

Honors Algebra 2
9.3 – 9.4 Review

Name: _____
Date: _____ Period: _____

Simplify each of the following by performing the indicated operation:

1.) $\frac{x^{10}y^4}{33x^4} \div \frac{4y^{10}}{39x^5}$

2.) $\frac{4x+1}{x^2-4} - \frac{3}{x-2}$

3.) $\frac{x-3}{2x-8} \cdot \frac{6x^2-96}{x^2-9}$

4.) $\frac{x^2+3x}{x^2+6x+8} \div \frac{4x^3+12x^2}{x^2+x-2}$

5.) $\frac{4x}{x+1} + \frac{5}{x} - \frac{2}{2x-3}$

6.) $\frac{x^2+3x-4}{x^2-4x+3} \cdot \frac{3-x}{x+4}$

$$7.) \frac{x+3}{x^2-1} - \frac{x-5}{x^2+3x-4}$$

$$8.) \frac{\left(\frac{2}{3x+15}\right)}{\left(\frac{2}{x+5} + \frac{1}{4x+20}\right)}$$

$$9.) \frac{x+4 - \frac{1}{x+4}}{x+11 + \frac{48}{x-3}}$$

$$10.) \frac{\frac{x^2+8x+15}{x^2+2-6}}{\frac{x^2+2x-15}{x^2-2x-3}}$$

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- 11.) A company has a preset fence package for a rectangular yard with the given length and width below. Find the perimeter of the fence.

$$\text{Length} = \frac{(x-2)}{x}$$

$$\text{Width} = \frac{x}{(x+2)}$$