

$$y = (3x^4 - x^2 - 4)^3$$

$$y = (3x^4 - x^2 - 4)^3 \quad \text{und} \quad u = 3x^4 - x^2 - 4$$

$$y' = 3(3x^4 - x^2 - 4)^2 \quad u' = 12x^3 - 2x$$

$$\begin{aligned} y' &= 3(3x^4 - x^2 - 4)^2 \cdot (12x^3 - 2x) \\ &= 6x(6x^2 - 1)(3x^4 - x^2 - 4)^2 \end{aligned}$$