List of Antiderivatives

$$\int x^n \mathrm{d}x = \frac{x^{n+1}}{n+1} + C$$

$$\int \frac{1}{x}\mathrm{d}x = \ln|x| + C$$

$$\int \mathrm{e}^x\,\mathrm{d}x = \mathrm{e}^x + C$$

$$\int \mathrm{e}^{ax}\,\mathrm{d}x = \frac{\mathrm{e}^{ax}}{a} + C$$

$$\int a^x \mathrm{d}x = \frac{a^x}{\ln a} + C$$

$$\int \sin x \mathrm{d}x = -\cos x + C$$

$$\int \sin ax \mathrm{d}x = -\frac{\cos ax}{a} + C$$

$$\int \cos x \mathrm{d}x = \sin x + C$$

$$\int \cos ax \mathrm{d}x = \frac{\sin ax}{a} + C$$

$$\int \sec^2 x \mathrm{d}x = \int 1 + \tan^2 x \mathrm{d}x = \tan x + C$$

$$\int \csc^2 \mathrm{d}x = -\cot x + C$$

$$\int \sec x \tan x \mathrm{d}x = \sec x + C$$

$$\int \tan x \mathrm{d}x = -\ln(|\cos x|) + C$$

$$\int \frac{1}{1+x^2}\mathrm{d}x = \operatorname{Arctan} x + C$$

$$\int \frac{1}{\sqrt{1-x^2}}\mathrm{d}x = \operatorname{Arcsin} x + C$$