

Q1. Evaluate the Riemann sum for $f(x) = x^2$ over $[0, 2]$, taking the sample points to be the Midpoints with n approximating rectangles of equal widths.



Q2. Evaluate $\int \left(2^x + \frac{1}{x} \right) dx$



Q1. Express the limit as a definite integral $\lim_{n \rightarrow \infty} \sum_{i=1}^n \frac{i}{n^2 + i^2}$

Q2. Evaluate $\int_0^{\pi} |\cos x| dx$