

# Extra Practice

## Chapter 2

### 2.1 Evaluate the expression.

1.  $-\sqrt{36}$

2.  $\pm\sqrt{400}$

3.  $\sqrt{6400}$

4.  $\pm\sqrt{144}$

### 2.1 Approximate the square root to the nearest integer.

5.  $\sqrt{135}$

6.  $-\sqrt{75}$

7.  $-\sqrt{160}$

8.  $\sqrt{250}$

Solve the equation. Check your solution.

2.2 9.  $x + 4 = 20$

10.  $8 = m - 13$

11.  $t + 2 = -10$

12.  $z - 8 = -7$

13.  $7h = 63$

14.  $-4t = -44$

15.  $\frac{b}{4} = 13$

16.  $\frac{y}{-3} = 8$

2.3 17.  $4x + 3 = 27$

18.  $6m - 4 = 14$

19.  $50 = 7y - 6$

20.  $\frac{t}{4} - 3 = 9$

21.  $\frac{x}{7} + 3 = -2$

22.  $6p - 2p = 28$

2.4 23.  $6x + 3x + 8 = 35$

24.  $12w - 5 - 3w = 40$

25.  $4d - 3 - 2d = -15$

26.  $7m + 3(m + 2) = -24$

27.  $5x - 3(x - 5) = 13$

28.  $\frac{3}{4}(2y - 8) = 6$

2.5 29.  $8x - 4 = 3x + 6$

30.  $10 - 2x = 3x - 20$

31.  $5 - 5x = 14 - 8x$

32.  $3(2y - 5) = 4y - 7$

33.  $9 + 4y = 2(3 - y)$

34.  $3x - 3 = \frac{3}{4}(2x + 12)$

### 2.6 Solve the proportion. Check your solution.

35.  $\frac{7}{2} = \frac{x}{16}$

36.  $\frac{m}{9} = \frac{6}{27}$

37.  $\frac{z}{4} = \frac{48}{12}$

38.  $\frac{30}{50} = \frac{t}{10}$

### 2.6 Write the sentence as a proportion. Then solve the proportion.

39. 5 is to 7 as 15 is to  $x$ .

40. 9 is to 3 as  $x$  is to 12.

41.  $g$  is to 9 as 16 is to 12.

42. 6 is to 18 as  $y$  is to 3.

### 2.7 Solve the proportion. Check your solution.

43.  $\frac{12}{x} = \frac{6}{7}$

44.  $\frac{6x}{4} = \frac{18}{12}$

45.  $\frac{7}{x+13} = \frac{4}{12}$

46.  $\frac{y+5}{y} = \frac{10}{8}$

47.  $\frac{2x+6}{x} = \frac{7}{2}$

48.  $\frac{3b}{5b-7} = \frac{8}{11}$

49.  $\frac{8}{2x+12} = \frac{6}{x+8}$

50.  $\frac{4.8-2x}{8} = \frac{0.4+x}{10}$

### 2.8 Solve the literal equation for $x$ . Then use the solution to solve the specific equation.

51.  $ax - b = c; 6x - 5 = 25$

52.  $a(b - x) = c; 2(8 - x) = -6$

### 2.8 Write the equation so that $y$ is a function of $x$ .

53.  $5x + y = 10$

54.  $8x - 2y = 16$

55.  $7x + 3y = 6 - 5x$

56.  $21 = 6x + 7y$