

Math 124 Quiz #5
October 28, 2008

Name: _____

Show all work.

1. (6 pts.) Differentiate the following. Do **not** simplify your answers.

(a) (2 pts.) $h(t) = e^t(4t^2 + 7t)$

(b) (4 pts.) $F(x) = \frac{3x \cdot e^x}{x^2 - 7} + 9x^2$

2. (2 pts.) Find an equation of the tangent line to $g(x) = 3 \sin x + 2$ at the point (0,2).

3. (2 pts.) At what x -value(s) does $y = 3e^x - 6x$ have a horizontal tangent?