

## ALAPINTEGRÁLOK

f(x)	F(x)	f(x)	F(x)
$c \quad c \in \mathbb{R}$	$cx + C$	$\frac{1}{\cos^2(x)}$	$\operatorname{tg}(x) + C$
$x^\alpha$	$\frac{x^{\alpha+1}}{\alpha+1} + C$	$\frac{-1}{\sin^2(x)}$	$\operatorname{ctg}(x) + C$
$\frac{1}{x}$	$\ln x  + C$	$\frac{1}{\sqrt{1-x^2}}$	$\arcsin(x) + C$
$a^x$	$\frac{a^x}{\ln a} + C$	$\frac{-1}{\sqrt{1-x^2}}$	$\arccos(x) + C$
$e^x$	$e^x + C$	$\frac{1}{1+x^2}$	$\operatorname{arctg}(x) + C$
$\sin(x)$	$-\cos(x) + C$	$\frac{-1}{1+x^2}$	$\operatorname{arcctg}(x) + C$
$\cos(x)$	$\sin(x) + C$		

## INTEGRÁLÁSI SZABÁLYOK

$$\int c f(x) dx = c \int f(x) dx$$

$$\int f(x) \pm g(x) dx = \int f(x) dx \pm \int g(x) dx$$

$$\int f(ax + b) dx = \frac{F(ax + b)}{a} + C$$

$$\int \frac{f'(x)}{f(x)} dx = \ln|f(x)| + C$$

$$\int f^n(x) f'(x) dx = \frac{[f(x)]^{n+1}}{n+1} + C$$

$$\int g'(x) f(g(x)) dx = F(g(x)) + C$$

$$\int f'(x) g(x) dx = f(x) g(x) - \int f(x) g'(x) dx$$