

TABELLA INTEGRALI

$$\int x^a dx = \frac{x^{a+1}}{a+1} + k$$

$$\int dx = x + k$$

$$\int x dx = \frac{x^2}{2} + k$$

$$\int x^2 dx = \frac{x^3}{3} + k$$

$$\int x^3 dx = \frac{x^4}{4} + k$$

$$\int \frac{dx}{\sqrt{x}} = 2\sqrt{x} + k$$

$$\int \frac{dx}{x} = \log|x| + k$$

$$\int \log x \cdot dx = x \log x - x + k = x(\log x - 1) + k$$

$$\int \text{sen} x \cdot dx = -\text{cos} x + k$$

$$\int \text{sen}^2 x \cdot dx = \frac{x}{2} - \frac{\text{sen} 2x}{4} + k$$

$$\int \cos x \cdot dx = \text{sen}x + k$$

$$\int \cos^2 x \cdot dx = \frac{x}{2} + \frac{\text{sen}2x}{4} + k$$

$$\int \text{tg}^2 x \cdot dx = \text{tg}x - x + k$$

$$\int a^x dx = \frac{a^x}{\log a} + k$$

$$\int e^x dx = e^x + k$$

$$\int \frac{dx}{\cos^2 x} = \int (1 + \text{tg}^2 x) dx = \text{tg}x + k$$

$$\int \frac{dx}{\text{sen}^2 x} = -\text{ctg}x + k$$

$$\int \frac{dx}{\sqrt{1-x^2}} = \text{arcsen}x + k = -\text{arccos}x + k$$

$$\int \frac{dx}{1+x^2} = \text{arctg}x + k$$

$$\int \frac{dx}{\sqrt{1+x^2}} = \log(x + \sqrt{x^2 + 1}) + k$$

$$\int \frac{dx}{\sqrt{x^2 - 1}} = \log(x + \sqrt{x^2 - 1}) + k$$