

## Algebra 2: Homework 23

Express in simplest form:

$$1. \quad \frac{\frac{1}{7} + \frac{1}{b}}{\frac{1}{b}}$$

$$2. \quad \frac{\frac{x^2}{4} - 1}{\frac{x}{4} - \frac{1}{2}}$$

$$3. \quad \frac{4}{y^2 - 9} - \frac{2}{y^2 - 3y}$$

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

$$5. \quad \frac{25 - x^2}{x^2 + 7x} \cdot \frac{x^2 + 9x + 14}{x^2 + 7x + 10}$$

$$6. \quad \frac{\frac{3}{x-2} - \frac{3}{x+2}}{\frac{12}{x^2-4}}$$