CHAPTER REVIEW

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- Multi-Language Glossary
- Vocabulary practice

REVIEW KEY VOCABULARY

- relation, p. 72
- domain, range, p. 72
- function, p. 73
- equation in two variables, p. 74
- solution, graph of an equation in two variables, p. 74
- independent variable, p. 74
- dependent variable, p. 74
- linear function, p. 75
- function notation, p. 75
- slope, p. 82
- parallel, perpendicular, p. 84
- rate of change, p. 85

VOCABULARY EXERCISES

- parent function, p. 89
- y-intercept, p. 89
- slope-intercept form, p. 90
- x-intercept, p. 91
- standard form of a linear equation, p. 91

- constant of variation, p. 107
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- best-fitting line, p. 114
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- vertex of an absolute value graph, p. 123
- transformation, p. 123
- translation, p. 123
- reflection, p. 124
- · linear inequality in two variables, p. 132
- solution, graph of a linear inequality in two variables, p. 132
- half-plane, p. 132
- 1. Copy and complete: The linear equation 5x 4y = 16 is written in _? form.
- **2.** Copy and complete: A set of data pairs (x, y) shows a ? correlation if y tends to decrease as x increases.
- **3.** Copy and complete: Two variables x and y show ? if y = ax and $a \neq 0$.
- 4. WRITING *Explain* what distinguishes a function from a relation.

REVIEW EXAMPLES AND EXERCISES

Use the review examples and exercises below to check your understanding of the concepts you have learned in each lesson of Chapter 2.

Represent Relations and Functions 2.1 pp. 72-79 Input Output EXAMPLE Tell whether the relation given by the ordered pairs (-6, 3), (-4, 5), (-1, -2), (2, -1), and (2, 3) is a function. The relation is *not* a function because the input 2 is mapped onto both -1 and 3, as shown in the mapping diagram.

EXERCISES

Consider the relation given by the ordered pairs. Identify the domain and range. Then tell whether the relation is a function.

5. (-2, -2), (-1, 0), (2, 6), (3, 8)

6. (-1, -5), (1, 2), (3, 4), (1, -7)

7. Tell whether f(x) = 16 - 7x is a linear function. Then find f(-5).

- **EXAMPLES** 1, 2, and 5 on pp. 72-75 for Exs. 5–7

- point-slope form, p. 98
- direct variation, p. 107
- - negative correlation, p. 113