

Name _____

Mathematics 105D: Calculus I
Fall Semester 2012
David Haines
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Quiz #27

On Monday's quiz you used the Fundamental Theorem of Calculus to evaluate $\int_0^4 \sqrt{x} dx$ to get $16/3$. Now you are going to estimate $\int_0^4 \sqrt{x} dx$ numerically using sums of two terms, i.e. $n = 2$ with two equal subintervals.

- A. Sketch a graph of $f(x) = \sqrt{x}$ over the interval $[0, 4]$.
- B. Sketch a graph of the rectangles and write out the sum of the two terms to compute the number R_2 .
- C. Sketch a graph of the rectangles and write out the sum of the two terms to compute the number L_2 .