

$$\int x^{\alpha} dx = \frac{1}{\alpha+1} x^{\alpha+1} + c \quad (\alpha \neq -1),$$

$$\int \frac{1}{x} dx = \ln|x| + c,$$

$$\int a^x dx = \frac{1}{\ln a} a^x + c \quad (0 < a \neq 1),$$

$$\int e^x dx = e^x + c,$$

$$\int \sin x dx = -\cos x + c,$$

$$\int \cos x dx = \sin x + c,$$

$$\int \frac{1}{\cos^2 x} dx = \tan x + c,$$

$$\int \frac{1}{\sin^2 x} dx = -\cot x + c,$$

$$\int \frac{1}{\sqrt{1-x^2}} dx = \begin{cases} \arcsin x + c, \\ -\arccos x + \tilde{c}, \end{cases}$$

$$\int \frac{1}{1+x^2} dx = \begin{cases} \arctan x + c, \\ -\operatorname{arccot} x + \tilde{c}, \end{cases}$$

$$\int \sinh x dx = \cosh x + c,$$

$$\int \cosh x dx = \sinh x + c,$$

$$\int \frac{1}{\cosh^2 x} dx = \tanh x + c,$$

$$\int \frac{1}{\sinh^2 x} dx = -\coth x + c,$$

$$\int \frac{1}{\sqrt{x^2 \pm 1}} dx = \ln|x + \sqrt{x^2 \pm 1}| + c,$$

$$\int \frac{1}{1-x^2} dx = \frac{1}{2} \ln \left| \frac{1+x}{1-x} \right| + c.$$