$QUIZ \ddagger 2$ Math102-sec 31.

Net Time Allowed: 25 minutes

Name:

ID ♯ :

Serial #:

Exercise1:(05 points)

Evaluate $\int_0^{\ln\sqrt{3}} \frac{e^x}{1+e^{2x}} dx$

(Justify clearly your answer!)

 $\underline{\mathbf{Exercise2:}}(05 \text{ points})$

Find the slope of the tangent line to the curve $y = \int_{3}^{\sec x} \frac{\sqrt{t^2 - 1}}{t} dt$, $0 < x < \frac{\pi}{2}$, at $x = \frac{\pi}{3}$. Justify your answer !