

$$\int \sin(ax) \, dx = -\frac{1}{a} \cos(ax) + c$$

$$\int \cot(ax) \, dx = \frac{1}{a} \ln \sin(ax) + c$$

$$\int \cos(ax) \, dx = \frac{1}{a} \sin(ax) + c$$

$$\int \sec(x) \, dx = \ln(\sec(x) + \tan(x)) + c$$

$$\int \tan(ax) \, dx = -\frac{1}{a} \ln |\cos(ax)| + c$$

$$\int \csc(x) \, dx = \ln |\csc(x) - \cot(x)| + c$$

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

$$\int e^{-x} \, dx = -e^{-x} + c$$

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

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

$$\int \sec(x) \tan(x) \, dx = \sec(x) + c$$

$$\int \sec^2(x) \, dx = \tan(x) + c$$

$$\int \csc(x) \cot(x) \, dx = -\csc(x) + c$$

$$\int \csc^2(x) \, dx = -\cot(x) + c$$

$$\int \frac{dx}{\sin(x)} = \ln \left| \tan \left(\frac{x}{2} \right) \right| + c$$

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

$$\int \frac{dx}{\cos(x)} = \ln \left| \tan \left(\frac{x}{2} + \frac{\pi}{4} \right) \right| + c$$

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

$$\int \frac{dx}{\sqrt{a^2 - x^2}} = \arcsin \left(\frac{x}{a} \right) + c$$

$$\int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln(x + \sqrt{x^2 \pm a^2}) + c$$

$$\int \frac{dx}{a^2 + x^2} = \frac{1}{a} \arctan \left(\frac{x}{a} \right) + c$$

$$\int \frac{dx}{x\sqrt{x^2 - a^2}} = \frac{1}{a} \operatorname{arcsec} \left(\frac{x}{a} \right) + c$$