Tabella di integrali elementari

$$\int x^n \, \mathrm{d}x = \frac{x^{n+1}}{n+1} + c \qquad \text{con } n \in \mathbb{N}$$

$$\int x^\alpha \, \mathrm{d}x = \frac{x^{\alpha+1}}{\alpha+1} + c \qquad \forall\, \alpha \in \mathbb{R},\ \alpha \neq -1 \quad \text{su } I = (0, +\infty)$$

$$\int \frac{1}{x} \, \mathrm{d}x = \ln(|x|) + c \qquad \text{su } \mathbb{R} \setminus \{0\}$$

$$\text{quindi } \int \frac{1}{x} \, \mathrm{d}x = \ln(x) + c \qquad \text{su } I = (0, +\infty)$$

$$\int e^x \, \mathrm{d}x = e^x + c$$

$$\int a^x \, \mathrm{d}x = \frac{a^x}{\ln(a)} + c \qquad \forall\, a \in (0, +\infty),\ a \neq 1$$

$$\int \cos(x) \, \mathrm{d}x = \sin(x) + c$$

$$\int \sin(x) \, \mathrm{d}x = -\cos(x) + c$$

$$\int \frac{1}{\cos^2(x)} \, \mathrm{d}x = \tan(x) + c \qquad \text{su } \mathrm{dom}(\tan)$$

$$\int \frac{1}{\sin^2(x)} \, \mathrm{d}x = -\cot(x) + c \qquad \text{su } \mathrm{dom}(\cot)$$

$$\int \frac{1}{\sqrt{1-x^2}}\,\mathrm{d}x = \arcsin(x) + c \qquad \text{su } I = [-1, 1]$$

$$\int \frac{1}{1+x^2}\,\mathrm{d}x = \arctan(x) + c$$

$$\int \cosh(x)\,\mathrm{d}x = \sinh(x) + c$$

$$\int \sinh(x)\,\mathrm{d}x = \cosh(x) + c$$