

8.5B

Kuta Software - Infinite Algebra 2

Name \_\_\_\_\_

## Adding/Subtracting Rational Expressions

Date \_\_\_\_\_ Period \_\_\_\_\_

Simplify each expression.

9)  $\frac{3}{x+7} + \frac{4}{x-8}$

$$\frac{7x+4}{(x+7)(x-8)}$$

12)  $\frac{5}{n+5} + \frac{4n}{2n+6}$

$$\frac{15n+15+2n^2}{(n+3)(n+5)}$$

13)  $\frac{2x}{5x+4} + \frac{6x}{2x+3}$

$$\frac{34x^2+30x}{(5x+4)(2x+3)}$$

14)  $\frac{2}{3x^2+12x} + \frac{8}{2x}$

$$\frac{50+12x}{3x(x+4)}$$

15)  $\frac{7n}{n+1} + \frac{8}{n-7}$

$$\frac{7n^2-41n+8}{(n+1)(n-7)}$$

16)  $\frac{2}{n+8} + \frac{4}{n+1}$

$$\frac{6n+34}{(n+1)(n+8)}$$