

TABLA DE INTEGRALES INMEDIATAS

FORMA SENCILLA	FORMA GENERALIZADA
$\int dx = x + C$	$\int k dx = kx + C$
$\int x^n dx = \frac{x^{n+1}}{n+1} + C \quad n \neq -1$	$\int (u(x))^n \cdot u'(x) dx = \frac{(u(x))^{n+1}}{n+1} + C \quad n \neq -1$
$\int \frac{1}{x} dx = \ln x + C$	$\int \frac{u'(x)}{u(x)} dx = \ln u(x) + C$
$\int e^x dx = e^x + C$	$\int e^{u(x)} \cdot u'(x) dx = e^{u(x)} + C$
$\int a^x dx = \frac{a^x}{\ln a} + C$	$\int a^{u(x)} \cdot u'(x) dx = \frac{a^{u(x)}}{\ln a} + C$
$\int \operatorname{sen} x dx = -\cos x + C$	$\int u'(x) \cdot \operatorname{sen}(u(x)) dx = -\cos(u(x)) + C$
$\int \cos x dx = \operatorname{sen} x + C$	$\int u'(x) \cdot \cos(u(x)) dx = \operatorname{sen}(u(x)) + C$
$\int \frac{1}{\cos^2 x} dx = \int (1 + \operatorname{tg}^2 x) dx = \operatorname{tg} x + C$	$\int \frac{u'(x)}{\cos^2(u(x))} dx = \operatorname{tg}(u(x)) + C$
$\int \frac{-1}{\operatorname{sen}^2 x} dx = \cot gx + C$	$\int \frac{-u'(x)}{\operatorname{sen}^2(u(x))} dx = \cot gu(x) + C$
$\int \frac{1}{1+x^2} dx = \operatorname{arctg} x + C$	$\int \frac{u'(x)}{1+(u(x))^2} dx = \operatorname{arctg}(u(x)) + C$
$\int \frac{1}{\sqrt{1-x^2}} dx = \operatorname{arcsen} x + C$	$\int \frac{u'(x)}{\sqrt{1-(u(x))^2}} dx = \operatorname{arcsen}(u(x)) + C$
$\int \frac{-1}{\sqrt{1-x^2}} dx = \operatorname{arccos} x + C$	$\int \frac{-u'(x)}{\sqrt{1-(u(x))^2}} dx = \operatorname{arccos}(u(x)) + C$