Name: _____

Math 102
Spring 2014, Term 132

Quiz 2 Section 16

Student ID: _____

Serial Number: _____

Instructions: Show Your Work!

(3^{pts}) **1.** Evaluate the integral

$$\int \frac{\sec x}{\sqrt{\ln \sec x + \tan x}} dx.$$

(3^{pts}) **2.** Find the length of the curve

$$y = \left(x^2/8\right) - \ln x, \quad 4 \le x \le 8.$$

(4^{pts}) **3.** Find the derivative of y with respect to x.

$$y = \cos^{-1} x - \quad x \operatorname{sech}^{-1} \left(\frac{1}{2}\right)^x.$$