USING THE DISTRIBUTIVE PROPERTY Solve the equation. Check your solution.

12. $3 + 4(z + 5) = 31$

13. $14 + 2(4g - 3) = 40$

14. $5m + 2(m + 1) = 23$

15. $5h + 2(11 - h) = -5$

16. $27 = 3c - 3(6 - 2c)$

17. $-3 = 12y - 5(2y - 7)$

18. ⬩ **TAKS REASONING** What is the solution of $7v - (6 - 2v) = 12$?

Ⓐ -3.6　　　　　Ⓑ -2　　　　　Ⓒ 2　　　　　Ⓓ 3.6

MULTIPLYING BY A RECIPROCAL Solve the equation. Check your solution.

19. $\frac{1}{3}(d + 3) = 5$

20. $\frac{3}{2}(x - 5) = -6$

21. $\frac{4}{3}(7 - n) = 12$

22. $4 = \frac{2}{9}(4y - 2)$

23. $-32 = \frac{8}{7}(3w - 1)$

24. $-14 = \frac{2}{5}(9 - 2b)$

ERROR ANALYSIS *Describe* and correct the error in solving the equation.

25.

$5x - 3(x - 6) = 2$
$5x - 3x - 18 = 2$
$2x - 18 = 2$
$2x = 20$
$x = 10$ ✗

26.

$\frac{1}{2}(2x - 10) = 4$
$2x - 10 = 2$
$2x = 12$
$x = 6$ ✗

SOLVING EQUATIONS Solve the equation. Check your solution.

27. $8.9 + 1.2(3a - 1) = 14.9$

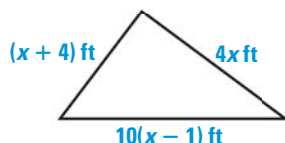**28.** $-11.2 + 4(2.1 + q) = -0.8$

29. $1.3t + 3(t + 8.2) = 37.5$

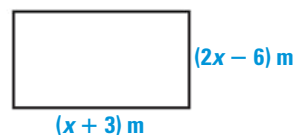**30.** $1.6 = 7.6 - 5(k + 1.1)$

31. $0.5 = 4.1x - 2(1.3x - 4)$

32. $8.7 = 3.5m - 2.5(5.4 - 6m)$

GEOMETRY Find the value of x for the triangle or rectangle.

33. Perimeter = 24 feet

$(x + 4)$ ft　　$4x$ ft

$10(x - 1)$ ft

34. Perimeter = 26 meters

$(2x - 6)$ m

$(x + 3)$ m

35. **WRITING**　The length of a rectangle is 3.5 inches more than its width. The perimeter of the rectangle is 31 inches. Find the length and the width of the rectangle. *Explain* your reasoning.

36. ⬩ **TAKS REASONING** Solve each equation by first dividing each side of the equation by the number outside the parentheses. When would you recommend using this method to solve an equation? *Explain*.

a. $9(x - 4) = 72$

b. $8(x + 5) = 60$

37. **CHALLENGE** An even integer can be represented by the expression $2n$. Find three consecutive even integers that have a sum of 54.