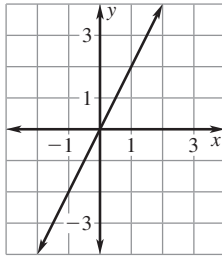


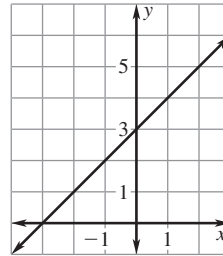
**LESSON**  
**4.6**
**Practice A**
*For use with pages 253–259*

**Tell whether the graph represents direct variation. If so, identify the constant of variation.**

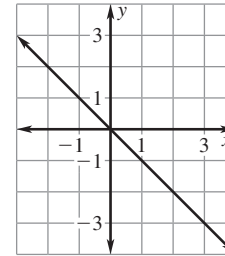
1.  $y = 2x$



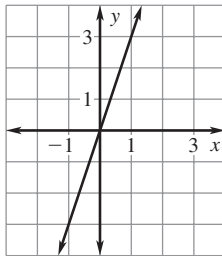
2.  $y = x + 3$



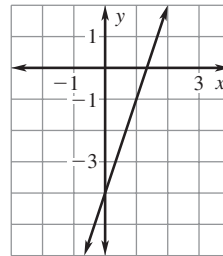
3.  $y = -x$



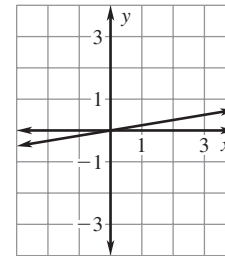
4.  $2y = 6x$



5.  $y = 3x - 4$

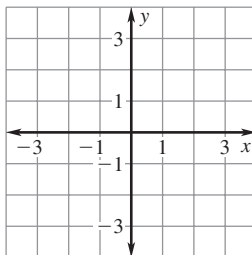


6.  $6y = x$

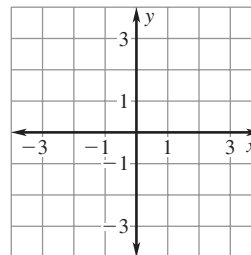


**Graph the direct variation equation.**

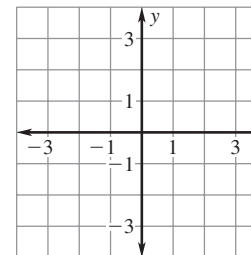
7.  $y = 4x$



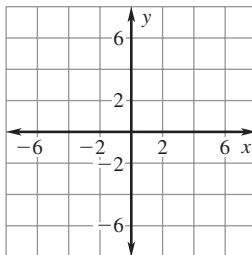
8.  $y = -2x$



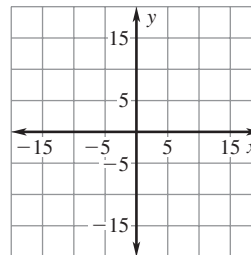
9.  $y = \frac{1}{3}x$



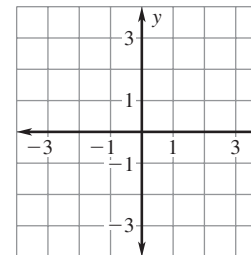
10.  $y = -7x$



11.  $y = 10x$

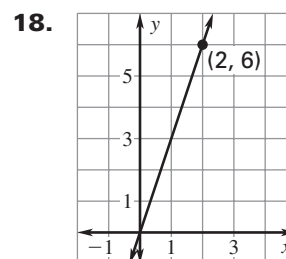
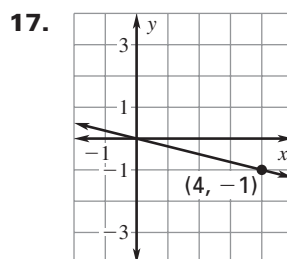
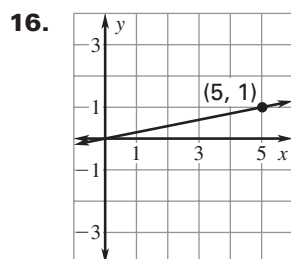
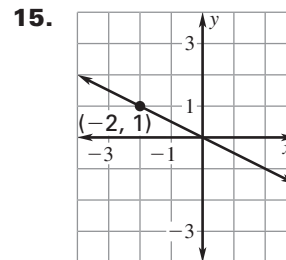
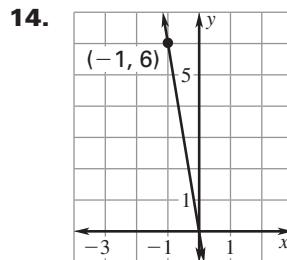
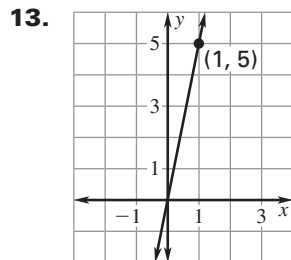


12.  $y = \frac{1}{4}x$



**LESSON**  
**4.6**
**Practice A** *continued*  
 For use with pages 253–259

The graph of a direct variation equation is shown. Write the direct variation equation. Then find the value of  $y$  when  $x = 10$ .



Given that  $y$  varies directly with  $x$ , use the specified values to write a direct variation equation that relates  $x$  and  $y$ .

19.  $x = 2, y = 4$

20.  $x = 3, y = 21$

21.  $x = 20, y = -5$

22.  $x = 3, y = -10$

23.  $x = 15, y = 6$

24.  $x = 20, y = 2$

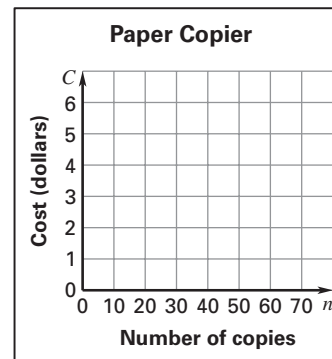
25.  $x = 30, y = -9$

26.  $x = -8, y = -1$

27.  $x = -2, y = -30$

28. **Paper Copier** A library has a copier that you can use to make copies of book pages. The cost  $C$  (in dollars) varies directly with the number of copies made  $n$ . It costs \$.08 to make one copy.

- Write a direct variation equation that relates  $C$  and  $n$ .
- Graph the direct variation equation.



29. **Shower Head** The amount  $w$  of water (in gallons) used by a shower head varies directly with the number  $m$  of minutes the shower is run. For every minute of a shower, 2.5 gallons of water is used.

- Write a direct variation equation that relates  $w$  and  $m$ .
- How many gallons of water do you use if you take a 5-minute shower?

30. **Circumference and Radius** The circumference  $C$  of a circle varies directly with the length of the radius  $r$ . When the circumference is  $10\pi$ , the radius is 5.

- Write a direct variation equation that relates  $C$  and  $r$ .
- What is the circumference of a circle with a radius of 13 inches? Use 3.14 for  $\pi$ .