

**EXAMPLES
2 and 3**on pp. 139–140
for Exs. 15–26, 36**USING THE DISTRIBUTIVE PROPERTY** Solve the equation. Check your solution.

15. $3 + 4(z + 5) = 31$

17. $5m + 2(m + 1) = 23$

19. $27 = 3c - 3(6 - 2c)$

21. $5(2x - 4) - 3(3x - 7) = 6$

23. $2(3y - 1) + 3(y - 4) = 13$

25. ♦ **MULTIPLE CHOICE** What is the solution of $7v - (6 - 2v) = 12$?

(A) -3.6

(B) -2

(C) 2

(D) 3.6

26. ♦ **MULTIPLE CHOICE** Which equation is equivalent to

$3(4x + 2) - 2(5x - 3) = 12$?

(A) $2x = 0$

(B) $2x = 24$

(C) $22x = 0$

(D) $22x = 12$

EXAMPLE 4on p. 140
for Exs. 27–35,
37**MULTIPLYING BY A RECIPROCAL** Solve the equation. Check your solution.

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

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

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

30. $\frac{6}{5}(a + 4) = -18$

31. $\frac{5}{8}(g - 6) = -35$

32. $\frac{2}{11}(3 + 2n) = 10$

33. $4 = \frac{2}{9}(4y - 2)$

34. $-32 = \frac{8}{7}(3w - 1)$

35. $-14 = \frac{2}{5}(9 - 2b)$

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

36.

$5x - 3(x - 6) = 2$

~~$5x - 3x - 18 = 2$~~

$2x - 18 = 2$

$2x = 20$

$x = 10$

37.

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

$2x - 10 = 2$

$2x = 12$

$x = 6$

SOLVING EQUATIONS Solve the equation. Check your solution.

38. $8.9 + 1.2(3a - 1) = 14.9$

39. $-11.2 + 4(2.1 + q) = -0.8$

40. $1.3t + 3(t + 8.2) = 37.5$

41. $1.6 = 7.6 - 5(k + 1.1)$

42. $0.5 = 4.1x - 2(1.3x - 4)$

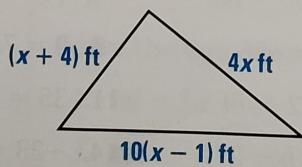
43. $8.7 = 3.5m - 2.5(5.4 - 6m)$

44. $3(2x - 1.4) - \frac{1}{2}(7x + 5.6) = 0$

45. $3.5(2x + 1.8) - 2(3.2x + 5) = 8.9$

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

46. Perimeter = 24 ft



47. Perimeter = 26 m

