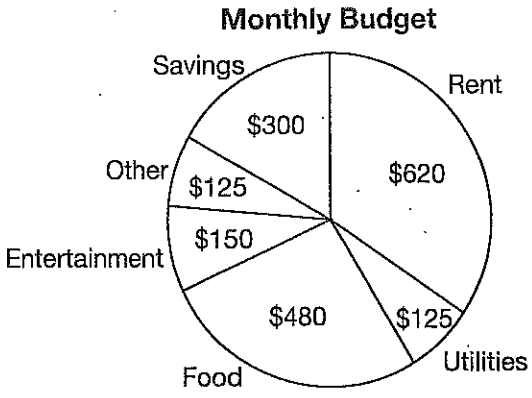
1.6	1.65	1.7	1.5	1.6
1.6	1.7	1.8	1.7	1.5
1.6	1.6	1.5	1.7	1.6

   What is the interquartile range of these data?

   A. 0.1 m B. 0.3 m

   C. 1.6 m D. 1.7 m

3. The circle graph shows Kawika's monthly budget. He makes $1,800 per month.

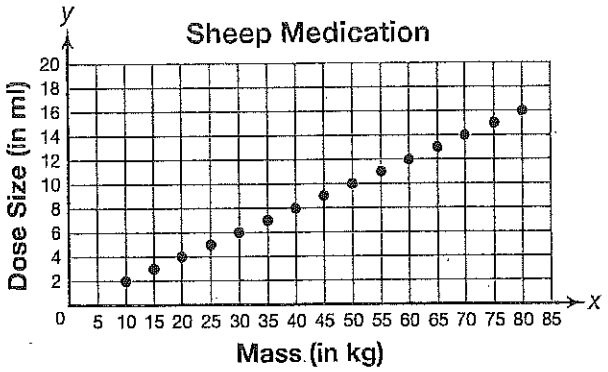


   About what percent of his monthly income does he spend on rent and utilities?

   A. 7% B. 34%

   C. 41% D. 51%

4. The dose size for a particular sheep medication versus the sheep's mass is shown in the scatter plot.



What dose should be given to a sheep whose mass is 100 kg?

A. 16 ml B. 17 ml

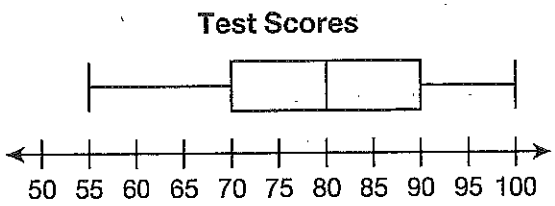
C. 19 ml D. 20 ml

5. Arwen rolls a number cube (with sides labeled 1 through 6) twice. What is the probability that the first or second result is the number 5?

A. $\frac{1}{36}$ B. $\frac{1}{6}$

C. $\frac{11}{36}$ D. $\frac{1}{3}$

6. Mr. Kim recorded the test scores for his math class, and he displayed the data in the box-and-whisker plot shown below.



About what percent of the students in Mr. Kim's class received a score greater than or equal to 90 on the test?

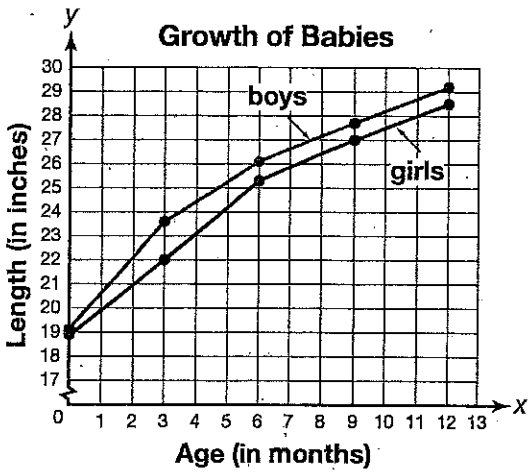
A. 10%

B. 15%

C. 25%

D. 45%

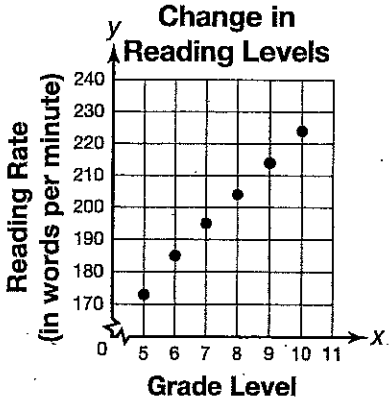
7. The line graph shows the lengths of male and female babies compared to their ages.



