1. $\int x^\alpha\,dx = \frac{x^{\alpha+1}}{\alpha+1} + C$ $(\alpha \neq -1)$; при $\alpha = 0$ имеем $\int dx = x + C$.

2. $\int \frac{dx}{x} = \ln|x| + C$.

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

4. $\int \cos x\,dx = \sin x + C$.

5. $\int \frac{dx}{\cos^2 x} = \operatorname{tg} x + C$.

6. $\int \frac{dx}{\sin^2 x} = -\operatorname{ctg} x + C$.

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

8. $\int \frac{dx}{1+x^2} = \operatorname{arctg} x + C$.

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

10. $\int e^x\,dx = e^x + C$.

11. $\int \operatorname{tg} x\,dx = -\ln|\cos x| + C$.

12. $\int \operatorname{ctg} x\,dx = \ln|\sin x| + C$.

13. $\int \frac{dx}{\sin x} = \ln|\operatorname{cosec} x - \operatorname{ctg} x| + C = \ln\left|\operatorname{tg}\frac{x}{2}\right| + C$.

14. $\int \frac{dx}{\cos x} = \ln|\sec x + \operatorname{tg} x| + C = \ln\left|\operatorname{tg}\left(\frac{x}{2} + \frac{\pi}{4}\right)\right| + C$.

15. $\int \frac{dx}{a^2+x^2} = \frac{1}{a}\operatorname{arctg}\frac{x}{a} + C$, $a \neq 0$.

16. $\int \frac{dx}{a^2-x^2} = \frac{1}{2a}\ln\left|\frac{a+x}{a-x}\right| + C$, $a \neq 0$.

17. $\int \frac{dx}{x^2-a^2} = \frac{1}{2a}\ln\left|\frac{x-a}{x+a}\right| + C$, $a \neq 0$.

18. $\int \frac{dx}{\sqrt{a^2-x^2}} = \arcsin\frac{x}{a} + C$, $|x| < a$, $a \neq 0$.

19. $\int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln|x + \sqrt{x^2 \pm a^2}| + C$.

20. $\int \sqrt{x^2+a^2}\,dx = \frac{x}{2}\sqrt{x^2+a^2} + \frac{a^2}{2}\ln|x + \sqrt{x^2+a^2}| + C$.

21. $\int \sqrt{x^2-a^2}\,dx = \frac{x}{2}\sqrt{x^2-a^2} - \frac{a^2}{2}\ln|x + \sqrt{x^2-a^2}| + C$.