## Mathematics 11U

## 2.4 – Simplifying Rational Expressions

$$\frac{3}{12}$$

$$\frac{15p^3}{10p^2}$$

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

$$\frac{x^2 + 11x + 28}{x^2 + 13x + 36}$$

$$\frac{35x^2 + 28x - 7}{21x^2 + 56x + 35}$$

## 2.6 – Multiplying and Dividing Rational Expressions

$$\frac{2x+2}{x^2+2x+1} \times \frac{x^2-9x+14}{2x-4}$$

$$\frac{5x+1}{5x^2-42x+49} \times \frac{5x^2-27x+42}{35x+7}$$

$$\frac{5x+4}{5} \div \frac{10x^2 + 8x}{2x^2 + 2x}$$

$$\frac{x^2 - 14x + 40}{x^2 - 17x + 70} \div \frac{3x^2 - 12x}{5x^2 - 35x}$$

## 2.7 – Adding and Subtracting Rational Expressions

$$\frac{2}{5} + \frac{5}{6}$$

$$\frac{3}{8x^2} + \frac{1}{4x} - \frac{5}{6x^3}$$

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

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

$$\frac{2}{3} - \frac{4}{7} \div \frac{9}{14}$$

$$\frac{x+1}{x^2+5x+6} - \frac{3x+12}{x^2-4} \div \frac{x^2+7x+12}{x^2+4x+4}$$