



## Lesson 7 Distributive Properties using Negative numbers

### Simplifying Pre-Algebraic Expressions

Name \_\_\_\_\_

*Directions: Click on the video button above to provide you with instructions and answers. Rewrite the statements using distributive property.*

*What are the rules for multiplying negative numbers?*

*With two numbers, the rules for multiplying and dividing positive and negative numbers are not only simple, but they're also the same for both operations: When multiplying or dividing two numbers, if the two signs are the same, the result is positive, and if the two signs are different, the result is negative.*

Examples (A)  $6X - 5(3X + 15) = -138$

$$6X - 15X - 75 = -138$$

$$-9X - 75 = -138$$

$$-9X = -63$$

$$X = 7$$

(B)  $-3X - 6(-4X + 12) = 138$

$$-3X + 24X - 72 = 138$$

$$21X - 72 = 138$$

$$21X = 210$$

$$X = 10$$

(1)  $4X + 2(-6X - 2) = -44$

(2)  $-6X - 3(7X + 2) = 318$

(3)  $-3X + 7(6X - 29) = 187$

(4)  $5X - 2(-2X - 17) = 133$

(5)  $-6X - 7(-2X + 28) = -252$

(6)  $-3X + 3(4X - 5) = 39$