

Name _____

Date _____

Advanced Algebra

Unit 5 Polynomials: Assignment #12

I can work with rational Expressions:

NOTE: You MUST completely factor every problem BEFORE you cancel like terms!

1) $\frac{16x^3}{5y^9} * \frac{x^3y^7}{80xy^2}$	2) $\frac{x^{10}y^4}{33x^4} * \frac{39x^5}{4y^{10}}$
3) $\frac{2x^2-10}{(x+1)} * \frac{(x-4)}{4x^2-20}$	4) $\frac{x^2+3x}{x^2+6x+8} * \frac{x^2+x-2}{4x^3+12x^2}$
5) $\frac{(x-3)}{2x-8} * \frac{6x^2-96}{x^2-9}$	6) $\frac{x^2-5x-6}{4x^5} * \frac{x+2}{x^2+3x+2}$

$$7) \frac{x^2+6x-7}{x^4+8x^3+7x^2} * 3x^2$$

$$8) (x+2) * \frac{x^2-9}{x^2-x-6}$$

$$9) (x^2 + 8x + 16) * \frac{16x^2 - 64}{x^2 - 16}$$

$$10) \frac{2x^2-2}{x^2-6x-7} * (x^2-10x+21)$$

Review:

Solving quadratic equations with the complete the square method:

1) $f(x) = x^2 + 6x - 18$ what is x when $f(x) = 12$

2) $f(x) = x^2 - 8x + 12$ what is x when $f(x) = 25$