

DERIVADAS

Problema 11:

Hallar la derivada de:

$$y = (1 + 4x^3) \cdot (1 + 2x^2)$$

Solución Problema 11:

$$y = (1 + 4x^3) \cdot (1 + 2x^2)$$

$$y' = (3 \cdot 4x^2)(1 + 2x^2) + (2 \cdot 2x)(1 + 4x^3)$$

$$y' = (12x^2)(1 + 2x^2) + (4x)(1 + 4x^3)$$

$$y' = 12x^2 + 24x^4 + 4x + 16x^4$$

$$y' = 12x^2 + 4x + 40x^4 = 40x^4 + 12x^2 + 4x$$

$$y' = 4x(10x^3 + 3x + 1)$$