

TABLA DE INTEGRALES INMEDIATAS

FUNCIONES SIMPLES	FUNCIONES COMPUESTAS
$\int dx = x$	
$\int k dx = kx$	
$\int x^n dx = \frac{x^{n+1}}{n+1} \quad (n \neq -1)$	$\int u' u^n dx = \frac{u^{n+1}}{n+1} \quad (n \neq -1)$
$\int \frac{1}{x} dx = \ln x$	$\int \frac{u'}{u} = \ln u$
$\int a^x dx = \frac{a^x}{\ln a}$	$\int u' a^u = \frac{a^u}{\ln a}$
$\int e^x dx = e^x$	$\int u' e^u = e^u$
$\int \cos x dx = \sin x$	$\int u' \cos u = \sin u$
$\int \sin x dx = -\cos x$	$\int u' \sin u = -\cos u$
$\int \frac{1}{\cos^2 x} dx = \int (1 + \operatorname{tg}^2 x) dx = \int \sec^2 x dx = \operatorname{tg} x$	$\int \frac{u'}{\cos^2 u} = \int u' (1 + \operatorname{tg}^2 u) = \int u' \sec^2 u = \operatorname{tg} u$
$\int \frac{1}{\sin^2 x} dx = \int (1 + \operatorname{ctg}^2 x) dx = \int \operatorname{cosec}^2 x dx = -\operatorname{ctg} x$	$\int \frac{u'}{\sin^2 u} = \int u' (1 + \operatorname{ctg}^2 u) = \int u' \operatorname{cosec}^2 u = -\operatorname{ctg} u$
$\int \frac{1}{\sqrt{1-x^2}} dx = \operatorname{arcsen} x$	$\int \frac{u'}{\sqrt{1-u^2}} = \operatorname{arcsen} u$
$\int \frac{1}{1+x^2} dx = \operatorname{arctg} x$	$\int \frac{u'}{1+u^2} = \operatorname{arctg} u$

En esta tabla, k y n son números reales, a es un número real positivo, y u es una función.