Based on the graph, what is the difference in lengths of boys and girls at 2 months of age?

A. 0.5 in.
B. 1.0 in.
C. 1.5 in.
D. 2.0 in.

8. The average reading rate for several grade levels is shown in the scatter plot.



Using a line of best fit for the data, at what rate would you expect a twelfth grader to read?

A. 230 words per minute
B. 235 words per minute
C. 240 words per minute
D. 245 words per minute

9. A contestant on a game show has three boxes and three curtains to choose from in order to win a car. First, the contestant must choose a box. There is a key under each box, and one of the three keys is for the car. Then the contestant has to choose one of the three curtains. Behind one of them is the car. What is the probability that the contestant will choose the car and its key?

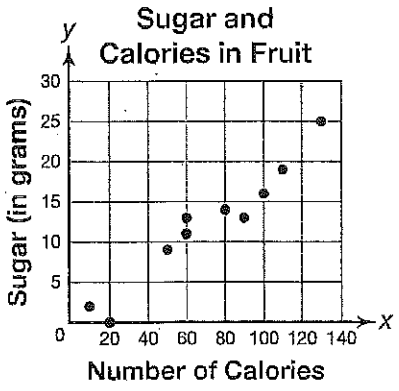
   A. $\frac{1}{9}$

   B. $\frac{1}{6}$

   C. $\frac{1}{3}$

   D. $\frac{2}{3}$

10. Shown is a scatter plot of the number of calories in different types of fruit versus grams of sugar.



Which statement best describes the general trend of these data?

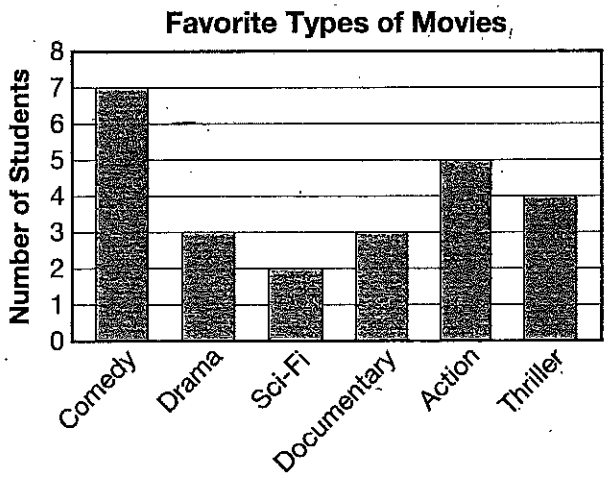
A. As the number of calories increases, the number of grams of sugar decreases.

B. As the number of calories increases, the number of grams of sugar increases.

C. The grams of sugar remain constant as the number of calories increases.

D. There is no correlation between the number of calories and the grams of sugar.

11. Mindy took a poll of her classmates to find out the type of movie that each student likes best. The results are shown in the bar graph.



Mindy decides to expand her survey to another 80 students. Based on the data, what number of students should Mindy expect to say that they prefer documentaries?

A. 7

B. 10

C. 13

D. 17

12. Keiko picks a marble at random from a bag containing 8 red, 4 blue, and 8 green marbles. She then replaces it and picks a second marble, also at random. What is the probability that she picks a blue marble on the first pick and a green marble on the second pick?

