Check It Out
Help with Homework
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✓ Vocabulary and Concept Check

1. **VOCABULARY** How can you find the *x*-intercept of the graph of $2x + 3y = 6$?

2. **CRITICAL THINKING** Is the equation $y = 3x$ in slope-intercept form? Explain.

3. **OPEN-ENDED** Describe a real-life situation that can be modeled by a linear equation. Write the equation. Interpret the *y*-intercept and slope.
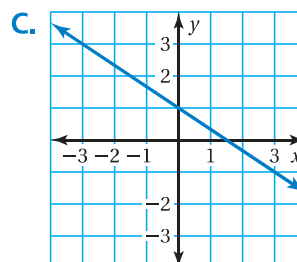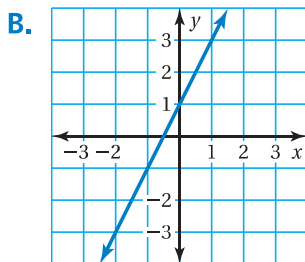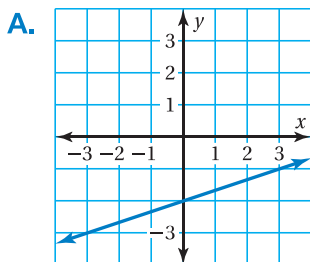
Practice and Problem Solving

Match the equation with its graph. Identify the slope and *y*-intercept.

4. $y = 2x + 1$

5. $y = \dfrac{1}{3}x - 2$

6. $y = -\dfrac{2}{3}x + 1$

A.

B.

C.

Find the slope and *y*-intercept of the graph of the linear equation.

① 7. $y = 4x - 5$

8. $y = -7x + 12$

9. $y = -\dfrac{4}{5}x - 2$

10. $y = 2.25x + 3$

11. $y + 1 = \dfrac{4}{3}x$

12. $y - 6 = \dfrac{3}{8}x$

13. $y - 3.5 = -2x$

14. $y + 5 = -\dfrac{1}{2}x$

15. $y = 1.5x + 11$

16. **ERROR ANALYSIS** Describe and correct the error in finding the slope and *y*-intercept of the graph of the linear equation.

> ✗ $y = 4x - 3$
> The slope is 4 and the y-intercept is 3.

17. **SKYDIVING** A skydiver parachutes to the ground. The height *y* (in feet) of the skydiver after *x* seconds is $y = -10x + 3000$.

 a. Graph the equation.

 b. Interpret the *x*-intercept and slope.