Chapter 9 so far:

/ constant ratio

- Determine if a relationship is Direct Variation, Inverse Con STANT Variation, or neither and write a variation equation.
 - PRoduct
- Write a variation equation for combined variations and find the constant.
- Write equations and graph transformed reciprocal functions.
- Find holes, VA, HA, x-int, y-int, and graph rational functions.
- Simplify a rational expression and the product or quotient of rational expressions.

Sec 9-5: Sum & Difference of Rational Expressions

Simplify.

$$\frac{4}{x-3} + \frac{7x}{x^2 + 2x - 15}$$

$$(x+5)(x-3) + \frac{7x}{(x-3)(x+5)}$$

$$\frac{(X-3)(X+5)}{(X-3)(X+5)}$$

Chapter 9: Still to do

- Find the sum or difference of two rational expressions.
- Solve rational equations.

2.
$$\frac{2x}{x^{2}-x-20} + \frac{3}{x^{2}+x-30}$$

$$(x+4)$$

$$(x+6)$$

$$(x-5)(x+4)$$

$$(x-5)(x+4)$$

$$(x+6)$$

$$(x+4)(x+6)$$

$$(x+4)(x+6)$$

$$(x+4)(x+6)$$

3.
$$\frac{4x}{x^{2} + 9x + 14} - \frac{9}{x^{2} - 2x - 8}$$

$$\frac{(x-4)}{(x-4)} \frac{4x}{(x+7)(x+2)} - \frac{9}{(x-4)(x+2)} \frac{x+7}{(x+7)(x+2)}$$

$$\frac{(x-4)}{(x+7)(x+2)} \frac{4x}{(x+7)(x+2)} - \frac{(x+7)(x+2)}{(x+7)(x+2)} = \frac{4x}{(x+7)(x+2)}$$

$$\frac{4x}{(x-4)} \frac{9}{(x+7)(x+2)} - \frac{4x}{(x+7)(x+2)} = \frac{4x}{(x+7)(x+2)}$$

$$\frac{4x}{(x-4)} \frac{9}{(x+7)(x+2)} - \frac{4x}{(x+7)(x+2)} = \frac{4x}{(x+7)(x+2)}$$

Sec 9-5: Simplifying complex rational expressions.

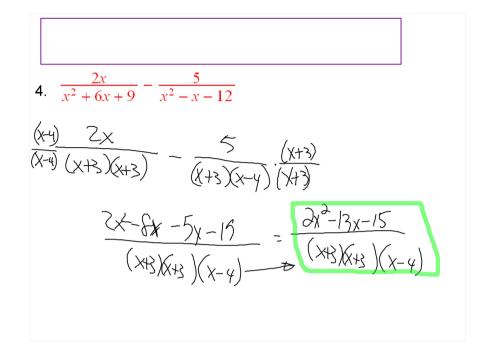
5. Simplify.
$$\frac{5}{x+3} + 7$$

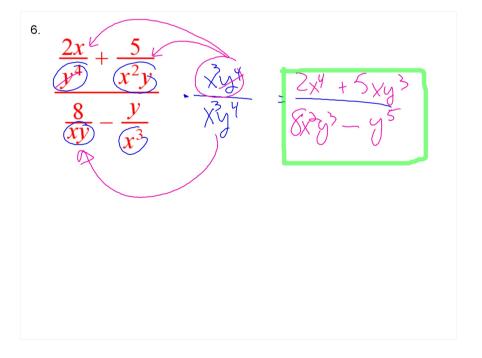
$$\frac{4-\frac{2}{x+3}}{4-\frac{2}{x+3}}$$

$$\frac{3}{4+2}$$

$$\frac{7}{4+26}$$

$$\frac{7}{4+26}$$





You can now finish Hwk #29.		