Math 102 Quiz 3

(B)

Name: Serial #: Sec #.

Q.1: Find f'(x) for $f(x) = \log_a (\tan^2 x)$.

Q.2: Sketch the region bounded by the curves $y = \sin(x)$, $y = \sin(2x)$, x = 0, $x = \frac{\pi}{2}$. Also find the area of the region.

Q.3: Find volume of the solid obtained by rotating the region bounded by $y = x^2$, $x = y^2$, about y = 2.