

Name \_\_\_\_\_

Date \_\_\_\_\_

Mr. Tallman

**Do Now****Simplify the following by Combining Like Terms.**

1)  $4x - 7x$

2)  $5y - 2 - 3y + 8$

3)  $7x^2 + 3x^2$

4)  $\frac{2}{5}g - \frac{1}{6} + \frac{3}{10}g - \frac{4}{5}$

**Lesson #51 - Distributive Property**

The **Distributive Property** allows us to multiply an expression with two or more terms by a single constant term.

In the **Distributive Property**, we use \_\_\_\_\_.

Example 1) Simplify the following.

A)  $-6(-4d)$

B) Find the product of 7 and  $-2y$ .

Directions: Use the distributive property to simplify the following expressions.

1) $2(x + 5)$	
2) $3(x + 4)$	
3) $6(x + 1)$	
4) $7(x - 3)$	
5)	$5x + 30$
6)	$8x + 8$
7)	$3x - 12$

**Use the distributive property to simplify the following expressions.**

8) $3(x - 2)$	9) $-2(x + 2)$	10) $-(x + 2)$
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**Directions: Simplify the following expressions. USE CALCULATORS FOR FRACTIONS.**

11) $4(-3x + 2)$	12) $-2(4x - 9)$	13) $\frac{1}{5}(10x - 5)$
14) $\frac{3}{4}(5x - 1)$	15) $\frac{1}{8}(2x + 4)$	16) $\frac{4}{5}(x + 1)$
17) $\frac{1}{6}(r - 6)$	18) $\frac{1}{4}(4x + 8)$	19) $-(2h - 9)$
20) $-7(-4q + 5)$	21) $-3(2p - 3q)$	22) $-3(1 - 8m - 2n)$

**Challenge:** Simplify the following:  $7(m + 6) + 10m + 10$