LESSON 4.5 **Practice C**
For use with pages 243–250

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

1. $y = \frac{2}{3}x - 4$

2. $y = 19 - 6x$

3. $6x + 2y = 14$
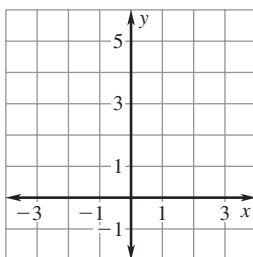
4. $3x + 2y = 8$

5. $4x - 5y = 15$

6. $6y - 8x = 18$

7. $8x - 10y = 14$
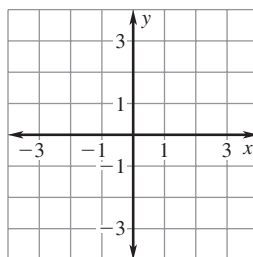
8. $4x - 9y = 18$

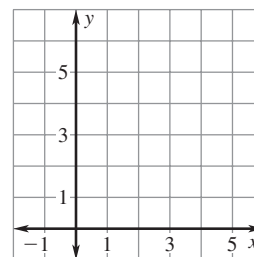**9.** $5y - 3x = 12$

Graph the equation.

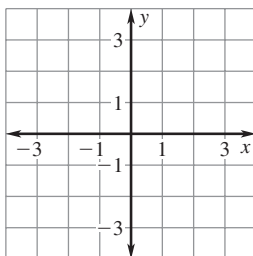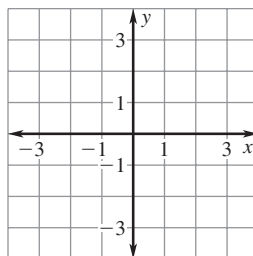**10.** $y = \frac{5}{3}x$

11. $y = \frac{3}{2}x - 2$

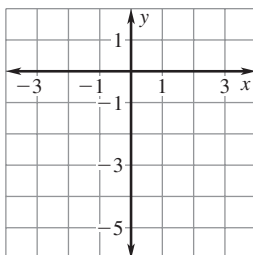**12.** $y = -\frac{3}{4}x + 6$

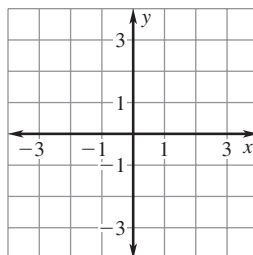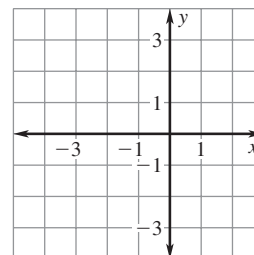**13.** $7x - y = 3$

14. $6x + 2y = 5$
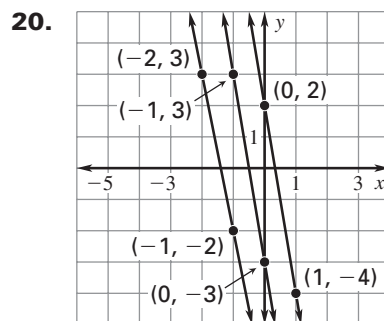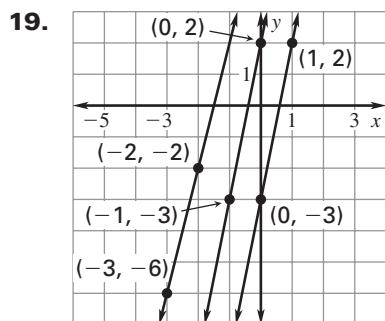

15. $4x - 3y = -6$
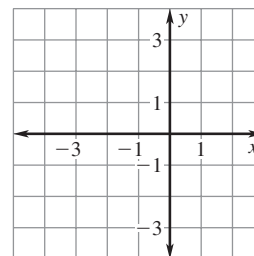
16. $0.5x - 0.2y = 1$

17. $8y - 2x = 4$

18. $-6x - 4y = 8$

Algebra 1

LESSON 4.5 | **Practice C** *continued*
For use with pages 243–250

Determine which lines are parallel.

19.

20.

Tell whether the graphs of the two equations are parallel lines.

21. $x - 3y = 6, y = -\frac{1}{3}x$

22. $4x - 8y = 8, y = 0.5x - 1$

Find the value of *k* so that the lines through the given points are parallel.

23. Line 1: $(-5, -2)$ and $(0, 0)$
Line 2: $(1, 6)$ and $(k, 7)$

24. Line 1: $(-2, 8)$ and $(-4, -6)$
Line 2: $(-5, k)$ and $(0, -3)$

25. Line 1: $(-2, -7)$ and $(3, 8)$
Line 2: $(-3, -6)$ and $(2, k)$

26. Line 1: $(-2, k)$ and $(4, -5)$
Line 2: $(-2, 3)$ and $(8, -2)$

27. Power Tools You are considering buying a variable-speed drill. One model you are considering has two different speeds. The number of revolutions *r* of the drill bit in *m* minutes using the slower speed is given by the equation $r = 300m$. The number of revolutions using the faster speed is given by the equation $r = 1200m$.

a. Graph both equations in the same coordinate plane. What do the *r*-intercepts mean in this situation?

b. How many more revolutions in 3 minutes does the faster speed on the drill make than the slower speed?
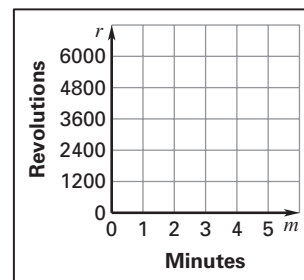
28. Plumber A plumber charges $50 to come to your house to diagnose a problem and then charges $30 an hour for labor if you decide to have the plumber repair the problem. The total cost *C* (in dollars) is given by the equation $C = 50 + 30t$ where *t* is the time (in hours) the plumber takes to repair the problem.

a. Graph the equation.

b. Suppose the plumber raises the charge for labor to $32 per hour so that the total cost for a repair that takes *t* hours is given by the equation $C = 50 + 32t$. Graph the equation in the same coordinate plane as the equation in part (a).

c. How much more does it cost for a repair if it takes the plumber 3 hours to complete the job? What do you notice about the difference in the costs? *Explain*.