

## Algebra 2: Homework 25

Express in simplest form:

$$1. \quad \frac{\frac{9}{2} + \frac{3}{2x}}{\frac{9x}{2} - \frac{1}{2x}}$$

$$2. \quad \frac{15x^2 - 14x - 8}{9x^3 - 16x}$$

$$3. \quad \frac{1 + \frac{2}{y+1}}{1 + \frac{4}{y-1}}$$

Solve:

$$4. \quad \frac{2x+7}{6} - \frac{2x-9}{10} = 3$$

$$5. \quad \frac{1}{k-2} = \frac{6}{k^2-2k}$$

$$6. \quad \frac{x}{x-3} - \frac{4}{x} = \frac{3}{x-3}$$