

Chapter 11.4-11.6 Quiz Review

Name: _____

Section 11.4: Multiplying and Dividing Rational Expressions

Multiply or divide. Simplify the expression.

$$1.) \frac{3x^2}{2x} \cdot \frac{18x^2}{9x}$$

$$2.) \frac{5x^2}{7} \div \frac{10x^3}{21}$$

$$3.) \frac{3x + 12}{4x} \div \frac{x + 4}{2x}$$

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

$$5.) \frac{x + 4}{x^2 + 5x + 4} \cdot (3x + 3)$$

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

Section 11.5: Adding and Subtracting with Like Denominators

Add or subtract. Simplify the expression.

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

$$8.) \frac{2x}{x^2 + 5x + 4} + \frac{8}{x^2 + 5x + 4}$$

$$9.) \frac{4x}{2x+6} - \frac{16}{2x+6}$$

$$10.) \frac{x^2 - 2}{x^2 - 25} + \frac{4x - 3}{x^2 - 25}$$

Section 11.6: Adding and Subtracting with Unlike Denominators

Add or subtract. Simplify the expression.

$$11.) \frac{9}{2x} - \frac{2}{7x^2}$$

$$12.) \frac{x}{x-10} + \frac{4}{x+6}$$

$$13.) \frac{x-1}{6x^2} + \frac{2}{3x}$$

$$14.) \frac{x^2}{x-3} - \frac{2x}{x^2 - x - 6}$$