

Math 102 Quiz 3

(A)

Name:.....Serial #:.....Sec #:.....

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

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