Integrated Math 3
Unit 7: Modeling Rational Representations
7.6

Name: _____

Date: _____ Period: _____

Objective: To solve rational equations.

Warm Up: Simplify the following expression: $\frac{7}{x-3}+\frac{2x}{x-6}$

Example 1: Solve. Be sure to check for excluded values!

a. $\frac{3}{x^2+4x}=\frac{1}{x+4}$

b. $\frac{6}{2x^2+2x}=\frac{x-2}{x+1}$

c. $\frac{x^2}{x^2-x} = \frac{1}{x-1}$

Example 2: Solve each of the following. Be sure to check for excluded values.

a. $\frac{3}{x+4} - \frac{2x}{x+4} = \frac{5x}{x+4}$

b. $\frac{8}{x-1} + \frac{6}{x+1} = \frac{12}{(x+1)(x-1)}$

c. $\frac{10}{x^2-2x} + \frac{4}{x} = \frac{5}{x-2}$