

Quiz 3, Calculus I - No calculators

Dr. Graham-Squire, Fall 2017

Name: _____

1. (4 points) Find y' for the equation

$$y^2 + \arctan(x) = (\ln |x|)(\sin y)$$

2. (3 points) Calculate the derivative below. You do NOT need to simplify.

$$f(x) = \left(5x^2 - \sqrt{6^x + x^8}\right)^4$$

3. (3 points) Calculate the derivative of $h(x)$. You can either simplify the expression using logarithm rules, and then take the derivative, OR take the derivative directly and then simplify.

$$h(x) = \ln \left(\frac{(e^x)(\cos x)}{(x+7)^6} \right)^2$$