

Tabela de Primitivas

Seja f uma função diferenciável.

$$\mathbf{1} \quad \int f'(x)(f(x))^p dx = \frac{(f(x))^{p+1}}{p+1} + C, \quad C \in \mathbb{R}, \quad p \in \mathbb{R} \setminus \{-1\}$$

$$\mathbf{2} \quad \int \frac{f'(x)}{f(x)} dx = \ln |f(x)| + C, \quad C \in \mathbb{R}$$

$$\mathbf{3} \quad \int f'(x)e^{f(x)} dx = e^{f(x)} + C, \quad C \in \mathbb{R}$$

$$\mathbf{4} \quad \int f'(x)a^{f(x)} dx = \frac{a^{f(x)}}{\ln a} + C, \quad C \in \mathbb{R}, \quad a \in \mathbb{R}^+ \setminus \{1\}$$

$$\mathbf{5} \quad \int f'(x) \sin(f(x)) dx = -\cos(f(x)) + C, \quad C \in \mathbb{R}$$

$$\mathbf{6} \quad \int f'(x) \cos(f(x)) dx = \sin(f(x)) + C, \quad C \in \mathbb{R}$$

$$\mathbf{7} \quad \int f'(x) \sec^2(f(x)) dx = \tan(f(x)) + C, \quad C \in \mathbb{R}$$

$$\mathbf{8} \quad \int f'(x) \operatorname{cosec}^2(f(x)) dx = -\cotg(f(x)) + C, \quad C \in \mathbb{R}$$

$$\mathbf{9} \quad \int \frac{f'(x)}{\sqrt{1-(f(x))^2}} dx = \arcsen(f(x)) + C, \quad C \in \mathbb{R}$$

$$\mathbf{10} \quad \int \frac{f'(x)}{1+(f(x))^2} dx = \arctg(f(x)) + C, \quad C \in \mathbb{R}$$

$$\mathbf{11} \quad \int f'(x) \sec(f(x)) \tan(f(x)) dx = \sec(f(x)) + C, \quad C \in \mathbb{R}$$

$$\mathbf{12} \quad \int f'(x) \operatorname{cosec}(f(x)) \cotg(f(x)) dx = -\operatorname{cosec}(f(x)) + C, \quad C \in \mathbb{R}$$