

Tabela de Derivadas

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|--|---|
| 1. $k' = 0$ | 12. $(\ln u)' = \frac{u'}{u}$ |
| 2. $x' = 1$ | 13. $(\log_a u)' = \frac{u'}{u \cdot \ln a}$ |
| 3. $(u \pm v)' = u' \pm v'$ | 14. $(\operatorname{sen} u)' = u' \cos u$ |
| 4. $(k v)' = k v'$ | 15. $(\cos u)' = -u' \operatorname{sen} u$ |
| 5. $(u v)' = u' v + v' u$ | 16. $(\operatorname{tg} u)' = u' \sec^2 u$ |
| 6. $\left(\frac{u}{v}\right)' = \frac{u' v - v' u}{v^2}$ | 17. $(\operatorname{cotg} u)' = -u' \operatorname{cosec}^2 u$ |
| 7. $\left(\frac{k}{v}\right)' = \frac{-k v'}{v^2}$ | 18. $(\sec u)' = u' \sec u \operatorname{tg} u$ |
| 8. $(u^k)' = k u^{k-1} u'$ | 19. $(\operatorname{cosec} u)' = -u' \operatorname{cosec} u \operatorname{cotg} u$ |
| 9. $(\sqrt{u})' = \frac{u'}{2 \sqrt{u}}$ | 20. $(\operatorname{arc} \operatorname{tg} u)' = \frac{u'}{1+u^2} = (\operatorname{tg}^{-1} u)'$ |
| 10. $(e^u)' = u' e^u$ | 21. $(\operatorname{arc} \operatorname{sen} u)' = \frac{u'}{\sqrt{1-u^2}} = (\operatorname{sen}^{-1} u)'$ |
| 11. $(a^u)' = u' a^u \ln a$ | 22. $(\operatorname{arc} \cos u)' = \frac{-u'}{\sqrt{1-u^2}} = (\cos^{-1} u)'$ |

Obs. **k** e **a** são constantes, **a**>0, **a**≠1; **u** e **v** são funções de **x**; **e**≅2,7182 é o número de Euler