

EJERCICIOS DERIVADAS

$$\circ f(x) = 4 \longrightarrow f'(x) = 0$$

$$\circ f(x) = 3x^2 \longrightarrow f'(x) = 6x$$

$$\circ f(x) = 3x^5 - x^3 \longrightarrow f'(x) = 15x^4 - 3x^2$$

$$\circ f(x) = x \longrightarrow f'(x) = 1$$

$$\circ f(x) = x^4 + 4 \longrightarrow f'(x) = 4x^3$$

$$\circ f(x) = a^5 \longrightarrow f'(x) = 0$$

$$\circ f(x) = ax^2 + bx + c \longrightarrow f'(x) = 2ax + b$$

$$\circ f(x) = (x + 1)(x^2 - x + 3) \longrightarrow f'(x) = 3x^2 + 2$$

$$\circ f(x) = x(x - 1)^2 \longrightarrow f'(x) = 3x^2 - 4x + 1$$

- $f(x) = x^{-2} \longrightarrow f'(x) = \frac{-2}{x^3}$
- $f(x) = \frac{1}{x+1} \longrightarrow f'(x) = \frac{-1}{(x+1)^2}$
- $f(x) = \frac{x^2 - 3}{x^3 + x} \longrightarrow f'(x) = \frac{-x^4 + 10x^2 + 3}{(x^3 + x)^2}$
- $f(x) = \frac{x+1}{x} \longrightarrow f'(x) = \frac{-1}{x^2}$
- $f(x) = \sqrt{3x-2} \longrightarrow f'(x) = \frac{3}{2\sqrt{3x-2}}$
- $f(x) = (x^2 + x)^3 \longrightarrow f'(x) = (x^2 + x)^2 (6x + 3)$
- $f(x) = (3x + x^2)^{100} \longrightarrow f'(x) = 100 (3x + x^2)^{99} (3 + 2x)$
- $f(x) = \frac{x}{\sqrt{3x}} \longrightarrow f'(x) = \frac{\sqrt{3}x - x \frac{3}{2\sqrt{3x}}}{3x}$