

MAT 1352 - IFUSP - Cálculo II
Segundo semestre de 2023
Prof. Oswaldo Rio Branco de Oliveira

Tabela de Primitivas

1. $\int c \, dx = cx + k$
2. $\int x^\alpha \, dx = \frac{x^{\alpha+1}}{\alpha+1} + k, (\alpha \neq -1)$
3. $\int e^x \, dx = e^x + k$
4. $\int \frac{1}{x} \, dx = \ln |x| + k, x \neq 0$
5. $\int \cos x \, dx = \text{sen } x + k$
6. $\int \text{sen } x \, dx = -\cos x + k$
7. $\int \sec^2 x \, dx = \text{tg } x + k$
8. $\int \sec x \, \text{tg } x \, dx = \sec x + k$
9. $\int \sec x \, dx = \ln |\sec x + \text{tg } x| + k$
10. $\int \text{tg } x \, dx = \ln |\sec x| + k$
11. $\int \frac{1}{1+x^2} \, dx = \text{arctg } x + k$
12. $\int \frac{dx}{\sqrt{1-x^2}} = \text{arcsen } x + k$

Fórmulas para Primitivas

1. $\int \frac{f'(x)}{f(x)} \, dx = \ln |f(x)| + k$
2. $\int e^{f(x)} f'(x) \, dx = e^{f(x)} + k$
3. $\int f(x)^\alpha f'(x) \, dx = \frac{f(x)^{\alpha+1}}{\alpha+1} + k, \alpha \neq -1$
4. $\int [\cos f(x)] f'(x) \, dx = \text{sen } f(x) + k$