The Practise Ground

Class 12 Maths

Integration Formulas

Standard integrals every Class 12 student needs

1

$$\int x^n \, dx = x^{n+1} / (n+1) + C$$

Power rule (n ≠ −1)
Add 1 to the power, divide by the new power

2

$$\int (1/x) \, dx = \ln|x| + C$$

Reciprocal
The special case n = −1

3

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

Exponential
Unchanged by integration

4

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

Sine
Also $\int \cos x \, dx = \sin x + C$

More results

$\int \sec^2 x \, dx = \tan x + C$

Parts: $\int u \, dv = uv - \int v \, du$

Never forget + C for an indefinite integral.

Quick examples

$\int (3x^2 + 2) \, dx = x^3 + 2x + C$

Definite: $\int$ from 0 to 2 of $x \, dx = [x^2/2] = 2$

Think you've got it? Test yourself.

Scan for a free Class 12 Maths quiz.

thepractiseground.in

Free for every class. Print and display it anywhere.