9. **TAKS REASONING** Which equation is a direct variation equation?

Ⓐ $y = 7 - 3x$ Ⓑ $3x - 7y = 1$ Ⓒ $3x - 7y = 0$ Ⓓ $3y = 7x - 1$

10. **ERROR ANALYSIS** *Describe* and correct the error in identifying the constant of variation for the direct variation equation $-5x + 3y = 0$.

$-5x + 3y = 0$
$3y = 5x$
The constant of variation is 5.

EXAMPLE 2 on p. 254 for Exs. 11–22

GRAPHING EQUATIONS **Graph the direct variation equation.**

11. $y = x$ **12.** $y = 3x$ **13.** $y = -4x$ **14.** $y = 5x$

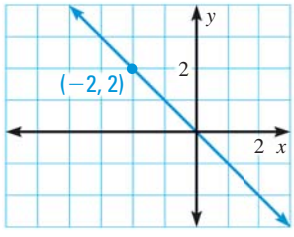
15. $y = \frac{4}{3}x$ **16.** $y = \frac{1}{2}x$ **17.** $y = -\frac{1}{3}x$ **18.** $y = -\frac{3}{2}x$

19. $12y = -24x$ **20.** $10y = 25x$ **21.** $4x + y = 0$ **22.** $y - 1.25x = 0$

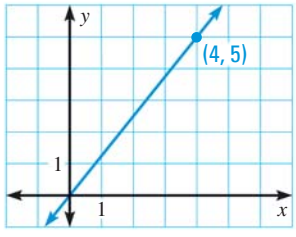
EXAMPLE 3 on p. 254 for Exs. 23–25

WRITING EQUATIONS **The graph of a direct variation equation is shown. Write the direct variation equation. Then find the value of y when $x = 8$.**

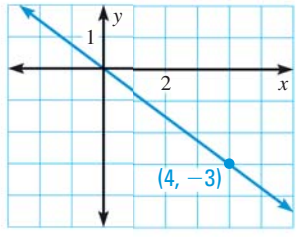
23.



24.



25.



IDENTIFYING DIRECT VARIATION EQUATIONS **Tell whether the table represents direct variation. If so, write the direct variation equation.**

26.

x	1	2	3	4	6
y	5	10	15	20	30

27.

x	−3	−1	1	3	5
y	−2	0	2	4	6

28. **WRITING** A student says that a direct variation equation can be used to model the data in the table. *Explain* why the student is mistaken.

x	2	4	8	16
y	1	2	4	6

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

29. $x = 3, y = 9$ **30.** $x = 2, y = 26$ **31.** $x = 14, y = 7$

32. $x = 15, y = -5$ **33.** $x = -2, y = -2$ **34.** $x = -18, y = -4$

35. $x = \frac{1}{4}, y = 1$ **36.** $x = -6, y = 15$ **37.** $x = -5.2, y = 1.4$

38. **WRITING** If y varies directly with x, does x vary directly with y? If so, what is the relationship between the constants of variation? *Explain*.

39. **CHALLENGE** The slope of a line is $-\frac{1}{3}$, and the point $(-6, 2)$ lies on the line. Use the formula for the slope of a line to determine if the equation of the line is a direct variation equation.