

Centum Preparation 100 Days plan class 12 Maths

Q.N o.	DAY - 60
372	Example 9.25 Evaluate : $\int_{-\log 2}^{\log 2} e^{- x } dx$
373	Example 9.27 Prove that $\int_0^{\frac{\pi}{4}} \log(1 + \tan x) dx = \frac{\pi}{8} \log 2.$
374	Example 9.28 Show that $\int_0^1 \left(\tan^{-1} x + \tan^{-1}(1-x) \right) dx = \frac{\pi}{2} - \log_e 2 .$
375	Example 9.29 Evaluate $\int_2^3 \frac{\sqrt{x}}{\sqrt{5-x} + \sqrt{x}} dx.$
376	Example 9.30 Evaluate $\int_{-\pi}^{\pi} \frac{\cos^2 x}{1 + a^x} dx$
377	EXERCISE 9.3 1. Evaluate the following definite integrals : (ii) $\int_{-1}^1 \frac{dx}{x^2 + 2x + 5}$ (iii) $\int_0^1 \sqrt{\frac{1-x}{1+x}} dx$ (vi) $\int_0^1 \frac{1-x^2}{(1+x^2)^2} dx$