

Derivadas

Indicar V o F

1) $f(x) = \ln(x^3)$

$$f'(x) = 3x$$

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

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

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

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

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

$$f''(x) = \frac{-2}{\sqrt[3]{3x^5}} - 4$$

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

$$f'''(x) = \frac{18}{x^4}$$

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

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

4) $f(x) = \sin^3 x$

$$f''(x) = 6\sin x \cos^2 x - 3\sin^3 x$$

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

$$f'''(x) = 6\sin x$$

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

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

$$f''(x) = \frac{1}{6x}$$

$$f'''(x) = \frac{1}{6}$$

6) $f(x) = 2x^3 \cdot \ln x$

$$f'(x) = 10x^2 \cdot \ln x$$

$$f''(x) = 10x + 12x \cdot \ln x$$

$$f'''(x) = 22x \cdot \ln x$$