$\begin{array}{c} {\rm Math~2551~(L1-L3)}\\ {\rm ~3/30/2016} \end{array}$

Quiz 8

1. Using cylindrical coordinates, set up the triple integral to compute the volume of the solid enclosed by the sphere $x^2 + y^2 + z^2 = 1$ and the cone $z = \sqrt{x^2 + y^2}$ (pictured below). You do not have to compute the value of the integral.



2. Use spherical coordinates to set up the triple integral to compute the volume of the smaller region cut from the solid sphere $\rho \leq 14$ by the plane z = 7. You do not have to compute the value of the integral.