

4.2 Adding and Subtracting Rational Expressions

Simplify each expression.

1) $\frac{4y}{8x^3} + \frac{x-2y}{8x^3}$

2) $\frac{x-6y}{9x^5} + \frac{5x+2y}{9x^5}$

3) $\frac{2}{6} - \frac{2}{4y^2}$

4) $\frac{3x}{2xy} - \frac{4}{2x}$

5) $\frac{n-2}{2n-12} + \frac{2n}{2n-12}$

6) $\frac{2a+6}{8a-24} + \frac{6a}{8a-24}$

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

8) $\frac{3r}{r+2} - \frac{6}{r-5}$

9) $\frac{m-4}{6m^3+12m^2-144m} - \frac{2m+3}{6m^3+12m^2-144m}$

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

11) $\frac{3a}{6a} + \frac{a+4}{a^2-25}$

12) $\frac{a-5}{a^2-a-6} - \frac{3}{5}$