

Choose the equation of the line that is perpendicular to the given line and passes through the given point.

_____ 10. $y = \frac{2}{3}x + \frac{4}{5}; \left(0, -\frac{9}{2}\right)$

a. $y = -\frac{3}{2}x + \frac{9}{2}$

c. $y = -\frac{3}{2}x - \frac{9}{2}$

b. $y = \frac{2}{3}x - \frac{32}{3}$

d. $y = \frac{2}{3}x + \frac{32}{3}$

Write an equation of the line that is perpendicular to the given line and passes through the given point. Express your answer in slope-intercept form.

11. $y = -4x - 7; (0, -8)$

12. Find the slope-intercept equation of the line passing through the points $(-3, -5)$ and $(6, -2)$.

13. Find the slope-intercept equation of the line passing through the points $(-5, -3)$ and $(-2, 6)$.

_____ 14. Write the standard form of the equation of the line that has slope -2 and passes through the point $(-2, -1)$.

a. $-x + 2y = -4$

c. $-2x + y = 5$

b. $x - 2y = 4$

d. $2x + y = -5$

_____ 15. Write the standard form of the equation of the line that passes through the point $(4, 1)$ and is parallel to the line $3x + 2y = 5$.

a. $3x - 2y = -5$

c. $4x + y = 5$

b. $3x + 2y = 11$

d. $3x + 2y = 14$

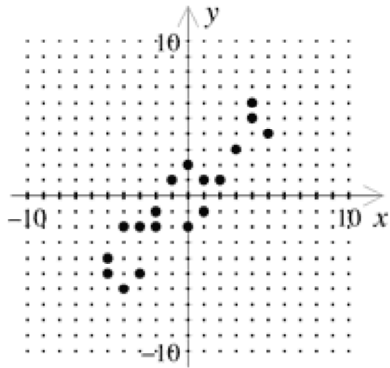
_____ 16. Which of the following best describes the graphs of the equations below?

$$3y = 6x + 9$$

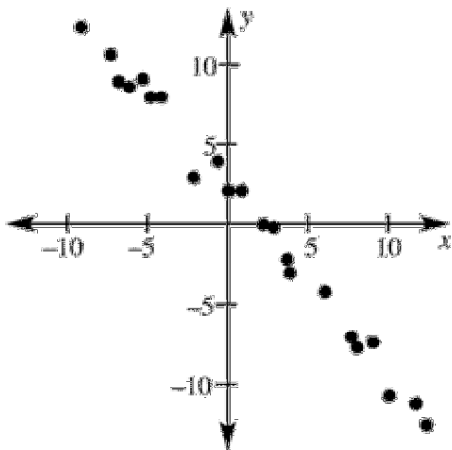
$$8y = -4x + 4$$

- a. The lines are parallel.
- b. The lines are perpendicular.
- c. The lines have the same y -intercept.
- d. The lines have the same x -intercept.

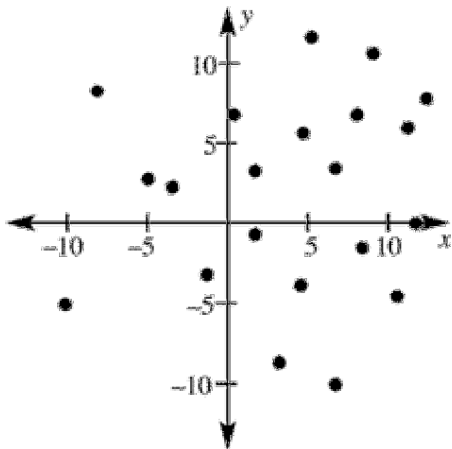
17. Describe the correlation shown by the scatter plot.



18. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



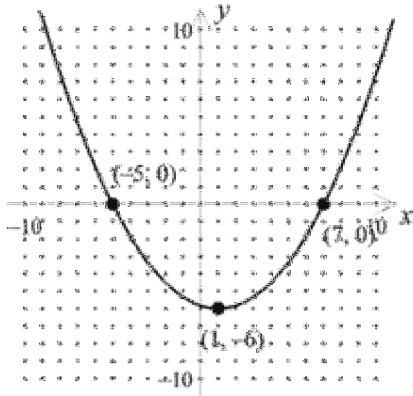
19. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



Name: _____

ID: A

____ 25. Write an equation for the parabola shown.



a. $y = \frac{7}{36}(x+6)(x-7)$

c. $y = 5\left(x + \frac{1}{6}\right)(x-7)$

b. $y = -7\left(x + \frac{7}{36}\right)\left(x - \frac{1}{6}\right)$

d. $y = \frac{1}{6}(x+5)(x-7)$

U6 Test

Answer Section

1. ANS:
 $y = -5x + 2$

 PTS: 1 DIF: Level A REF: MAL20247
 TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line
 BLM: Knowledge NOT: 978-0-618-65615-8
2. ANS: A PTS: 1 DIF: Level A REF: MAL20248
 TOP: Lesson 2.4 Write Equations of Lines KEY: line | slope-intercept
 BLM: Knowledge NOT: 978-0-618-65615-8
3. ANS:
 $y = -6x + 12$

 PTS: 1 DIF: Level A REF: MAL20249
 TOP: Lesson 2.4 Write Equations of Lines KEY: equation | slope-intercept | linear
 BLM: Knowledge NOT: 978-0-618-65615-8
4. ANS:
 $y = -2x + 11$

 PTS: 1 DIF: Level B REF: MAL20250
 TOP: Lesson 2.4 Write Equations of Lines KEY: line | point | slope-intercept
 BLM: Knowledge NOT: 978-0-618-65615-8
5. ANS: D PTS: 1 DIF: Level B REF: MAL20251
 TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line | point
 BLM: Knowledge NOT: 978-0-618-65615-8
6. ANS: C PTS: 1 DIF: Level B REF: MAL20252
 TOP: Lesson 2.4 Write Equations of Lines BLM: Knowledge
 KEY: linear | point | equation | slope | slope-intercept
 NOT: 978-0-618-65615-8
7. ANS: B PTS: 1 DIF: Level B REF: MAL20253
 TOP: Lesson 2.4 Write Equations of Lines BLM: Comprehension
 KEY: equation | parallel | slope-intercept | line | point
 NOT: 978-0-618-65615-8
8. ANS:
 $y = -2x - 2$

 PTS: 1 DIF: Level B REF: MAL20254
 TOP: Lesson 2.4 Write Equations of Lines BLM: Comprehension
 KEY: line | point | equation | parallel | slope-intercept
 NOT: 978-0-618-65615-8
9. ANS: A PTS: 1 DIF: Level B REF: MAL20255
 TOP: Lesson 2.4 Write Equations of Lines BLM: Comprehension
 KEY: equation | parallel | slope-intercept | line | point
 NOT: 978-0-618-65615-8

10. ANS: C PTS: 1 DIF: Level B REF: MAL20256
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: point | slope | parallel | perpendicular | slope-intercept BLM: Comprehension
 NOT: 978-0-618-65615-8
11. ANS:

$$y = \frac{1}{4}x - 8$$
- PTS: 1 DIF: Level B REF: MAL20257
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | slope | perpendicular | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
12. ANS:

$$y = \frac{1}{3}x - 4$$
- PTS: 1 DIF: Level B REF: MAL20259
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: slope-intercept form | linear equations BLM: Comprehension
 NOT: 978-0-618-65615-8
13. ANS:

$$y = 3x + 12$$
- PTS: 1 DIF: Level B REF: MAL20260
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: slope-intercept form | linear equations BLM: Comprehension
 NOT: 978-0-618-65615-8
14. ANS: D PTS: 1 DIF: Level B REF: MAL20270
 TOP: Lesson 2.4 Write Equations of Lines KEY: linear | standard form | equation
 BLM: Knowledge NOT: 978-0-618-65615-8
15. ANS: D PTS: 1 DIF: Level B REF: MAL20271
 TOP: Lesson 2.4 Write Equations of Lines KEY: parallel | line | general equation
 BLM: Comprehension NOT: 978-0-618-65615-8
16. ANS: B PTS: 1 DIF: Level B
 REF: 62af5f50-4f27-11db-b4d8-0011258082f7
 TOP: Lesson 2.4 Write Equations of Lines KEY: linear equations
 BLM: Comprehension NOT: 978-0-618-65615-8
17. ANS:
 Positive correlation
- PTS: 1 DIF: Level A REF: MAL20285 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8

18. ANS:
Negative correlation
- PTS: 1 DIF: Level A REF: MAL20286 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
19. ANS:
No correlation
- PTS: 1 DIF: Level A REF: MAL20287 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines
KEY: approximate | solve | equation | word | model BLM: Knowledge
NOT: 978-0-618-65615-8
20. ANS:
Positive correlation
- PTS: 1 DIF: Level A REF: MAL20288 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
21. ANS: B PTS: 1 DIF: Level B REF: MAL20291
NAT: NCTM 9-12.DAP.2.b | NCTM 9-12.DAP 2.e | NCTM 9-12.DAP.1.d
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
22. ANS: A PTS: 1 DIF: Level B REF: MAL20717
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: parabola | vertex | equation | function | vertex form BLM: Knowledge
NOT: 978-0-618-65615-8
23. ANS:
 $f(x) = 2(x + 9)^2 - 9$
- PTS: 1 DIF: Level B REF: MAL20718
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: equation | function | vertex form | parabola | vertex BLM: Knowledge
NOT: 978-0-618-65615-8
24. ANS:
 $f(x) = -x^2$
- PTS: 1 DIF: Level A REF: MAL20719
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: parabola | vertex | equation | function BLM: Knowledge
NOT: 978-0-618-65615-8
25. ANS: D PTS: 1 DIF: Level B REF: MAL20721
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: write quadratic function | intercept form BLM: Knowledge
NOT: 978-0-618-65615-8

U6 Test

1. Write the equation of the line, in slope-intercept form, that passes through the point $(3, 5)$ and has slope -2 .

Write an equation of the line with the given slope and y-intercept. Express your answer in slope-intercept form.

2. slope = -2 ; y-intercept = 0

Choose the equation of the line that is parallel to the given line and passes through the given point.

_____ 3. $y = -2x - 1$; $(0, 5)$

a. $y = -2x + 5$

c. $y = -2x + 10$

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

d. $y = 2x - 5$

_____ 4. Write the equation of the line, in slope-intercept form, that passes through the point $(4, -4)$ and has slope 2 .

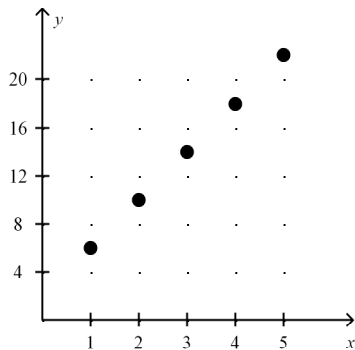
a. $y = 2x + 12$

c. $y = 2x - 12$

b. $y = -2x + 12$

d. $y = -2x - 12$

_____ 5. Which equation represents the scatter plot?



a. $y = 4x + 2$

c. $y = 4 - 4x$

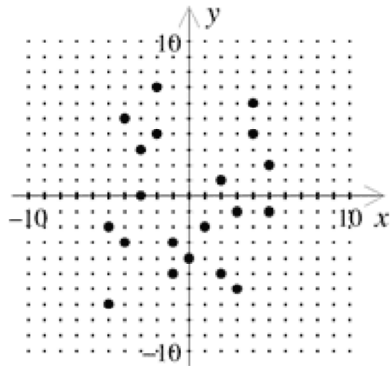
b. $y = 4x - 2$

d. $y = 2 - 4x$

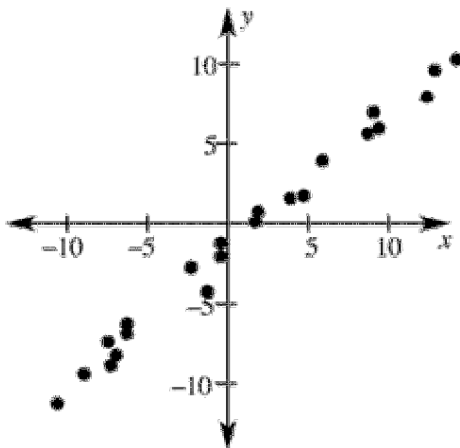
Write an equation of the line that is perpendicular to the given line and passes through the given point. Express your answer in slope-intercept form.

6. $y = 2x - 9$; $(0, -7)$

7. Describe the correlation shown by the scatter plot.



8. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



- _____ 9. Write a quadratic function in vertex form that has the given vertex and passes through the given point.

Vertex: $(-6, 2)$; Point: $(8, -586)$

a. $f(x) = -3(x-6)^2 + 2$

c. $f(x) = 3(x+6)^2 - 2$

b. $f(x) = -3(x+6)^2 + 2$

d. $f(x) = -3(x-6)^2 - 2$

- _____ 10. Write the standard form of the equation of the line that passes through the point $(-4, 6)$ and is parallel to the line $3x + 2y = -6$.

