QUIZ♯1   Math102-sec 12.

Net Time Allowed: 20 minutes

Name: **ID ♯ :**   **Serial ♯:**

Exercise1:(05 points)

Evaluate
$$S = \lim_{n \longrightarrow \infty} \left[\frac{5}{n} \sum_{i=1}^{n} \sqrt{\frac{15\,n + 9\,i}{3\,n}} \; \right] \quad .$$

(**Justify clearly your answer!**)

Exercise2:(05 points)

If g is a continuous function on $[-3,\,0]$ such that : $\displaystyle\int_{0}^{-3} g(t)\,dt \; = \; \sqrt{2}$, then find

$$\int_{-3}^{0} \left(1 + \frac{3\,g(x)}{\sqrt{2}}\right) dx \,. \quad \textbf{Justify your answer !}$$