TABELLA INTEGRALI INDEFINITI

$$\int k \, dx = k \, x + c \qquad \text{con k costante}$$

$$\int x^n dx = \frac{x^{n+1}}{n+1} + c \qquad \int \int [f(x)]^n \cdot f'(x) \, dx = \frac{[f(x)]^{n+1}}{n+1} + c$$

$$\int \frac{1}{x} dx = \ln|x| + c \qquad \int \frac{f'(x)}{f(x)} \, dx = \ln|f(x)| + c$$

$$\int a^x dx = a^x \, lg_a e + c \qquad \int a^{f(x)} \cdot f'(x) \, dx = a^{f(x)} \, lg_a e + c$$

$$\int e^x dx = e^x + c \qquad \int e^{f(x)} \cdot f'(x) \, dx = e^{f(x)} + c$$

$$\int sen x \, dx = -\cos x + c \qquad \int sen [f(x)] \cdot f'(x) \, dx = -\cos f(x) + c$$

$$\int \cos x \, dx = sen x + c \qquad \int cos [f(x)] \cdot f'(x) \, dx = sen f(x) + c$$

$$\int \frac{1}{\cos^2 x} dx = tg \, x + c \qquad \int \frac{f'(x)}{\cos^2 [f(x)]} dx = tg \, f(x) + c$$

$$\int \frac{1}{\sqrt{1-x^2}} dx = arcsen x + c \qquad \int \frac{f'(x)}{\sqrt{1-[f(x)]^2}} dx = arcsen f(x) + c$$

$$\int \frac{1}{1+x^2} dx = arctg \, x + c \qquad \int \frac{f'(x)}{\sqrt{1+[f(x)]^2}} dx = arctg \, f(x) + c$$

$$\int \frac{1}{\sqrt{n^2-x^2}} dx = arcsen \frac{x}{|a|} + c \qquad \int \frac{f'(x)}{\sqrt{n^2-|f(x)|^2}} dx = arcsen \frac{f(x)}{|a|} + c$$

 $\int \frac{1}{a^2 + x^2} dx = \frac{1}{a} \operatorname{arctg} \frac{x}{a} + c$

 $\int \frac{f'(x)}{a^2 + [f(x)]^2} dx = \frac{1}{a} \operatorname{arctg} \frac{f(x)}{a} + c$