

Pledge:

10/19/2005  
Dr. Lunsford

MATH261 Calculus I  
Quiz 9

Name: \_\_\_\_\_  
(20 Points Total)

I. Find the indicated derivatives. Do not simplify your answers. (4 points each - 16 total)

(a)  $y = \frac{\tan 3\theta}{\sqrt[3]{2\theta-1}}, \frac{dy}{d\theta} =$

(b)  $g(x) = \sin^4(e^{5x} + 7), g'(x) =$

(c)  $y = \ln(t^2 e^{4t}), \frac{dy}{dt} =$

(d)  $h(w) = \arctan(e^{2w}), \frac{d}{dw} h(w) =$

II. The graph of  $y = [\ln(x+4)]^2 + \frac{7}{6}$  is given below. Find all points on the graph where the tangent line to the graph is horizontal. Clearly indicate the coordinates of the point(s) in your answer and on the graph. (4 points)

