

Math 102 Quiz 1

(B)

Name:.....Serial #:.....Sec #:.....

Q.1: Write an expression as a **limit** for the area under the graph of $f(x) = x + \tan(x)$, $1 \leq x \leq 6$. Do not evaluate the limit.

Q.2: Use Riemann sum with $n = 4$ and take sample points as midpoints to approximate the integral $\int_0^4 (1 + x^2) dx$.

Q.3: Use Fundamental Theorem of Calculus to find the derivative of $y = \int_{\ln x}^{x^2} (t^3 + \cos(t)) dt$.