February 22,2018

QUIZ♯2 Math102-sec 32

Net Time Allowed: 20 minutes

Name: **ID ♯ :** **Serial ♯:**

(**Justify clearly your answer !**)

Exercise1:(05 points)

Evaluate $\int_{\frac{\pi}{2}}^{\pi} \sqrt{1-\sin^2 t}\, dt.$

Exercise2:(05 points)

The base of a solid is bounded by the curves $y = e^x, y = 0, x = 0$ and $x = 1$. If the cross sections, perpendicular to the $x-$axis, are **semicircles**, then find the volume of the solid.

(sketch the graph and a typical cross section !)