

Regras de Derivação

K constante, $n \in \mathbb{R} \setminus \{-1\}$, u e v funções diferenciáveis

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| 1. $K' = 0$ | 17. $(\operatorname{arccotg} u)' = -\frac{u'}{1+u^2}$ |
| 2. $(Ku)' = Ku'$ | 18. $(\operatorname{arcsec} u)' = \frac{u'}{ u \sqrt{u^2-1}}$ |
| 3. $(x^n)' = nx^{n-1}$ | 19. $(\operatorname{arccosec} u)' = -\frac{u'}{ u \sqrt{u^2-1}}$ |
| 4. $(u^n)' = nu^{n-1}u'$ | 20. $(e^x)' = e^x$ |
| 5. $(u+v)' = u' + v'$ | 21. $(e^u)' = u'e^u$ |
| 6. $(u.v)' = u'v + uv'$ | 22. $(a^u)' = u'a^u \ln a$ |
| 7. $\left(\frac{u}{v}\right)' = \frac{u'v - uv'}{v^2}$ | 23. $(\ln x)' = \frac{1}{x}$ |
| 8. $(\sin u)' = u' \cos u$ | 24. $(\ln u)' = \frac{u'}{u}$ |
| 9. $(\cos u)' = -u' \sin u$ | 25. $(\log_a u)' = \frac{u'}{u \ln a}$ |
| 10. $(\tan u)' = u' \sec^2 u$ | 26. $(u^v)' = vu^{v-1}u' + u^v v' \ln u$ |
| 11. $(\cotg u)' = -u' \operatorname{cosec}^2 u$ | 27. $(\operatorname{sh} u)' = u' \operatorname{ch} u$ |
| 12. $(\sec u)' = u' \sec u \tan u$ | 28. $(\operatorname{ch} u)' = u' \operatorname{sh} u$ |
| 13. $(\operatorname{cosec} u)' = -u' \operatorname{cosec} u \cotg u$ | 29. $(\operatorname{tgh} u)' = u' \operatorname{sech}^2 u$ |
| 14. $(\arcsin u)' = \frac{u'}{\sqrt{1-u^2}}$ | 30. $(\operatorname{argsh} u)' = \frac{u'}{\sqrt{u^2+1}}$ |
| 15. $(\arccos u)' = -\frac{u'}{\sqrt{1-u^2}}$ | 31. $(\operatorname{argch} u)' = \frac{u'}{\sqrt{u^2-1}}$ |
| 16. $(\operatorname{arctg} u)' = \frac{u'}{1+u^2}$ | 32. $(\operatorname{argtgh} u)' = \frac{u'}{1-u^2}$ |