

Reteaching 2-1**Evaluating and Writing Algebraic Expressions**

To evaluate an *expression*, substitute a value for the *variable* and compute.

Evaluate $5y - 8$ for $y = 7$.

$$\begin{array}{l} 5y - 8 \\ 5 \times 7 - 8 \quad \leftarrow \text{Substitute } y \text{ with } 7. \\ 35 - 8 = 27 \quad \leftarrow \text{Compute.} \end{array}$$

You can use key words to write a word phrase for an algebraic expression.

$$\begin{array}{ll} a + 5 & \rightarrow \text{ } a \text{ plus } 5 \\ & \text{or } a \text{ increased by } 5 \\ 2n & \rightarrow \text{ the product of } 2 \text{ and } n \\ & \text{or } 2 \text{ times } n \end{array}$$

Evaluate each expression using the values $m = 3$ and $x = 8$.

1. $4m + 9$

Substitute m : $4 \times \underline{\hspace{1cm}} + 9$

Compute: $\underline{\hspace{1cm}} + 9 = \underline{\hspace{1cm}}$

2. $4x - 7$

Substitute x : $4 \times \underline{\hspace{1cm}} - 7$

Compute: $\underline{\hspace{1cm}} - 7 = \underline{\hspace{1cm}}$

3. $5x + x$

Substitute x : $5 \times \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

Compute: $\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

4. $x + 2m$

Substitute x and m : $\underline{\hspace{1cm}} + 2 \times \underline{\hspace{1cm}}$

Compute: $\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

Evaluate each expression using the values $y = 4$, $z = 8$, and $p = 10$.

5. $3y + 6 = \underline{\hspace{1cm}}$

6. $4z - 2 = \underline{\hspace{1cm}}$

7. $p + 2p = \underline{\hspace{1cm}}$

8. $3z \times z = \underline{\hspace{1cm}}$

Write a word phrase for each algebraic expression.

9. $9 + x$

10. $6x$

11. $x - 8$

12. $\frac{x}{5}$

Write an algebraic expression for each word phrase.

13. x newspapers plus 10

14. 4 less than x teabags

15. 3 more than x envelopes

16. 6 times x school buses
