

TABLICA REDOVA

$e^x = 1 + x + \frac{x^2}{2!} + \frac{x^3}{3!} + \frac{x^4}{4!} + \frac{x^5}{4!} + \dots,$	$x \in \mathbb{R}$
$\sin x = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \frac{x^9}{9!} - \frac{x^{11}}{11!} + \dots,$	$x \in \mathbb{R}$
$\cos x = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \frac{x^6}{6!} + \frac{x^8}{8!} - \frac{x^{10}}{10!} + \dots,$	$x \in \mathbb{R}$
$\operatorname{sh} x = x + \frac{x^3}{3!} + \frac{x^5}{5!} + \frac{x^7}{7!} + \frac{x^9}{9!} + \frac{x^{11}}{11!} + \dots,$	$x \in \mathbb{R}$
$\operatorname{ch} x = 1 + \frac{x^2}{2!} + \frac{x^4}{4!} + \frac{x^6}{6!} + \frac{x^8}{8!} + \frac{x^{10}}{10!} + \dots,$	$x \in \mathbb{R}$
$\ln(1+x) = x - \frac{x^2}{2} + \frac{x^3}{3} - \frac{x^4}{4} + \frac{x^5}{5} - \frac{x^6}{6} + \dots,$	$ x < 1$
$\frac{1}{1-x} = 1 + x + x^2 + x^3 + x^4 + x^5 + \dots,$	$ x < 1$
$(1+x)^\alpha = 1 + \alpha x + \binom{\alpha}{2} x^2 + \binom{\alpha}{3} x^3 + \binom{\alpha}{4} x^4 + \binom{\alpha}{5} x^5 + \dots,$	$ x < 1$

NEKI TABLIČNI INTEGRALI

$\int \frac{1}{a^2 + x^2} dx = \frac{1}{a} \operatorname{arctg} \frac{x}{a} + C$
$\int \frac{1}{a^2 - x^2} dx = \frac{1}{2a} \ln \left \frac{a+x}{a-x} \right + C$
$\int \frac{1}{\sqrt{a^2 - x^2}} dx = \operatorname{arcsin} \frac{x}{a} + C$
$\int \frac{1}{\sqrt{x^2 \pm a^2}} dx = \ln \left x + \sqrt{x^2 \pm a^2} \right + C$
