

Sec 4.5 - Rational & Radical Relationships
Add & Subtract Rational Expressions

Name: _____

ADD, SUBTRACT, and SIMPLIFY the following Rational Expressions.

1. $\frac{5y}{4y^2} + \frac{12}{4y^2} + \frac{3y}{4y^2}$

2. $\frac{9a^3}{3a^2} - \frac{6a}{3a^2}$

1.

2.

3. $\frac{2t}{3t-12} - \frac{8}{3t-12}$

4. $\frac{w^2}{w^2-9} + \frac{2w-15}{w^2-9}$

3.

4.

5. $\frac{a^2+10}{a^2-4} - \frac{7a}{a^2-4}$

6. $\frac{y^2-13}{y^2-25} + \frac{3(1-y)}{y^2-25}$

5.

6.

ADD, SUBTRACT, and SIMPLIFY the following Rational Expressions (need to first rewrite each with a common denominator).

7. $\frac{2}{y^2} + \frac{1}{3} - \frac{5}{6y^2}$

8. $\frac{x^2-12}{x^2-4} + \frac{2}{x-2}$

7.



8.



9. $\frac{d}{d^2-1} - \frac{d}{d-1}$

10. $\frac{x}{x+1} + \frac{8}{x-2}$

9.



10.



11. $\frac{3}{m+2} + \frac{m^2}{m^2-4} - \frac{1}{m-2}$

12. $\frac{6}{a^2-2a-35} - \frac{2}{a^2+9a+20}$

11.



12.

