Module 2 – Rational Expressions

Lesson 1 – Simplifying Rational Expressions

Homework 1

Name _____

Find all solutions for each section. Show all work.

Simplify the following rational expressions.

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

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

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

4. $\frac{x^2-7x+10}{x^2+3x-10}$

5. $\frac{x^2+2x}{x^3+8}$

Simplify the following rational expressions.

1. $\frac{-14x^3y}{63xy^4}$

2. $\frac{x^2-7x+10}{x^2+3x-10}$

3. $\frac{y^3-27}{y^2-9}$

4. $\frac{1-9x^2}{9x^2+6x+1}$

5. $\frac{a^2b-ab^2}{a^3-a^2b}$

Simplify the following rational expressions.

1. $\frac{-14x^3y}{63xy^4}$

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

3. $\frac{2x^2-50}{2x+10}$

4. $\frac{y^2-y}{y^2-1}$

5. $\frac{x-10}{x^2-100}$