## **Rational Equation**

a statement of equality using rational expressions.

$$\frac{2}{x-4} = \frac{x}{x-1}$$

$$\frac{2}{x-4} = \frac{x}{x-1} \qquad \frac{1}{x+2} + \frac{5}{x-3} = \frac{3}{x}$$

To Solve rational equations...

Multiply every term by the LCD. This will clear all the fractions.

Simplify and solve for x.

$$x + \frac{8}{x} = 6$$

Solve the following rational equations

$$\frac{2x}{x+4} = \frac{x+2}{x+4}$$

$$\frac{2}{x+2} = \frac{x-3}{x+6}$$

Solve the following rational equations

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

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

$$\frac{2}{x+3} + \frac{1}{x-4} = \frac{7}{x^2 - x - 12}$$