

## Algebra 2: Homework 22

Express in simplest form:

$$1. \quad \frac{7}{y^2 - 49} - \frac{6}{y^2 - 2y - 35}$$

$$2. \quad \frac{2y^2 - 6y}{y - 7} \div \frac{3 - y}{2y - 14}$$

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

$$4. \quad \frac{\frac{a}{b} - \frac{b}{a}}{1 - \frac{b}{a}}$$

$$5. \quad \frac{1 + \frac{7}{y-2}}{1 + \frac{3}{y+2}}$$

$$6. \quad \frac{\frac{3}{b} - 1}{1 - \frac{6}{b} + \frac{9}{b^2}}$$