

NAME: _____ Panther ID: _____

Quiz 2 - MAC 2311, Summer B 2019

To receive full credit you MUST SHOW ALL YOUR WORK.

1. (10 pts) Compute $\frac{dy}{dx}$ for each of the following functions. Simplify your answer when possible. (2 pts each)

(a) $y = 3x^5 + \frac{1}{2x^2}$ (b) $y = x^2 e^{-3x}$

(c) $y = \ln(\sec x + \tan x)$ (d) $y = \sin^4(\sqrt{x})$

(e) $y = (\ln x)^x$ Hint: Use logarithmic differentiation for this one.