

DERIVADAS

Problema 18:

Hallar la derivada de:

$$y = \frac{x^3 + 1}{x^2 - x - 2}$$

Solución Problema 18:

$$y = \frac{x^3 + 1}{x^2 - x - 2}$$

$$y' = \frac{[3x^2 \cdot (x^2 - x - 2)] - [(2x - 1)(x^3 + 1)]}{(x^2 - x - 2)^2}$$

$$y' = \frac{3x^4 - 3x^3 - 6x^2 - (2x^4 - x^3 + 2x - 1)}{(x^2 - x - 2)^2}$$

$$y' = \frac{3x^4 - 3x^3 - 6x^2 - 2x^4 + x^3 - 2x + 1}{(x^2 - x - 2)^2}$$

$$y' = \frac{x^4 - 2x^3 - 6x^2 - 2x + 1}{(x^2 - x - 2)^2}$$