$$\int x^\alpha \mathrm{d}x = \frac{1}{\alpha+1}x^{\alpha+1} + C \quad (\alpha \neq 1)$$

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

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

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

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

$$\int \sec x \tan x \mathrm{d}x = \sec x + C \qquad \int \csc x \cot x \mathrm{d}x = -\csc x + C$$

$$\int \tan x \mathrm{d}x = -\ln|\cos x| + C, \qquad \int \cot x \mathrm{d}x = \ln|\sin x| + C$$

$$\int \sec x \mathrm{d}x = \ln|\sec x + \tan x| + C \qquad \int \csc x \mathrm{d}x = \ln|\csc x - \cot x| + C$$

$a > 0:$

$$\int \frac{1}{\sqrt{1-x^2}}\mathrm{d}x = \arcsin x + C \qquad \int \frac{1}{\sqrt{a^2-x^2}}\mathrm{d}x = \arcsin \frac{x}{a} + C$$

$$\int \frac{1}{1+x^2}\mathrm{d}x = \arctan x + C \qquad \int \frac{\mathrm{d}x}{a^2+x^2} = \frac{1}{a}\arctan \frac{x}{a} + C$$

$$\int \frac{\mathrm{d}x}{x^2-a^2} = \frac{1}{2a}\ln\left|\frac{x-a}{x+a}\right| + C$$

$$\int \frac{\mathrm{d}x}{\sqrt{x^2 \pm a^2}} = \ln|x + \sqrt{x^2 \pm a^2}| + C$$