

## Tabela de Integrais Indefinidos Imediatos

$$\text{T1. } \int x^p dx = \frac{x^{p+1}}{p+1} + C, \quad C \in \mathbb{R}, \quad p \in \mathbb{R} \setminus \{-1\}$$

$$\text{T2. } \int \frac{1}{x} dx = \ln |x| + C, \quad C \in \mathbb{R}, \quad (\text{onde } x \in \mathbb{R}^+ \text{ ou } x \in \mathbb{R}^-)$$

$$\text{T3. } \int e^x dx = e^x + C, \quad C \in \mathbb{R}$$

$$\text{T4. } \int a^x dx = \frac{a^x}{\ln a} + C, \quad C \in \mathbb{R}, \quad a \in \mathbb{R}^+ \setminus \{1\}$$

$$\text{T5. } \int \sin x dx = -\cos x + C, \quad C \in \mathbb{R}$$

$$\text{T6. } \int \cos x dx = \sin x + C, \quad C \in \mathbb{R}$$

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12/10/2022

7 / 30

$$\text{T7. } \int \sec^2 x dx = \operatorname{tg} x + C, \quad C \in \mathbb{R}$$

$$\text{T8. } \int \operatorname{cosec}^2 x dx = -\operatorname{cotg} x + C, \quad C \in \mathbb{R}$$

$$\text{T9. } \int \frac{1}{\sqrt{1-x^2}} dx = \arcsen x + C, \quad C \in \mathbb{R}$$

$$\text{T10. } \int \frac{1}{1+x^2} dx = \operatorname{arctg} x + C, \quad C \in \mathbb{R}$$

$$\text{T11. } \int \sec x \operatorname{tg} x dx = \sec x + C, \quad C \in \mathbb{R}$$

$$\text{T12. } \int \operatorname{cosec} x \operatorname{cotg} x dx = -\operatorname{cosec} x + C, \quad C \in \mathbb{R}$$

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12/10/2022

8 / 30

## Lista de Integrais Indefinidos Quase Imediatos

$$\text{G1. } \int g'(x) g^p(x) dx = \frac{g^{p+1}(x)}{p+1} + C, \quad C \in \mathbb{R} \quad (\text{onde } p \in \mathbb{R} \setminus \{-1\})$$

$$\text{G2. } \int \frac{g'(x)}{g(x)} dx = \ln |g(x)| + C, \quad C \in \mathbb{R}$$

$$\text{G3. } \int g'(x) e^{g(x)} dx = e^{g(x)} + C, \quad C \in \mathbb{R}$$

$$\text{G4. } \int g'(x) a^{g(x)} dx = \frac{a^{g(x)}}{\ln a} + C, \quad C \in \mathbb{R}, \quad a \in \mathbb{R}^+ \setminus \{1\}$$

$$\text{G5. } \int g'(x) \sin(g(x)) dx = -\cos(g(x)) + C, \quad C \in \mathbb{R}$$

$$\text{G6. } \int g'(x) \cos(g(x)) dx = \sin(g(x)) + C, \quad C \in \mathbb{R}$$

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2 Primitivação (Integrais indefinidos)

12/10/2022

11 / 30

$$\text{G7. } \int g'(x) \sec^2(g(x)) dx = \operatorname{tg}(g(x)) + C, \quad C \in \mathbb{R}$$

$$\text{G8. } \int g'(x) \operatorname{cosec}^2(g(x)) dx = -\operatorname{cotg}(g(x)) + C, \quad C \in \mathbb{R}$$

$$\text{G9. } \int \frac{g'(x)}{\sqrt{1-(g(x))^2}} dx = \arcsen(g(x)) + C, \quad C \in \mathbb{R}$$

$$\text{G10. } \int \frac{g'(x)}{1+(g(x))^2} dx = \operatorname{arctg}(g(x)) + C, \quad C \in \mathbb{R}$$

$$\text{G11. } \int g'(x) \sec(g(x)) \operatorname{tg}(g(x)) dx = \sec(g(x)) + C, \quad C \in \mathbb{R}$$

$$\text{G12. } \int g'(x) \operatorname{cosec}(g(x)) \operatorname{cotg}(g(x)) dx = -\operatorname{cosec}(g(x)) + C, \quad C \in \mathbb{R}$$

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12/10/2022

12 / 30