

Quiz #3A

Math 101 - 17

Sem 031

Name _____ I.D.# _____ Serial # _____

Q1 $\lim_{x \rightarrow 1} \cos \frac{1}{x}$

Q2 Find the value of k at which the function $f(x) = \begin{cases} \frac{\sin x - 3}{x^2 - 9} & \text{if } x \neq 3 \\ k & \text{if } x = 3 \end{cases}$ is continuous at $x = 3$.

Q3. Determine if $f(x) = x^3 - x^2 - 1$ has any zero in the interval $(-1, 1)$