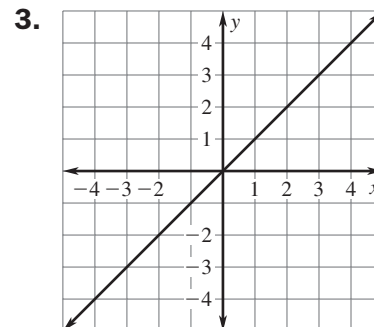
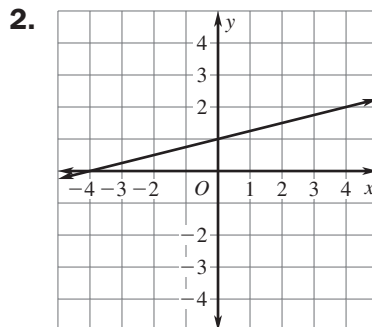
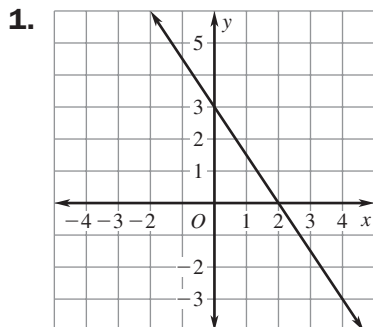


8.3

Practice A

For use with pages 398–402

Identify the x -intercept and the y -intercept of the line.

Draw the line with the given intercepts.

4. x -intercept: 1
 y -intercept: 4

5. x -intercept: 5
 y -intercept: -3

6. x -intercept: -3
 y -intercept: -2

7. x -intercept: -2
 y -intercept: 4

8. You are kayaking along a 24-mile stretch of river. You travel 6 miles per hour when paddling and 2 miles per hour when drifting. Write and graph an equation describing your possible paddling and drifting times. Give three possible combinations of paddling and drifting times.

9. A fitness center charges \$25 for a yoga class and \$45 for an aerobic class. The fitness center receives a total of \$675 for the two classes. Write and graph an equation describing the possible number of people who joined the yoga and aerobic classes. Give three possible combinations of the number of people in the classes.

Find the intercepts of the equation's graph. Then graph the equation.

10. $3x + y = 6$

11. $-4x + 3y = 12$

12. $-5x + 4y = -20$

13. $2x + y = -4$

14. $5x + 3y = -15$

15. $-x + 7y = -7$

16. $6x + y = -6$

17. $-5x + 8y = 40$

18. $-9x - 4y = -36$

19. At the start of a trip, you fill up your SUV's fuel tank with gas. After you drive for x hours, the amount y (in gallons) of gas remaining is given by the equation $y = 22 - 3x$.

a. Find the x -intercept and the y -intercept of the given equation's graph. Use the intercepts to graph the equation.

b. What real-life quantities do the x - and y -intercepts represent in this situation?

c. After how many hours of driving do you have $\frac{1}{2}$ tank of gas left?