

## Lesson 4 - Dividing Polynomials:

When dividing a polynomial by a constant or a monomial, we "distribute" the denominator to each term in the numerator.

Where else do we see something like this:

Example:

$$\frac{(14t^2 - 35t + 21)}{7} =$$

Is this any different if there is a variable in the denominator?

$$\frac{24b^2c - 15bc + 6c}{3c} =$$

More Examples:

$$\frac{16n^4 - 4n^3}{-2n^2} =$$

$$\frac{-5(2g^3 - 4g^5h)}{-2g^2} =$$

If the Area of a rectangle is  $32m^2 - 8m$  and the short side is 4m, find the long side: