Tablica integrala

1. $\int dx = x + C$

2. $\int x^n dx = \dfrac{x^{n+1}}{n+1} + C, n \neq -1$

3. $\int \dfrac{dx}{x} = \ln|x| + C$

4. $\int a^x dx = \dfrac{a^x}{\ln a} + C, a > 0, a \neq 1$

5. $\int e^x dx = e^x + C$

6. $\int \sin x dx = -\cos x + C$

7. $\int \cos x dx = \sin x + C$

8. $\int \dfrac{1}{\cos^2 x} dx = tgx + C$

9. $\int \dfrac{1}{\sin^2 x} dx = -ctgx + C$

10. $\int \dfrac{1}{\sqrt{1-x^2}} dx = \arcsin x + C$

11. $\int \dfrac{1}{1+x^2} dx = arctgx + C$

12. $\int \dfrac{dx}{x^2 + a^2} = \dfrac{1}{a} arctg \dfrac{x}{a} + C, a \in R, a \neq 0$

13. $\int \dfrac{dx}{x^2 - a^2} = \dfrac{1}{2a} \ln\left|\dfrac{x-a}{x+a}\right| + C, a \in R, a \neq 0$

14. $\int \dfrac{dx}{\sqrt{x^2 \pm a^2}} = \ln\left|x + \sqrt{x^2 \pm a^2}\right| + C.$