

Lecture time: 1 pm

Quiz 3

Quiz time limit: 20 min.

Spring 2015

Your name: _____

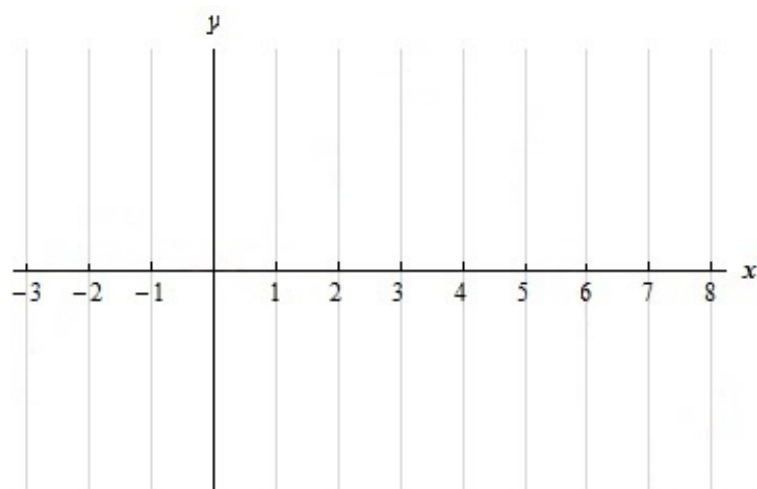
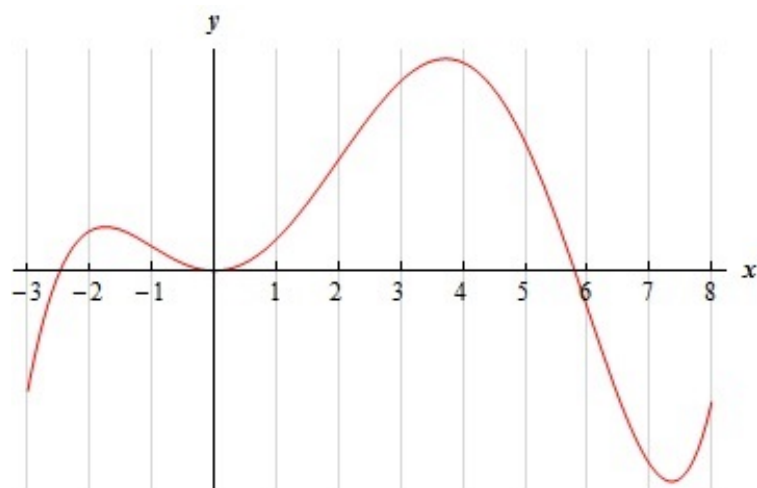
Math 0220

Your TA's name: _____

No calculators, no notes, no books are permitted. L'Hospital's rule is not allowed.

SHOW ALL WORK (no work = no credit). Write neatly. Simplify your answers.

1. [5 points] A graph of a function is given. In the coordinate plane below plot the graph of its derivative. Mark all important points.



2. [5 points] Find an equation of the tangent line to the curve $\cos(2x + y) = y^2 \cos x$ at the point $(\frac{\pi}{4}, 0)$. Write answer in the Slope-Intercept form.

bonus problem [5 points extra] $f(x) = \cos^2 x$. Find $f^{(9)}(\frac{\pi}{4})$. Simplify your answer.