PRIMITIVAS

Sejam $u \equiv u(x)$ e $v \equiv v(x)$ funções deriváveis.

1. $\displaystyle\int 0\,dx = C$ 2. $\displaystyle\int 1\,dx = x + C$

3. $\displaystyle\int u'u^r\,dx = \frac{1}{r+1}u^{r+1} + C, \quad r \neq -1$ 4. $\displaystyle\int \frac{u'}{u}\,dx = \ln|u| + C$

5. $\displaystyle\int u'e^u\,dx = e^u + C$ 6. $\displaystyle\int a^u u'\,dx = \frac{1}{\ln a}a^u + C, \quad a \in \mathbb{R}^+$

7. $\displaystyle\int u'\,\text{sen}(u)\,dx = -\cos(u) + C$ 8. $\displaystyle\int u'\cos(u)\,dx = \text{sen}(u) + C$

9. $\displaystyle\int u'\sec^2(u)\,dx = \text{tg}(u) + C$ 10. $\displaystyle\int u'\text{cosec}^2(u)\,dx = -\text{cotg}(u) + C$

11. $\displaystyle\int u'\sec(u)\,\text{tg}(u)\,dx = \sec(u) + C$ 12. $\displaystyle\int u'\text{cosec}(u)\,\text{cotg}(u)\,dx = -\text{cosec}(u) + C$

13. $\displaystyle\int u'\,\text{senh}(u)\,dx = \cosh(u) + C$ 14. $\displaystyle\int u'\cosh(u)\,dx = \text{senh}(u) + C$

15. $\displaystyle\int u'\,\text{sech}^2(u)\,dx = \text{tgh}(u) + C$ 16. $\displaystyle\int u'\,\text{cosech}^2(u)\,dx = -\text{cotgh}(u) + C$

17. $\displaystyle\int \frac{u'}{\sqrt{1-u^2}}\,dx = \arcsin(u) + C = -\arccos(u) + C$

18. $\displaystyle\int \frac{u'}{1+u^2}\,dx = \text{arctg}(u) + C = -\text{arccotg}(u) + C$

19. $\displaystyle\int \frac{u'}{u\sqrt{u^2-1}}\,dx = \text{arcsec}(u) + C = -\text{arccosec}(u) + C$

20. $\displaystyle\int \frac{u'}{\sqrt{u^2+1}}\,dx = \text{argsh}(u) + C \equiv \ln\left|u + \sqrt{u^2+1}\right| + C$

21. $\displaystyle\int \frac{u'}{\sqrt{u^2-1}}\,dx = \text{argch}(u) + C \equiv \ln\left|u + \sqrt{u^2-1}\right| + C$

22. $\displaystyle\int \frac{u'}{1-u^2}\,dx = \text{argtgh}(u) + C = -\text{argcotgh}(u) + C \equiv \frac{1}{2}\ln\left|\frac{1+u}{1-u}\right| + C$