

Derivadas usuales

$$y = a, \quad a \in \mathbb{R}$$

$$y' = 0$$

$$y = x$$

$$y' = 1$$

$$y = f(x) + g(x)$$

$$y' = f'(x) + g'(x)$$

$$y = f(x) \cdot g(x)$$

$$y' = f'(x) \cdot g(x) + f(x) \cdot g'(x)$$

$$y = a \cdot f(x), \quad a \in \mathbb{R}$$

$$y' = a \cdot f'(x)$$

$$y = f(x)^m, \quad m \in \mathbb{R}$$

$$y' = m \cdot f(x)^{m-1} \cdot f'(x)$$

$$y = \frac{f(x)}{g(x)}$$

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

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

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

$$y = \ln f(x)$$

$$y' = \frac{f'(x)}{f(x)}$$

$$y = f(x)^{g(x)}$$

$$y' = g(x) \cdot f(x)^{g(x)-1} \cdot f'(x) + f(x)^{g(x)} \cdot g'(x) \cdot \ln f(x)$$

$$y = a^{f(x)}, \quad a \in \mathbb{R}$$

$$y' = a^{f(x)} \cdot f'(x) \cdot \ln a$$

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

$$y' = e^{f(x)} \cdot f'(x)$$

$$y = \operatorname{sen} f(x)$$

$$y' = f'(x) \cdot \cos f(x)$$

$$y = \cos f(x)$$

$$y' = -f'(x) \cdot \operatorname{sen} f(x)$$

$$y = \tan f(x)$$

$$y' = \frac{f'(x)}{\cos^2 f(x)} = f'(x) \cdot (1 + \tan^2 f(x))$$

$$y = \arcsen f(x)$$

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

$$y = \arccos f(x)$$

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

$$y = \arctan f(x)$$

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