

Lesson 5 Homework Practice

Simplify Algebraic Expressions

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

1. $4b + 7b + 5$

terms: **4b, 7b, 5;**
like terms: **4b, 7b**
coefficients: **4, 7;**
constant: **5**

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

terms: **8, 6t, -3t, t;**
like terms: **6t, -3t, t;**
coefficients: **6, -3, 1;**
constant: **8**

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

terms: **-5x, 4, -x, -1;**
like terms: **-5x, -x;**
4, -1; coefficients: **-5,**
-1; constants: **4, -1**

4. $2z - z + 6$

terms: **2z, -z, 6;**
like terms: **2z, -z;**
coefficients: **2, -1;**
constant: **6**

5. $4 + h - 8 - h$

terms: **4, h, -8, -h;**
like terms: **h, -h;**
4, -8; coefficients:
1, -1; constants: **4, -8**

6. $y - y - 2 + 2$

terms: **y, -y, -2, 2;**
like terms: **y, -y; -2, 2;**
coefficients: **1, -1;**
constants: **-2, 2**

Write each expression in simplest form.

7. $h + 6h$ **7h**

8. $10k - k$ **9k**

9. $3b + 8 + 2b$ **5b + 8**

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

$\frac{1}{8}x - \frac{5}{6}$

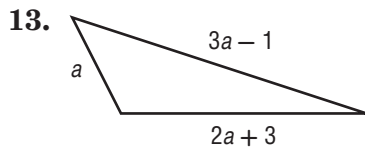
11. $5c - 3d - 12c + d$

$-7c - 2d$

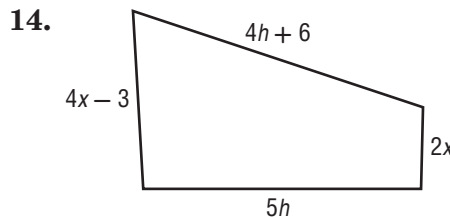
12. $-y + 9z - 16y - 25z$

$-17y - 16z$

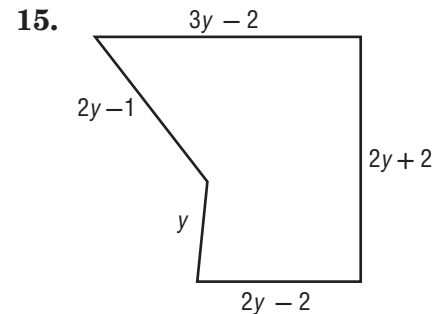
MEASUREMENT Write an expression in simplest form for the perimeter of each figure.



$6a + 2$



$9h + 6x + 3$



$10y - 3$

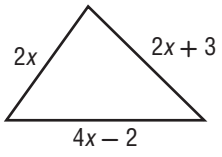
16. **SHOPPING** Maggie bought c CDs for \$12 each, b books for \$7 each, and a purse costing \$24.

a. Write an expression to show the total amount of money Maggie spent.
 $\$12c + \$7b + \$24$

b. If Maggie bought 4 CDs and 3 books, how much money did she spend?
 $\$93$

Lesson 5 Problem-Solving Practice

Simplify Algebraic Expressions

<p>1. GAMES At the Beltway Outlet store, you buy x 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. $\\$13x + \\4</p>	<p>2. TENNIS 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 d dollars per can. Write an expression in simplest form that represents the total amount that Star spent. $\\$9d$</p>
<p>3. AMUSEMENT PARKS Sari and her friends played miniature golf. There were p 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. $\\$5p + \\9</p>	<p>4. BICYCLING The bicycle path at the park is a loop that covers a distance of m 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. $7m + 10 \text{ mi}$</p>
<p>5. GEOMETRY Write an expression in simplest form for the perimeter of the triangle below. $8x + 1$</p>  <p>The diagram shows a triangle with three sides. The left side is labeled $2x$, the right side is labeled $2x + 3$, and the bottom side is labeled $4x - 2$.</p>	<p>6. SIBLINGS Mala is y 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. $2y + 4 \text{ yr}$</p>