

Integrated Algebra I
Unit 3 – Lesson 1 - Rational Expressions Review

Name _____ Pd. _____

Find the Product:

1. $\frac{x-3}{2x+8} \cdot \frac{x+4}{x^2+2x-15}$

2. $\frac{x^2+x-6}{10x^2-20x} \cdot \frac{5x^2+15x}{x^2-2x-15}$

3. $\frac{21}{2x+12} \cdot \frac{4x+24}{15}$

Find the Quotient:

4. $\frac{x^2+3x-10}{3x^2-3x} \div \frac{x^2-8x+12}{x-1}$

5. $\frac{7x+21}{30} \div \frac{21x+63}{20}$

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

Find the Sum: List the LCD:

7. $\frac{11}{2x} + \frac{4}{7x}$

8. $\frac{8x}{x-5} + \frac{3x}{x+2}$

9. $\frac{6}{5x^3} + \frac{7}{15x}$

Find the Difference: List the LCD

10. $\frac{x+9}{x+10} - \frac{3}{x-1}$

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

12. $\frac{x-5}{8x} - \frac{2x}{x+6}$

Solve for X:

13. $\frac{10}{x+2} = \frac{7}{x-4}$

14. $\frac{8}{x+8} = \frac{x}{x+2}$

15. $\frac{3x+2}{2x-5} = \frac{x}{x-1}$

16. $\frac{2x+3}{x+2} + 3x = \frac{-2}{x+2}$

17. $\frac{2x}{x-1} - 2 = \frac{10}{x+2}$