Einige Integrale

$$\int x^{\alpha} dx = \frac{x^{\alpha+1}}{\alpha+1} + C, \ \alpha \neq -1.$$

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

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

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

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

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

$$\int \frac{dx}{\cos^2 x} = \tan x + C.$$

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

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

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

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

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

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