

Lesson #1
Using the
Distributive Property to
Simplify
Algebraic Expressions

The Distributive Property

The product of a and $(b + c) =$ _____

The product of a and $(b - c) =$ _____

Practice!

1) $4(x + 5)$

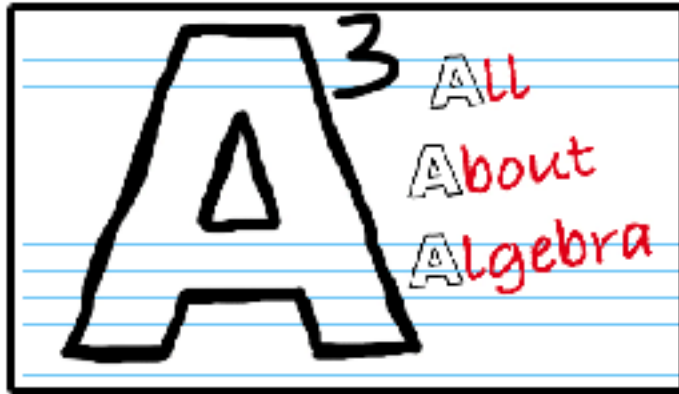
2) $5(x - 7)$

3) $8(4 + x)$

4) $-5(x + 3)$

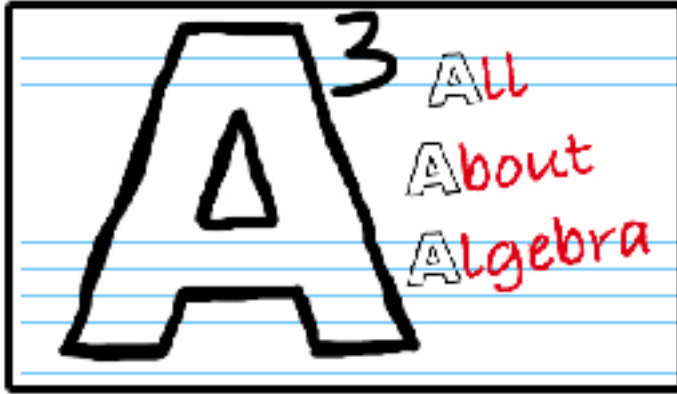
5) $-6(x - 8)$

6) $-9(-x + 10)$



Simplifying and Evaluating Algebraic Expressions

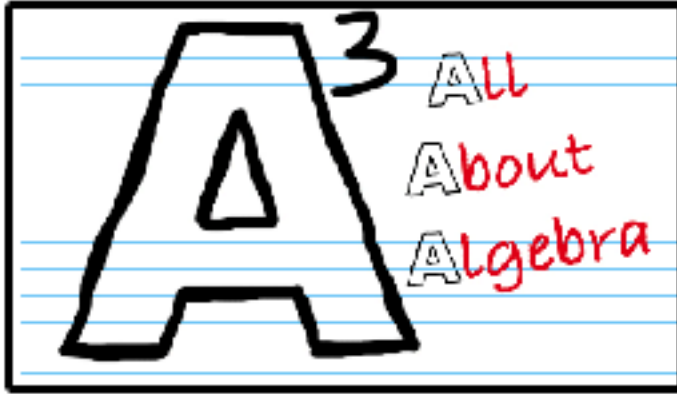
Simplify	Evaluate
7) $8(2x - 3) - 6x$	If $x = 3$
8) $9 - 2(4x + 5)$	If $x = -4$
9) $10 - (2y - 6) - y$	If $y = 8$
10) $5(-3y - 1) - (6 - 5y)$	If $y = -6$



Simplifying and Evaluating Algebraic Expressions

Extra Practice!

Simplify	Evaluate
11) $2(7 + 6y) + 15(-1 + y)$	If $y = 1$
12) $(-9y + 5) - 8(-y - 2)$	If $y = -3$
13) $-(5y - 6) + 4(3 + 5y)$	If $y = 2$



Just for FUN!

A Desert Trek

Assume that one person can carry a 4-day supply of food and water for a trip across a desert that takes 6 days to cross. One person cannot make the trip alone because the food and water would be gone after 4 days. How many persons would have to start out in order for one person to get across and the others to return to the starting point?