

## Math 9 Review – Part 2

### Distributive Law and Like Terms

$$4x^3$$

#### Like Terms

Like terms are terms that have the same variable(s) with the same exponent(s) of the variable(s). The only thing different are the coefficients.

#### Example 1:

#### Combining Like Terms

When we combine like terms we are simplifying an algebraic expression.

- Identify like terms
- Group like terms together (be sure to include the correct sign in front of each term)
- Add/subtract the coefficients of each like term together
- Write your final answer

**Example 2:** Simplify the following expressions:

a)  $2a + 3c - 6a + 4b - 5c + 3b$

b)  $-4x + 5x^2 + 3x - 2x + 6x^2$

## Distributive Law

The distributive law is an algebra property which is used to multiply a single term and two or more terms inside a set of parentheses.

We often use the expression "**expand**" when we need to use the distributive law.

**Example 3:** Simplify the following expressions:

a)  $4(a+6)$

b)  $5+3(2b-1)$

c)  $-6(5+x)-(7x-11)$

b)  $8(c+5)-6c+2(9c-3)$

Name: \_\_\_\_\_

## Distributive Law and Like Terms – Worksheet #2

1. Simplify each expression.

a)  $8n - n$

b)  $-v - v$

c)  $1 + 3k - 8 + k$

d)  $-5x - 4 + x + 7$

e)  $-4(1 - 8n)$

f)  $6(6 + 5m)$

g)  $-7(8v - 5) + 6v$

h)  $-3 + 6(x + 4)$

i)  $-3a + 7(a + 8)$

j)  $4 + 8(x - 7)$

$$k) 5(r-2) + 7(-4r+1)$$

$$l) -4(1+5x) - 6(2x+1)$$

$$m) 1 + 2(x+6) - (8x-1)$$

$$n) 8a(a-7) - 4(4a+3)$$