

TABLA DE INTEGRALES

$\int x^n dx = \frac{x^{n+1}}{n+1} + C$	$\longrightarrow \int u^n \cdot u' \cdot dx = \frac{u^{n+1}}{n+1} + C$
$\int e^x dx = e^x + C$	$\longrightarrow \int e^u \cdot u' dx = e^u + C$
$\int a^x dx = \frac{a^x}{\ln a} + C$	$\longrightarrow \int a^u \cdot u' dx = \frac{a^u}{\ln a} + C$
$\int \frac{1}{x} dx = \ln x + C$	$\longrightarrow \int \frac{1}{u} \cdot u' dx = \ln u + C$
$\int \cos x dx = \operatorname{sen} x + C$	$\longrightarrow \int \cos u \cdot u' dx = \operatorname{sen} u + C$
$\int \operatorname{sen} x dx = -\cos x + C$	$\longrightarrow \int \operatorname{sen} u \cdot u' dx = -\cos u + C$
$\int \frac{1}{\cos^2 x} dx = \int (1 + \operatorname{tg}^2 x) dx = \operatorname{tg} x + C$	$\longrightarrow \int \frac{1}{\cos^2 u} \cdot u' dx = \int (1 + \operatorname{tg}^2 u) \cdot u' dx = \operatorname{tg} u + C$
$\int \frac{1}{\operatorname{sen}^2 x} dx = -\operatorname{cotg} x + C$	$\longrightarrow \int \frac{1}{\operatorname{sen}^2 u} \cdot u' dx = -\operatorname{cotg} u + C$
$\int \frac{1}{\sqrt{1-x^2}} dx = \operatorname{arc} \operatorname{sen} x + C$	$\longrightarrow \int \frac{1}{\sqrt{1-u^2}} \cdot u' dx = \operatorname{arc} \operatorname{sen} u + C$
$\int \frac{-1}{\sqrt{1-x^2}} dx = \operatorname{arc} \cos x + C$	$\longrightarrow \int \frac{-1}{\sqrt{1-u^2}} \cdot u' dx = \operatorname{arc} \cos u + C$
$\int \frac{1}{1+x^2} dx = \operatorname{arc} \operatorname{tg} x + C$	$\longrightarrow \int \frac{1}{1+u^2} \cdot u' dx = \operatorname{arc} \operatorname{tg} u + C$
$\int \frac{-1}{1+x^2} dx = \operatorname{arc} \operatorname{cotg} x + C$	$\longrightarrow \int \frac{-1}{1+u^2} \cdot u' dx = \operatorname{arc} \operatorname{cotg} u + C$