

Name: _____

Unit 10: Rational Expressions



Date: _____ Per: _____

Homework 5: Adding and Subtracting
Rational Expressions

**** This is a 2-page document! ****

Directions: Find each sum or difference. Make sure your answer is simplified.

1. $\frac{7y}{6} - \frac{y}{2} + \frac{2y}{9}$

2. $\frac{3}{4x} + \frac{1}{20x}$

3. $\frac{m-1}{2} - \frac{3m+1}{18}$

4. $\frac{12}{4k-20} - \frac{1}{k-5}$

5. $\frac{x-4}{3x-3} + \frac{1}{x-1}$

6. $\frac{y}{y-8} - \frac{6y+80}{y^2-64}$

7. $\frac{6x}{x^2-4} - \frac{3}{x-2}$

8. $\frac{3w}{w^2-4w} - \frac{1}{w-4}$

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

$$10. \frac{1}{g-6} + \frac{g-17}{g^2-g-30}$$

$$11. \frac{8y-26}{y^2-4y-21} - \frac{3}{y-7}$$

$$12. \frac{x^2-3x-1}{2x^2+5x+2} + \frac{x}{2x+1}$$

$$13. \frac{17}{6a} - \frac{11}{2a} + \frac{1}{3a}$$

$$14. \frac{n-13}{n+2} + \frac{n^2-1}{n^2-4n-12} - \frac{2n-5}{n-6}$$

$$15. \frac{9r-12}{r^2-16} - \frac{r+3}{5r^2+15r} \cdot \frac{15r^2}{r^2+4r}$$

$$16. \left(\frac{v+3}{v+2} + \frac{6}{v-8} \right) \div \frac{2v^2+9v+4}{2v^2+5v+2}$$