February 19,2015

QUIZ♯2 Math101-sec 4.

Net Time Allowed: 25 minutes

Name: **ID ♯ :** **Serial ♯:**

Exercise1:(04 points)

Consider the function f given by $f(x) = \frac{\sqrt{x^2-16}}{x^2-3x-10}$.
Find the domain where f is continuous. **Justify clearly your answer.**

Exercise2:(06 points)
Consider the functions f and g given by $f(x) = \ln x$ and $g(x) = e^{-x}$.
Use the Intermediate value theorem to show that the graphs of the functions f and g intersect at a point whose $x-$coordinate lies in the interval $[1, e]$.