

Таблиця основних невизначених інтегралів

1	$\int u^\alpha du = \frac{u^{\alpha+1}}{\alpha+1} + C$	10	$\int \operatorname{ch} u du = \operatorname{sh} u + C$
2	$\int \frac{1}{u} du = \ln u + C$	11	$\int \frac{1}{\operatorname{ch}^2 u} du = \operatorname{th} u + C$
3	$\int a^u du = \frac{a^u}{\ln a} + C$	12	$\int \frac{1}{\operatorname{sh}^2 u} du = -\operatorname{cth} u + C$
4	$\int e^u du = e^u + C$	13	$\int \frac{du}{\sqrt{a^2 - u^2}} = \arcsin \frac{u}{a} + C$
5	$\int \sin(au) du = -\frac{1}{a} \cos(au) + C$	14	$\int \frac{du}{\sqrt{u^2 \pm a^2}} = \ln \left u + \sqrt{u^2 \pm a^2} \right + C$
6	$\int \cos(au) du = \frac{1}{a} \sin(au) + C$	15	$\int \frac{du}{a^2 + u^2} = \frac{1}{a} \operatorname{arctg} \frac{u}{a} + C$
7	$\int \frac{1}{\cos^2 u} du = \operatorname{tg} u + C$	16	$\int \frac{du}{u^2 - a^2} = \frac{1}{2a} \cdot \ln \left \frac{u-a}{u+a} \right + C$
8	$\int \frac{1}{\sin^2 u} du = -\operatorname{ctg} u + C$	17	$\int \frac{1}{\cos u} du = \ln \left \operatorname{tg} \left(\frac{u}{2} + \frac{\pi}{4} \right) \right + C$
9	$\int \operatorname{sh} u du = \operatorname{ch} u + C$	18	$\int \frac{1}{\sin u} du = \ln \left \operatorname{tg} \left(\frac{u}{2} \right) \right + C$