

Calcula las derivadas de las siguientes funciones:

$$f(x) = 2 \qquad f'(x) = 0$$

$$f(x) = \frac{\sqrt{3}}{5} \qquad f'(x) = 0$$

$$f(x) = x \qquad f'(x) = 1$$

$$f(x) = 2x + 1 \qquad f'(x) = 2$$

$$f(x) = 4x - 5 \qquad f'(x) = 4$$

$$f(x) = 6 - 3x \qquad f'(x) = -3$$

$$f(x) = x^2 \qquad f'(x) = 2x$$

$$f(x) = x^3 \qquad f'(x) = 3x^2$$

$$f(x) = x^5 \qquad f'(x) = 5x^4$$

$$f(x) = x^7 \qquad f'(x) = 7x^6$$

$$f(x) = x^6 \qquad f'(x) = 6x^5$$

$$f(x) = x^{20} \qquad f'(x) = 20x^{19}$$

$$f(x) = 2x^2 \qquad f'(x) = 4x$$

$$f(x) = 4x^3 \qquad f'(x) = 12x^2$$

$$f(x) = -5x^6 \qquad f'(x) = -30x^5$$

$$f(x) = -4x^3 + 2x - 1 \qquad f'(x) = -12x^2 + 2$$

$$f(x) = 3x^2 + 4x - 8 \qquad f'(x) = 6x + 4$$

$$f(x) = x^5 - 4x^3 \qquad f'(x) = 5x^4 - 12x^2$$

$$f(x) = \sqrt{2}x^3 - \frac{3}{4}x^2 \qquad f'(x) = 3\sqrt{2}x^2 - \frac{3}{2}x$$

$$f(x) = (x + 1)^2 \qquad f'(x) = 2(x + 1)$$

$$f(x) = (x + 1)^3 \qquad f'(x) = 3(x + 1)^2$$

$$f(x) = (2x - 1)^2 \qquad f'(x) = 4(2x - 1)$$

$$f(x) = (x^2 + 1)^5 \qquad f'(x) = 10x(x^2 + 1)^4$$

$$f(x) = \frac{1}{x}$$

$$f'(x) = \frac{-1}{x^2}$$

$$f(x) = \frac{1}{x^2}$$

$$f'(x) = \frac{-2}{x^3}$$

$$f(x) = \frac{1}{x^4}$$

$$f'(x) = \frac{-4}{x^5}$$

$$f(x) = \frac{1}{x^{20}}$$

$$f'(x) = \frac{-20}{x^{21}}$$

$$f(x) = \frac{2}{x}$$

$$f'(x) = \frac{-2}{x^2}$$

$$f(x) = \frac{1}{3x^2}$$

$$f'(x) = \frac{-2}{3x^3}$$

$$f(x) = \frac{1}{x} + \frac{3}{x^2} + \frac{1}{3x^5}$$

$$f'(x) = \frac{-1}{x^2} - \frac{6}{x^3} - \frac{5}{3x^6}$$

$$f(x) = \sqrt{x}$$

$$f'(x) = \frac{1}{2\sqrt{x}}$$

$$f(x) = \sqrt[3]{x}$$

$$f'(x) = \frac{1}{3\sqrt[3]{x^2}}$$

$$f(x) = \sqrt{2x}$$

$$f'(x) = \frac{1}{\sqrt{2x}}$$

$$f(x) = \sqrt{3x^3}$$

$$f'(x) = \frac{9x^2}{2\sqrt{3x^3}}$$

$$f(x) = 2\sqrt{x}$$

$$f'(x) = \frac{1}{\sqrt{x}}$$

$$f(x) = \frac{1}{\sqrt{x}}$$

$$f'(x) = \frac{-1}{2\sqrt{x^3}}$$

$$f(x) = \sqrt[3]{2x} + \frac{2}{\sqrt{x}}$$

$$f'(x) = \frac{2}{3\sqrt[3]{4x^2}} - \frac{1}{\sqrt{x^3}}$$

$$f(x) = e^x$$

$$f'(x) = e^x$$

$$f(x) = 2^x$$

$$f'(x) = 2^x \ln 2$$

$$f(x) = 5^x$$

$$f'(x) = 5^x \ln 5$$

$$f(x) = e^{x+2}$$

$$f'(x) = e^{x+2}$$

$$f(x) = e^{x^2}$$

$$f'(x) = 2x e^{x^2}$$

$$f(x) = e^{2x^3+5}$$

$$f'(x) = 6x^2 e^{2x^3+5}$$

$$f(x) = \log_2 x$$

$$f'(x) = \frac{1}{x} \log_2 e$$

$$f(x) = \log_3 x$$

$$f'(x) = \frac{1}{x} \log_3 e$$

$$f(x) = \log_5 x$$

$$f'(x) = \frac{1}{x} \log_5 e$$

$$f(x) = \log_5(x+3)$$

$$f'(x) = \frac{1}{x+3} \log_5 e$$

$$f(x) = \ln(x+5)$$

$$f'(x) = \frac{1}{x+5}$$

$$f(x) = \ln(x^2+1)$$

$$f'(x) = \frac{2x}{x^2+1}$$

$$f(x) = \ln \sqrt{x}$$

$$f'(x) = \frac{1}{2x}$$

$$f(x) = \sin(2x+1)$$

$$f'(x) = 2 \cos(2x+1)$$

$$f(x) = \sin(x^2+3)$$

$$f'(x) = 2x \cos(x^2+3)$$

$$f(x) = \sin(-2x+1)$$

$$f'(x) = -2 \cos(-2x+1)$$

$$f(x) = \sin \sqrt{x}$$

$$f'(x) = \frac{1}{2\sqrt{x}} \cos \sqrt{x}$$

$$f(x) = \sin(x+1)^2$$

$$f'(x) = 2(x+1) \cos(x+1)^2$$

$$f(x) = \cos(2+3x)$$

$$f'(x) = -3 \sin(2+3x)$$

$$f(x) = \cos(x+3)^2$$

$$f'(x) = -2(x+3) \sin(x+3)^2$$

$$f(x) = \cos(-2x+1)$$

$$f'(x) = 2 \sin(-2x+1)$$

$$f(x) = \frac{x}{x+3}$$

$$f'(x) = \frac{3}{(x+3)^2}$$

$$f(x) = \frac{x^2}{x-3}$$

$$f'(x) = \frac{x^2 - 6x}{(x-3)^2}$$

$$f(x) = \frac{3x}{x^2 - 1}$$

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

$$f(x) = \frac{\text{sen}x}{x+1}$$

$$f'(x) = \frac{(x+1)\cos x - \text{sen}x}{(x+1)^2}$$

$$f(x) = \frac{\text{sen}x}{\cos x}$$

$$f'(x) = \frac{1}{\cos^2 x}$$

$$f(x) = x \cdot \text{Ln} x$$

$$f'(x) = \text{Ln} x + 1$$

$$f(x) = x \cdot \text{sen} x$$

$$f'(x) = \text{sen} x + x \cos x$$

$$f(x) = (x^2 + 1) \cdot e^x$$

$$f'(x) = (x+1)^2 e^x$$

$$f(x) = \text{sen} x \cdot \cos x$$

$$f'(x) = \cos^2 x - \text{sen}^2 x = \cos 2x$$