

Simplify the following rational expressions:

a)  $\left(\frac{10w^3}{15x^2y^2}\right) \left(-\frac{25w}{9x^4y}\right)^{-1}$

b)  $\frac{9x^2 - 4}{3x^2 + 5x + 2} \div \frac{27x^4 - 8x}{9x^4 + 6x^3 + 4x^2}$

c)  $\frac{3}{x^2 - 9} + \frac{1}{x^2 - 2x} - \frac{2}{x^3 + x^2 - 6x}$

$$d) \frac{x}{x-2} + \frac{x}{x-3} \div \frac{x^2+3x}{x^2+x-12}$$

$$e) \frac{\frac{2}{x} - 2}{1 - \frac{1}{x^2}}$$

$$f) \frac{2}{2 + \frac{3}{1 - \frac{4}{x}}}$$

$$g) \frac{4y^2 - x^{-2}}{(x^{-1} - 2y)(x^{-1} + 2y)}$$

**BONUS**