

Adding/Subtracting Rational Expressions

Class: _____ Period: _____

Simplify each expression.

1) $\frac{a+1}{3a} + \frac{2a+3}{3a}$

2) $\frac{a+3}{3a+6} - \frac{a+1}{3a+6}$

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

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

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

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

7) $\frac{2}{x+3} - \frac{2}{x}$

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

9) $\frac{1}{x+2} + \frac{1}{x+4}$

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

11) $\frac{2}{3} + \frac{2}{3(2x-3)}$

12) $\frac{2}{x+1} + \frac{2x}{3x+6}$

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

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