

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

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

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

9) $\frac{2}{x+3} + \frac{2}{x+4}$

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

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

12) $\frac{2}{x+3} + \frac{2x}{2x+4}$

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

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