Time: 10min

QUIZ 1

Let $f(x) = x^2$, $0 \le x \le 5$. Suppose that we divide the interval [0, 5] into 10 equal segments and compute the corresponding left hand sum and right hand sum of f. Which sum is bigger? Why? What is the difference between the two sums? Into how many segments should we divide [0, 5] so that the difference is less than 1?

 $\mathtt{IMT}_{EX} \hspace{1cm} \mathcal{M}\mathcal{G}$