

Operations with Polynomials - Notes

Simplify each and state the excluded values. Show your work.

$$1) \frac{4}{2n^2 - 2n - 4} + \frac{4}{3}$$

$$2) \frac{v + 1}{v - 6} - \frac{4v}{v + 5}$$

Simplify each and state the excluded values. Show your work.

$$3) \frac{m^2 + 4m + 3}{5m^3 + 5m^2} \cdot \frac{5m^3 - 10m^2}{m^2 + 4m - 12}$$

$$4) \frac{7r^3 - 7r^2}{3r + 18} \cdot \frac{3r - 3}{r^2 - 2r + 1}$$

$$5) \frac{-k^2 + 18k - 80}{6k - 24} \div \frac{k^2 - 18k + 80}{k - 6}$$

$$6) \frac{2x^2 + 12x}{x + 1} \div \frac{2x^2 - 20x}{4x^3 + 4x^2}$$