

Name _____

Due Date _____

Block _____

Rational Functions #4

Simplify each expression. Show your work on another piece of paper.

1. $\frac{3x^2}{4} \cdot \frac{8}{x^4}$

2. $\frac{3}{x} + \frac{2}{5}$

3. $\frac{8x+8}{x+4} \cdot \frac{2x}{x+1}$

4. $\frac{x+2}{x-1} \cdot \frac{x+1}{x+2} \cdot \frac{x}{x+1}$

5. $\frac{x+4}{x+1} + \frac{x+2}{x+2}$

6. $\frac{x+5}{x+2} - \frac{3x}{x+3}$

7. $\frac{x+1}{x-7} \div \frac{x+3}{x+1}$

8. $\frac{7}{x^2+7x+12} + \frac{1}{x+2}$

9. $\frac{x+1}{x^2+6x+8} + \frac{x+3}{x^2+5x+4}$

10. $\frac{x^3+3x^2+3x+1}{x^2+7x+6} + \frac{4x+2}{x}$