

**Chapter 2 Quiz 1**

Form G

Lessons 2-1 through 2-4

**Do you know HOW?****Determine whether the relation is a function. Then list the domain and range.**

1.  $\{(-3, -5), (-1, 1), (0, 4), (1, 7)\}$                       2.  $\{(1, -2), (-1, 2), (-2, 4), (1, 3)\}$

**Write an equation in slope-intercept form for the line passing through each pair of points.**

3.  $(-1, 3)$  and  $(2, -5)$                                       4.  $(0, 0)$  and  $(3, 5)$

**Find the  $x$ - and  $y$ -intercepts of each line and write the equation in standard form.**

5.  $y = \frac{2}{7}x - 1$     6.  $y = -\frac{4}{3}x + 6$

7. Using standard form, write the equation of the line through  $(-2, 5)$  and parallel to  $y = -2x + 5$ .

8. Using point-slope form, write the equation of the line through  $(1, -5)$  and perpendicular to  $-3x + 2y = 12$ .

**Do you UNDERSTAND?**

9. **Writing** Describe a situation that could be represented by the direct variation  $y = 12x$ .
10. **Open-ended** Write an equation for a line with zero slope and an equation for a line with undefined slope. How do the lines differ?
11. **Reasoning** Is the slope of any linear function undefined? How do you know?
12. **Error Analysis** A student says that if  $y$  varies directly with  $x$  and  $y = 9$  when  $x = -3$ , then  $y = -4$  when  $x = 2$ . What is his error?