

Rational Equation Operations

Simplify each expression.

1) $\frac{7x}{4} \cdot \frac{6x}{3x^2}$

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

3) $\frac{6m}{6m+3} \cdot \frac{16m^3+8m^2}{8m^2}$

4) $\frac{4p^3-10p^2}{6p+3} \div \frac{10p-4p^2}{6p+3}$

5) $\frac{m-2}{6} \div \frac{m+4}{6m+24}$

6) $\frac{r-5}{12r^2+24r} - \frac{8r+4}{12r^2+24r}$

7) $\frac{6y}{3} + \frac{6}{3y}$

8) $\frac{n+2}{2n-3} - \frac{4}{6}$

9) $\frac{n+3}{(n+5)(4n-5)} - \frac{n+1}{(n+5)(4n-5)}$

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