

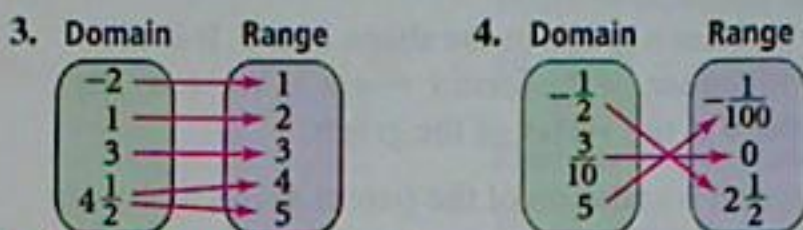
Differentiated Instruction Resources

- **L5** Ch. 2 Test
- **L2** Below Level Ch. 2 Test
- **L4** Ch. 2 Alternative Assessment
- **L3** Spanish Ch. 2 Test
- **L4** Spanish Ch. 2 Alternative Assessment
- ExamView CD-ROM
 - Ch. 2 Pre-Made Test
 - Make your own Ch. 2 test
- Online Chapter 2 Test at www.PHSchool.com

Find the domain and range. Graph each relation.

- $\{(0, 0), (1, -1), (2, -4), (3, -9), (4, -16)\}$ 1-2. See back of book.
- $\{(3, 2), (4, 3), (5, 4), (6, 5), (7, 6)\}$

Determine whether each relation is a function.



3-4. See margin. Suppose $f(x) = 2x - 5$ and $g(x) = |-3x - 1|$. Find each value.

- $f(3)$ 1
- $f(1) + g(2)$ 4
- $g(0)$ 1
- $g(2) - f(0)$ 12
- $f(-1) - g(3)$ -17
- $2g(-4)$ 22

11. **Open-Ended** Graph a relation that is *not* a function. Find its domain and range.

Check students' work.

Find the slope of each line.

- through $(3, 5)$ and $(1, 1)$ 2
- $4x + 3y = 2$ $-\frac{4}{3}$
- through $(-0.5, 0.5)$, perpendicular to $y = -2x - 4$ $\frac{1}{2}$

Write in standard form an equation of the line with the given slope through the given point.

- $3x + y = 0$
- slope = -3 , $(0, 0)$
- slope = 4 , $(-2, -5)$
- $2x - 5y = -23$
- slope = $\frac{2}{3}$, $(6, 7)$
- slope = -0.5 , $(0, 6)$

Write in point-slope form an equation of the line through each pair of points. Answers may vary. Samples:

- $(0, 0)$ and $(-4, 7)$ $y = -\frac{7}{4}x$
- $(3, 0)$ and $(-1, -2)$ $y + 6 = -16(x + 1)$
- $(9, 5)$ and $(8, 2)$ $y - 2 = 3(x - 8)$

- Open-Ended** Write an equation of a line with negative slope. a-e. See back of book.
 - Write an equation of the line perpendicular to the line from part (a) passing through $(-6, 9)$.
 - Write an equation of the line parallel to the line from part (b) passing through $(12, 12)$.
 - Write an equation of the line perpendicular to the line from part (c) passing through $(-1, -4)$.
 - Graph the lines from parts (a), (b), (c), and (d). If they form a polygon, describe it.

For each direct variation, find the constant of variation. Then find the value of y when $x = -0.5$.

- $y = 4$ when $x = 0.5$ 8; -4
- $y = 2$ when $x = 3$ $\frac{2}{3}$; $-\frac{1}{3}$

26. **Transportation** The number of minutes a freight train takes to pass an intersection varies directly with the number of cars in the train. A 150-car train passes in 3 min. How long will a 210-car train take to pass? 4.2 min

Graph each function. 27-30. See back of book.

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

31. **Recreation** The table displays the amounts the Jackson family spent on vacations during the years 1996-2006.

Jackson Family Vacation Costs

Year	Cost	Year	Cost
1996	\$1000	2002	\$2750
1997	\$1750	2003	\$3200
1998	\$1750	2004	\$2900
1999	\$2000	2005	\$3100
2000	\$2200	2006	\$3300
2001	\$2700		

- See back of book.
- Make a scatter plot of the data.
- Draw a trend line. Write its equation.
- Estimate the cost to the Jackson family of vacations in 2008.
- Writing** Explain how to use a trend line with a scatter plot. Check students' work.

32-37. See back of book. Describe each transformation of the parent function $y = |x|$. Then, graph each function.

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

Graph each inequality. 38-41. See back of book.

- $y \geq x + 7$
- $y > |2x + 3| - 3$
- $4x + 3y < 2$
- $y \leq -|x + 1| - 2$

Below Level Chapter Test L2

Chapter Test L3

Chapter Test

Chapter 2

Find the domain and range of each relation, and determine whether it is a function.

- $\{(0, 0), (1, -1), (2, -4), (3, -9), (4, -16)\}$
- $\{(3, 2), (4, 3), (5, 4), (6, 5), (7, 6)\}$

Graph each relation on a coordinate plane.

- $y = x^2 - 4$
- $y = |x - 2| - 3$

Write an equation of the line passing through the given points.

- through $(-2, 5)$ and $(1, 1)$
- through $(-0.5, 0.5)$, perpendicular to $y = -2x - 4$

Write in standard form an equation of the line with the given slope through the given point.

- slope = -3 , $(0, 0)$
- slope = 4 , $(-2, -5)$

Write in point-slope form an equation of the line through each pair of points.

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

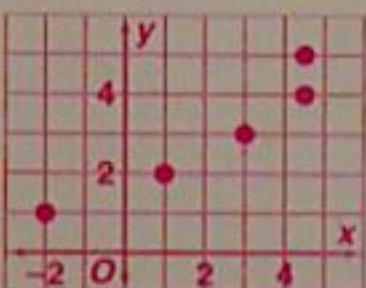
Write an equation of a line with negative slope.

- Write an equation of the line perpendicular to the line from part (a) passing through $(-6, 9)$.
- Write an equation of the line parallel to the line from part (b) passing through $(12, 12)$.
- Write an equation of the line perpendicular to the line from part (c) passing through $(-1, -4)$.

Graph the lines from parts (a), (b), (c), and (d). If they form a polygon, describe it.

page 112 Chapter Test

- domain: $\{-2, 1, 3, 4\}$, range: $\{1, 2, 3, 4, 5\}$



- domain: $\{-\frac{1}{2}, 0.3, 5\}$, range: $\{-0.01, 0, 2.5\}$

