

LESSON
10-2**Evaluating Expressions****Reteach**

A **variable** is a letter that represents a number that can change in an expression. When you **evaluate** an algebraic expression, you substitute the value given for the variable in the expression.

- Algebraic expression: $x - 3$

The value of the expression depends on the value of the variable x .

$$\text{If } x = 7 \rightarrow 7 - 3 = 4$$

$$\text{If } x = 11 \rightarrow 11 - 3 = 8$$

$$\text{If } x = 25 \rightarrow 25 - 3 = 22$$

- Evaluate $4n + 5$ for $n = 7$.

Replace the variable n with 7. $\rightarrow 4(7) + 5$

Evaluate, following the order of operations. $\rightarrow 4(7) + 5 = 28 + 5 = 33$

Evaluate each expression for the given value. Show your work.

1. $a + 7$ when $a = 3$

$$a + 7 = 3 + 7 = \underline{\quad}$$

2. $y \div 3$ when $y = 6$

$$y \div 3 = \underline{\quad} \div 3 = \underline{\quad}$$

3. $n - 5$ when $n = 15$

$$n - 5 = \underline{\quad} - 5 = \underline{\quad}$$

4. $(6 + d) \cdot 2$ when $d = 3$

$$\begin{aligned} (6 + d) \cdot 2 &= (6 + \underline{\quad}) \cdot 2 \\ &= \underline{\quad} \cdot 2 = \underline{\quad} \end{aligned}$$

5. $3n - 2$ when $n = 5$

$$3n - 2 = 3(\underline{\quad}) - 2 = \underline{\quad}$$

6. $6b$ when $b = 7$

$$\underline{\quad}$$

7. $12 - f$ when $f = 3$

$$\underline{\quad}$$

8. $\frac{m}{5}$ when $m = 35$

$$\underline{\quad}$$

9. $2k + 5$ when $k = 8$

$$\underline{\quad}$$

10. $10 - (p + 3)$ when $p = 7$

$$\underline{\quad}$$