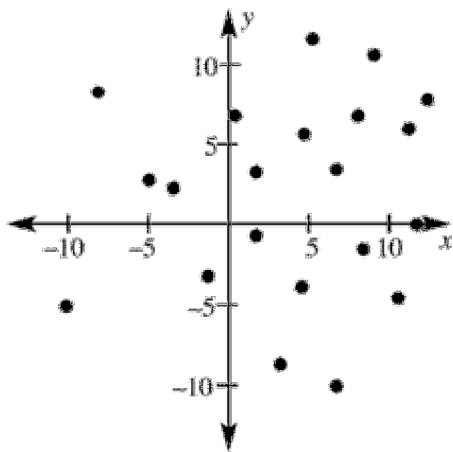
a. $-4x + 6y = -6$

c. $3x + 2y = 10$

b. $3x - 2y = 6$

d. $3x + 2y = 0$

11. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



12. Write a quadratic function in vertex form that has the given vertex and passes through the given point.

Vertex: $(0, 0)$; Point: $(2, -8)$

- _____ 13. Write an equation of a line that has slope 2 and y-intercept 8.

a. $y = 2x - 8$

c. $y = 2x + 8$

b. $y = \frac{1}{2}x + 8$

d. $x = 2y + 8$

- _____ 14. Which of the following best describes the graphs of the equations below?

$$3y = 6x + 9$$

$$8y = -4x + 4$$

- The lines have the same x -intercept.
- The lines are perpendicular.
- The lines have the same y -intercept.
- The lines are parallel.

Write an equation of the line that is parallel to the given line and passes through the given point. Express your answer in slope-intercept form.

15. $y = -2x + 6$; $(0, -2)$

16. Write a quadratic function in vertex form that has the given vertex and passes through the given point.

Vertex: $(-9, -9)$; Point: $(-7, -1)$

- _____ 17. Which equation represents a line that passes through the point $(-5, 5)$ and has slope -3 ?

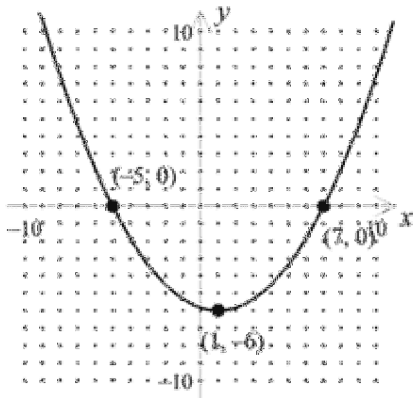
a. $y = -3x - 10$

c. $y = 3x + 10$

b. $y = -3x + 10$

d. $y = 3x - 10$

____ 24. Write an equation for the parabola shown.



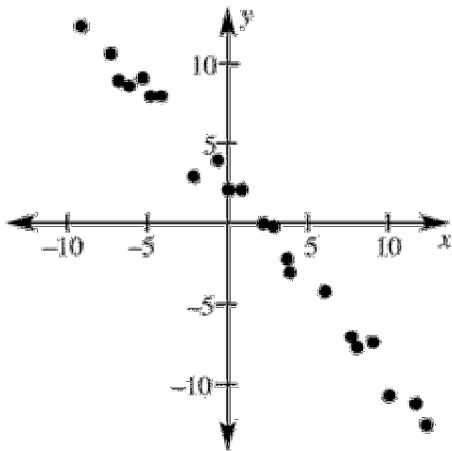
a. $y = \frac{7}{36}(x+6)(x-7)$

c. $y = 5\left(x + \frac{1}{6}\right)(x-7)$

b. $y = -7\left(x + \frac{7}{36}\right)\left(x - \frac{1}{6}\right)$

d. $y = \frac{1}{6}(x+5)(x-7)$

25. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



U6 Test

Answer Section

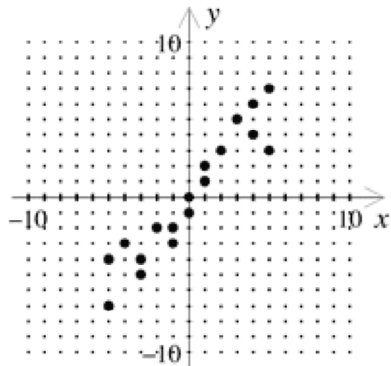
1. ANS:
 $y = -2x + 11$
- PTS: 1 DIF: Level B REF: MAL20250
 TOP: Lesson 2.4 Write Equations of Lines KEY: line | point | slope-intercept
 BLM: Knowledge NOT: 978-0-618-65615-8
2. ANS:
 $y = -2x$
- PTS: 1 DIF: Level A REF: MAL20249
 TOP: Lesson 2.4 Write Equations of Lines KEY: equation | slope-intercept | linear
 BLM: Knowledge NOT: 978-0-618-65615-8
3. ANS: A PTS: 1 DIF: Level B REF: MAL20255
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
4. ANS: C PTS: 1 DIF: Level B REF: MAL20251
 TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line | point
 BLM: Knowledge NOT: 978-0-618-65615-8
5. ANS: A PTS: 1 DIF: Level B REF: MAL20291
 NAT: NCTM 9-12.DAP.2.b | NCTM 9-12.DAP 2.e | NCTM 9-12.DAP.1.d
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8
6. ANS:
 $y = -\frac{1}{2}x - 7$
- PTS: 1 DIF: Level B REF: MAL20257
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | slope | perpendicular | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
7. ANS:
 No correlation
- PTS: 1 DIF: Level A REF: MAL20285 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8
8. ANS:
 Positive correlation
- PTS: 1 DIF: Level A REF: MAL20288 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8

9. ANS: B PTS: 1 DIF: Level B REF: MAL20717
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: parabola | vertex | equation | function | vertex form BLM: Knowledge
 NOT: 978-0-618-65615-8
10. ANS: D PTS: 1 DIF: Level B REF: MAL20271
 TOP: Lesson 2.4 Write Equations of Lines KEY: parallel | line | general equation
 BLM: Comprehension NOT: 978-0-618-65615-8
11. ANS:
 No correlation
- PTS: 1 DIF: Level A REF: MAL20287 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines
 KEY: approximate | solve | equation | word | model BLM: Knowledge
 NOT: 978-0-618-65615-8
12. ANS:
 $f(x) = -2x^2$
- PTS: 1 DIF: Level A REF: MAL20719
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: parabola | vertex | equation | function BLM: Knowledge
 NOT: 978-0-618-65615-8
13. ANS: C PTS: 1 DIF: Level A REF: MAL20248
 TOP: Lesson 2.4 Write Equations of Lines KEY: line | slope-intercept
 BLM: Knowledge NOT: 978-0-618-65615-8
14. ANS: B PTS: 1 DIF: Level B
 REF: 62af5f50-4f27-11db-b4d8-0011258082f7
 TOP: Lesson 2.4 Write Equations of Lines KEY: linear equations
 BLM: Comprehension NOT: 978-0-618-65615-8
15. ANS:
 $y = -2x - 2$
- PTS: 1 DIF: Level B REF: MAL20254
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: line | point | equation | parallel | slope-intercept BLM: Comprehension
 NOT: 978-0-618-65615-8
16. ANS:
 $f(x) = 2(x + 9)^2 - 9$
- PTS: 1 DIF: Level B REF: MAL20718
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: equation | function | vertex form | parabola | vertex BLM: Knowledge
 NOT: 978-0-618-65615-8
17. ANS: A PTS: 1 DIF: Level B REF: MAL20252
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: linear | point | equation | slope | slope-intercept BLM: Knowledge
 NOT: 978-0-618-65615-8

18. ANS: D PTS: 1 DIF: Level B REF: MAL20253
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
19. ANS:
 $y = \frac{1}{3}x - 4$
- PTS: 1 DIF: Level B REF: MAL20259
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: slope-intercept form | linear equations BLM: Comprehension
 NOT: 978-0-618-65615-8
20. ANS:
 $y = -5x + 2$
- PTS: 1 DIF: Level A REF: MAL20247
 TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line
 BLM: Knowledge NOT: 978-0-618-65615-8
21. ANS: B PTS: 1 DIF: Level B REF: MAL20270
 TOP: Lesson 2.4 Write Equations of Lines KEY: linear | standard form | equation
 BLM: Knowledge NOT: 978-0-618-65615-8
22. ANS: C PTS: 1 DIF: Level B REF: MAL20256
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: point | slope | parallel | perpendicular | slope-intercept BLM: Comprehension
 NOT: 978-0-618-65615-8
23. ANS:
 $y = 3x + 12$
- PTS: 1 DIF: Level B REF: MAL20260
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: slope-intercept form | linear equations BLM: Comprehension
 NOT: 978-0-618-65615-8
24. ANS: D PTS: 1 DIF: Level B REF: MAL20721
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: write quadratic function | intercept form BLM: Knowledge
 NOT: 978-0-618-65615-8
25. ANS:
 Negative correlation
- PTS: 1 DIF: Level A REF: MAL20286 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8

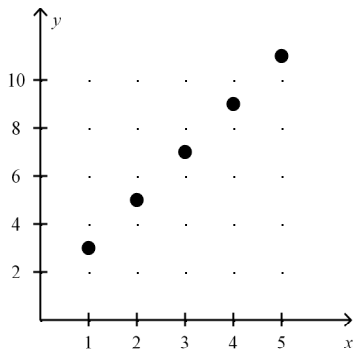
U6 Test

1. Describe the correlation shown by the scatter plot.



2. Write a quadratic function in vertex form that has the given vertex and passes through the given point.
 Vertex: (0, 0); Point: (-2, -4)

- _____ 3. Which equation represents the scatter plot?

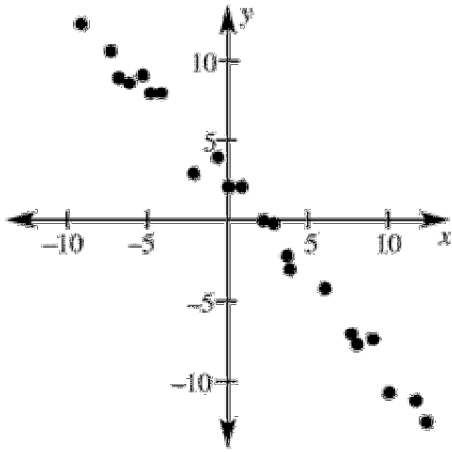


- | | |
|-----------------|-----------------|
| a. $y = 2x + 1$ | c. $y = 1 - 2x$ |
| b. $y = 2 - 2x$ | d. $y = 2x - 1$ |

Write an equation of the line that is perpendicular to the given line and passes through the given point. Express your answer in slope-intercept form.

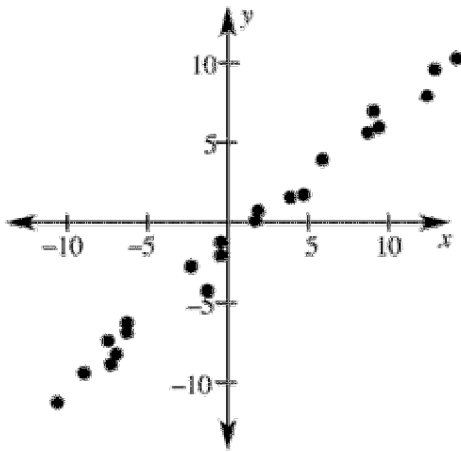
4. $y = 3x + 7; (0, 7)$
5. Find the slope-intercept equation of the line passing through the points (-5, -3) and (-2, 6).
6. Write a quadratic function in vertex form that has the given vertex and passes through the given point.
 Vertex: (-9, -9); Point: (-7, -1)

7. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



- _____ 8. Write a quadratic function in vertex form that has the given vertex and passes through the given point.
Vertex: $(-6, 2)$; Point: $(7, 340)$
- a. $f(x) = -2(x+6)^2 - 2$ c. $f(x) = 2(x-6)^2 - 2$
b. $f(x) = 2(x-6)^2 + 2$ d. $f(x) = 2(x+6)^2 + 2$
- _____ 9. Write an equation of a line that has slope -4 and y -intercept -6 .
- a. $x = -4y - 6$ c. $y = -\frac{1}{4}x - 6$
b. $y = -4x + 6$ d. $y = -4x - 6$
- _____ 10. Which equation represents a line that passes through the point $(-5, 5)$ and has slope -3 ?
- a. $y = -3x + 10$ c. $y = 3x - 10$
b. $y = -3x - 10$ d. $y = 3x + 10$
11. Write an equation of a line that has slope -5 and y -intercept 2 .
- _____ 12. Which slope-intercept equation represents a line that passes through the point $(1, -1)$ and is parallel to the line $y = -3x - 6$?
- a. $y = -\frac{1}{3}x - 6$ c. $y = 3x - 2$
b. $y = -3x - 4$ d. $y = -3x + 2$
- _____ 13. Write the standard form of the equation of the line that passes through the point $(5, -4)$ and is parallel to the line $7x + y = -1$.
- a. $5x - 4y = -1$ c. $7x + y = -23$
b. $7x - y = 1$ d. $7x + y = 31$
14. Find the slope-intercept equation of the line passing through the points $(-3, -5)$ and $(6, -2)$.

15. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



- ____ 16. Which of the following best describes the graphs of the equations below?

$$3y = 6x + 9$$

$$8y = -4x + 4$$

- a. The lines have the same y -intercept.
- b. The lines have the same x -intercept.
- c. The lines are perpendicular.
- d. The lines are parallel.

- ____ 17. Write the standard form of the equation of the line that has slope 2 and passes through the point $(5, 1)$.

