

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