Math 9   Date: Name:

3.7 Polynomials – Dividing a Polynomial By a Monomial – Dividing by Variables   Pg 142-145

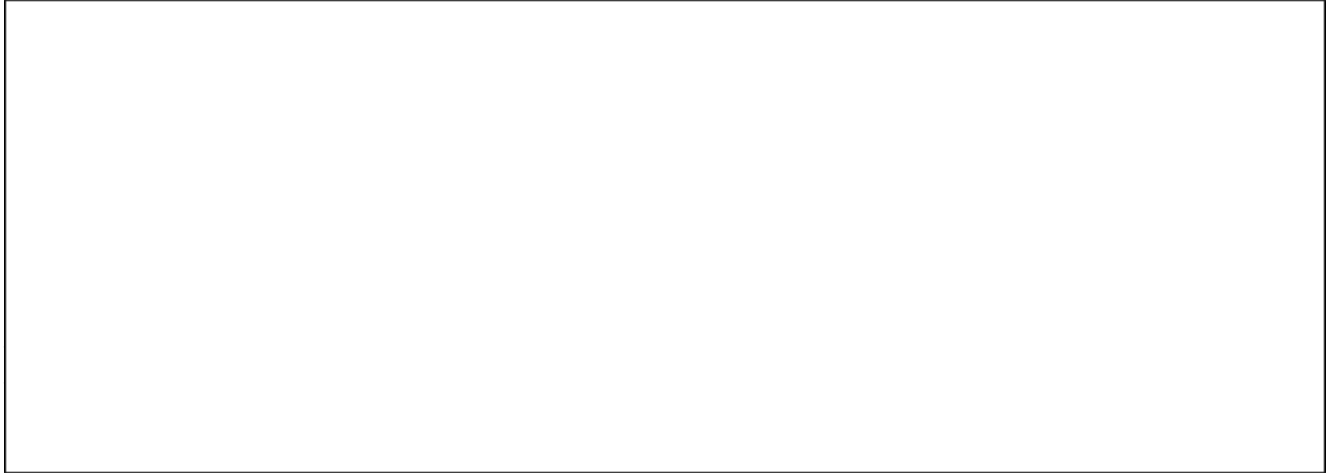**Draw the algebra tiles or area model for 2x (4x -2) and determine the product:**

To **divide a polynomial by a monomial**, we **reverse** the process.

Determine the **quotient** of $\frac{8x^2}{4x}$

Step 1: First, arrange _____ x^2 and tiles where one of the dimensions is _____

Step 2: On the other dimension, the **guiding tiles** must **also** be _____ tiles, since (x)(x) = x^2

There are _____ of these guiding x – tiles.

Therefore, (**8x²**) ÷ x^2 = _____ ,l since (x)(_____) = $8x^2$

Ex. Determine the quotient of: $\dfrac{-6w^2+9w}{3w}$

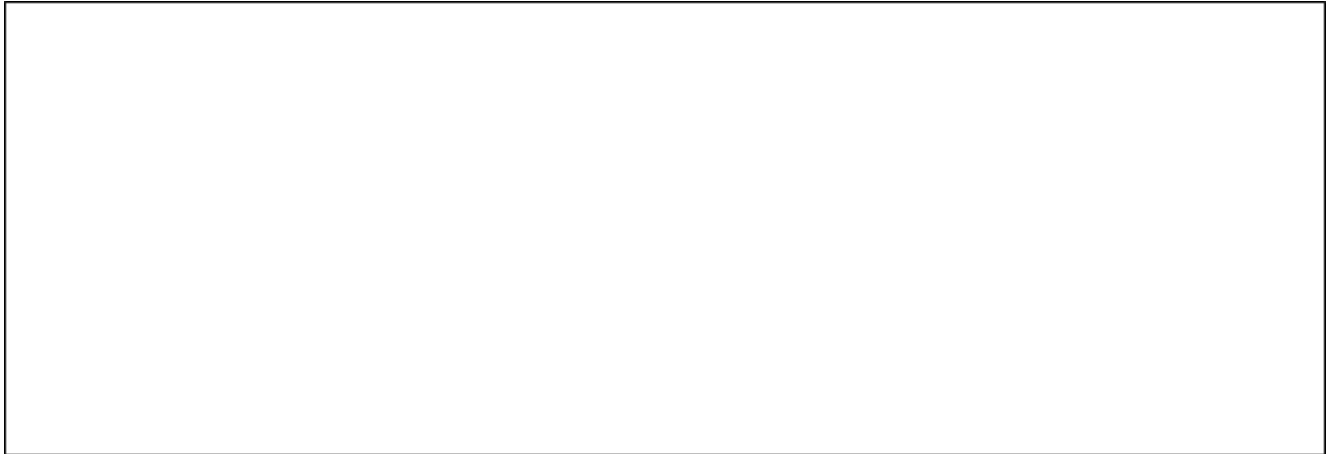Arrange _____ -w^2 tiles and 9 _____ tiles in a rectangle where one dimension is _____

a) $\dfrac{-10m^2}{2m}$

Use algebra tiles   Think multiplication

$\dfrac{30k^2-18k}{-6k}$

Think multiplication   Write the quotient as the sum of two fractions

Practice: pg 146-149 **Basic** - #1, 3-4, 6, 8, 10 **Dev** to **Ext** - #7, 9, 11,13, 15, 18,-20