ERROR ANALYSIS *Describe* **and correct the error in finding the value of one of the variables in the given linear system.**

23. $5x - 7y = 16$
$-x - 7y = 8$

$5x - 7y = 16$
$-x - 7y = 8$
$4x = 24$
$x = 6$

24. $3x - 2y = -3$
$5y = 60 - 3x$

$3x - 2y = -3$
$-3x + 5y = 60$
$3y = 57$
$y = 19$

SOLVING LINEAR SYSTEMS **Solve the linear system using elimination.**

25. $-x + \frac{1}{2}y = -19$
$x - y = 12$

26. $\frac{1}{4}x - \frac{2}{3}y = 7$
$\frac{1}{2}x + \frac{2}{3}y = -4$

27. $8x - \frac{1}{2}y = -38$
$\frac{1}{4}x - \frac{1}{2}y = -7$

28. $5.2x + 3.5y = 54$
$-3.6x + 3.5y = 10$

29. $1.3x - 3y = -17.6$
$-1.3x + 4.5y = 25.1$

30. $-2.6x - 3.2y = 4.8$
$1.9x - 3.2y = -4.2$

31. $\frac{4}{5}x + \frac{2}{5}y = 14$
$\frac{2}{5}y + \frac{1}{5}x = 11$

32. $2.7x + 1.5y = 36$
$3.5y = 2.7x - 6$

33. $4 - 4.8x = 1.7y$
$12.8 + 1.7y = -13.2x$

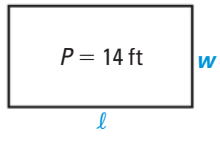
34. **WRITING AN EQUATION OF A LINE** Use the following steps to write an equation of the line that passes through the points (1, 2) and (−4, 12).

a. Write a system of linear equations by substituting 1 for x and 2 for y in $y = mx + b$ and −4 for x and 12 for y in $y = mx + b$.

b. Solve the system of linear equations from part (a). What is the slope of the line? What is the y-intercept?

c. Write an equation of the line that passes through (1, 2) and (−4, 12).

35. **GEOMETRY** The rectangle has a perimeter P of 14 feet, and twice its length ℓ is equal to 1 less than 4 times its width w. Write and solve a system of linear equations to find the length and the width of the rectangle.



36. **TAKS REASONING** Find the solution of the system of linear equations below. *Explain* your steps.

$x + 3y = 8$ **Equation 1**
$x - 6y = -19$ **Equation 2**
$5x - 3y = -14$ **Equation 3**

37. **CHALLENGE** For $a \neq 0$, what is the solution of the system $ax + 2y = 4$ and $ax - 3y = -6$?

38. **CHALLENGE** Solve for x, y, and z in the system of equations below. *Explain* your steps.

$x + 7y + 3z = 29$ **Equation 1**
$3z + x - 2y = -7$ **Equation 2**
$5y = 10 - 2x$ **Equation 3**

= WORKED-OUT SOLUTIONS on p. WS1 = TAKS PRACTICE AND REASONING = MULTIPLE REPRESENTATIONS