Quiz 3A, Calculus I - No Calculators

Dr. Graham-Squire, Spring 2014

Name: _____

1. (4 points) Use implicit differentiation to find y'.

$$\frac{\sec x}{y^2} = x^3 + 2y^4$$

2. (3 points) Find $f'(x)$ if $f(x) = \sqrt{\cot\left(\frac{\pi}{4}x\right)}$. You don't have to simplify your answer.

3. (3 points) Find the equation of the tangent line at $x = -1$ if $f(x) = \arctan(x^5)$.