

Adding and Subtracting Rational Functions

Simplify each expression

1. $\frac{5}{6x} + \frac{8}{9x^2}$

2. $\frac{2x+3}{2x^2+13x+20} - \frac{x-2}{2x^2+13x+20}$

3. $\frac{6}{x+5} + \frac{2}{x-8}$

4. $\frac{6}{x-1} - \frac{5x}{4}$

5. $\frac{x}{5x-3} + \frac{7x}{2x+5}$

6. $\frac{7}{3x} - \frac{8}{3x^2-12}$

7. $\frac{5}{n+5} + \frac{4n}{n+3}$

8. $\frac{4}{x+1} - \frac{2}{x+2}$

9. $\frac{7n-2}{n+1} + \frac{8}{n-6}$

10. $\frac{2x-1}{x+5} - \frac{3x+2}{x-4}$

$$11. \frac{7}{x^2+8x+15} - \frac{3}{x-5}$$

$$12. \frac{3x}{x^2-10x+21} + \frac{5}{x-3}$$

$$13. \frac{2x+1}{x^2+6x+8} - \frac{3}{x^2-16}$$

$$14. \frac{10}{x^2-5x-14} + \frac{2}{x^2-4x-21}$$

$$15. \frac{10x}{3x^2-3} + \frac{4}{x-1} + \frac{5}{6x}$$

$$16. \frac{x-2}{5x(x-1)} + \frac{1}{x-1} - \frac{3x+2}{x^2+4x-5}$$