Таблица интегралов

1. $\int dx = x + C$, где C=const
2. $\int x^n dx = \frac{x^{n+1}}{n+1} + C$
3. $\int \frac{dx}{x} = \ln|x| + C$
4. $\int \sin x dx = -\cos x + C$
5. $\int \cos x dx = \sin x + C$
6. $\int \frac{dx}{\cos^2 x} = tgx + C$
7. $\int \frac{dx}{\sin^2 x} = -ctgx + C$
8. $\int e^x dx = e^x + C$
9. $\int a^x dx = \frac{a^x}{\ln a} + C$
10. $\int tgx dx = -\ln|\cos x| + C$
11. $\int ctgx dx = \ln|\sin x| + C$
12. $\int \frac{dx}{1+x^2} = arctgx + C$
13. $\int \frac{dx}{a^2+x^2} = \frac{1}{a} arctg\frac{x}{a} + C$
14. $\int \frac{dx}{a^2-x^2} = \frac{1}{2a}\ln\left|\frac{a+x}{a-x}\right| + C$
15. $\int \frac{dx}{\sqrt{a^2-x^2}} = \arcsin\frac{x}{a} + C$
16. $\int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln|x + \sqrt{x^2 \pm a^2}| + C$