

Regras de Primitivação Imediata

k constante, $n \in \mathbb{R} \setminus \{-1\}$, u e v funções,
 $a \in \mathbb{R}^+ \setminus \{1\}$

1. $Pk = kx$
2. $Px^n = \frac{x^{n+1}}{n+1}$
3. $Pu'u^n = \frac{u^{n+1}}{n+1}$
4. $P\frac{1}{x} = \ln |x|$
5. $P\frac{u'}{u} = \ln |u|$
6. $Pe^u u' = e^u$
7. $Pa^u u' = \frac{a^u}{\ln a}$
8. $Pu' \sin u = -\cos u$
9. $Pu' \cos u = \sin u$
10. $Pu' \sec^2 u = \tan u$
11. $Pu' \operatorname{cosec}^2 u = -\cotan u$
12. $Pu' \sec u \tan u = \sec u$
13. $Pu' \operatorname{cosec} u \cotan u = -\operatorname{cosec} u$
14. $P\frac{u'}{1+u^2} = \arctan u$
15. $P\frac{u'}{\sqrt{1-u^2}} = \arcsin u$
16. $P\frac{u'}{|u|\sqrt{u^2-1}} = \operatorname{arcsec} u$
17. $Pu' \operatorname{sh} u = \operatorname{ch} u$
18. $Pu' \operatorname{ch} u = \operatorname{sh} u$
19. $Pu' \operatorname{sech}^2 u = \tanh u$
20. $Pu' \operatorname{cosech}^2 u = -\cotanh u$
21. $Pu' \operatorname{sech} u \tanh u = -\operatorname{sech} u$
22. $Pu' \operatorname{cosech} u \cotanh u = -\operatorname{cosech} u$
23. $P\frac{u'}{\sqrt{u^2+1}} = \operatorname{argsh} u$
24. $P\frac{u'}{\sqrt{u^2-1}} = \operatorname{argch} u$

Algumas primitivas quase imediatas

- $Pu' \tan u = -\ln |\cos u|$
- $Pu' \cotan u = \ln |\sin u|$
- $Pu' \sec u = \ln |\sec u + \tan u|$
- $Pu' \operatorname{cosec} u = -\ln |\operatorname{cosec} u + \cotan u|$

Propriedades:

- $P(u+v) = Pu + Pv$
- $Pku = kPu$

Primitivação por partes:

$$Puv' = uv - Pu'v$$