

## Algebra 2: Homework 18

In 1 – 4, simplify:

$$1. \quad \frac{m+1}{3m-15} \cdot \frac{8m-80}{m^2-9m-10}$$

$$2. \quad \frac{3x^2-6x-9}{x^2-x-2} \cdot \frac{x^2-4}{6x+12}$$

$$3. \quad \frac{3y^2-13y+4}{3y^2+8y-3} \div \frac{12y^2-7y+1}{4y^2+11y-3}$$

$$4. \quad \frac{3x^2-27}{18x+30} \div \frac{x^2-7x+12}{3x^2-7x-20}$$

In 5 – 6, combine and simplify.

$$5. \quad \frac{b}{b+4} + \frac{b+8}{b+4}$$

$$6. \quad \frac{x^2+4}{3x^2+12x-36} - \frac{3x+2}{3x^2+12x-36}$$