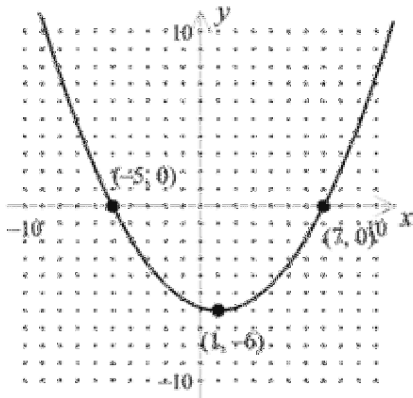
a. $-2x - y = -9$

c. $2x - y = 9$

b. $-x + 2y = 3$

d. $x - 2y = -3$

_____ 18. Write an equation for the parabola shown.



a. $y = 5\left(x + \frac{1}{6}\right)(x - 7)$

c. $y = \frac{7}{36}(x + 6)(x - 7)$

b. $y = \frac{1}{6}(x + 5)(x - 7)$

d. $y = -7\left(x + \frac{7}{36}\right)\left(x - \frac{1}{6}\right)$

Choose the equation of the line that is perpendicular to the given line and passes through the given point.

_____ 19. $y = \frac{2}{3}x + \frac{4}{5}; \left(0, -\frac{9}{2}\right)$

a. $y = \frac{2}{3}x - \frac{32}{3}$

c. $y = -\frac{3}{2}x - \frac{9}{2}$

b. $y = -\frac{3}{2}x + \frac{9}{2}$

d. $y = \frac{2}{3}x + \frac{32}{3}$

Write an equation of the line that is parallel to the given line and passes through the given point. Express your answer in slope-intercept form.

20. $y = -2x + 6; (0, -2)$

U6 Test Answer Section

- ANS:
Positive correlation

PTS: 1 DIF: Level A REF: MAL20285 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
- ANS:
 $f(x) = -x^2$

PTS: 1 DIF: Level A REF: MAL20719
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: parabola | vertex | equation | function BLM: Knowledge
NOT: 978-0-618-65615-8
- ANS: A PTS: 1 DIF: Level B REF: MAL20291
NAT: NCTM 9-12.DAP.2.b | NCTM 9-12.DAP 2.e | NCTM 9-12.DAP.1.d
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
- ANS:
 $y = -\frac{1}{3}x + 7$

PTS: 1 DIF: Level B REF: MAL20257
TOP: Lesson 2.4 Write Equations of Lines
KEY: equation | slope | perpendicular | line | point BLM: Comprehension
NOT: 978-0-618-65615-8
- ANS:
 $y = 3x + 12$

PTS: 1 DIF: Level B REF: MAL20260
TOP: Lesson 2.4 Write Equations of Lines
KEY: slope-intercept form | linear equations BLM: Comprehension
NOT: 978-0-618-65615-8
- ANS:
 $f(x) = 2(x + 9)^2 - 9$

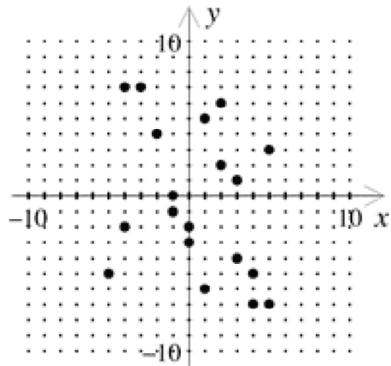
PTS: 1 DIF: Level B REF: MAL20718
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: equation | function | vertex form | parabola | vertex BLM: Knowledge
NOT: 978-0-618-65615-8
- ANS:
Negative correlation

PTS: 1 DIF: Level A REF: MAL20286 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8

8. ANS: D PTS: 1 DIF: Level B REF: MAL20717
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: parabola | vertex | equation | function | vertex form
 NOT: 978-0-618-65615-8 BLM: Knowledge
9. ANS: D PTS: 1 DIF: Level A REF: MAL20248
 TOP: Lesson 2.4 Write Equations of Lines
 BLM: Knowledge NOT: 978-0-618-65615-8
 KEY: line | slope-intercept
10. ANS: B PTS: 1 DIF: Level B REF: MAL20252
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: linear | point | equation | slope | slope-intercept
 NOT: 978-0-618-65615-8 BLM: Knowledge
11. ANS:
 $y = -5x + 2$
- PTS: 1 DIF: Level A REF: MAL20247
 TOP: Lesson 2.4 Write Equations of Lines
 BLM: Knowledge NOT: 978-0-618-65615-8
 KEY: slope-intercept | line
12. ANS: D PTS: 1 DIF: Level B REF: MAL20253
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | parallel | slope-intercept | line | point
 NOT: 978-0-618-65615-8 BLM: Comprehension
13. ANS: D PTS: 1 DIF: Level B REF: MAL20271
 TOP: Lesson 2.4 Write Equations of Lines
 BLM: Comprehension NOT: 978-0-618-65615-8
 KEY: parallel | line | general equation
14. ANS:
 $y = \frac{1}{3}x - 4$
- PTS: 1 DIF: Level B REF: MAL20259
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: slope-intercept form | linear equations
 NOT: 978-0-618-65615-8 BLM: Comprehension
15. ANS:
 Positive correlation
- PTS: 1 DIF: Level A REF: MAL20288 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines
 BLM: Knowledge NOT: 978-0-618-65615-8
 KEY: correlation | scatter plot
16. ANS: C PTS: 1 DIF: Level B
 REF: 62af5f50-4f27-11db-b4d8-0011258082f7
 TOP: Lesson 2.4 Write Equations of Lines
 BLM: Comprehension NOT: 978-0-618-65615-8
 KEY: linear equations
17. ANS: C PTS: 1 DIF: Level B REF: MAL20270
 TOP: Lesson 2.4 Write Equations of Lines
 BLM: Knowledge NOT: 978-0-618-65615-8
 KEY: linear | standard form | equation

18. ANS: B PTS: 1 DIF: Level B REF: MAL20721
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: write quadratic function | intercept form BLM: Knowledge
 NOT: 978-0-618-65615-8
19. ANS: C PTS: 1 DIF: Level B REF: MAL20256
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: point | slope | parallel | perpendicular | slope-intercept BLM: Comprehension
 NOT: 978-0-618-65615-8
20. ANS:
 $y = -2x - 2$
- PTS: 1 DIF: Level B REF: MAL20254
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: line | point | equation | parallel | slope-intercept BLM: Comprehension
 NOT: 978-0-618-65615-8
21. ANS:
 No correlation
- PTS: 1 DIF: Level A REF: MAL20287 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines
 KEY: approximate | solve | equation | word | model BLM: Knowledge
 NOT: 978-0-618-65615-8
22. ANS:
 $y = -2x + 11$
- PTS: 1 DIF: Level B REF: MAL20250
 TOP: Lesson 2.4 Write Equations of Lines KEY: line | point | slope-intercept
 BLM: Knowledge NOT: 978-0-618-65615-8
23. ANS: C PTS: 1 DIF: Level B REF: MAL20251
 TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line | point
 BLM: Knowledge NOT: 978-0-618-65615-8
24. ANS: D PTS: 1 DIF: Level B REF: MAL20255
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
25. ANS:
 $y = 7x - 17$
- PTS: 1 DIF: Level A REF: MAL20249
 TOP: Lesson 2.4 Write Equations of Lines KEY: equation | slope-intercept | linear
 BLM: Knowledge NOT: 978-0-618-65615-8

12. Describe the correlation shown by the scatter plot.



Write an equation of the line that is parallel to the given line and passes through the given point. Express your answer in slope-intercept form.

13. $y = -2x + 6; (0, -2)$

- _____ 14. Which slope-intercept equation represents a line that passes through the point $(-4, 1)$ and is parallel to the line $y = 2x - 2$?

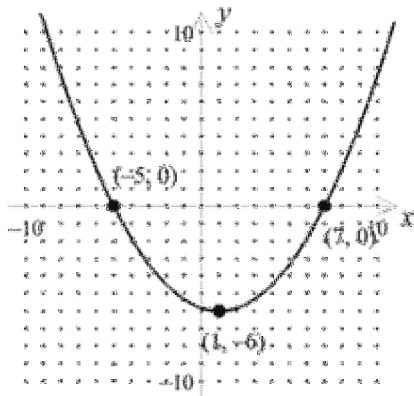
a. $y = \frac{1}{2}x - 2$

c. $y = -2x - 9$

b. $y = 2x + 2$

d. $y = 2x + 9$

- _____ 15. Write an equation for the parabola shown.



a. $y = 5\left(x + \frac{1}{6}\right)(x - 7)$

c. $y = \frac{1}{6}(x + 5)(x - 7)$

b. $y = -7\left(x + \frac{7}{36}\right)\left(x - \frac{1}{6}\right)$

d. $y = \frac{7}{36}(x + 6)(x - 7)$

_____ 22. Which of the following best describes the graphs of the equations below?

$$3y = 6x + 9$$

$$8y = -4x + 4$$

- a. The lines have the same y -intercept.
- b. The lines have the same x -intercept.
- c. The lines are parallel.
- d. The lines are perpendicular.

Choose the equation of the line that is perpendicular to the given line and passes through the given point.

_____ 23. $y = \frac{2}{3}x + \frac{4}{5}; \left(0, -\frac{9}{2}\right)$

a. $y = \frac{2}{3}x + \frac{32}{3}$

c. $y = -\frac{3}{2}x + \frac{9}{2}$

b. $y = \frac{2}{3}x - \frac{32}{3}$

d. $y = -\frac{3}{2}x - \frac{9}{2}$

_____ 24. Write the equation of the line, in slope-intercept form, that passes through the point $(-5, 2)$ and has slope 3.

a. $y = 3x + 17$

c. $y = 3x - 17$

b. $y = -3x - 17$

d. $y = -3x + 17$

25. Find the slope-intercept equation of the line passing through the points $(-5, -3)$ and $(-2, 6)$.

U6 Test

Answer Section

1. ANS: B PTS: 1 DIF: Level B REF: MAL20270
 TOP: Lesson 2.4 Write Equations of Lines KEY: linear | standard form | equation
 BLM: Knowledge NOT: 978-0-618-65615-8
2. ANS: A PTS: 1 DIF: Level B REF: MAL20252
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: linear | point | equation | slope | slope-intercept BLM: Knowledge
 NOT: 978-0-618-65615-8
3. ANS: A PTS: 1 DIF: Level B REF: MAL20255
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
4. ANS:

$$f(x) = -\frac{3}{2}x^2$$

 PTS: 1 DIF: Level A REF: MAL20719
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: parabola | vertex | equation | function BLM: Knowledge
 NOT: 978-0-618-65615-8
5. ANS:
 No correlation
 PTS: 1 DIF: Level A REF: MAL20287 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines
 KEY: approximate | solve | equation | word | model BLM: Knowledge
 NOT: 978-0-618-65615-8
6. ANS:

$$y = -2x + 11$$

 PTS: 1 DIF: Level B REF: MAL20250
 TOP: Lesson 2.4 Write Equations of Lines KEY: line | point | slope-intercept
 BLM: Knowledge NOT: 978-0-618-65615-8
7. ANS:

$$y = \frac{1}{3}x - 4$$

 PTS: 1 DIF: Level B REF: MAL20259
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: slope-intercept form | linear equations BLM: Comprehension
 NOT: 978-0-618-65615-8
8. ANS: D PTS: 1 DIF: Level B REF: MAL20291
 NAT: NCTM 9-12.DAP.2.b | NCTM 9-12.DAP 2.e | NCTM 9-12.DAP.1.d
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8

9. ANS:

Positive correlation

PTS: 1 DIF: Level A REF: MAL20288 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8

10. ANS:

$$f(x) = 2(x+9)^2 - 9$$

PTS: 1 DIF: Level B REF: MAL20718
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: equation | function | vertex form | parabola | vertex BLM: Knowledge
 NOT: 978-0-618-65615-8

11. ANS:

$$y = -\frac{1}{2}x + 6$$

PTS: 1 DIF: Level B REF: MAL20257
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | slope | perpendicular | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8

12. ANS:

No correlation

PTS: 1 DIF: Level A REF: MAL20285 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8

13. ANS:

$$y = -2x - 2$$

PTS: 1 DIF: Level B REF: MAL20254
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: line | point | equation | parallel | slope-intercept BLM: Comprehension
 NOT: 978-0-618-65615-8

14. ANS: D PTS: 1 DIF: Level B

REF: MAL20253

TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8

15. ANS: C PTS: 1 DIF: Level B

REF: MAL20721

TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: write quadratic function | intercept form BLM: Knowledge
 NOT: 978-0-618-65615-8

16. ANS:

$$y = -7x + 18$$

PTS: 1 DIF: Level A REF: MAL20249
 TOP: Lesson 2.4 Write Equations of Lines KEY: equation | slope-intercept | linear
 BLM: Knowledge NOT: 978-0-618-65615-8

17. ANS:
 $y = -5x + 2$
- PTS: 1 DIF: Level A REF: MAL20247
TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line
BLM: Knowledge NOT: 978-0-618-65615-8
18. ANS:
Negative correlation
- PTS: 1 DIF: Level A REF: MAL20286 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
19. ANS: A PTS: 1 DIF: Level A REF: MAL20248
TOP: Lesson 2.4 Write Equations of Lines KEY: line | slope-intercept
BLM: Knowledge NOT: 978-0-618-65615-8
20. ANS: D PTS: 1 DIF: Level B REF: MAL20271
TOP: Lesson 2.4 Write Equations of Lines KEY: parallel | line | general equation
BLM: Comprehension NOT: 978-0-618-65615-8
21. ANS: B PTS: 1 DIF: Level B REF: MAL20717
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: parabola | vertex | equation | function | vertex form BLM: Knowledge
NOT: 978-0-618-65615-8
22. ANS: D PTS: 1 DIF: Level B
REF: 62af5f50-4f27-11db-b4d8-0011258082f7
TOP: Lesson 2.4 Write Equations of Lines KEY: linear equations
BLM: Comprehension NOT: 978-0-618-65615-8
23. ANS: D PTS: 1 DIF: Level B REF: MAL20256
TOP: Lesson 2.4 Write Equations of Lines
KEY: point | slope | parallel | perpendicular | slope-intercept BLM: Comprehension
NOT: 978-0-618-65615-8
24. ANS: A PTS: 1 DIF: Level B REF: MAL20251
TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line | point
BLM: Knowledge NOT: 978-0-618-65615-8
25. ANS:
 $y = 3x + 12$
- PTS: 1 DIF: Level B REF: MAL20260
TOP: Lesson 2.4 Write Equations of Lines
KEY: slope-intercept form | linear equations BLM: Comprehension
NOT: 978-0-618-65615-8

U6 Test

1. Write the equation of the line, in slope-intercept form, that passes through the point $(3, 5)$ and has slope -2 .

Write an equation of the line that is perpendicular to the given line and passes through the given point. Express your answer in slope-intercept form.

