

National Institute of Open Schooling (NIOS)
Senior Secondary Course
Lesson – 30: Integration
Worksheet -30

1. Evaluate $\int \sin(ax+b).\cos(ax+b).dx$
2. List out properties of integrals with examples.
3. Evaluation $\int \sin 5x.\cos 2x.dx$
4. Find the integral value of $\int \tan x.\tan 2x.\tan 3x.dx$
5. Evaluate $\int \frac{e^{3x}}{e^{3x}+1}.dx$
6. Evaluate $\int \frac{x^2}{\sqrt{x+2}} dx$
7. Evaluate $\int \frac{1}{\cos^4 x + \sin^4 x}.dx$
8. Find out $\int \log(2+x^2).dx$
9. Evaluate $\int \frac{\sin 2x}{a^2 \sin^2 x + b^2 \cos^2 x} dx$
10. Evaluate $\int \frac{1-\tan x}{1+\tan x} dx$