

Шпоры

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1. $\int x^\alpha dx = \frac{x^{\alpha+1}}{\alpha+1} + C, (\alpha \neq -1)$	9. $\int \frac{dx}{\sqrt{1-x^2}} = \arcsin x + C$
2. $\int \frac{dx}{x} = \ln x + C$	10. $\int \frac{dx}{1+x^2} = \operatorname{arctg} x + C$
3. $\int a^x dx = \frac{a^x}{\ln a} + C, (a > 0)$	11. $\int \frac{dx}{\sqrt{x^2 \pm 1}} = \ln x + \sqrt{x^2 \pm 1} + C$
4. $\int e^x dx = e^x + C$	12. $\int \frac{dx}{x^2 - 1} = \frac{1}{2} \ln \left \frac{x-1}{x+1} \right + C$
5. $\int \sin x dx = -\cos x + C$	13. $\int \frac{dx}{\sqrt{a^2 - x^2}} = \arcsin \frac{x}{a} + C$
6. $\int \cos x dx = \sin x + C$	14. $\int \frac{dx}{a^2 + x^2} = \frac{1}{a} \operatorname{arctg} \frac{x}{a} + C$
7. $\int \frac{dx}{\sin^2 x} = -\operatorname{ctg} x + C$	15. $\int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln x + \sqrt{x^2 \pm a^2} +$
8. $\int \frac{dx}{\cos^2 x} = \operatorname{tg} x + C$	16. $\int \frac{dx}{x^2 - a^2} = \frac{1}{2a} \ln \left \frac{x-a}{x+a} \right + C$