

Adding/Subtracting Rational Expressions

Date: _____ Period: _____

Simplify each expression.

1) $\frac{x+1}{3x} + \frac{3x+1}{3x}$

2) $\frac{4x+3x}{4x^2+4} - \frac{4x+1}{4x^2+4}$

3) $\frac{5}{x^2+3x+2} + \frac{3x+1}{x^2+3x+2}$

4) $\frac{5}{35x^2+15x+2} + \frac{x+2}{35x^2+15x+2}$

5) $\frac{x+5}{3x+6} + \frac{x+3}{3x+6}$

6) $\frac{x+2}{2x^2+15x+28} + \frac{x+3}{2x^2+15x+28}$

7) $\frac{8}{x+3} - \frac{5}{4}$

8) $4 - \frac{x+5}{(3x+1)(x+2)}$

9) $\frac{6}{x+7} + \frac{6}{x+8}$

10) $\frac{5}{4x^2+4x} + \frac{7}{3}$

11) $\frac{9}{3} + \frac{8}{12x+8}$

12) $\frac{5}{x+1} + \frac{4x}{3x+6}$

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

14) $\frac{5}{2x^2+12x} + \frac{6}{5x}$