Primitivas Imediatas

Na lista de primitivas que se segue, $f : I \longrightarrow \mathbb{R}$ é uma função derivável no intervalo I e $\mathcal{C}$ denota uma constante real arbitrária.

1. $\mathrm{P}\,(a) = ax + \mathcal{C}$

2. $\mathrm{P}\,(f' f^\alpha) = \dfrac{f^{\alpha+1}}{\alpha+1} + \mathcal{C} \ \ (\alpha \neq -1)$

3. $\mathrm{P}\left(\dfrac{f'}{f}\right) = \log|f| + \mathcal{C}$

4. $\mathrm{P}\,(a^f f') = \dfrac{a^f}{\log a} + \mathcal{C} \ \ (a \in \mathbb{R}^+ \setminus 1)$

5. $\mathrm{P}\,(f' \cos f) = \operatorname{sen} f + \mathcal{C}$

6. $\mathrm{P}\,(f' \operatorname{sen} f) = -\cos f + \mathcal{C}$

7. $\mathrm{P}\left(\dfrac{f'}{\cos^2 f}\right) = \operatorname{tg} f + \mathcal{C}$

8. $\mathrm{P}\left(\dfrac{f'}{\operatorname{sen}^2 f}\right) = -\operatorname{cotg} f + \mathcal{C}$

9. $\mathrm{P}\,(f' \operatorname{tg} f) = -\log|\cos f| + \mathcal{C}$

10. $\mathrm{P}\,(f' \operatorname{cotg} f) = \log|\operatorname{sen} f| + \mathcal{C}$

11. $\mathrm{P}\left(\dfrac{f'}{\cos f}\right) = \log\left|\dfrac{1}{\cos f} + \operatorname{tg} f\right| + \mathcal{C}$

12. $\mathrm{P}\left(\dfrac{f'}{\operatorname{sen} f}\right) = \log\left|\dfrac{1}{\operatorname{sen} f} - \operatorname{cotg} f\right| + \mathcal{C}$

13. $\mathrm{P}\left(\dfrac{f'}{\sqrt{1-f^2}}\right) = \operatorname{arcsen} f + \mathcal{C}$

14. $\mathrm{P}\left(\dfrac{-f'}{\sqrt{1-f^2}}\right) = \arccos f + \mathcal{C}$

15. $\mathrm{P}\left(\dfrac{f'}{1+f^2}\right) = \operatorname{arctg} f + \mathcal{C}$

16. $\mathrm{P}\left(\dfrac{-f'}{1+f^2}\right) = \operatorname{arccotg} f + \mathcal{C}$

17. $\mathrm{P}\,(f' \operatorname{ch} f) = \operatorname{sh} f + \mathcal{C}$

18. $\mathrm{P}\,(f' \operatorname{sh} f) = \operatorname{ch} f + \mathcal{C}$

19. $\mathrm{P}\left(\dfrac{f'}{\operatorname{ch}^2 f}\right) = \operatorname{th} f + \mathcal{C}$

20. $\mathrm{P}\left(\dfrac{f'}{\operatorname{sh}^2 f}\right) = -\coth f + \mathcal{C}$

21. $\mathrm{P}\left(\dfrac{f'}{\sqrt{f^2+1}}\right) = \operatorname{argsh} f + \mathcal{C}$

22. $\mathrm{P}\left(\dfrac{f'}{\sqrt{f^2-1}}\right) = \operatorname{argch} f + \mathcal{C}$

23. $\mathrm{P}\left(\dfrac{f'}{1-f^2}\right) = \operatorname{argth} f + \mathcal{C}$

24. $\mathrm{P}\left(\dfrac{f'}{1-f^2}\right) = \operatorname{argcoth} f + \mathcal{C}$