

### Propiedades da integral indefinida

- $\int [f(x) + g(x)] dx = \int f(x) dx + \int g(x) dx$
- $\int \alpha f(x) dx = \alpha \int f(x) dx$

### Táboa de integrais inmediatas

$\int k dx = kx + C$	
$\int x^n dx = \frac{x^{n+1}}{n+1} + C, \quad n \neq -1$	$\int [f(x)]^n \cdot f'(x) dx = \frac{[f(x)]^{n+1}}{n+1} + C$
$\int x^{-1} dx = \int \frac{1}{x} dx = \ln x  + C$	$\int \frac{f'(x)}{f(x)} dx = \ln f(x)  + C$
$\int e^x dx = e^x + C$	$\int e^{f(x)} \cdot f'(x) dx = e^{f(x)} + C$
$\int a^x dx = \frac{1}{\ln a} a^x + C$	$\int a^{f(x)} \cdot f'(x) dx = \frac{1}{\ln a} a^{f(x)} + C$
$\int \sin x dx = -\cos x + C$	$\int f'(x) \cdot \sin[f(x)] dx = -\cos[f(x)] + C$
$\int \cos x dx = \sin x + C$	$\int f'(x) \cdot \cos[f(x)] dx = \sin[f(x)] + C$
$\int \tan x dx = \int \frac{\sin x}{\cos x} dx = -\ln \cos x  + C$	$\int f'(x) \tan[f(x)] dx = -\ln \cos(f(x))  + C$
$\int \cot x dx = \ln \sin x  + C$	$\int f'(x) \cot[f(x)] dx = \ln \sin(f(x))  + C$
$\int (1 + \tan^2 x) dx = \int \frac{1}{\cos^2 x} dx = \tan x + C$	$\int (1 + \tan^2 f(x)) \cdot f'(x) dx = \int \frac{f'(x)}{\cos^2 f(x)} dx = \tan[f(x)] + C$
$\int \frac{1}{1+x^2} dx = \arctan x + C$	$\int \frac{f'(x)}{1+f^2(x)} dx = \arctan[f(x)] + C$
$\int \frac{1}{\sqrt{1-x^2}} dx = \arcsin x + C$	$\int \frac{f'(x)}{\sqrt{1-f^2(x)}} dx = \arcsin[f(x)] + C$
$\int \frac{-1}{\sqrt{1-x^2}} dx = \begin{cases} \arccos x + C \\ -\arcsin x + C \end{cases}$	$\int \frac{-f'(x)}{\sqrt{1-f^2(x)}} dx = \begin{cases} \arccos f(x) + C \\ -\arcsin f(x) + C \end{cases}$