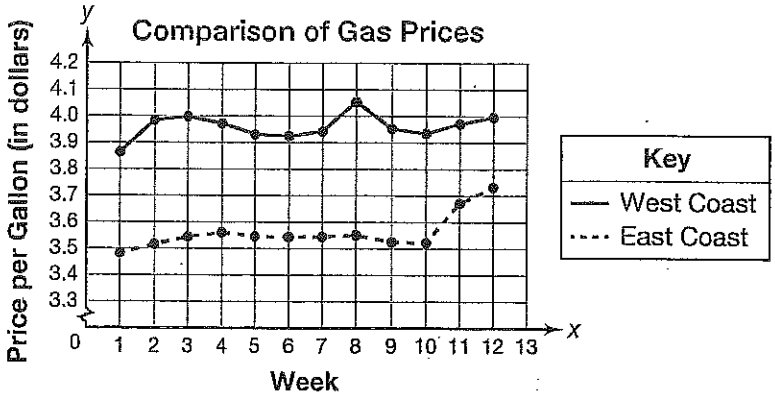
A. $\frac{7}{95}$

B. $\frac{2}{25}$

C. $\frac{1}{9}$

D. $\frac{3}{5}$

13. The line graph shows the average price of a gallon of gas over the course of several weeks for the West Coast and the East Coast.



During which week was the difference in prices the greatest?

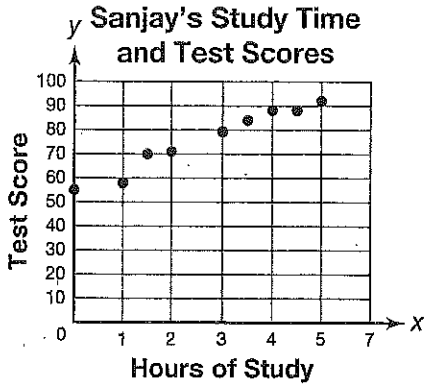
A. Week 2

B. Week 3

C. Week 8

D. Week 10

14. During the school year, Sanjay recorded the number of hours he studied for each math exam and the score he received. The results are shown in the scatter plot.



Based on these data, approximately how many hours would Sanjay need to study if he would like to make a score of 100 on his next math exam?

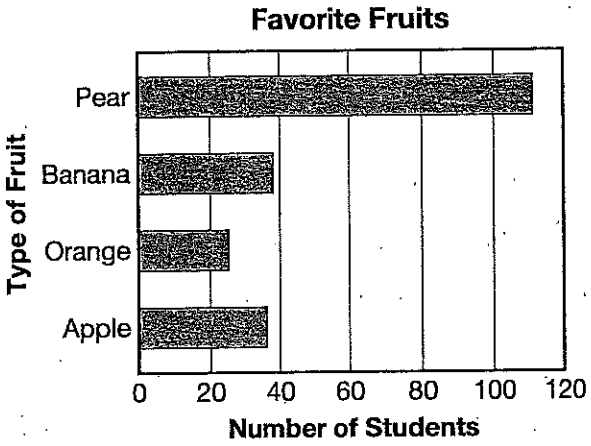
A. 4

B. 6

C. 8

D. 9

15. The manager at a school cafeteria kept track of the number of each of four types of fruit that students purchased in one day. She recorded these data on the bar graph shown below.



An additional 50 students did not purchase fruit. If 300 students are in the cafeteria on another day, about how many would be expected to buy oranges, based on these results?

A. 30

B. 35

C. 60

D. 75

16. At a party, each of 20 students wrote his or her name on a slip of paper and put it into a hat. Names were selected at random to pick a prize from a grab bag at random. The types of items in the grab bag and how many of each are shown in the table below.

Art set	3
Chemistry set	1
Board game	5
Book reader	1

A. What is the probability that the first prize chosen was an art set?

B. Five of the students wanted the art set. What is the probability that the first name chosen was one of these students and he or she picked an art set? Explain.

16. ***Continued***. Please refer to the previous page for task explanation.

C. What is the probability that the first prize chosen was an art set and the second prize chosen was a board game? Show your calculation.

D. Is the probability that the first prize chosen was a board game and the second prize chosen was an art set different from the probability in **Part C**? Explain. Show your calculation.