

Centum Preparation 100 Days plan class 12 Maths

Q.N o.	DAY - 59
365	Example 9.15 Evaluate : $\int_{-4}^4 x+3 \, dx$.
366	Example 9.16 Show that $\int_0^{\frac{\pi}{2}} \frac{dx}{4+5\sin x} = \frac{1}{3} \log_e 2$.
367	Example 9.17 Prove that $\int_0^{\frac{\pi}{4}} \frac{\sin 2x \, dx}{\sin^4 x + \cos^4 x} = \frac{\pi}{4}$
368	Example 9.18 Prove that $\int_0^{\frac{\pi}{4}} \frac{dx}{a^2 \sin^2 x + b^2 \cos^2 x} = \frac{1}{ab} \tan^{-1} \left(\frac{a}{b} \right)$, where $a, b > 0$
369	Example 9.19 Evaluate $\int_0^{\frac{\pi}{4}} \frac{1}{\sin x + \cos x} \, dx$
370	Example 9.21 Evaluate $\int_0^{\pi} \frac{x}{1 + \sin x} \, dx$.
371	Example 9.24 Evaluate : $\int_{-\frac{\pi}{2}}^{\frac{\pi}{2}} x \cos x \, dx$.