

2 Linear Equations and Functions



2A.1.A

2.1 Represent Relations and Functions

a.4

2.2 Find Slope and Rate of Change

2A.4.A

2.3 Graph Equations of Lines

a.3

2.4 Write Equations of Lines

2A.10.G

2.5 Model Direct Variation

2A.1.B

2.6 Draw Scatter Plots and Best-Fitting Lines

2A.4.B

2.7 Use Absolute Value Functions and Transformations

a.5

2.8 Graph Linear Inequalities in Two Variables

Before

In Chapter 1, you learned the following skills, which you'll use in Chapter 2: evaluating algebraic expressions, solving linear equations, and rewriting equations.

Prerequisite Skills

VOCABULARY CHECK

Copy and complete the statement.

1. A **linear equation** in one variable is an equation that can be written in the form $ax + b = c$ where a and b are constants and $a \neq 0$.
2. The **absolute value** of a real number is the distance the number is from 0 on a number line.

SKILLS CHECK

Evaluate the expression for the given value of x . (Review p. 10 for 2.1.)

3. $-2(x + 1)$ when $x = -5$
4. $11x - 14$ when $x = -3$
5. $x^2 + x + 1$ when $x = 4$
6. $-x^2 - 3x + 7$ when $x = 1$

Solve the equation. Check your solution. (Review p. 18 for 2.3.)

7. $5x - 2 = 8$
8. $-6x - 10 = 20$
9. $-x + 9 = 2x - 27$

Solve the equation for y . (Review p. 26 for 2.4.)

10. $2x + 3y = 6$
11. $-x - y = 10$
12. $x + 4y = -5$



TEXAS

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Prerequisite skills practice at classzone.com