QUIZ♯1   Math102-sec 9

Net Time Allowed: 20 minutes

Name: **ID ♯ :**   **Serial ♯:**

(**Justify clearly your answer !**)

Exercise1:(05 points)

$$\text{Find } \lim_{n \longrightarrow \infty} \sum_{k=1}^{n} \left(\frac{2}{n} + \frac{3k}{n^2} \right)$$

Exercise2:(05 points)

Find the slope of the tangent line to the curve $y = \int_{2}^{\sec x} \frac{\sqrt{t^2 - 1}}{t} dt, \ 0 < x < \frac{\pi}{2}$ at $x = \frac{\pi}{3}$.