SOLVING EQUATIONS Solve the equation, if possible.

30. $8w - 8 - 6w = 4w - 7$

31. $3x - 4 = 2x + 8 - 5x$

32. $-15c + 7c + 1 = 3 - 8c$

33. $\frac{3}{2} + \frac{3}{4}a = \frac{1}{4}a - \frac{1}{2}$

34. $\frac{5}{8}m - \frac{3}{8} = \frac{1}{2}m + \frac{7}{8}$

35. $n - 10 = \frac{5}{6}n - 7 - \frac{1}{3}n$

36. $3.7b + 7 = 8.1b - 19.4$

37. $6.2h + 5 - 1.4h = 4.8h + 5$

38. $0.7z + 1.9 + 0.1z = 5.5 - 0.4z$
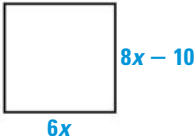
39. $5.4t + 14.6 - 10.1t = 12.8 - 3.5t - 0.6$

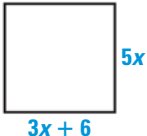**40.** $\frac{1}{8}(5y + 64) = \frac{1}{4}(20 + 2y)$

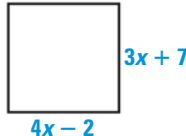**41.** $14 - \frac{1}{5}(j - 10) = \frac{2}{5}(25 + j)$

42. $5(1.2k + 6) = 7.1k + 34.4$

43. $-0.25(4v - 8) = 0.5(4 - 2v)$

GEOMETRY Find the perimeter of the square.

44.

$8x - 10$

$6x$

45.

$5x$

$3x + 6$

46.

$3x + 7$

$4x - 2$

CHALLENGE Find the value(s) of a for which the equation is an identity.

47. $a(2x + 3) = 9x + 12 - x$

48. $10x - 35 + 3ax = 5ax - 7a$

PROBLEM SOLVING

49. CAMPING The membership fee for joining a camping association is $45. A local campground charges members of the camping association $35 per night for a campsite and nonmembers $40 per night for a campsite. After how many nights of camping is the total cost for members, including the membership fee, the same as the total cost for nonmembers?

TEXAS @HomeTutor for problem solving help at classzone.com

50. HIGH-SPEED INTERNET Dan and Sydney are getting high-speed Internet access at the same time. Dan's provider charges $60 for installation and $42.95 per month. Sydney's provider has free installation and charges $57.95 per month. After how many months will Dan and Sydney have paid the same amount for high-speed Internet service?

TEXAS @HomeTutor for problem solving help at classzone.com

51. LANGUAGES Information about students who take Spanish and students who take French at a high school is shown in the table. If the trends continue, in how many years will there be 3 times as many students taking Spanish as French?

Language	Students enrolled this year	Average rate of change
Spanish	555	33 more students each year
French	230	2 fewer students each year

○ = **WORKED-OUT SOLUTIONS** on p. WS1

= **TAKS PRACTICE AND REASONING**

◆ = **MULTIPLE REPRESENTATIONS**