Algebra II 5.2 Dividing Polynomials

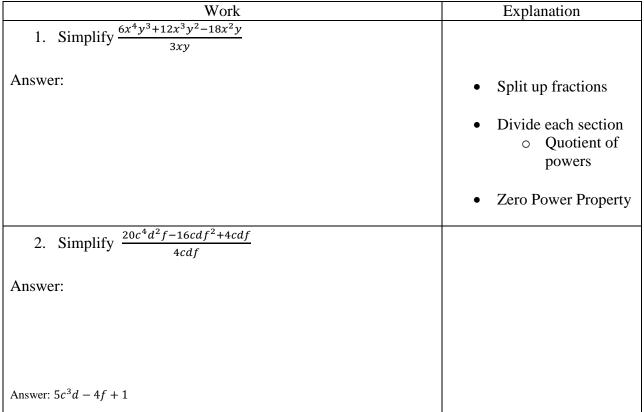
## Goals:

• I can divide polynomials using long division.

Long Division (Old School Examples):

Question:  $\frac{1472}{3}$ Solution:

Divide a Polynomial by a Monomial



HW:

1.  $(4xy^2 - 2xy + 2x^2y)(xy)^{-1}$ 

2.  $\frac{9n^3p^3 - 18n^2p^2 + 21n^2p^3}{3n^2p^2}$ 

Name:	

Using the Division Algorithm

3. Use long division to find  $(x^2 + 3x - 40) \div (x - 5)$ 

Answer:

4. Use long division to find each quotient.  $(x^2 + 7x - 30) \div (x - 3)$ 

Answer: x + 10

HW:

3.  $(x^2 - 6x - 20) \div (x + 2)$ 

4.  $(3z^4 - 6z^3 - 9z^2 + 3z - 6) \div (z + 3)$