

ALGEBRA REVIEW – DAY 1

Like Terms contain the same variables, with corresponding variables having the same powers.

List some **like terms**:

List some terms that are **not like terms**:

You combine like terms to SIMPLIFY an expression – not necessarily get one numeric answer!

EXAMPLES: SIMPLIFY each expression.

1. $7x - 5 - 3y - 10x + 8y - 8$ _____

2. $-2x - 6 + 9y - 3x - 9y$ _____

3. $7x - y - z - x - y + z$ _____

4. $4xy - 4xz + 7xy - 11yz$ _____

Determine whether the equation below is true or false, and then tell how the two sides of the equation differ.

5. $4(3 + 2) = 4 \bullet 3 + 4 \bullet 2$ _____

The equation above demonstrates the use of the **distributive property**. When the distributive property is used, the numbers in a sum or difference are BOTH **multiplied** by the same value.

EXAMPLES: SIMPLIFY each expression. Remember PEMDAS!

6. $3(x + 4) - 4x + 2 =$ _____

7. $5 - 2(x - 3) = \underline{\hspace{2cm}}$

8. $6a + 3(2a - 1) = \underline{\hspace{2cm}}$

9. $2(7x + 5) - (x + 4) - 2(2x - 1) = \underline{\hspace{2cm}}$

To **SOLVE** an equation, you reverse **PEMDAS** to get one numerical answer!

SOLVE each equation.

10) $x + 12 = 7$

$x = \underline{\hspace{1cm}}$

11) $c - 9 = 13$

$c = \underline{\hspace{1cm}}$

12) $15 = -2r$

$r = \underline{\hspace{1cm}}$

13) $\frac{a}{-3} = 4.2$

$a = \underline{\hspace{1cm}}$