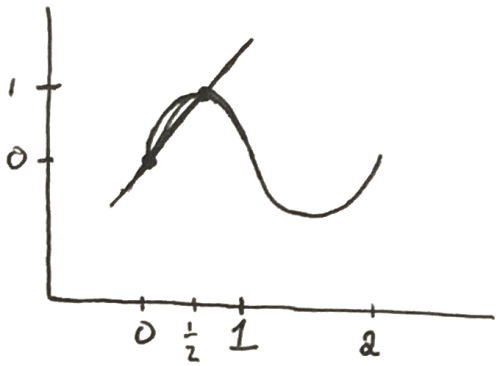
quiz 5
math111702
u new haven
18 Sep

name: Solution

1 (10 points). Consider the position function $s(t) = \sin(\pi t)$ representing the position of an object moving along the line at the end of a spring. Sketch a graph of s together with the secant line that passes through $(0, s(0))$ and $(0.5, s(0.5))$. Determine the slope of this secant line.



$$\text{slope} = \frac{s(0.5) - s(0)}{0.5 - 0}$$

$$= \frac{1 - 0}{0.5}$$

$$= 2$$