

Quiz 1- MAC 2311, Sp'15    NAME: \_\_\_\_\_    Panther ID: \_\_\_\_\_

1. (6 pts) Compute the derivative of each of the following functions:

(a)  $f(x) = \frac{4}{\sqrt{x}} - 3 \cos x + 10^5$

(b)  $g(x) = \frac{\tan x}{1 + \sec x}$

2. (5 pts) Find the equation of the tangent line to the graph of  $f(x) = x \sin x$  at  $x = \frac{\pi}{2}$ .