1) $\int x^n\,dx = \frac{x^{n+1}}{n+1} + C,\ \ n \neq -1$

2) $\int (x \pm a)^n\,dx = \frac{(x \pm a)^{n+1}}{n+1} + C$

3) $\int \frac{x\,dx}{x^2 \pm a^2} = \frac{\ln\left|x^2 \pm a^2\right|}{2}$

4) $\int (a - x)^n\,dx = \frac{(a-x)^{n+1}}{-(n+1)} + C, \qquad n \neq 1$

5) $\int \frac{dx}{x} = \ln|x| + C$

6) $\int \frac{dx}{(x \pm a)} = \ln|x \pm a| + C$

7) $\int \frac{dx}{\operatorname{ch}^2 x} = \operatorname{th} x + C$

8) $\int \frac{dx}{\operatorname{sh}^2 x} = -\operatorname{cth} x + C$

9) $\int e^x\,dx = e^x + C$

10) $\int a^x\,dx = \frac{1}{\ln a}a^x + C, a > 0, a \neq 1$

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

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

13) $\int \sin^2 ax\,dx = \frac{x}{2} - \frac{\sin 2ax}{4a} + C$

14) $\int \cos^2 ax\,dx = \frac{x}{2} + \frac{\sin 2ax}{4a} + C$

15) $\int \sin^3 ax\,dx = -\frac{3\cos ax}{4a} + \frac{\cos 3ax}{12a} + C$

16) $\int \cos^3 ax\,dx = \frac{3\sin ax}{4a} + \frac{\sin 3ax}{12a} + C$

17) $\int \frac{dx}{\sin x} = \ln\left|\operatorname{tg}\frac{x}{2}\right| + C$

18) $\int \frac{dx}{\cos x} = \ln\left|\operatorname{tg}\left(\frac{x}{2} - \frac{\pi}{4}\right)\right| + C$

19) $\int \frac{dx}{\sin^2 x} = -\operatorname{ctg} x + C$

20) $\int \frac{dx}{\cos^2 x} = \operatorname{tg} x + C$

21) $\int \operatorname{tg} x\,dx = -\ln|\cos x| + C$

22) $\int \operatorname{ctg} x\,dx = \ln|\sin x| + C$

23) $\int \operatorname{tg}^2 x\,dx = \operatorname{tg} x - x + C$

24) $\int \operatorname{ctg}^2 x\,dx = -\operatorname{ctg} x - x + C$

25) $\int \frac{dx}{a^2 + x^2} = \frac{\operatorname{arctg}\frac{x}{a}}{a} + C = -\frac{\operatorname{arcctg}\frac{x}{a}}{a} + C$

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

27) $\int \sqrt{a^2 - x^2}\,dx = \frac{x\sqrt{a^2 - x^2}}{2} + \frac{a^2 \arcsin\frac{x}{a}}{2} + C$

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

29) $\int \sqrt{x^2 \pm a^2}\,dx = \frac{x\sqrt{x^2 \pm a^2}}{2} \pm \frac{a^2 \ln\left|x + \sqrt{x^2 \pm a^2}\right|}{2} + C$

30) $\int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln\left|x + \sqrt{x^2 \pm a^2}\right| + C$

31) $\int \frac{dx}{\sqrt{a^2 - x^2}} = \arcsin\frac{x}{a} + C = -\arccos\frac{x}{a} + C$