

## Lesson 12: Solving Rational Equations

Solve each equation.

$$1) \frac{x}{4} - \frac{1}{2} = \frac{x}{12}$$

$$2) \frac{x}{3} + \frac{1}{2} = \frac{x}{4} + \frac{5}{12}$$

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

Solve each equation.

$$4) \frac{3}{x+4} = \frac{2}{x+5}$$

$$5) \frac{9}{x} + 2 = \frac{2x}{x+3}$$

$$6) \frac{3}{x+5} - \frac{5}{x} = \frac{13}{x+5}$$

Solve each equation.

$$7) \frac{3}{2} + \frac{2}{3x-9} = \frac{1}{x-3}$$

$$8) \frac{x}{3x+6} + \frac{x-1}{x+2} = \frac{5}{3}$$