2. $y = -2x + 7; (0, 5)$

- _____ 3. Write a quadratic function in vertex form that has the given vertex and passes through the given point.

Vertex: $(-5, 8)$; Point: $(-5, 8)$

a. $f(x) = 3(x - 5)^2 - 8$

c. $f(x) = 3(x - 5)^2 + 8$

b. $f(x) = -3(x + 5)^2 - 8$

d. $f(x) = 3(x + 5)^2 + 8$

- _____ 4. Write an equation of a line that has slope -7 and y-intercept 9 .

a. $y = -7x + 9$

c. $y = -\frac{1}{7}x + 9$

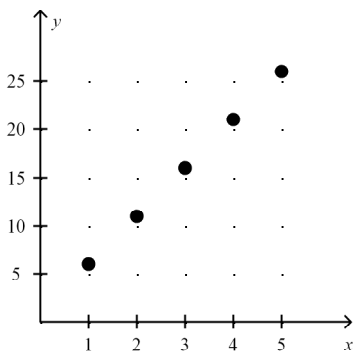
b. $y = -7x - 9$

d. $x = -7y + 9$

Write an equation of the line that is parallel to the given line and passes through the given point. Express your answer in slope-intercept form.

5. $y = -2x + 6; (0, -2)$

- _____ 6. Which equation represents the scatter plot?



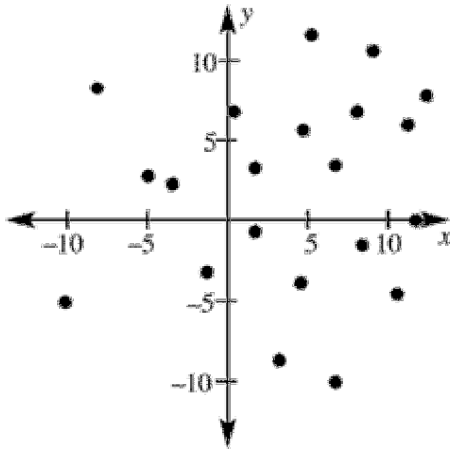
a. $y = 1 - 5x$

c. $y = 5x + 1$

b. $y = 5 - 5x$

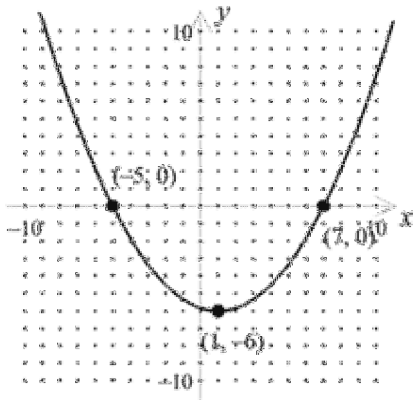
d. $y = 5x - 1$

7. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



8. Which equation represents a line that passes through the point $(-5, 5)$ and has slope -3 ?
- | | |
|-------------------|-------------------|
| a. $y = 3x - 10$ | c. $y = 3x + 10$ |
| b. $y = -3x + 10$ | d. $y = -3x - 10$ |
9. Write a quadratic function in vertex form that has the given vertex and passes through the given point.
Vertex: $(-9, -9)$; Point: $(-7, -1)$

10. Write an equation for the parabola shown.



- | | |
|---------------------------------|----------------------------------------------------------------------|
| a. $y = \frac{7}{36}(x+6)(x-7)$ | c. $y = -7\left(x + \frac{7}{36}\right)\left(x - \frac{1}{6}\right)$ |
| b. $y = \frac{1}{6}(x+5)(x-7)$ | d. $y = 5\left(x + \frac{1}{6}\right)(x-7)$ |

Choose the equation of the line that is perpendicular to the given line and passes through the given point.

_____ 17. $y = \frac{2}{3}x + \frac{4}{5}; \left(0, -\frac{9}{2}\right)$

a. $y = \frac{2}{3}x - \frac{32}{3}$

c. $y = \frac{2}{3}x + \frac{32}{3}$

b. $y = -\frac{3}{2}x - \frac{9}{2}$

d. $y = -\frac{3}{2}x + \frac{9}{2}$

18. Find the slope-intercept equation of the line passing through the points $(-3, -5)$ and $(6, -2)$.

Write an equation of the line with the given slope and y-intercept. Express your answer in slope-intercept form.

19. slope = -8 ; y-intercept = 8

- _____ 20. Which of the following best describes the graphs of the equations below?

$$3y = 6x + 9$$

$$8y = -4x + 4$$

- a. The lines have the same x -intercept.
- b. The lines are perpendicular.
- c. The lines have the same y -intercept.
- d. The lines are parallel.

- _____ 21. Write the equation of the line, in slope-intercept form, that passes through the point $(-5, 6)$ and has slope -5 .

a. $y = 5x + 19$

c. $y = 5x - 19$

b. $y = -5x - 19$

d. $y = -5x + 19$

U6 Test Answer Section

1. ANS:
 $y = -2x + 11$
- PTS: 1 DIF: Level B REF: MAL20250
 TOP: Lesson 2.4 Write Equations of Lines KEY: line | point | slope-intercept
 BLM: Knowledge NOT: 978-0-618-65615-8
2. ANS:
 $y = \frac{1}{2}x + 5$
- PTS: 1 DIF: Level B REF: MAL20257
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | slope | perpendicular | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
3. ANS: D PTS: 1 DIF: Level B REF: MAL20717
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: parabola | vertex | equation | function | vertex form BLM: Knowledge
 NOT: 978-0-618-65615-8
4. ANS: A PTS: 1 DIF: Level A REF: MAL20248
 TOP: Lesson 2.4 Write Equations of Lines KEY: line | slope-intercept
 BLM: Knowledge NOT: 978-0-618-65615-8
5. ANS:
 $y = -2x - 2$
- PTS: 1 DIF: Level B REF: MAL20254
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: line | point | equation | parallel | slope-intercept BLM: Comprehension
 NOT: 978-0-618-65615-8
6. ANS: C PTS: 1 DIF: Level B REF: MAL20291
 NAT: NCTM 9-12.DAP.2.b | NCTM 9-12.DAP 2.e | NCTM 9-12.DAP.1.d
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8
7. ANS:
 No correlation
- PTS: 1 DIF: Level A REF: MAL20287 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines
 KEY: approximate | solve | equation | word | model BLM: Knowledge
 NOT: 978-0-618-65615-8
8. ANS: D PTS: 1 DIF: Level B REF: MAL20252
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: linear | point | equation | slope | slope-intercept BLM: Knowledge
 NOT: 978-0-618-65615-8

9. ANS:

$$f(x) = 2(x+9)^2 - 9$$

PTS: 1 DIF: Level B REF: MAL20718

TOP: Lesson 4.10 Write Quadratic Functions and Models

KEY: equation | function | vertex form | parabola | vertex

BLM: Knowledge

NOT: 978-0-618-65615-8

10. ANS: B

PTS: 1

DIF: Level B

REF: MAL20721

TOP: Lesson 4.10 Write Quadratic Functions and Models

KEY: write quadratic function | intercept form

BLM: Knowledge

NOT: 978-0-618-65615-8

11. ANS:

No correlation

PTS: 1 DIF: Level A REF: MAL20285

NAT: NCTM 9-12.DAP.2.b

TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines

KEY: scatter plot

BLM: Knowledge NOT: 978-0-618-65615-8

12. ANS: C

PTS: 1

DIF: Level B

REF: MAL20270

TOP: Lesson 2.4 Write Equations of Lines

KEY: linear | standard form | equation

BLM: Knowledge NOT: 978-0-618-65615-8

13. ANS:

Negative correlation

PTS: 1 DIF: Level A REF: MAL20286

NAT: NCTM 9-12.DAP.2.b

TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines

KEY: correlation | scatter plot

BLM: Knowledge NOT: 978-0-618-65615-8

14. ANS: C

PTS: 1

DIF: Level B

REF: MAL20271

TOP: Lesson 2.4 Write Equations of Lines

KEY: parallel | line | general equation

BLM: Comprehension

NOT: 978-0-618-65615-8

15. ANS:

$$f(x) = \frac{2}{3}x^2$$

PTS: 1 DIF: Level A REF: MAL20719

TOP: Lesson 4.10 Write Quadratic Functions and Models

KEY: parabola | vertex | equation | function

BLM: Knowledge

NOT: 978-0-618-65615-8

16. ANS:

$$y = -5x + 2$$

PTS: 1 DIF: Level A REF: MAL20247

TOP: Lesson 2.4 Write Equations of Lines

KEY: slope-intercept | line

BLM: Knowledge NOT: 978-0-618-65615-8

17. ANS: B

PTS: 1

DIF: Level B

REF: MAL20256

TOP: Lesson 2.4 Write Equations of Lines

KEY: point | slope | parallel | perpendicular | slope-intercept

BLM: Comprehension

NOT: 978-0-618-65615-8

18. ANS:

$$y = \frac{1}{3}x - 4$$

PTS: 1 DIF: Level B REF: MAL20259

TOP: Lesson 2.4 Write Equations of Lines

KEY: slope-intercept form | linear equations

BLM: Comprehension

NOT: 978-0-618-65615-8

19. ANS:

$$y = -8x + 8$$

PTS: 1 DIF: Level A REF: MAL20249

TOP: Lesson 2.4 Write Equations of Lines

KEY: equation | slope-intercept | linear

BLM: Knowledge NOT: 978-0-618-65615-8

20. ANS: B PTS: 1 DIF: Level B

REF: 62af5f50-4f27-11db-b4d8-0011258082f7

TOP: Lesson 2.4 Write Equations of Lines

KEY: linear equations

BLM: Comprehension

NOT: 978-0-618-65615-8

21. ANS: B PTS: 1 DIF: Level B

REF: MAL20251

TOP: Lesson 2.4 Write Equations of Lines

KEY: slope-intercept | line | point

BLM: Knowledge NOT: 978-0-618-65615-8

22. ANS:

Positive correlation

PTS: 1 DIF: Level A REF: MAL20288

NAT: NCTM 9-12.DAP.2.b

TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines

KEY: correlation | scatter plot

BLM: Knowledge NOT: 978-0-618-65615-8

23. ANS:

$$y = 3x + 12$$

PTS: 1 DIF: Level B REF: MAL20260

TOP: Lesson 2.4 Write Equations of Lines

KEY: slope-intercept form | linear equations

BLM: Comprehension

NOT: 978-0-618-65615-8

24. ANS: A PTS: 1 DIF: Level B

REF: MAL20255

TOP: Lesson 2.4 Write Equations of Lines

KEY: equation | parallel | slope-intercept | line | point

BLM: Comprehension

NOT: 978-0-618-65615-8

25. ANS: A PTS: 1 DIF: Level B

REF: MAL20253

TOP: Lesson 2.4 Write Equations of Lines

KEY: equation | parallel | slope-intercept | line | point

BLM: Comprehension

NOT: 978-0-618-65615-8

U6 Test

Write an equation of the line that is parallel to the given line and passes through the given point.
Express your answer in slope-intercept form.

1. $y = -2x + 6; (0, -2)$

_____ 2. Write an equation of a line that has slope -9 and y -intercept -5 .

a. $x = -9y - 5$

c. $y = -9x - 5$

b. $y = -9x + 5$

d. $y = -\frac{1}{9}x - 5$

_____ 3. Write the equation of the line, in slope-intercept form, that passes through the point $(5, 6)$ and has slope 2 .

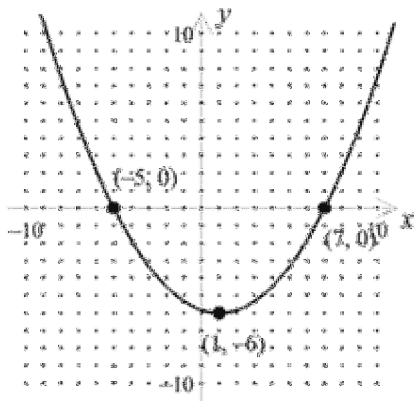
a. $y = -2x - 4$

c. $y = 2x + 4$

b. $y = 2x - 4$

d. $y = -2x + 4$

_____ 4. Write an equation for the parabola shown.



a. $y = \frac{1}{6}(x+5)(x-7)$

c. $y = -7\left(x + \frac{7}{36}\right)\left(x - \frac{1}{6}\right)$

b. $y = \frac{7}{36}(x+6)(x-7)$

d. $y = 5\left(x + \frac{1}{6}\right)(x-7)$

_____ 5. Write the standard form of the equation of the line that passes through the point $(-5, -6)$ and is parallel to the line $5x + 3y = -3$.

a. $-5x - 6y = -3$

c. $5x + 3y = -43$

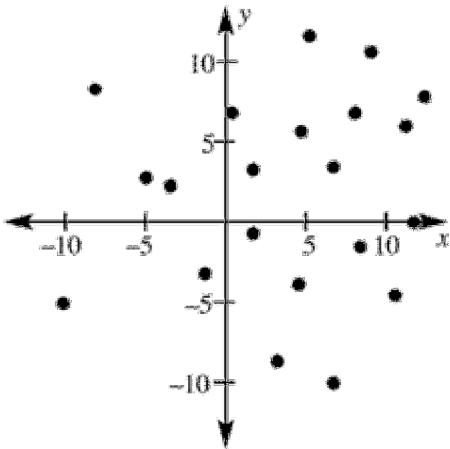
b. $5x + 3y = -45$

d. $5x - 3y = 3$

Write an equation of the line that is perpendicular to the given line and passes through the given point.
Express your answer in slope-intercept form.

