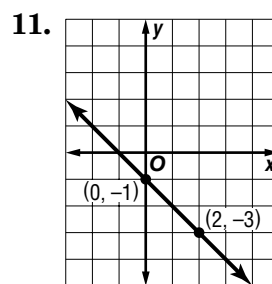**5-3** # Skills Practice
Slope-Intercept Form

Write an equation of the line with the given slope and *y*-intercept.

1. slope: 5, *y*-intercept: -3

2. slope: -2, *y*-intercept: 7

3. slope: -6, *y*-intercept: -2

4. slope: 7, *y*-intercept: 1

5. slope: 3, *y*-intercept: 2

6. slope: -4, *y*-intercept: -9

7. slope: 1, *y*-intercept: -12

8. slope: 0, *y*-intercept: 8

Write an equation of the line shown in each graph.

9.

(2, 1)
(0, −3)

10.

(0, 2)
(2, −4)

11.
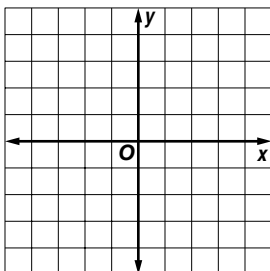

(0, −1)
(2, −3)
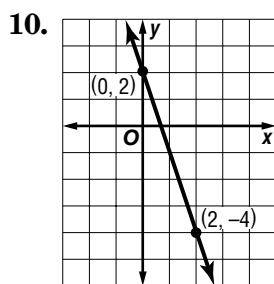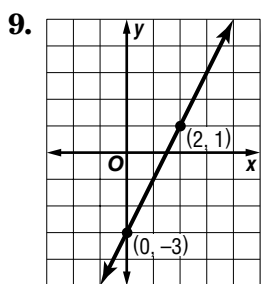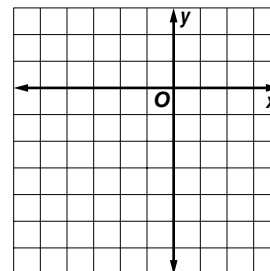
Graph each equation.

12. $y = x + 4$
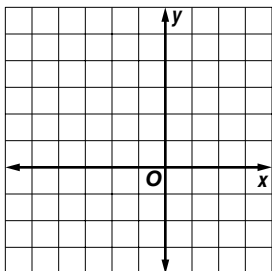
13. $y = -2x - 1$

14. $x + y = -3$

Write a linear equation in slope-intercept form to model each situation.

15. A video store charges $10 for a rental card plus $2 per rental.

16. A Norfolk pine is 18 inches tall and grows at a rate of 1.5 feet per year.

17. A Cairn terrier weighs 30 pounds and is on a special diet to lose 2 pounds per month.

18. An airplane at an altitude of 3000 feet descends at a rate of 500 feet per mile.

 Glencoe Algebra 1

Lesson 5-3