

## Całki funkcji elementarnych

Funkcja $y = f(x)$	Całka $\int f(x)dx$
$y = x^n$	$\int x^n dx = \frac{1}{n+1} x^{n+1} + C$
$y = \sin x$	$\int \sin x dx = -\cos x + C$
$y = \cos x$	$\int \cos x dx = \sin x + C$
$y = 1/\sin^2 x$	$\int \frac{dx}{\sin^2 x} = -\operatorname{ctg} x + C$ <b><math>\sin x \neq 0</math></b>
$y = 1/\cos^2 x$	$\int \frac{dx}{\cos^2 x} = \operatorname{tg} x + C$ <b><math>\cos x \neq 0</math></b>
$y = \ln x$	$\int \ln x dx = x \ln x - x + C = x(\ln x - 1) + C$
$y = 1/x$	$\int \frac{dx}{x} = \ln x  + C$
$y = e^x$	$\int e^x dx = e^x + C$
$y = a^x$	$\int a^x dx = \frac{1}{\ln a} a^x + C$ <b><math>a &gt; 0, a \neq 1</math></b>
$y = kf(x)$	$\int kf(x) dx = k \int f(x) dx$
$y = f(x) + g(x)$	$\int (f(x) + g(x)) dx = \int f(x) dx + \int g(x) dx$
<b><math>[y = u(x)v(x)]</math></b>	$\int u dv = uv - \int v du$
$y = f(g(x))$	$\int f(g(x))g'(x) dx = \int f(u) du$ <b><math>g(x) = u</math></b>