

Q1. Evaluate the integrals;

*i.*  $\int \frac{dx}{4x^2 + 9}$

*ii.*  $\int x 3^x dx$

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*iii.*  $\int \sin^{-1}(x) dx$

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*iv.*  $\int \frac{\cos^2 x}{\sin^6 x} dx$