




**SKILL**  
**56** **Skills Readiness**  
**Distributive Property**

<b>The Distributive Property of Multiplication</b>	
Multiplying a sum by a number: $a(b + c) = ab + ac$	Multiplying a difference by a number: $a(b - c) = ab - ac$
Example 1: Simplify $7(2x + 3)$ .  $7(2x + 3) = 7(2x) + 7(3) = 14x + 21$	Example 2: Simplify $15(3 - 4m)$ .  $15(3 - 4m) = 15(3) - 15(4m) = 45 - 60m$
Note: Remember, if a variable does not have a coefficient, assume the coefficient is 1.	
Example 3: Simplify $11(5 + y)$ .  $11(5 + 1y) = 11(5) + 11(1y) = 55 + 11y$	

**Practice on Your Own**  
Simplify each expression.

1.  $5(x + 6)$

\_\_\_\_\_

2.  $5(z - 7)$

\_\_\_\_\_

3.  $(n - 2)2$

\_\_\_\_\_

4.  $4(3 + k)$

\_\_\_\_\_

5.  $8(6 - y)$

\_\_\_\_\_

6.  $(m + 3)6$

\_\_\_\_\_

7.  $10(p + 1)$

\_\_\_\_\_

8.  $(20 - c)3$

\_\_\_\_\_

9.  $(q - 1)7$

\_\_\_\_\_

10.  $11(5 + t)$

\_\_\_\_\_

11.  $(7 + b)2$

\_\_\_\_\_

12.  $9(4 - w)$

\_\_\_\_\_

**Check**  
Simplify each expression.

13.  $12(c + 2)$

\_\_\_\_\_

14.  $(3 - a)5$

\_\_\_\_\_

15.  $25(1 + d)$

\_\_\_\_\_

16.  $10(5 - j)$

\_\_\_\_\_

17.  $(x + 3)4$

\_\_\_\_\_

18.  $15(2 + y)$

\_\_\_\_\_

19.  $3(g - 25)$

\_\_\_\_\_

20.  $(m - 1)9$

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