$\alpha, C \in R,\ a \in R_+, a \neq 1$

$f(x)$	$\int f(x)\,dx$
0	C
1	$x + C$
x^α	$\frac{x^{\alpha+1}}{\alpha+1} + C, \quad \alpha \neq -1$
$\frac{1}{x}$	$\ln\|x\| + C$
e^x	$e^x + C$
a^x	$\frac{a^x}{\ln a} + C$

$f(x)$	$\int f(x)\,dx$
$\sin x$	$-\cos x + C$
$\cos x$	$\sin x + C$
$\frac{1}{\cos^2 x}$	$\operatorname{tg} x + C$
$\frac{1}{\sin^2 x}$	$-\operatorname{ctg} x + C$
$\frac{1}{1+x^2}$	$\operatorname{arc\,tg} x + C = -\operatorname{arc\,ctg} x + C$
$\frac{1}{\sqrt{1-x^2}}$	$\arcsin x + C = -\arccos x + C$

Jeżeli $\int f(x)\,dx = F(x) + C$, to $\boxed{\int f(ax+b)\,dx = \frac{1}{a}\cdot F(ax+b) + C, \quad a \neq 0}$

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

$$\boxed{\int \frac{1}{a^2+x^2}\,dx = \frac{1}{a}\cdot \operatorname{arc\,tg}\left(\frac{x}{a}\right) + C, \quad a \neq 0} \qquad \boxed{\int \frac{1}{\sqrt{a^2-x^2}}\,dx = \arcsin\left(\frac{x}{a}\right) + C, \quad a > 0}$$

Liniowość całki

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

$$\int a\cdot f(x)\,dx = a\cdot \int f(x)\,dx, \quad a \in R$$

Całkowanie przez części

$$\int u(x)\cdot v'(x)\,dx = \left\{\begin{array}{cc} u(x) \searrow & v'(x) \\ u'(x) \rightarrow & v(x) \end{array}\right\} = u(x)\cdot v(x) - \int u'(x)\cdot v(x)\,dx$$

Całkowanie przez podstawienie, $(F'(x) = f(x))$

$$\int \underbrace{f(g(x))}_{f(u)}\cdot \underbrace{g'(x)\,dx}_{du} = \left\{\begin{array}{c} u = g(x) \\ du = g'(x)dx \end{array}\right\} = \int f(u)\,du = F(u) + C = F(g(x)) + C$$