

Adding & Subtracting Rational Expressions - Practice Worksheet

Name: _____ Date: _____

Instructions: Simplify each expression. Write your answer as a single fraction in lowest terms. Show all steps including factoring and finding the LCD.

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

.....

2. $\frac{7}{2x} - \frac{3}{2x}$

.....

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

.....

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

.....

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

.....

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

.....

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

.....

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

.....

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

.....

10. $\frac{5}{x^2-1} - \frac{2}{x^2-x}$

.....

Answer Key

1. $\frac{8}{x}$

2. $\frac{2}{x}$

3. $\frac{(2y + 3x)}{(xy)}$

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

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

6. $\frac{(8x-1)}{((x-2)(x+3))}$

7. $\frac{(x-1)}{((x-2)(x+2))}$

8. $\frac{(x^2-3x-6)}{((x+3)(x-1))}$

9. $\frac{(2x+7)}{((x+2)(x+3))}$

10. $\frac{(3x-5)}{(x(x-1)(x+1))}$