| REGRAS GERAIS | REGRAS PARTICULARES |
|---|---|
| $k' = 0$ <br> $(f \pm g)' = f' \pm g'$ | |
| $(kf)' = kf'$ | $(kx)' = k$ , $\quad x' = 1$ |
| $(f \cdot g)' = f' \cdot g + f \cdot g'$ | |
| $(f^n)' = n \cdot f^{n-1} \cdot f'$ | $(x^n)' = n \cdot x^{n-1}$ |
| $\left(\dfrac{f}{g}\right)' = \dfrac{f' \cdot g - f \cdot g'}{g^2}$ | $\left(\dfrac{k}{f}\right)' = -\dfrac{k \cdot f'}{f^2}$ |
| | $\left(\dfrac{1}{x}\right)' = -\dfrac{1}{x^2}$ |
| $\left(\sqrt{f}\right)' = \dfrac{f'}{2\sqrt{f}}$ $\qquad$ $\left(\sqrt[n]{f}\right)' = \dfrac{f'}{n\sqrt[n]{f^{n-1}}}$ | $\left(\sqrt{x}\right)' = \dfrac{1}{2\sqrt{x}}$ |
| $(e^f)' = f' \cdot e^f$ | $(e^x)' = e^x$ |
| $(a^f)' = f' \cdot a^f \cdot \ln a$ | $(a^x)' = a^x \cdot \ln a$ |
| $(\ln f)' = \dfrac{f'}{f}$ | $(\ln x)' = \dfrac{1}{x}$ |
| $(\log_a f)' = \dfrac{f'}{f \cdot \ln a}$ | $(\log_a x)' = \dfrac{1}{x \cdot \ln a}$ |
| $(\sin f)' = f' \cdot \cos f$ | $(\sin x)' = \cos x$ |
| $(\cos f)' = -f' \cdot \sin f$ | $(\cos x)' = -\sin x$ |
| $(\tan f)' = \dfrac{f'}{\cos^2 f}$ | $(\tan x)' = \dfrac{1}{\cos^2 x}$ |
| $(\arctan f)' = \dfrac{f'}{1+f^2}$ | $(\arctan x)' = \dfrac{1}{1+x^2}$ |
| $(f \circ g)'(x) = f'[g(x)] \cdot g'(x)$ $\quad$ com $\quad y = f(x), \; x = g(t)$ | |
| $\left(f^{-1}\right)'(y) = \dfrac{1}{f'(x)}$ $\quad$ com $\quad y = f(x)$ e $f'(x) \neq 0$ | |