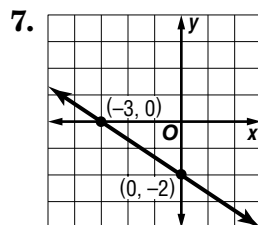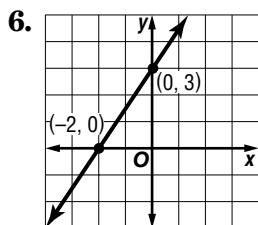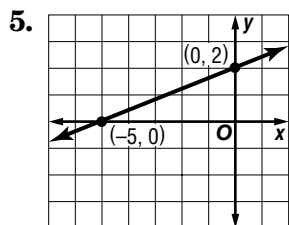## 5-3 Practice

Slope-Intercept Form

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

1. slope: $\frac{1}{4}$, *y*-intercept: 3

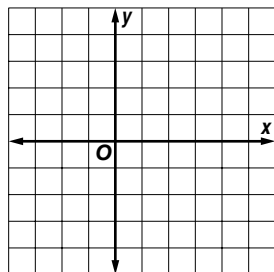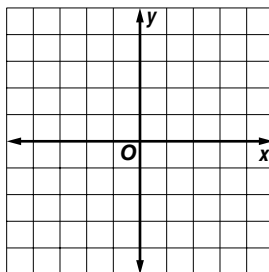**2.** slope: $\frac{3}{2}$, *y*-intercept: -4

3. slope: 1.5, *y*-intercept: -1

4. slope: -2.5, *y*-intercept: 3.5

Write an equation of the line shown in each graph.

5.

(0, 2)

(−5, 0)   O   x

6.

(0, 3)

(−2, 0)

O   x

7.

(−3, 0)   O   x

(0, −2)
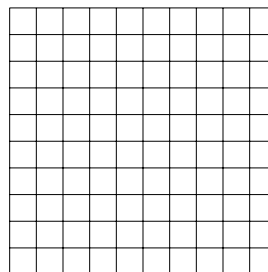
Graph each equation.

8. $y = -\frac{1}{2}x + 2$

9. $3y = 2x - 6$

10. $6x + 3y = 6$

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

11. A computer technician charges $75 for a consultation plus $35 per hour.

12. The population of Pine Bluff is 6791 and is decreasing at the rate of 7 per year.

WRITING For Exercises 13–15, use the following information.

Carla has already written 10 pages of a novel. She plans to write 15 additional pages per month until she is finished.

13. Write an equation to find the total number of pages P written after any number of months m.

14. Graph the equation on the grid at the right.

15. Find the total number of pages written after 5 months.

Carla's Novel

Pages Written

100
80
60
40
20

0   1   2   3   4   5   6   *m*

Months