

Math 180, Quiz 6: Thursday, March 6, 2013

Take fifteen minutes to complete this quiz. Please show all your work, and write your name on the front *and* back of the paper before turning it in. Make sure to show all relevant work.

1. **(5 pts)** Find the equation of the tangent line to the graph of $\sin(xy) = \frac{1}{2}$ at the point $(\pi, \frac{1}{6})$.

2. **(4 pts)** If $g(x) = 4 - 3x$, find the derivative of g^{-1} . (You may do this any way you like.)

3. **(1 pt)** Consider $f(t) = e^{2t}$. Find $f''(0)$.