समाकलन के सूत्र

1. $\int x^n dx = \frac{x^{n+1}}{n+1}$
2. $\int \cos x \, dx = \sin x$
3. $\int \sin x \, dx = -\cos x$
4. $\int \sec^2 x \, dx = \tan x$
5. $\int \text{cosec}^2 x \, dx = -\cot x$
6. $\int \sec x . \tan x \, dx = \sec x$
7. $\int \text{cosec} x . \cot x \, dx = -\text{cosec} x$
8. $\int a^x dx = \frac{a^x}{\log_e a}$
9. $\int e^x dx = e^x$
10. $\int \frac{1}{x} dx = \log x$
11. $\int \frac{1}{\sqrt{1 - x^2}} dx = \sin^{-1} x$
12. $\int \frac{-1}{\sqrt{1 - x^2}} dx = \cos^{-1} x$
13. $\int \frac{1}{1 + x^2} dx = \tan^{-1} x$
14. $\int \frac{-1}{1 + x^2} dx = \cot^{-1} x$
15. $\int \frac{1}{x\sqrt{x^2 - 1}} dx = \sec^{-1} x$
16. $\int \frac{-1}{x\sqrt{x^2 - 1}} dx = \text{cosec}^{-1} x$
17. $\int \frac{1}{a^2 + x^2} dx = \frac{1}{a} \tan^{-1}\left(\frac{x}{a}\right)$
18. $\int \frac{1}{\sqrt{a^2 - x^2}} dx = \sin^{-1}\left(\frac{x}{a}\right)$
19. $\int \frac{1}{x\sqrt{x^2 - a^2}} dx = \frac{1}{a} \sec^{-1}\left(\frac{x}{a}\right)$
20. $\int \tan x \, dx = \log \sec x$
21. $\int \cot x \, dx = \log \sin x$
22. $\int \text{cosec} x \, dx = \log \tan \frac{x}{2}$
23. $\int \text{cosec} x \, dx = -\log(\text{cosec} x + \cot x)$
24. $\int \sec x \, dx = \log \tan\left(\frac{\pi}{4} + \frac{x}{2}\right)$
25. $\int \sec x \, dx = \log(\sec x + \tan x)$
26. $\int \frac{1}{\sqrt{a^2 + x^2}} dx = \log(x + \sqrt{a^2 + x^2})$
27. $\int \frac{1}{\sqrt{x^2 - a^2}} dx = \log(x + \sqrt{x^2 - a^2})$
28. $\int e^{ax} \sin bx \, dx = \frac{e^{ax}}{(a^2 + b^2)} (a \sin bx - b \cos bx)$
29. $\int e^{ax} \cos bx \, dx = \frac{e^{ax}}{(a^2 + b^2)} (b \sin bx + a \cos bx)$
30. $\int \sqrt{a^2 - x^2} dx = \frac{x}{2}\sqrt{a^2 - x^2} + \frac{a^2}{2} \sin^{-1}\left|\frac{x}{2}\right|$
31. $\int \sqrt{a^2 + x^2} dx = \frac{1}{2}\left[x\sqrt{a^2 + x^2} + a^2 \log(x + \sqrt{a^2 + x^2})\right]$
32. $\int \sqrt{x^2 - a^2} dx = \frac{1}{2}\left[x\sqrt{x^2 - a^2} + a^2 \log(x + \sqrt{x^2 - a^2})\right]$