

Math 1A

Quiz 5 - October 7, 2009

Name:

1. Find y' if $x^2 + xy^2 = \sin y$

2. Use log rules to simplify as best you can, $\ln(\cos^4(x) \cdot \sin(x) \cdot e^x)$

(Something to think about: If I had asked you to find the derivative of this function, would you have simplified it first this way, or used a messy combination of product and chain rules. Be alert for problems like this!)

3. Find the derivative of the following functions:

(a) $(17)^x$

(b) $y = e^x \cdot x^{\sin x}$