

CHAPTER
4

Extra Practice

Skills

● **Lesson 4-1** Write an algebraic expression and draw a diagram for each word phrase.

- The difference of a number n and 3
- 17 more than s students
- 5 fewer than d days
- 6 more than the quotient of n and 2

5. Copy and complete the table at the right. Substitute the value on the left for the variable in the expression at the top of each column. Then evaluate.

| x | $3(x - 1)$ | $3x - 1$ | $3x + 1$ |
|-----|------------|----------|----------|
| 5 | ■ | ■ | ■ |
| 2 | ■ | ■ | ■ |

● **Lesson 4-2** Use mental math to solve each equation.

- $5b = 30$
- $n + 5 = 17$
- $m - 8 = 15$
- $\frac{z}{3} = 9$

● **Lesson 4-3** Solve each equation. Check your answer.

- $t - 13 = -29$
- $17 + d = -7$
- $d + 112 = 159$
- $y - 68 = 94$

● **Lesson 4-4** Solve each equation. Check your answer.

- $\frac{m}{5} = -15$
- $-7y = -42$
- $0.4t = 16$
- $\frac{x}{12} = -8$

● **Lesson 4-5** Solve each equation using number sense.

- $7t + 5 = 40$
- $2d - 12 = 18$
- $5w - 18 = 7$
- $\frac{z}{4} + 5 = 15$

● **Lesson 4-6** Solve each equation. Check your answer.

- $\frac{r}{-6} + 4 = 3$
- $12m + 24 = 0$
- $-6g - 9 = 15$
- $\frac{k}{-3} - 2 = -20$

● **Lessons 4-7 through 4-9** Solve each inequality. Graph the solution.

- $y + 5 \geq 11$
- $p + 7 < -3$
- $a - 9 \leq 1$
- $d - 3 > -13$
- $3y \geq 33$
- $\frac{p}{7} < -2$
- $\frac{a}{-8} \leq -7$
- $4d > -36$

Word Problems

● **Lesson 4-1**

- A dance club spends \$20 on advertising to promote its fall show. Write an algebraic expression for the amount of money left in the budget if the club starts with d dollars.