

# Lesson 5 Homework Practice

## Simplify Algebraic Expressions

Identify the terms, like terms, coefficients, and constants in each expression.

1.  $4b + 7b + 5$

2.  $8 + 6t - 3t + t$

3.  $-5x + 4 - x - 1$

4.  $2z - z + 6$

5.  $4 + h - 8 - h$

6.  $y - y - 2 + 2$

Write each expression in simplest form.

7.  $h + 6h$

8.  $10k - k$

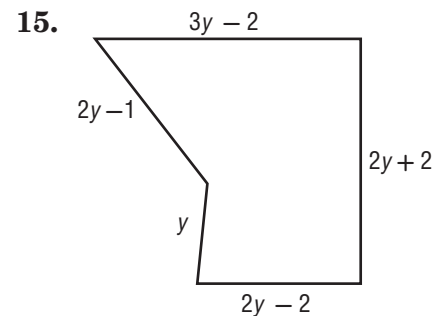
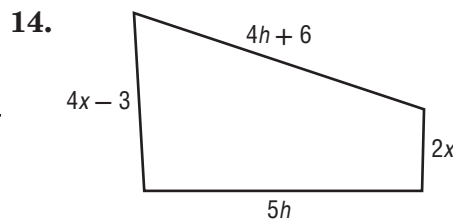
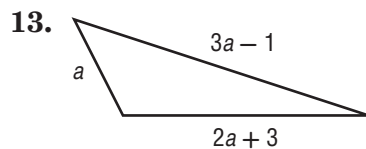
9.  $3b + 8 + 2b$

10.  $-\frac{3}{4}x - \frac{1}{3} + \frac{7}{8}x - \frac{1}{2}$

11.  $5c - 3d - 12c + d$

12.  $-y + 9z - 16y - 25z$

**MEASUREMENT** Write an expression in simplest form for the perimeter of each figure.



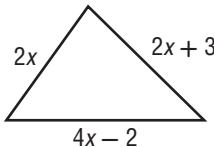
16. **SHOPPING** Maggie bought  $c$  CDs for \$12 each,  $b$  books for \$7 each, and a purse costing \$24.

a. Write an expression to show the total amount of money Maggie spent.

b. If Maggie bought 4 CDs and 3 books, how much money did she spend?

# Lesson 5 Problem-Solving Practice

## Simplify Algebraic Expressions

<p>1. <b>GAMES</b> At the Beltway Outlet store, you buy <math>x</math> computer games for \$13 each and a magazine for \$4. Write an expression in simplest form that represents the total amount of money you spend.</p>	<p>2. <b>TENNIS</b> Two weeks ago, Star bought 3 cans of tennis balls. Last week, she bought 4 cans of tennis balls. This week, she bought 2 cans of tennis balls. The tennis balls cost <math>d</math> dollars per can. Write an expression in simplest form that represents the total amount that Star spent.</p>
<p>3. <b>AMUSEMENT PARKS</b> Sari and her friends played miniature golf. There were <math>p</math> people in the group. Each person paid \$5 for a round of golf and together they spent \$9 on snacks. Write an expression in simplest form that represents the total amount that Sari and her friends spent.</p>	<p>4. <b>BICYCLING</b> The bicycle path at the park is a loop that covers a distance of <math>m</math> miles. Dot biked 2 loops each on Monday and Wednesday and 3 loops on Friday. On Sunday, Dot biked 10 miles. Write an expression in simplest form that represents the total distance that Dot biked this week.</p>
<p>5. <b>GEOMETRY</b> Write an expression in simplest form for the perimeter of the triangle below.</p>  <p>The diagram shows a triangle with three sides. The left side is labeled <math>2x</math>, the right side is labeled <math>2x + 3</math>, and the bottom side is labeled <math>4x - 2</math>.</p>	<p>6. <b>SIBLINGS</b> Mala is <math>y</math> years old. Her sister is 4 years older than Mala. Write an expression in simplest form that represents the sum of the ages of the sisters.</p>