

Section 11.6 Worksheet

Name: _____

Find the common denominator between the pair of rational expressions.

$$1.) \frac{2}{7}, \frac{x}{4}$$

$$2.) \frac{4}{x-4}, \frac{2}{x+2}$$

$$3.) \frac{2}{2}, \frac{x}{4x}$$

$$4.) \frac{7}{x+3}, \frac{4}{x}$$

$$5.) \frac{9x}{8x^3}, \frac{x+2}{4x}$$

$$6.) \frac{5}{x+6}, \frac{7+x}{x+5}$$

Find the sum of the rational expression and simplify.

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

$$8.) \frac{2x+3}{4} + \frac{x+1}{2}$$

$$9.) \frac{6x}{2x} + \frac{7-x}{8x}$$

$$10.) \frac{x+8}{3x-3} + \frac{x+2}{x-1}$$

$$11.) \frac{x+6}{2} + \frac{x-10}{5}$$

$$12.) \frac{4}{x} + \frac{x-5}{x^2}$$

Find the difference of the rational expression and simplify.

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

$$14.) \frac{2x}{3} - \frac{x+1}{5}$$

$$15.) \frac{x-7}{x-4} - \frac{x+8}{3x-12}$$

$$16.) \frac{8}{x-2} - \frac{4}{x+2}$$

REVIEW:

Simplify the expression.

$$17.) \frac{x^2 - 4x + 4}{x - 2}$$

$$18.) \frac{x^2 + x}{8x}$$