Unit 2 Day 3 Multiplying Monomials

Recall that a monomial is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Since it only has one term, it will consist of a coefficient and variable(s).

Lets list some monomials:

In order to multiply two or more monomials together, we \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the coefficients and \_\_\_\_\_\_\_\_\_\_ the exponents.

**Examples:** Simplify by multiplying.

a) (5x)(3x2) b) (-2y3)(5y2) c) (10x2)(3y)

d) (8x2y)(-3xy) e) (-4ab2c3)(-3a5bc3) f) (4i3jk-2)(-ij3k-4)

g) (5x-1y2z4)(-2x3yz-2)(-3x4y-3z-2)

**Example:** Determine the volume of a cube with a side length 4x.

**Example:** Determine the area of the following:

6x

4x

x

**Example:** A rectangular prism has dimensions 32x, 2x, and 8x. Determine the side length of a cube whose volume is equal to the volume of the rectangular prism.

Hmwk: Page 317, #’s 1-45 odds, 46-49.