Math 201   Quiz 3

Name:...Serial#:...........................Sec #......................................

Q.1: Describe the traces of the quadratic surface $4x^2 + 25y^2 + z^2 = 100$ in the planes $x = k$, $y = k$, and $z = k$. Write the interval for each k.

Q.2: Change the spherical coordinates $\left(8, \dfrac{\pi}{3}, \dfrac{\pi}{4}\right)$ to cylindrical coordinates.

Q.2: Identify the surface given by $\rho^2 \left(4\sin^2\left(\phi\right) + 9\cos^2\left(\phi\right)\right) = 36$.