TAULES D'INTEGRALS IMMEDIATES

Bio Maresme

Taula d'integrals immediates simples	*Taula d'integrals immediates compostes*
$\int 0\, dx = C$	$\int (g(x))^n \cdot g'(x)\, dx = \frac{(g(x))^{n+1}}{n+1} + C\ \forall n \neq -1$
$\int k\, dx = kx + C$	$\int \frac{1}{g(x)} \cdot g'(x) dx = \ln\lvert g(x)\rvert + C$
$\int x^n\, dx = \frac{x^{n+1}}{n+1} + C\ \forall n \neq -1$	$\int e^{g(x)} \cdot g'(x)\, dx = e^{g(x)} + C$
$\int \frac{1}{x}\, dx = \ln\lvert x\rvert + C$	$\int a^{g(x)} \cdot g'(x) dx = \frac{a^{g(x)}}{\ln a} + C, \forall a \in \mathbb{R}^+$
$\int e^x\, dx = e^x + C$	$\int \sin(g(x)) \cdot g'(x)\, dx = -\cos(g(x)) + C$
$\int a^x\, dx = \frac{a^x}{\ln a} + C$	$\int \cos(g(x)) \cdot g'(x)\, dx = \sin(g(x)) + C$
$\int \sin x\ dx = -\cos x + C$	$\int \frac{g'(x)}{\cos^2 g(x)}\, dx = \operatorname{tg} g(x) + C$
$\int cosx\, dx = sinx + C$	$\int \frac{g'(x)}{sin^2 g(x)}\, dx = -cotg\ g(x) + C$
$\int \frac{1}{\cos^2 x}\, dx = \operatorname{tg} x + C$	$\int \frac{g'(x)}{\sqrt{1-(g(x))^2}}\, dx = \arcsin g(x) + C = -\arccos g(x) + C$
$\int \frac{1}{\sin^2 x} dx = -\operatorname{cotg} x + C$	$\int \frac{g'(x)}{1+(g(x))^2}\, dx = \operatorname{arctg} g(x) + C = -\operatorname{arccotg} g(x) + C$
$\int \frac{1}{\sqrt{1-x^2}} dx = \arcsin x + C = -\arccos x + C$	
$\int \frac{1}{1+x^2} dx = \operatorname{arctg} x + C = -\operatorname{arccotg} x + C$	