

First & Last Name _____ Date _____ Period _____

7.4 Review Rational Operations Practice

Directions: Simplify each expression. State the excluded values.

1. $\frac{y^2-14y+48}{y^2-64}$

$$\frac{y-6}{y+8} \quad y \neq -8, 8$$

2. $\frac{16a^2b^4}{3ab^3} \cdot \frac{6a^2b^3}{8a^5b}$

$$\frac{4b^3}{a^2} \quad \begin{array}{l} a \neq 0 \\ b \neq 0 \end{array}$$

3. $\frac{2m^2+9m-5}{3m^2+13m-10} \div \frac{14m-7}{4-9m^2}$

$$\frac{-(3m+2)}{7} \quad m \neq \frac{2}{3}, -5, \frac{1}{2}$$

4. $\frac{2k-3}{3k+24} - \frac{k-11}{3k+24}$

$$\frac{1}{3} \quad k \neq -8$$

5. $\frac{x}{x-2} + \frac{5}{x}$

$$\frac{x^2+5x-10}{x(x-2)} \quad x \neq 0, 2$$

6. $\frac{\frac{k^2-9k}{8} + 10}{\frac{k}{16} + \frac{k+5}{16}}$

$$8(k-4) \quad k \neq 5$$