

Procedure:

1. Multiply the coefficients
2. Multiply powers with same base by ADDING EXPONENTS
3. Multiply the product from step 1 and 2

Ex1. Multiply:  $(8xy)(3xz)$

Ex2. Multiply:  $(-5x^2y^3)(-2xy^2)$

### MULTIPLYING A POLYNOMIAL BY A MONOMIAL

When multiplying polynomials just use the distributive property!!

Let's Practice:

1.  $-5(4m - 6n) =$  \_\_\_\_\_

2.  $10\left(2x - \frac{1}{5}x\right) =$  \_\_\_\_\_

3.  $-8\left(4r - \frac{1}{4}k\right) =$  \_\_\_\_\_

4.  $4x(5x - 6) =$  \_\_\_\_\_

5.  $-5c^2(15c - 4c^2) =$  \_\_\_\_\_

6.  $-c^3m^3(6c^4m - 3m^4) =$  \_\_\_\_\_

7.  $-ab(a - b) =$  \_\_\_\_\_

8.  $5c^3m^3(-2c^2 + 3cm - 4m^2) =$  \_\_\_\_\_

9.  $5(d - 3 + d^2) - 10d =$  \_\_\_\_\_

10. The length of a rectangle is represented by  $5y - 7$  and the width is represented by  $3y$ . Determine the area of the rectangle.