

TABELLA INTEGRALI

$\int 0 \cdot dx = c$	
$\int dx = x + c$	$\int k \cdot f(x) = k \cdot \int f(x) dx$
$\int x^n dx = \frac{x^{n+1}}{n+1} + c, (n \neq -1)$	$\int [f(x)]^n \cdot f'(x) dx = \frac{1}{n+1} [f(x)]^{n+1} + c$
$\int \frac{dx}{2\sqrt{x}} dx = \sqrt{x} + c$	$\int \frac{f'(x)}{2\sqrt{f(x)}} dx = \sqrt{f(x)} + c$
$\int \sin x dx = -\cos x + c$	$\int \operatorname{sen} f(x) \cdot f'(x) dx = -\cos f(x) + c$
$\int \cos x dx = \operatorname{sen} x + c$	$\int \cos f(x) \cdot f'(x) dx = \operatorname{sen} f(x) + c$
$\int \frac{1}{\cos^2 x} dx = \operatorname{tg} x + c$	$\int \frac{f'(x)}{\cos^2 f(x)} dx = \operatorname{tg} f(x) + c$
$\int \frac{1}{\operatorname{sen}^2 x} dx = -\operatorname{ctg} x + c$	$\int \frac{f'(x)}{\operatorname{sen}^2 f(x)} dx = -\operatorname{ctg} f(x) + c$
$\int \frac{dx}{\sqrt{1-x^2}} = \operatorname{arcsin} x + c$	$\int \frac{f'(x)}{\sqrt{1-[f(x)]^2}} dx = \operatorname{arcsin} f(x) + c$
$\int \frac{dx}{1+x^2} = \operatorname{arctg} x + c$	$\int \frac{f'(x)}{1+[f(x)]^2} dx = \operatorname{arctg} f(x) + c$
$\int \frac{dx}{x} = \ln x + c$	$\int \frac{f'(x)}{f(x)} dx = \ln f(x) + c$
$\int e^x dx = e^x + c$	$\int e^{f(x)} f'(x) dx = e^{f(x)} + c$
$\int a^x dx = \frac{a^x}{\ln a} + c$	$\int a^{f(x)} f'(x) dx = \frac{a^{f(x)}}{\ln a} + c$
$\int (x+a)^m dx = \frac{(x+a)^{m+1}}{m+1} + c$	$\int (a+bx)^n dx = \frac{(a+bx)^{n+1}}{b(n+1)} + c$
$\int \frac{dx}{a^2+x^2} = \frac{1}{a} \operatorname{arctg} \frac{x}{a} + c$	$\int \frac{dx}{(a+bx)^2} = -\frac{1}{b(a+bx)} + c$
$\int (a+bx)^n dx = \frac{(a+bx)^{n+1}}{b(n+1)} + c$	$\int \frac{dx}{(a+bx)^2} = -\frac{1}{b(a+bx)} + c$
$\int \frac{1}{1-x^2} dx = \frac{1}{2} \ln \left \frac{1+x}{1-x} \right + c$	$\int \frac{1}{1+\cos x} = \operatorname{tg} \frac{x}{2} + c$

$\int \frac{1}{1 - \cos x} dx = -ctg \frac{x}{2} + c$	$\int tg x dx = -\ln \cos x + c$
$\int ctg x dx = \ln \sin x + c$	$\int \frac{dx}{\sin x} = \ln \left tg \frac{x}{2} \right + c$
$\int \frac{dx}{\cos x} = \frac{1}{2} \ln \left \frac{1 + \sin x}{1 - \sin x} \right + c$	$\int \arcsin x dx = x \arcsin x + \sqrt{1 - x^2} + c$
$\int \arccos x dx = x \arccos x - \sqrt{1 - x^2} + c$	$\int \operatorname{arctg} x dx = x \operatorname{arctg} x - \frac{1}{2} \ln 1 + x^2 + c$
$\int \operatorname{arctg} x dx = x \operatorname{arctg} x + \frac{1}{2} \ln 1 + x^2 + c$	$\int \frac{dx}{a + bx} = \frac{1}{b} \ln a + bx + c$
$\int \frac{dx}{a + bx^2} = \frac{1}{\sqrt{ab}} \operatorname{arctg} \left(\sqrt{\frac{b}{a}} \cdot x \right) + c$	$\int \frac{dx}{a - bx^2} dx = \frac{1}{2\sqrt{ab}} \ln \left \frac{\sqrt{ab} + bx}{\sqrt{ab} - bx} \right + c$
$\int \sqrt{a^2 - x^2} dx = \frac{x}{2} \sqrt{a^2 - x^2} + \frac{a^2}{2} \arcsin \frac{x}{a} + c$	$\int \frac{dx}{\sqrt{a^2 - x^2}} = \arcsin \frac{x}{a} + c$
$\int \sqrt{a^2 + x^2} dx = \frac{x}{2} \sqrt{a^2 + x^2} + \frac{a^2}{2} \ln x + \sqrt{a^2 + x^2} + c$	$\int \sqrt{a + bx} dx = \frac{2}{3b} \sqrt{(a + bx)^3} + c$
$\int \frac{dx}{\sqrt{a^2 \pm x^2}} = \ln x + \sqrt{a^2 \pm x^2} + c$	$\int \frac{dx}{\sqrt{a + bx}} = \frac{2}{b} \sqrt{a + bx} + c$
$\int \frac{dx}{x^2 - 1} = \frac{1}{2} \ln \left \frac{x - 1}{x + 1} \right + c$	$\int \ln x dx = x \ln x - x + c$
$\int \frac{\ln x}{x^2} dx = -\frac{\ln x}{x} - \frac{1}{x} + c$	$\int \cos^2 x dx = \frac{1}{2} (x + \sin x \cos x) + c$
$\int \sin^2 x dx = \frac{1}{2} (x - \sin x \cos x) + c$	$\int \cos^2 (x - a) dx = \frac{1}{2} (x + \sin (x - a) \cos (x - a)) + c$
$\int \frac{dx}{\sin x} = \ln \left tg \frac{x}{2} \right + c$	$\int \frac{dx}{\cos x} = -\ln \left tg \left(\frac{p}{4} - \frac{x}{2} \right) \right + c$