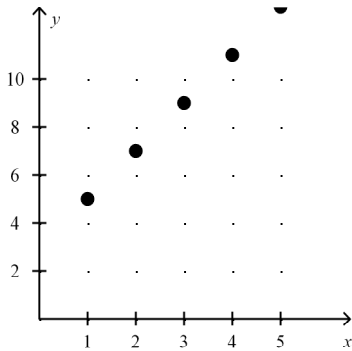
6. $y = -2x - 8; (0, 3)$

7. Find the slope-intercept equation of the line passing through the points $(-3, -5)$ and $(6, -2)$.
8. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



Choose the equation of the line that is parallel to the given line and passes through the given point.

9. $y = 6x - 3; (0, 2)$
- a. $y = -6x - 2$ c. $y = -\frac{1}{6}x + 2$
 b. $y = 6x + 2$ d. $y = 6x - 12$
10. Which equation represents the scatter plot?



- a. $y = 3 - 2x$ c. $y = 2 - 2x$
 b. $y = 2x - 3$ d. $y = 2x + 3$
11. Write the standard form of the equation of the line that has slope -3 and passes through the point $(1, 3)$.
- a. $x - 3y = -10$ c. $-x + 3y = 10$
 b. $-3x + y = -6$ d. $3x + y = 6$

_____ 12. Which of the following best describes the graphs of the equations below?

$$3y = 6x + 9$$
$$8y = -4x + 4$$

- The lines are parallel.
- The lines are perpendicular.
- The lines have the same y -intercept.
- The lines have the same x -intercept.

Write an equation of the line with the given slope and y -intercept. Express your answer in slope-intercept form.

13. slope = -9 ; y -intercept = -15

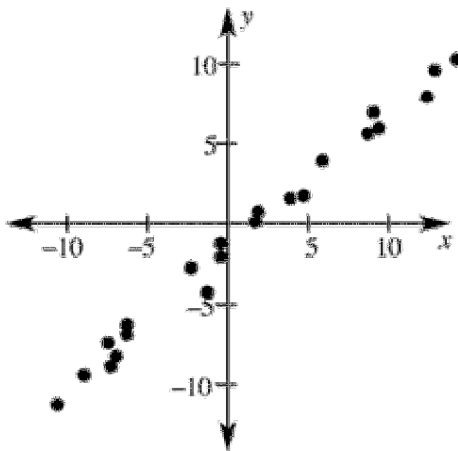
_____ 14. Which equation represents a line that passes through the point $(-5, 5)$ and has slope -3 ?

- | | |
|-------------------|------------------|
| a. $y = -3x - 10$ | c. $y = 3x + 10$ |
| b. $y = -3x + 10$ | d. $y = 3x - 10$ |

15. Write a quadratic function in vertex form that has the given vertex and passes through the given point.

Vertex: $(-9, -9)$; Point: $(-7, -1)$

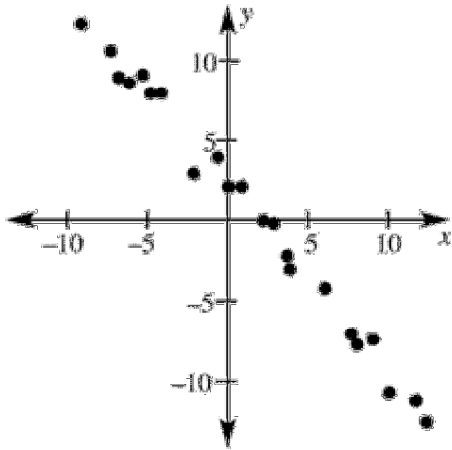
16. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



17. Find the slope-intercept equation of the line passing through the points $(-5, -3)$ and $(-2, 6)$.

18. Write the equation of the line, in slope-intercept form, that passes through the point $(3, 5)$ and has slope -2 .

19. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



- ____ 20. Write a quadratic function in vertex form that has the given vertex and passes through the given point.

Vertex: $(4, -6)$; Point: $(-4, -70)$

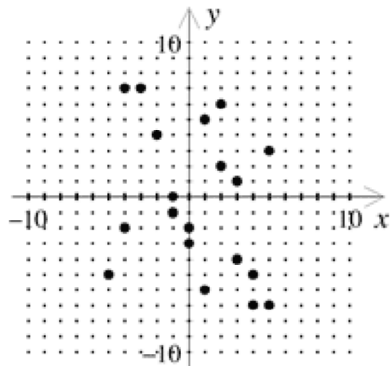
a. $f(x) = -(x+4)^2 + 6$

c. $f(x) = -(x+4)^2 - 6$

b. $f(x) = (x-4)^2 + 6$

d. $f(x) = -(x-4)^2 - 6$

21. Describe the correlation shown by the scatter plot.



- ____ 22. Which slope-intercept equation represents a line that passes through the point $(1, 6)$ and is parallel to the line

$y = -2x + 6$?

a. $y = -\frac{1}{2}x + 6$

c. $y = -2x + 8$

b. $y = 2x - 8$

d. $y = -2x + 11$

23. Write an equation of a line that has slope -5 and y -intercept 2 .

24. Write a quadratic function in vertex form that has the given vertex and passes through the given point.
Vertex: (0, 0); Point: (-2, 8)

Choose the equation of the line that is perpendicular to the given line and passes through the given point.

_____ 25. $y = \frac{2}{3}x + \frac{4}{5}; \left(0, -\frac{9}{2}\right)$

a. $y = -\frac{3}{2}x - \frac{9}{2}$

c. $y = \frac{2}{3}x - \frac{32}{3}$

b. $y = \frac{2}{3}x + \frac{32}{3}$

d. $y = -\frac{3}{2}x + \frac{9}{2}$

U6 Test Answer Section

1. ANS:
 $y = -2x - 2$
- PTS: 1 DIF: Level B REF: MAL20254
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: line | point | equation | parallel | slope-intercept BLM: Comprehension
 NOT: 978-0-618-65615-8
2. ANS: C PTS: 1 DIF: Level A REF: MAL20248
 TOP: Lesson 2.4 Write Equations of Lines
 BLM: Knowledge NOT: 978-0-618-65615-8
 KEY: line | slope-intercept
3. ANS: B PTS: 1 DIF: Level B REF: MAL20251
 TOP: Lesson 2.4 Write Equations of Lines
 BLM: Knowledge NOT: 978-0-618-65615-8
 KEY: slope-intercept | line | point
4. ANS: A PTS: 1 DIF: Level B REF: MAL20721
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: write quadratic function | intercept form BLM: Knowledge
 NOT: 978-0-618-65615-8
5. ANS: C PTS: 1 DIF: Level B REF: MAL20271
 TOP: Lesson 2.4 Write Equations of Lines KEY: parallel | line | general equation
 BLM: Comprehension NOT: 978-0-618-65615-8
6. ANS:
 $y = \frac{1}{2}x + 3$
- PTS: 1 DIF: Level B REF: MAL20257
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | slope | perpendicular | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
7. ANS:
 $y = \frac{1}{3}x - 4$
- PTS: 1 DIF: Level B REF: MAL20259
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: slope-intercept form | linear equations BLM: Comprehension
 NOT: 978-0-618-65615-8
8. ANS:
 No correlation
- PTS: 1 DIF: Level A REF: MAL20287 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines
 KEY: approximate | solve | equation | word | model BLM: Knowledge
 NOT: 978-0-618-65615-8

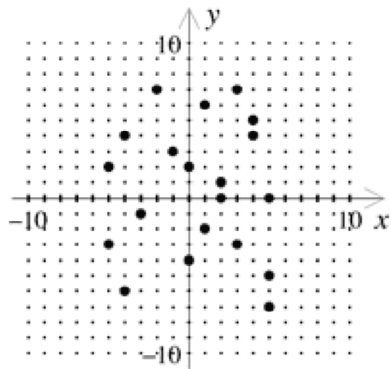
9. ANS: B PTS: 1 DIF: Level B REF: MAL20255
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
10. ANS: D PTS: 1 DIF: Level B REF: MAL20291
 NAT: NCTM 9-12.DAP.2.b | NCTM 9-12.DAP 2.e | NCTM 9-12.DAP.1.d
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8
11. ANS: D PTS: 1 DIF: Level B REF: MAL20270
 TOP: Lesson 2.4 Write Equations of Lines KEY: linear | standard form | equation
 BLM: Knowledge NOT: 978-0-618-65615-8
12. ANS: B PTS: 1 DIF: Level B
 REF: 62af5f50-4f27-11db-b4d8-0011258082f7
 TOP: Lesson 2.4 Write Equations of Lines KEY: linear equations
 BLM: Comprehension NOT: 978-0-618-65615-8
13. ANS:
 $y = -9x - 15$
- PTS: 1 DIF: Level A REF: MAL20249
 TOP: Lesson 2.4 Write Equations of Lines KEY: equation | slope-intercept | linear
 BLM: Knowledge NOT: 978-0-618-65615-8
14. ANS: A PTS: 1 DIF: Level B REF: MAL20252
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: linear | point | equation | slope | slope-intercept BLM: Knowledge
 NOT: 978-0-618-65615-8
15. ANS:
 $f(x) = 2(x + 9)^2 - 9$
- PTS: 1 DIF: Level B REF: MAL20718
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: equation | function | vertex form | parabola | vertex BLM: Knowledge
 NOT: 978-0-618-65615-8
16. ANS:
 Positive correlation
- PTS: 1 DIF: Level A REF: MAL20288 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8
17. ANS:
 $y = 3x + 12$
- PTS: 1 DIF: Level B REF: MAL20260
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: slope-intercept form | linear equations BLM: Comprehension
 NOT: 978-0-618-65615-8

18. ANS:
 $y = -2x + 11$
- PTS: 1 DIF: Level B REF: MAL20250
 TOP: Lesson 2.4 Write Equations of Lines KEY: line | point | slope-intercept
 BLM: Knowledge NOT: 978-0-618-65615-8
19. ANS:
 Negative correlation
- PTS: 1 DIF: Level A REF: MAL20286 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8
20. ANS: D PTS: 1 DIF: Level B REF: MAL20717
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: parabola | vertex | equation | function | vertex form BLM: Knowledge
 NOT: 978-0-618-65615-8
21. ANS:
 No correlation
- PTS: 1 DIF: Level A REF: MAL20285 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8
22. ANS: C PTS: 1 DIF: Level B REF: MAL20253
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
23. ANS:
 $y = -5x + 2$
- PTS: 1 DIF: Level A REF: MAL20247 KEY: slope-intercept | line
 TOP: Lesson 2.4 Write Equations of Lines
 BLM: Knowledge NOT: 978-0-618-65615-8
24. ANS:
 $f(x) = 2x^2$
- PTS: 1 DIF: Level A REF: MAL20719 BLM: Knowledge
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: parabola | vertex | equation | function
 NOT: 978-0-618-65615-8
25. ANS: A PTS: 1 DIF: Level B REF: MAL20256 BLM: Comprehension
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: point | slope | parallel | perpendicular | slope-intercept
 NOT: 978-0-618-65615-8

U6 Test

Write an equation of the line with the given slope and y-intercept. Express your answer in slope-intercept form.

- slope = 1; y-intercept = 11
- Describe the correlation shown by the scatter plot.



Write an equation of the line that is perpendicular to the given line and passes through the given point. Express your answer in slope-intercept form.

3. $y = -3x - 3$; $(0, -2)$

Write an equation of the line that is parallel to the given line and passes through the given point. Express your answer in slope-intercept form.

4. $y = -2x + 6$; $(0, -2)$

_____ 5. Write the equation of the line, in slope-intercept form, that passes through the point $(6, -5)$ and has slope -5 .

a. $y = 5x + 25$

c. $y = 5x - 25$

b. $y = -5x - 25$

d. $y = -5x + 25$

_____ 6. Write the standard form of the equation of the line that has slope 2 and passes through the point $(5, -3)$.

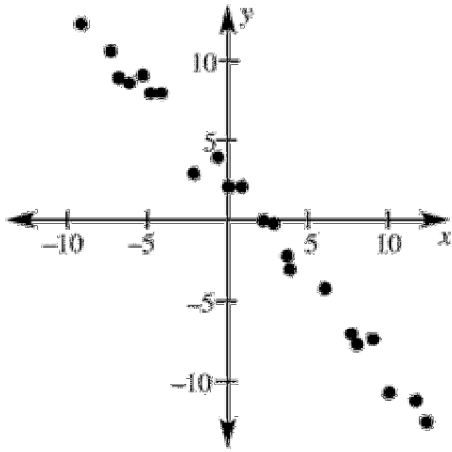
a. $-2x - y = -13$

c. $2x - y = 13$

b. $x - 2y = -11$

d. $-x + 2y = 11$

17. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



18. Write a quadratic function in vertex form that has the given vertex and passes through the given point.
Vertex: $(0, 0)$; Point: $(2, 2)$

Choose the equation of the line that is parallel to the given line and passes through the given point.

