



$$\int d(ax+b) = \frac{1}{a}(ax+b) + C$$

$$\int e^{kx} dx = \frac{e^{kx}}{k} + C$$

$$\int (ax+b)^{\alpha} dx = \frac{1}{a} \left(\frac{ax+b}{\alpha+1} \right)^{\alpha+1} + c, \alpha \neq -1$$

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

$$\int \frac{dx}{ax+b} = \frac{1}{a} \ln|ax+b| + c + c$$

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

$$\int e^{ax+b} dx = \frac{1}{a} e^{ax+b} + c$$

$$\int \operatorname{tg}(ax+b) dx = -\frac{1}{a} \ln|\cos(ax+b)| + c$$

$$\int a^{px+q} dx = \frac{1}{p \ln a} a^{px+q} + c$$

$$\int \operatorname{cotg}(ax+b) dx = \frac{1}{a} \ln|\sin(ax+b)| + c$$

$$\int \frac{dx}{a^2+x^2} = \frac{1}{a} \operatorname{arctg} \frac{x}{a} + c$$

$$\int \frac{dx}{\sin^2(ax+b)} = -\frac{1}{a} \operatorname{cotg}(ax+b) + c$$

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

$$\int \frac{dx}{\cos^2(ax+b)} = \frac{1}{a} \operatorname{tg}(ax+b) + c$$

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

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

$$\int \frac{dx}{\sqrt{a^2-x^2}} = \arcsin \frac{x}{|a|} + c$$

$$\int \arccos \frac{x}{a} dx = x \arccos \frac{x}{a} - \sqrt{a^2-x^2} + c$$

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

$$\int \operatorname{arctg} \frac{x}{a} dx = x \operatorname{arctg} \frac{x}{a} - \frac{a}{2} \ln(a^2+x^2) + c$$

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

$$\int \operatorname{arc cotg} \frac{x}{a} dx = x \operatorname{arc cotg} \frac{x}{a} + \frac{a}{2} \ln(a^2+x^2) + c$$

$$\int \ln(ax+b) dx = \left(x + \frac{b}{a} \right) \ln(ax+b) - x + c$$

$$\int \frac{dx}{\sin(ax+b)} = \frac{1}{a} \ln \left| \operatorname{tg} \frac{ax+b}{2} \right| + c$$

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

$$\int \frac{dx}{\sin(ax+b)} = \frac{1}{a} \ln \left| \operatorname{tg} \frac{ax+b}{2} \right| + c$$

$$\int e^{ax} \sin bx dx = \frac{e^{ax} (a \sin bx - b \cos bx)}{a^2 + b^2} + c$$

$$\int e^{ax} \cos bx dx = \frac{e^{ax} (a \cos bx + b \sin bx)}{a^2 + b^2} + c$$