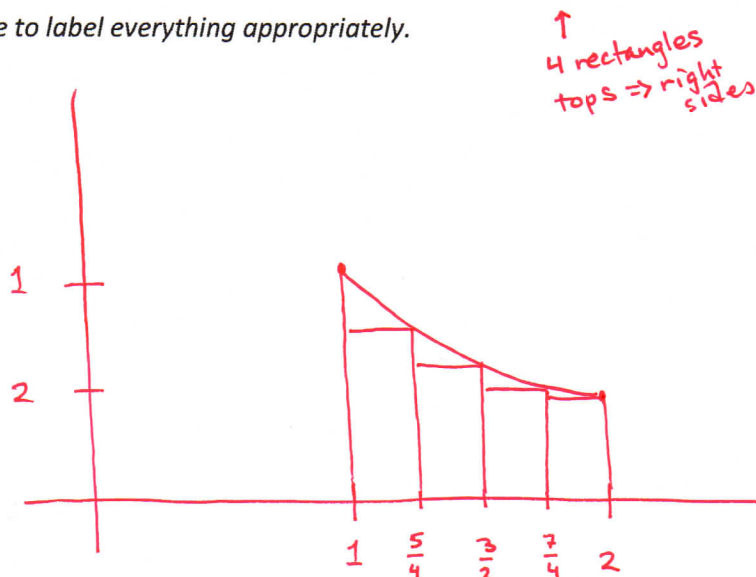


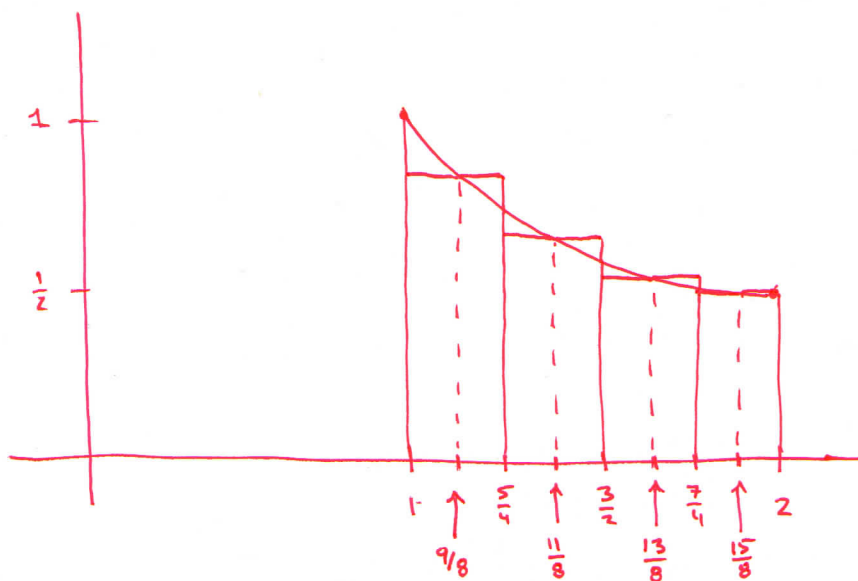
QUIZ 3

Consider the function $f(x) = \frac{1}{x}$ on the interval $x = 1$ to $x = 2$.

1. (5 points) Sketch a diagram of its right Riemann sum R_4 , and find Δx for this Riemann sum. Be sure to label everything appropriately.



2. (3 points) Sketch a diagram of the Riemann sum M_4 (called the midpoint rule).



3. (2 points) Based off of your sketches, which of the Riemann sums above gives the most accurate estimate of the area between the lines $f(x) = \frac{1}{x}$, $x = 1$, $x = 2$, and the x -axis?

the midpoint rule