- _____ 19. $y = -6x + 4$; $(0, -5)$
- | | |
|---------------------------|-------------------|
| a. $y = \frac{1}{6}x - 5$ | c. $y = -6x - 5$ |
| b. $y = 6x + 5$ | d. $y = -6x - 30$ |

20. Write a quadratic function in vertex form that has the given vertex and passes through the given point.
Vertex: $(-9, -9)$; Point: $(-7, -1)$

Choose the equation of the line that is perpendicular to the given line and passes through the given point.

- _____ 21. $y = \frac{2}{3}x + \frac{4}{5}$; $(0, -\frac{9}{2})$
- | | |
|--------------------------------------|--------------------------------------|
| a. $y = -\frac{3}{2}x - \frac{9}{2}$ | c. $y = \frac{2}{3}x + \frac{32}{3}$ |
| b. $y = -\frac{3}{2}x + \frac{9}{2}$ | d. $y = \frac{2}{3}x - \frac{32}{3}$ |

_____ 22. Which of the following best describes the graphs of the equations below?

$$3y = 6x + 9$$

$$8y = -4x + 4$$

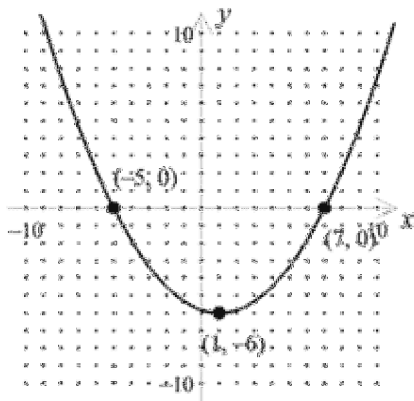
- The lines have the same y -intercept.
- The lines are perpendicular.
- The lines are parallel.
- The lines have the same x -intercept.

_____ 23. Write the standard form of the equation of the line that passes through the point $(5, 6)$ and is parallel to the line $8x + 5y = -4$.

- | | |
|-------------------|-------------------|
| a. $5x + 6y = -4$ | c. $8x - 5y = 4$ |
| b. $8x + 5y = 73$ | d. $8x + 5y = 70$ |

24. Write an equation of a line that has slope -5 and y -intercept 2 .

_____ 25. Write an equation for the parabola shown.



- | | |
|---------------------------------|----------------------------------------------------------------------|
| a. $y = \frac{7}{36}(x+6)(x-7)$ | c. $y = 5\left(x + \frac{1}{6}\right)(x-7)$ |
| b. $y = \frac{1}{6}(x+5)(x-7)$ | d. $y = -7\left(x + \frac{7}{36}\right)\left(x - \frac{1}{6}\right)$ |

U6 Test Answer Section

1. ANS:
 $y = x + 11$
- PTS: 1 DIF: Level A REF: MAL20249
 TOP: Lesson 2.4 Write Equations of Lines KEY: equation | slope-intercept | linear
 BLM: Knowledge NOT: 978-0-618-65615-8
2. ANS:
 No correlation
- PTS: 1 DIF: Level A REF: MAL20285 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8
3. ANS:
 $y = \frac{1}{3}x - 2$
- PTS: 1 DIF: Level B REF: MAL20257
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | slope | perpendicular | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
4. ANS:
 $y = -2x - 2$
- PTS: 1 DIF: Level B REF: MAL20254
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: line | point | equation | parallel | slope-intercept BLM: Comprehension
 NOT: 978-0-618-65615-8
5. ANS: D PTS: 1 DIF: Level B REF: MAL20251
 TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line | point
 BLM: Knowledge NOT: 978-0-618-65615-8
6. ANS: C PTS: 1 DIF: Level B REF: MAL20270
 TOP: Lesson 2.4 Write Equations of Lines KEY: linear | standard form | equation
 BLM: Knowledge NOT: 978-0-618-65615-8
7. ANS:
 No correlation
- PTS: 1 DIF: Level A REF: MAL20287 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines
 KEY: approximate | solve | equation | word | model BLM: Knowledge
 NOT: 978-0-618-65615-8

8. ANS:
Positive correlation
- PTS: 1 DIF: Level A REF: MAL20288 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
9. ANS:
 $y = -2x + 11$
- PTS: 1 DIF: Level B REF: MAL20250
TOP: Lesson 2.4 Write Equations of Lines KEY: line | point | slope-intercept
BLM: Knowledge NOT: 978-0-618-65615-8
10. ANS: B PTS: 1 DIF: Level B REF: MAL20252
TOP: Lesson 2.4 Write Equations of Lines KEY: linear | point | equation | slope | slope-intercept
NOT: 978-0-618-65615-8 BLM: Knowledge
11. ANS: B PTS: 1 DIF: Level B REF: MAL20717
TOP: Lesson 4.10 Write Quadratic Functions and Models KEY: parabola | vertex | equation | function | vertex form
NOT: 978-0-618-65615-8 BLM: Knowledge
12. ANS:
 $y = 3x + 12$
- PTS: 1 DIF: Level B REF: MAL20260
TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept form | linear equations
NOT: 978-0-618-65615-8 BLM: Comprehension
13. ANS: A PTS: 1 DIF: Level A REF: MAL20248
TOP: Lesson 2.4 Write Equations of Lines KEY: line | slope-intercept
BLM: Knowledge NOT: 978-0-618-65615-8
14. ANS: A PTS: 1 DIF: Level B REF: MAL20253
TOP: Lesson 2.4 Write Equations of Lines KEY: equation | parallel | slope-intercept | line | point
NOT: 978-0-618-65615-8 BLM: Comprehension
15. ANS:
 $y = \frac{1}{3}x - 4$
- PTS: 1 DIF: Level B REF: MAL20259
TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept form | linear equations BLM: Comprehension
NOT: 978-0-618-65615-8
16. ANS: C PTS: 1 DIF: Level B REF: MAL20291
NAT: NCTM 9-12.DAP.2.b | NCTM 9-12.DAP 2.e | NCTM 9-12.DAP.1.d
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8

17. ANS:
Negative correlation
- PTS: 1 DIF: Level A REF: MAL20286 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
18. ANS:
 $f(x) = \frac{1}{2}x^2$
- PTS: 1 DIF: Level A REF: MAL20719
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: parabola | vertex | equation | function BLM: Knowledge
NOT: 978-0-618-65615-8
19. ANS: C PTS: 1 DIF: Level B REF: MAL20255
TOP: Lesson 2.4 Write Equations of Lines
KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
NOT: 978-0-618-65615-8
20. ANS:
 $f(x) = 2(x+9)^2 - 9$
- PTS: 1 DIF: Level B REF: MAL20718
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: equation | function | vertex form | parabola | vertex BLM: Knowledge
NOT: 978-0-618-65615-8
21. ANS: A PTS: 1 DIF: Level B REF: MAL20256
TOP: Lesson 2.4 Write Equations of Lines
KEY: point | slope | parallel | perpendicular | slope-intercept BLM: Comprehension
NOT: 978-0-618-65615-8
22. ANS: B PTS: 1 DIF: Level B
REF: 62af5f50-4f27-11db-b4d8-0011258082f7
TOP: Lesson 2.4 Write Equations of Lines KEY: linear equations
BLM: Comprehension NOT: 978-0-618-65615-8
23. ANS: D PTS: 1 DIF: Level B REF: MAL20271
TOP: Lesson 2.4 Write Equations of Lines KEY: parallel | line | general equation
BLM: Comprehension NOT: 978-0-618-65615-8
24. ANS:
 $y = -5x + 2$
- PTS: 1 DIF: Level A REF: MAL20247
TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line
BLM: Knowledge NOT: 978-0-618-65615-8
25. ANS: B PTS: 1 DIF: Level B REF: MAL20721
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: write quadratic function | intercept form BLM: Knowledge
NOT: 978-0-618-65615-8

U6 Test

1. Write a quadratic function in vertex form that has the given vertex and passes through the given point.

Vertex: $(-9, -9)$; Point: $(-7, -1)$

2. Find the slope-intercept equation of the line passing through the points $(-5, -3)$ and $(-2, 6)$.

3. Write a quadratic function in vertex form that has the given vertex and passes through the given point.

Vertex: $(0, 0)$; Point: $(-2, -4)$

Write an equation of the line that is perpendicular to the given line and passes through the given point. Express your answer in slope-intercept form.

4. $y = 3x + 9$; $(0, -2)$

- _____ 5. Write the standard form of the equation of the line that passes through the point $(5, -5)$ and is parallel to the line $4x + y = -4$.

a. $4x + y = -15$

c. $4x + y = 15$

b. $5x - 5y = -4$

d. $4x - y = 4$

- _____ 6. Write an equation of a line that has slope 6 and y-intercept -2 .

a. $y = \frac{1}{6}x - 2$

c. $y = 6x - 2$

b. $y = 6x + 2$

d. $x = 6y - 2$

Write an equation of the line with the given slope and y-intercept. Express your answer in slope-intercept form.

7. slope = 7; y-intercept = 19

- _____ 8. Which slope-intercept equation represents a line that passes through the point $(3, -2)$ and is parallel to the line $y = -6x + 2$?

a. $y = -6x - 15$

c. $y = 6x - 16$

b. $y = -6x + 16$

d. $y = -\frac{1}{6}x + 2$

Choose the equation of the line that is parallel to the given line and passes through the given point.

- _____ 9. $y = 5x + 4$; $(0, 6)$

a. $y = 5x + 6$

c. $y = -\frac{1}{5}x + 6$

b. $y = -5x - 6$

d. $y = 5x - 30$

Choose the equation of the line that is perpendicular to the given line and passes through the given point.

_____ 10. $y = \frac{2}{3}x + \frac{4}{5}; \left(0, -\frac{9}{2}\right)$

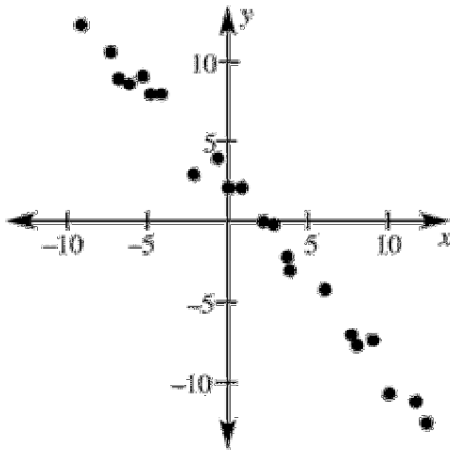
a. $y = -\frac{3}{2}x + \frac{9}{2}$

c. $y = -\frac{3}{2}x - \frac{9}{2}$

b. $y = \frac{2}{3}x + \frac{32}{3}$

d. $y = \frac{2}{3}x - \frac{32}{3}$

11. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



- _____ 12. Write the equation of the line, in slope-intercept form, that passes through the point $(-6, 4)$ and has slope -5 .

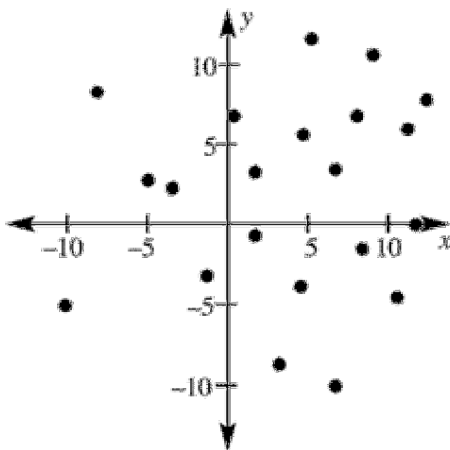
a. $y = -5x - 26$

c. $y = 5x + 26$

b. $y = -5x + 26$

d. $y = 5x - 26$

13. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



Write an equation of the line that is parallel to the given line and passes through the given point. Express your answer in slope-intercept form.

14. $y = -2x + 6; (0, -2)$

_____ 15. Which equation represents a line that passes through the point $(-5, 5)$ and has slope -3 ?

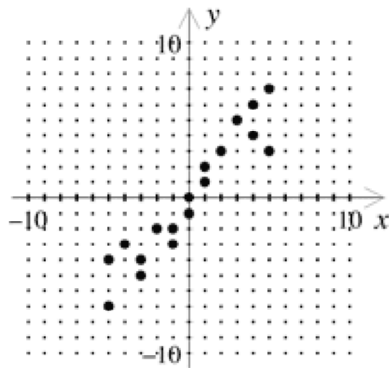
a. $y = -3x + 10$

c. $y = -3x - 10$

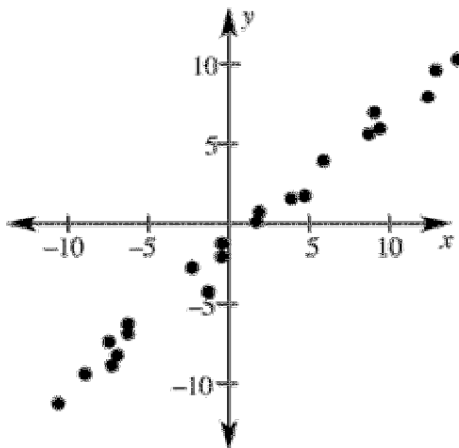
b. $y = 3x - 10$

d. $y = 3x + 10$

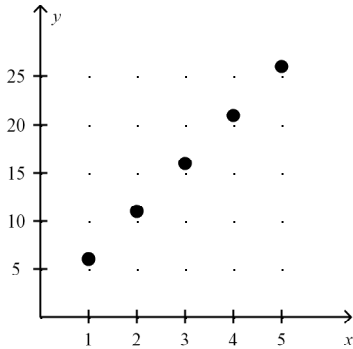
16. Describe the correlation shown by the scatter plot.



17. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



_____ 18. Which equation represents the scatter plot?



a. $y = 5x + 1$

c. $y = 5x - 1$

b. $y = 5 - 5x$

d. $y = 1 - 5x$

_____ 19. Which of the following best describes the graphs of the equations below?

$$3y = 6x + 9$$

$$8y = -4x + 4$$

- a. The lines are parallel.
- b. The lines are perpendicular.
- c. The lines have the same y -intercept.
- d. The lines have the same x -intercept.

_____ 20. Write the standard form of the equation of the line that has slope -3 and passes through the point $(-2, -1)$.

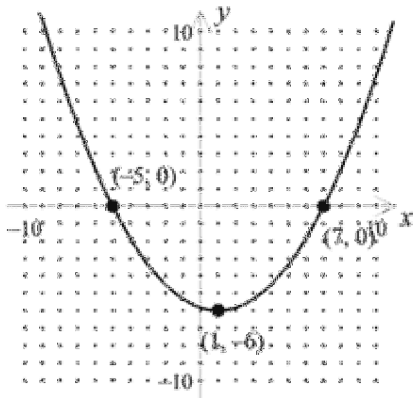
a. $x - 3y = 5$

c. $3x + y = -7$

b. $-3x + y = 7$

d. $-x + 3y = -5$

- _____ 21. Write an equation for the parabola shown.



- a. $y = \frac{1}{6}(x+5)(x-7)$ c. $y = -7\left(x + \frac{7}{36}\right)\left(x - \frac{1}{6}\right)$
 b. $y = \frac{7}{36}(x+6)(x-7)$ d. $y = 5\left(x + \frac{1}{6}\right)(x-7)$

22. Write an equation of a line that has slope -5 and y -intercept 2 .

- _____ 23. Write a quadratic function in vertex form that has the given vertex and passes through the given point.

Vertex: $(4, -7)$; Point: $(1, -16)$

- a. $f(x) = -(x-4)^2 - 7$ c. $f(x) = -(x+4)^2 + 7$
 b. $f(x) = -(x+4)^2 - 7$ d. $f(x) = (x-4)^2 + 7$

24. Write the equation of the line, in slope-intercept form, that passes through the point $(3, 5)$ and has slope -2 .

25. Find the slope-intercept equation of the line passing through the points $(-3, -5)$ and $(6, -2)$.

U6 Test Answer Section

1. ANS:

$$f(x) = 2(x+9)^2 - 9$$

PTS: 1 DIF: Level B REF: MAL20718

TOP: Lesson 4.10 Write Quadratic Functions and Models

KEY: equation | function | vertex form | parabola | vertex

BLM: Knowledge

NOT: 978-0-618-65615-8

2. ANS:

$$y = 3x + 12$$

PTS: 1 DIF: Level B REF: MAL20260

TOP: Lesson 2.4 Write Equations of Lines

KEY: slope-intercept form | linear equations

BLM: Comprehension

NOT: 978-0-618-65615-8

3. ANS:

$$f(x) = -x^2$$

PTS: 1 DIF: Level A REF: MAL20719

TOP: Lesson 4.10 Write Quadratic Functions and Models

KEY: parabola | vertex | equation | function

BLM: Knowledge

NOT: 978-0-618-65615-8

4. ANS:

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

PTS: 1 DIF: Level B REF: MAL20257

TOP: Lesson 2.4 Write Equations of Lines

KEY: equation | slope | perpendicular | line | point

BLM: Comprehension

NOT: 978-0-618-65615-8

5. ANS: C

PTS: 1

DIF: Level B

REF: MAL20271

TOP: Lesson 2.4 Write Equations of Lines

KEY: parallel | line | general equation

BLM: Comprehension

NOT: 978-0-618-65615-8

6. ANS: C

PTS: 1

DIF: Level A

REF: MAL20248

TOP: Lesson 2.4 Write Equations of Lines

KEY: line | slope-intercept

BLM: Knowledge NOT: 978-0-618-65615-8

7. ANS:

$$y = 7x + 19$$

PTS: 1 DIF: Level A REF: MAL20249

TOP: Lesson 2.4 Write Equations of Lines

KEY: equation | slope-intercept | linear

BLM: Knowledge NOT: 978-0-618-65615-8

8. ANS: B

PTS: 1

DIF: Level B

REF: MAL20253

TOP: Lesson 2.4 Write Equations of Lines

KEY: equation | parallel | slope-intercept | line | point

BLM: Comprehension

NOT: 978-0-618-65615-8

9. ANS: A PTS: 1 DIF: Level B REF: MAL20255
TOP: Lesson 2.4 Write Equations of Lines
KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
NOT: 978-0-618-65615-8
10. ANS: C PTS: 1 DIF: Level B REF: MAL20256
TOP: Lesson 2.4 Write Equations of Lines
KEY: point | slope | parallel | perpendicular | slope-intercept BLM: Comprehension
NOT: 978-0-618-65615-8
11. ANS:
Negative correlation
- PTS: 1 DIF: Level A REF: MAL20286 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
12. ANS: A PTS: 1 DIF: Level B REF: MAL20251
TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line | point
BLM: Knowledge NOT: 978-0-618-65615-8
13. ANS:
No correlation
- PTS: 1 DIF: Level A REF: MAL20287 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines BLM: Knowledge
KEY: approximate | solve | equation | word | model
NOT: 978-0-618-65615-8
14. ANS:
 $y = -2x - 2$
- PTS: 1 DIF: Level B REF: MAL20254
TOP: Lesson 2.4 Write Equations of Lines
KEY: line | point | equation | parallel | slope-intercept BLM: Comprehension
NOT: 978-0-618-65615-8
15. ANS: C PTS: 1 DIF: Level B REF: MAL20252
TOP: Lesson 2.4 Write Equations of Lines
KEY: linear | point | equation | slope | slope-intercept BLM: Knowledge
NOT: 978-0-618-65615-8
16. ANS:
Positive correlation
- PTS: 1 DIF: Level A REF: MAL20285 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
17. ANS:
Positive correlation
- PTS: 1 DIF: Level A REF: MAL20288 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8

18. ANS: A PTS: 1 DIF: Level B REF: MAL20291
 NAT: NCTM 9-12.DAP.2.b | NCTM 9-12.DAP 2.e | NCTM 9-12.DAP.1.d
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8
19. ANS: B PTS: 1 DIF: Level B
 REF: 62af5f50-4f27-11db-b4d8-0011258082f7
 TOP: Lesson 2.4 Write Equations of Lines KEY: linear equations
 BLM: Comprehension NOT: 978-0-618-65615-8
20. ANS: C PTS: 1 DIF: Level B REF: MAL20270
 TOP: Lesson 2.4 Write Equations of Lines KEY: linear | standard form | equation
 BLM: Knowledge NOT: 978-0-618-65615-8
21. ANS: A PTS: 1 DIF: Level B REF: MAL20721
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: write quadratic function | intercept form BLM: Knowledge
 NOT: 978-0-618-65615-8
22. ANS:
 $y = -5x + 2$
- PTS: 1 DIF: Level A REF: MAL20247
 TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line
 BLM: Knowledge NOT: 978-0-618-65615-8
23. ANS: A PTS: 1 DIF: Level B REF: MAL20717
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: parabola | vertex | equation | function | vertex form BLM: Knowledge
 NOT: 978-0-618-65615-8
24. ANS:
 $y = -2x + 11$
- PTS: 1 DIF: Level B REF: MAL20250
 TOP: Lesson 2.4 Write Equations of Lines KEY: line | point | slope-intercept
 BLM: Knowledge NOT: 978-0-618-65615-8
25. ANS:
 $y = \frac{1}{3}x - 4$
- PTS: 1 DIF: Level B REF: MAL20259
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: slope-intercept form | linear equations BLM: Comprehension
 NOT: 978-0-618-65615-8

Write an equation of the line that is parallel to the given line and passes through the given point. Express your answer in slope-intercept form.

6. $y = -2x + 6$; $(0, -2)$

7. Write the equation of the line, in slope-intercept form, that passes through the point $(3, 5)$ and has slope -2 .

_____ 8. Write a quadratic function in vertex form that has the given vertex and passes through the given point.

Vertex: $(-9, -4)$; Point: $(0, -166)$

a. $f(x) = 2(x+9)^2 + 4$

c. $f(x) = -2(x+9)^2 - 4$

b. $f(x) = -2(x-9)^2 + 4$

d. $f(x) = -2(x-9)^2 - 4$

Choose the equation of the line that is perpendicular to the given line and passes through the given point.

_____ 9. $y = \frac{2}{3}x + \frac{4}{5}$; $(0, -\frac{9}{2})$

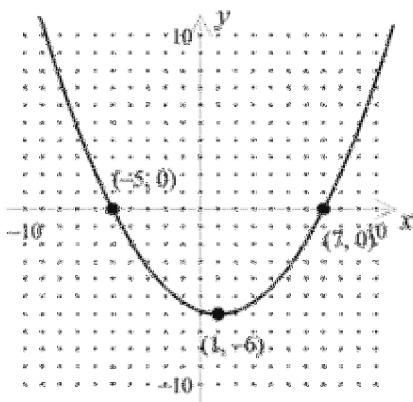
a. $y = \frac{2}{3}x - \frac{32}{3}$

c. $y = \frac{2}{3}x + \frac{32}{3}$

b. $y = -\frac{3}{2}x - \frac{9}{2}$

d. $y = -\frac{3}{2}x + \frac{9}{2}$

_____ 10. Write an equation for the parabola shown.



a. $y = \frac{1}{6}(x+5)(x-7)$

c. $y = 5\left(x + \frac{1}{6}\right)(x-7)$

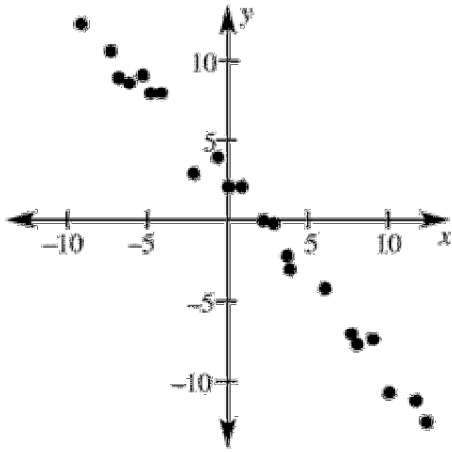
b. $y = \frac{7}{36}(x+6)(x-7)$

d. $y = -7\left(x + \frac{7}{36}\right)\left(x - \frac{1}{6}\right)$

Name: _____

ID: I

25. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



U6 Test

Answer Section

1. ANS:

$$f(x) = 2(x+9)^2 - 9$$

PTS: 1 DIF: Level B REF: MAL20718
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: equation | function | vertex form | parabola | vertex BLM: Knowledge
 NOT: 978-0-618-65615-8
2. ANS:
 No correlation

PTS: 1 DIF: Level A REF: MAL20287 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines
 KEY: approximate | solve | equation | word | model BLM: Knowledge
 NOT: 978-0-618-65615-8
3. ANS: D PTS: 1 DIF: Level A REF: MAL20248
 TOP: Lesson 2.4 Write Equations of Lines KEY: line | slope-intercept
 BLM: Knowledge NOT: 978-0-618-65615-8
4. ANS: A PTS: 1 DIF: Level B REF: MAL20255
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
5. ANS: D PTS: 1 DIF: Level B
 REF: 62af5f50-4f27-11db-b4d8-0011258082f7
 TOP: Lesson 2.4 Write Equations of Lines KEY: linear equations
 BLM: Comprehension NOT: 978-0-618-65615-8
6. ANS:

$$y = -2x - 2$$

PTS: 1 DIF: Level B REF: MAL20254
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: line | point | equation | parallel | slope-intercept BLM: Comprehension
 NOT: 978-0-618-65615-8
7. ANS:

$$y = -2x + 11$$

PTS: 1 DIF: Level B REF: MAL20250
 TOP: Lesson 2.4 Write Equations of Lines KEY: line | point | slope-intercept
 BLM: Knowledge NOT: 978-0-618-65615-8
8. ANS: C PTS: 1 DIF: Level B REF: MAL20717
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: parabola | vertex | equation | function | vertex form BLM: Knowledge
 NOT: 978-0-618-65615-8

9. ANS: B PTS: 1 DIF: Level B REF: MAL20256
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: point | slope | parallel | perpendicular | slope-intercept BLM: Comprehension
 NOT: 978-0-618-65615-8
10. ANS: A PTS: 1 DIF: Level B REF: MAL20721
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: write quadratic function | intercept form BLM: Knowledge
 NOT: 978-0-618-65615-8
11. ANS: B PTS: 1 DIF: Level B REF: MAL20271
 TOP: Lesson 2.4 Write Equations of Lines KEY: parallel | line | general equation
 BLM: Comprehension NOT: 978-0-618-65615-8
12. ANS: A PTS: 1 DIF: Level B REF: MAL20252
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: linear | point | equation | slope | slope-intercept BLM: Knowledge
 NOT: 978-0-618-65615-8
13. ANS: B PTS: 1 DIF: Level B REF: MAL20251
 TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line | point
 BLM: Knowledge NOT: 978-0-618-65615-8
14. ANS:
 $y = 3x + 12$
- PTS: 1 DIF: Level B REF: MAL20260
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: slope-intercept form | linear equations BLM: Comprehension
 NOT: 978-0-618-65615-8
15. ANS: B PTS: 1 DIF: Level B REF: MAL20253
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
16. ANS:
 Positive correlation
- PTS: 1 DIF: Level A REF: MAL20288 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8
17. ANS:
 $f(x) = -\frac{2}{3}x^2$
- PTS: 1 DIF: Level A REF: MAL20719
 TOP: Lesson 4.10 Write Quadratic Functions and Models
 KEY: parabola | vertex | equation | function BLM: Knowledge
 NOT: 978-0-618-65615-8

