QUIZ 5

- Show all your work and indicate your final answer clearly. You will be graded not merely on the final answer, but also on the work leading up to it.
- 1. (3 points) Find the derivative of the function $f(x) = \cos(\sec(3x))$.

2. (3 points) Find the derivative of $f(x) = 3\cos^{-1}(x)$.

3. (4 points) Use implicit differentiation to find the equation of the tangent line to the curve $x^2e^y + y^2 = 4$ at the point (0,2).