Math 241, Sections BL1 and BL2

Quiz # 2

September 25, 2012

Solve both exercises. Show work to get credit.

1) [5pts.] Find an equation of the tangent plane to the surface $\boxed{z = 4(x-1)^2 + 6(y+3)^2 + 4}$ at the point $\boxed{(2, -2, 14)}$

2) [5pts.] Use the equation $\boxed{\sin(xyz) = x + 5y + 8z}$ to find $\boxed{\dfrac{\partial z}{\partial x}}$ and $\boxed{\dfrac{\partial z}{\partial y}}$