18. ANS:
 $y = 8x - 10$
- PTS: 1 DIF: Level A REF: MAL20249
 TOP: Lesson 2.4 Write Equations of Lines KEY: equation | slope-intercept | linear
 BLM: Knowledge NOT: 978-0-618-65615-8
19. ANS:
 $y = \frac{1}{3}x - 4$
- PTS: 1 DIF: Level B REF: MAL20259
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: slope-intercept form | linear equations BLM: Comprehension
 NOT: 978-0-618-65615-8
20. ANS:
 No correlation
- PTS: 1 DIF: Level A REF: MAL20285 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8
21. ANS: B PTS: 1 DIF: Level B REF: MAL20270
 TOP: Lesson 2.4 Write Equations of Lines KEY: linear | standard form | equation
 BLM: Knowledge NOT: 978-0-618-65615-8
22. ANS:
 $y = -5x + 2$
- PTS: 1 DIF: Level A REF: MAL20247
 TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line
 BLM: Knowledge NOT: 978-0-618-65615-8
23. ANS: C PTS: 1 DIF: Level B REF: MAL20291
 NAT: NCTM 9-12.DAP.2.b | NCTM 9-12.DAP 2.e | NCTM 9-12.DAP.1.d
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8
24. ANS:
 $y = -\frac{1}{4}x + 5$
- PTS: 1 DIF: Level B REF: MAL20257
 TOP: Lesson 2.4 Write Equations of Lines
 KEY: equation | slope | perpendicular | line | point BLM: Comprehension
 NOT: 978-0-618-65615-8
25. ANS:
 Negative correlation
- PTS: 1 DIF: Level A REF: MAL20286 NAT: NCTM 9-12.DAP.2.b
 TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
 BLM: Knowledge NOT: 978-0-618-65615-8

Write an equation of the line that is parallel to the given line and passes through the given point. Express your answer in slope-intercept form.

6. $y = -2x + 6$; $(0, -2)$

Choose the equation of the line that is parallel to the given line and passes through the given point.

_____ 7. $y = -6x - 3$; $(0, 1)$

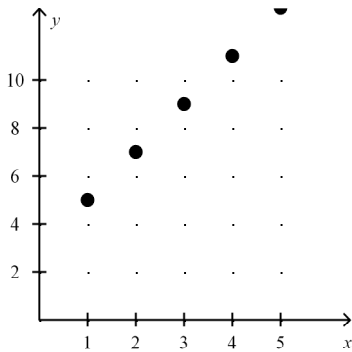
a. $y = -6x + 1$

c. $y = -6x + 6$

b. $y = 6x - 1$

d. $y = \frac{1}{6}x + 1$

_____ 8. Which equation represents the scatter plot?



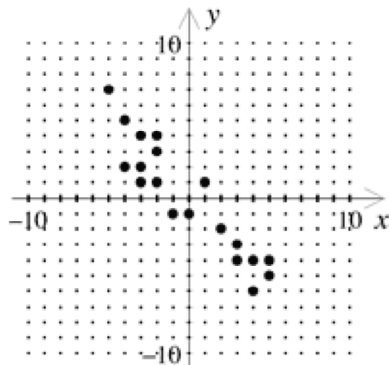
a. $y = 2x + 3$

c. $y = 3 - 2x$

b. $y = 2x - 3$

d. $y = 2 - 2x$

9. Describe the correlation shown by the scatter plot.



_____ 10. Write the standard form of the equation of the line that passes through the point $(6, -4)$ and is parallel to the line $8x + y = 5$.

a. $8x + y = 44$

c. $8x - y = -5$

b. $8x + y = -26$

d. $6x - 4y = 5$

_____ 11. Which slope-intercept equation represents a line that passes through the point $(-3, 4)$ and is parallel to the line $y = -4x - 2$?

a. $y = -\frac{1}{4}x - 2$

c. $y = -4x - 8$

b. $y = -4x + 19$

d. $y = 4x + 8$

_____ 12. Write an equation of a line that has slope 6 and y-intercept 2.

a. $y = 6x + 2$

c. $y = \frac{1}{6}x + 2$

b. $x = 6y + 2$

d. $y = 6x - 2$

13. Write an equation of a line that has slope -5 and y-intercept 2.

Write an equation of the line with the given slope and y-intercept. Express your answer in slope-intercept form.

14. slope = -3 ; y-intercept = -3

_____ 15. Write a quadratic function in vertex form that has the given vertex and passes through the given point.

Vertex: $(8, 9)$; Point: $(-5, -498)$

a. $f(x) = -3(x + 8)^2 - 9$

c. $f(x) = -3(x + 8)^2 + 9$

b. $f(x) = 3(x - 8)^2 - 9$

d. $f(x) = -3(x - 8)^2 + 9$

16. Write a quadratic function in vertex form that has the given vertex and passes through the given point.

Vertex: $(-9, -9)$; Point: $(-7, -1)$

_____ 17. Write the standard form of the equation of the line that has slope 4 and passes through the point $(-3, -1)$.

a. $x - 4y = -1$

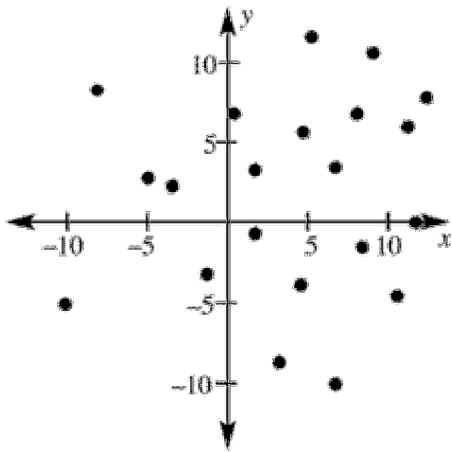
c. $-4x - y = 11$

b. $4x - y = -11$

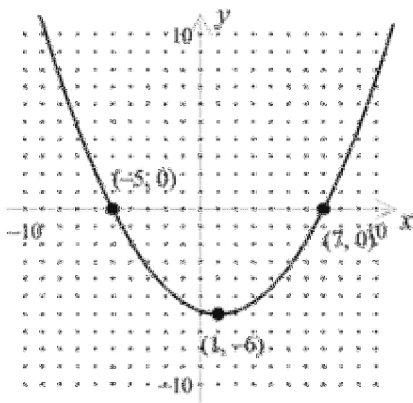
d. $-x + 4y = 1$

18. Find the slope-intercept equation of the line passing through the points $(-3, -5)$ and $(6, -2)$.

19. For the scatter plot shown, state whether x and y have a *positive correlation*, a *negative correlation*, or *no correlation*.



- ____ 20. Write an equation for the parabola shown.



- a. $y = 5\left(x + \frac{1}{6}\right)(x - 7)$ c. $y = \frac{7}{36}(x + 6)(x - 7)$
 b. $y = -7\left(x + \frac{7}{36}\right)\left(x - \frac{1}{6}\right)$ d. $y = \frac{1}{6}(x + 5)(x - 7)$

Write an equation of the line that is perpendicular to the given line and passes through the given point. Express your answer in slope-intercept form.

21. $y = -2x + 9$; $(0, -8)$

U6 Test

Answer Section

1. ANS: A PTS: 1 DIF: Level B REF: MAL20251
TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line | point
BLM: Knowledge NOT: 978-0-618-65615-8
2. ANS: C PTS: 1 DIF: Level B REF: MAL20256
TOP: Lesson 2.4 Write Equations of Lines
KEY: point | slope | parallel | perpendicular | slope-intercept BLM: Comprehension
NOT: 978-0-618-65615-8
3. ANS:
Positive correlation
- PTS: 1 DIF: Level A REF: MAL20288 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
4. ANS: A PTS: 1 DIF: Level B
REF: 62af5f50-4f27-11db-b4d8-0011258082f7
TOP: Lesson 2.4 Write Equations of Lines KEY: linear equations
BLM: Comprehension NOT: 978-0-618-65615-8
5. ANS:
 $f(x) = -x^2$
- PTS: 1 DIF: Level A REF: MAL20719
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: parabola | vertex | equation | function BLM: Knowledge
NOT: 978-0-618-65615-8
6. ANS:
 $y = -2x - 2$
- PTS: 1 DIF: Level B REF: MAL20254
TOP: Lesson 2.4 Write Equations of Lines
KEY: line | point | equation | parallel | slope-intercept BLM: Comprehension
NOT: 978-0-618-65615-8
7. ANS: A PTS: 1 DIF: Level B REF: MAL20255
TOP: Lesson 2.4 Write Equations of Lines
KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
NOT: 978-0-618-65615-8
8. ANS: A PTS: 1 DIF: Level B REF: MAL20291
NAT: NCTM 9-12.DAP.2.b | NCTM 9-12.DAP 2.e | NCTM 9-12.DAP.1.d
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
9. ANS:
Negative correlation
- PTS: 1 DIF: Level A REF: MAL20285 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8

10. ANS: A PTS: 1 DIF: Level B REF: MAL20271
TOP: Lesson 2.4 Write Equations of Lines KEY: parallel | line | general equation
BLM: Comprehension NOT: 978-0-618-65615-8
11. ANS: C PTS: 1 DIF: Level B REF: MAL20253
TOP: Lesson 2.4 Write Equations of Lines
KEY: equation | parallel | slope-intercept | line | point BLM: Comprehension
NOT: 978-0-618-65615-8
12. ANS: A PTS: 1 DIF: Level A REF: MAL20248
TOP: Lesson 2.4 Write Equations of Lines KEY: line | slope-intercept
BLM: Knowledge NOT: 978-0-618-65615-8
13. ANS:
 $y = -5x + 2$
- PTS: 1 DIF: Level A REF: MAL20247
TOP: Lesson 2.4 Write Equations of Lines KEY: slope-intercept | line
BLM: Knowledge NOT: 978-0-618-65615-8
14. ANS:
 $y = -3x - 3$
- PTS: 1 DIF: Level A REF: MAL20249
TOP: Lesson 2.4 Write Equations of Lines KEY: equation | slope-intercept | linear
BLM: Knowledge NOT: 978-0-618-65615-8
15. ANS: D PTS: 1 DIF: Level B REF: MAL20717
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: parabola | vertex | equation | function | vertex form BLM: Knowledge
NOT: 978-0-618-65615-8
16. ANS:
 $f(x) = 2(x + 9)^2 - 9$
- PTS: 1 DIF: Level B REF: MAL20718
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: equation | function | vertex form | parabola | vertex BLM: Knowledge
NOT: 978-0-618-65615-8
17. ANS: B PTS: 1 DIF: Level B REF: MAL20270
TOP: Lesson 2.4 Write Equations of Lines KEY: linear | standard form | equation
BLM: Knowledge NOT: 978-0-618-65615-8
18. ANS:
 $y = \frac{1}{3}x - 4$
- PTS: 1 DIF: Level B REF: MAL20259
TOP: Lesson 2.4 Write Equations of Lines
KEY: slope-intercept form | linear equations BLM: Comprehension
NOT: 978-0-618-65615-8

19. ANS:
No correlation
- PTS: 1 DIF: Level A REF: MAL20287 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines
KEY: approximate | solve | equation | word | model BLM: Knowledge
NOT: 978-0-618-65615-8
20. ANS: D PTS: 1 DIF: Level B REF: MAL20721
TOP: Lesson 4.10 Write Quadratic Functions and Models
KEY: write quadratic function | intercept form BLM: Knowledge
NOT: 978-0-618-65615-8
21. ANS:
 $y = \frac{1}{2}x - 8$
- PTS: 1 DIF: Level B REF: MAL20257
TOP: Lesson 2.4 Write Equations of Lines
KEY: equation | slope | perpendicular | line | point BLM: Comprehension
NOT: 978-0-618-65615-8
22. ANS:
Negative correlation
- PTS: 1 DIF: Level A REF: MAL20286 NAT: NCTM 9-12.DAP.2.b
TOP: Lesson 2.6 Draw Scatter Plots and Best-Fitting Lines KEY: correlation | scatter plot
BLM: Knowledge NOT: 978-0-618-65615-8
23. ANS:
 $y = -2x + 11$
- PTS: 1 DIF: Level B REF: MAL20250 KEY: line | point | slope-intercept
TOP: Lesson 2.4 Write Equations of Lines
BLM: Knowledge NOT: 978-0-618-65615-8
24. ANS: A PTS: 1 DIF: Level B REF: MAL20252
TOP: Lesson 2.4 Write Equations of Lines
KEY: linear | point | equation | slope | slope-intercept BLM: Knowledge
NOT: 978-0-618-65615-8
25. ANS:
 $y = 3x + 12$
- PTS: 1 DIF: Level B REF: MAL20260
TOP: Lesson 2.4 Write Equations of Lines
KEY: slope-intercept form | linear equations BLM: Comprehension
NOT: 978-0-618-65615-8