

Regra da cadeia – Lucas Barbosa Brancalhão

Regra da Cadeia

- 1- $y = (4x+2)^5 \Rightarrow y' = 5 \cdot (4x+2)^4 \cdot 4 = 20(4x+2)^4$
- 2- $y = (x^3+x)^6 \Rightarrow y' = 6 \cdot (x^3+x)^5 \cdot (3x^2+1)$
- 3- $f(x) = \sin(x^2+2) \Rightarrow f' = \cos(x^2+2) \cdot 2x$
- 4- $f(x) = \cos(x^3) \Rightarrow f' = -\sin(x^3) \cdot 3x^2$
- 5- $y = e^{x^2} \Rightarrow y' = e^{x^2} \cdot 2x$
- 6- $y = e^{x+2} \Rightarrow y' = e^{x+2} \cdot 1 = e^{x+2}$
- 7- $y = \sin(e^x) \Rightarrow y' = \cos(e^x) \cdot e^x = e^x \cdot \cos e^x$
- 8- $y = \sin(\cos x) \Rightarrow y' = \cos(\cos x) \cdot (-\sin x)$
 $y' = -\sin x \cdot \cos(\cos x)$

9) $y = e^{\sin x} \Rightarrow y' = e^{\sin x} \cdot \cos x$

10) $y = e^{\cos x} \Rightarrow y' = e^{\cos x} \cdot (-\sin x) = -\sin x \cdot e^{\cos x}$