

Name: _____

Algebra 2 Week 8: Adding and Subtracting Rationals

#1 – 2: Add or subtract and label any values for which the expression is undefined.

1. $\frac{x-3}{2x+1} + \frac{x-1}{2x+1}$	2. $\frac{3x-4}{x^2+1} - \frac{6x+1}{x^2+1}$
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#3 – 4: Find the LCM.

3. Find the LCM: $x^2 + 3x - 4$ and $x^2 - 3x + 2$	4. Find the LCM: $x^2 - 16$ and $x + 4$
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#5 – 10: Add or subtract and label any values for which the expression is undefined.

5. $\frac{x+4}{x^2-2x-15} + \frac{2}{x-5}$	6. $\frac{-3x}{x^2-9} + \frac{4}{2x-6}$
7. $\frac{3}{x-2} + \frac{2}{x+4}$	8. $\frac{x}{2x+4} - \frac{3}{x+2}$
9. $\frac{x}{3x+9} - \frac{8}{x^2+3x}$	10. $\frac{x}{x-2} - \frac{x-2}{x-5}$