

Integrated Math 3
Unit 7: Modeling Rational Representations
7.5 Worksheet

Name: _____

Date: _____ Period: _____

Mixed Review

Simplify the expressions below, solve the equations or perform the indicated operations. Be sure to determine all and any excluded values.

1. $\frac{15}{x-6} + \frac{7x}{x-6}$

2. $\frac{11x}{4x+9} - \frac{14}{4x+9}$

3. $\frac{4x}{x^2+4x-5} - \frac{5}{4}$

4. $\frac{x^2+6x+5}{x^2+8x+15}$

5. $\frac{x+3}{4} * \frac{3x-18}{3x+9}$

6. $\frac{3x}{7x} + \frac{1}{7}$

$$7. \frac{(x-7)(x+8)}{(x+8)(x-10)} \div \frac{1}{x-10}$$

$$8. \frac{2x}{3x} - \frac{5}{6}$$

$$9. \frac{18}{5x+10} + \frac{4}{5}$$

$$10. \frac{x+3}{x+2} \div \frac{(x-1)(x+3)}{(x-1)^2}$$

$$11. \frac{4x}{x+3} - \frac{4x}{x+6}$$

$$12. -\frac{4x}{x-8} - \frac{11}{x-8}$$

$$13. \frac{2x}{3x+3} - \frac{2}{x+5}$$

$$14. \frac{2}{v^2-12v+27} * \frac{v^2-12v+27}{3}$$

$$15. \frac{3}{6x} - \frac{9}{12}$$

$$16. \frac{3}{4} - \frac{2x}{4x-24}$$

$$17. \frac{x^2 - 2x - 15}{x^2 - 6x + 5}$$

$$18. \frac{x-8}{(x+6)(x-8)} * \frac{4x^2+40x}{x+10}$$

$$19. \frac{2}{5} - \frac{7}{x+6}$$

$$20. \frac{1}{7(x-3)} + \frac{4}{7}$$

