

TABLA DE INTEGRALES

<u>Función simple</u>	<u>Función compuesta</u>
$\int dx = x + c$	
$\int k dx = kx + c$	
$\int x^n dx = \frac{x^{n+1}}{n+1} + c \quad (n \neq -1)$	$\int u(x)^n \cdot u'(x) dx = \frac{u(x)^{n+1}}{n+1} + c \quad (n \neq -1)$
$\int \frac{dx}{x} = \ln x + c$	$\int \frac{u'(x)}{u(x)} dx = \ln u(x) + c$
$\int e^x dx = e^x + c$	$\int e^{u(x)} \cdot u'(x) dx = e^{u(x)} + c$
$\int a^x dx = \frac{a^x}{\ln a} + c$	$\int a^{u(x)} \cdot u'(x) dx = \frac{a^{u(x)}}{\ln a} + c$
$\int \operatorname{sen} x dx = -\cos x + c$	$\int \operatorname{sen} u(x) dx = -\cos u(x) + c$
$\int \cos x dx = \operatorname{sen} x + c$	$\int \cos u(x) dx = \operatorname{sen} u(x) + c$
$\int \frac{1}{\cos^2 x} dx = \operatorname{tg} x + c$ $\int (1 + \operatorname{tg}^2 x) dx = \operatorname{tg} x + c$	$\int \frac{u'(x)}{\cos^2 u(x)} dx = \operatorname{tg} u(x) + c$ $\int (1 + \operatorname{tg}^2 u(x)) u'(x) dx = \operatorname{tg} u(x) + c$
$\int -\frac{1}{\operatorname{sen}^2 x} dx = \operatorname{cotg} x + c$ $\int (-1 - \operatorname{cotg}^2 x) dx = \operatorname{cotg} x + c$	$\int -\frac{u'(x)}{\operatorname{sen}^2 u(x)} dx = \operatorname{cotg} u(x) + c$ $\int (-1 - \operatorname{tg}^2 u(x)) u'(x) dx = \operatorname{cotg} u(x) + c$
$\int \frac{\operatorname{sen} x}{\cos^2 x} dx = \sec x + c$	$\int \frac{u'(x) \cdot \operatorname{sen} u(x)}{\cos^2 u(x)} dx = \sec u(x) + c$
$\int -\frac{\cos x}{\operatorname{sen}^2 x} dx = \operatorname{cosec} x + c$	$\int -\frac{u'(x) \cdot \cos u(x)}{\operatorname{sen}^2 u(x)} dx = \operatorname{cosec} u(x) + c$
$\int \frac{1}{\sqrt{1-x^2}} dx = \operatorname{arc} \operatorname{sen} x + c$	$\int \frac{u'(x)}{\sqrt{1-u^2(x)}} dx = \operatorname{arc} \operatorname{sen} u(x) + c$
$\int -\frac{1}{\sqrt{1-x^2}} dx = \operatorname{arc} \cos x + c$	$\int -\frac{u'(x)}{\sqrt{1-u^2(x)}} dx = \operatorname{arc} \cos u(x) + c$
$\int \frac{1}{1+x^2} dx = \operatorname{arc} \operatorname{tg} x + c$	$\int \frac{u'(x)}{1+u^2(x)} dx = \operatorname{arc} \operatorname{tg} u(x) + c$