

Name \_\_\_\_\_

Section 0251

Answer all problems. There are 10 possible points.

1. Find the derivatives of the following functions (Show all work to receive full credit!):

a) (3pts)  $f(x) = 6^{(2x^4 + 2x^3 + x)}$

b) (3pts)  $p(y) = \frac{\ln(y+1)}{e^{y^2+3}}$

2. (4pts) Find the derivative of  $f(x) = \frac{2\sin(x)}{1-2\cos(x)}$ . (Show all work to receive full credit!).