

3/8/2006
Dr. Lunsford

MATH261 Calculus I
Quiz 7

Name: _____
(20 Points Total)

Neatly show all of your work on the quiz.

I. Find the indicated derivatives. Do not simplify your answers. (5 points each, 15 total)

(a) $l(x) = \frac{\cos(x)}{x^4} + \frac{3}{\sqrt{x}}$, $l'(x) = ?$

(b) $y = \frac{t^3 + te^t}{t^4 - 2}$, $\frac{dy}{dt} = ?$

(c) $u = e^t \sec(t)$, $\frac{du}{dt} = ?$

II. Below you are given the graph of $y = \frac{3x}{x^2 + 1}$. Find the coordinates of all points on the graph such that the tangent line to the graph at the point is horizontal. (5 points)

