SKILL Skills Readiness

60 Evaluate Expressions

To evaluate a variable expression, replace the variable(s) with the given value(s) and use the order of operations to simplify.

Example 1: Evaluate $10y + 3$ for $y = 6$.		
10y + 3 = 10(6) + 3	Replace <i>y</i> with 6 since 6 is the given value.	
= 60 + 3	Order of operations says to multiply first.	
= 63	Add.	

Example 2: Evaluate $-6p - 15$ for $p = -4$.		
-6p - 15 = -6(-4) - 15	Replace p with -4 since -4 is the given value.	
= 24 - 15	Order of operations says to multiply first.	
= 9	Subtract.	

Practice on Your Own

Evaluate each expression for the given value of the variable.

2. 8 <i>m</i> - 12 for <i>m</i> = 5	3. $2y + 9$ for $y = -6$
5. $27 - 9x$ for $x = 2$	6. $10 + 4q$ for $q = -3$
8. $\frac{1}{3}t + 5$ for $t = 9$	9. $\frac{1}{2}m - 16$ for $m = 20$
	5. 27 – 9 <i>x</i> for <i>x</i> = 2

Check

Evaluate each expression for the given value of the variable.

10. 2 <i>n</i> - 3 for <i>n</i> = 9	11. $x + 7$ for $x = -5$	12. $15 - 3h$ for $h = 5$
13. $15 - 7m$ for $m = 3$	 14. −5 <i>a</i> − 9 for <i>a</i> = −1	15. $\frac{1}{2}y + (-4)$ for $y = 12$