

MATH 201

Area

Problem 1 Consider the region bounded by $f(x) = 10 \sin(x^2)$, $f(x) = 0$, $x = 0$, and $x = 1$. For each part below: Use six rectangles, each with the same base length, and let units for x be radians.

1. Estimate the area of the region using a left hand sum, accurate to four decimal places. Is this estimate greater or less than the actual area?

2. Estimate the area of the region using a right hand sum, accurate to four decimal places. Is this estimate greater or less than the actual area?