5-3 Practice

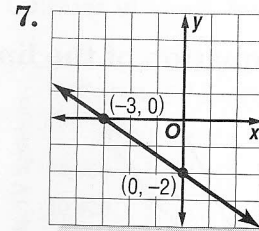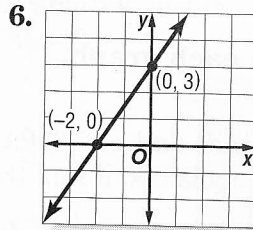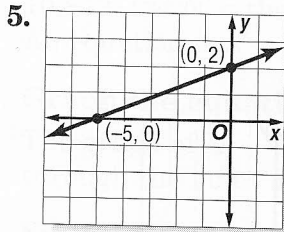### *Slope-Intercept Form*

Write an equation of the line with the given slope and *y*-intercept.
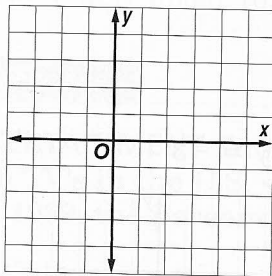
1. slope: $\dfrac{1}{4}$, *y*-intercept: 3

2. slope: $\dfrac{3}{2}$, *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.
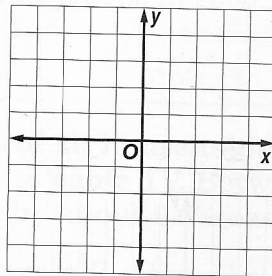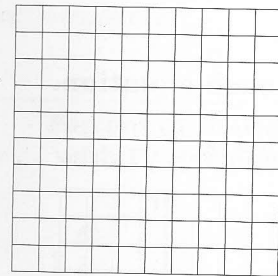
5.

6.

7.

Graph each equation.

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

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