

### GUIDED PRACTICE

1. **Vocabulary** Will the *solution of an equation* such as  $x - 3 = 9$  be a variable or a number? Explain.

Solve each equation. Check your answer.

SEE EXAMPLE 1

p. 77

2.  $s - 5 = 3$

3.  $17 = w - 4$

4.  $k - 8 = -7$

5.  $x - 3.9 = 12.4$

6.  $8.4 = y - 4.6$

7.  $\frac{3}{8} = t - \frac{1}{8}$

SEE EXAMPLE 2

p. 78

8.  $t + 5 = -25$

9.  $9 = s + 9$

10.  $42 = m + 36$

11.  $2.8 = z + 0.5$

12.  $b + \frac{2}{3} = 2$

13.  $n + 1.8 = 3$

SEE EXAMPLE 3

p. 78

14.  $-10 + d = 7$

15.  $20 = -12 + v$

16.  $-46 + q = 5$

17.  $2.8 = -0.9 + y$

18.  $-\frac{2}{3} + c = \frac{2}{3}$

19.  $-\frac{5}{6} + p = 2$

SEE EXAMPLE 4

p. 79

20. **Geology** In 1673, the Hope diamond was reduced from its original weight by about 45 carats, resulting in a diamond weighing about 67 carats. Write and solve an equation to find how many carats the original diamond weighed. Show that your answer is reasonable.

### PRACTICE AND PROBLEM SOLVING

#### Independent Practice

For Exercises	See Example
21–30	1
31–40	2
41–48	3
49	4

#### Extra Practice

Skills Practice p. S6

Application Practice p. S29

Solve each equation. Check your answer.

21.  $1 = k - 8$

22.  $u - 15 = -8$

23.  $x - 7 = 10$

24.  $-9 = p - 2$

25.  $\frac{3}{7} = p - \frac{1}{7}$

26.  $q - 0.5 = 1.5$

27.  $6 = t - 4.5$

28.  $4\frac{2}{3} = r - \frac{1}{3}$

29.  $6 = x - 3$

30.  $1.75 = k - 0.75$

31.  $19 + a = 19$

32.  $4 = 3.1 + y$

33.  $m + 20 = 3$

34.  $-12 = c + 3$

35.  $v + 2300 = -800$

36.  $b + 42 = 300$

37.  $3.5 = n + 4$

38.  $b + \frac{1}{2} = \frac{1}{2}$

39.  $x + 5.34 = 5.39$

40.  $2 = d + \frac{1}{4}$

41.  $-12 + f = 3$

42.  $-9 = -4 + g$

43.  $-1200 + j = 345$

44.  $90 = -22 + a$

45.  $26 = -4 + y$

46.  $1\frac{3}{4} = -\frac{1}{4} + w$

47.  $-\frac{1}{6} + h = \frac{1}{6}$

48.  $-5.2 + a = -8$

49. **Finance** Luis deposited \$500 into his bank account. He now has \$4732. Write and solve an equation to find how much was in his account before the deposit. Show that your answer is reasonable.

50. **/// ERROR ANALYSIS ///** Below are two possible solutions to  $x + 12.5 = 21.6$ . Which is incorrect? Explain the error.

**A**

$x + 12.5 = 21.6$
$- 12.5 - 12.5$
$x = 9.1$

**B**

$x + 12.5 = 21.6$
$+ 12.5 + 12.5$
$x = 34.1$