Math 223 Quiz 8

Name:

A two-dimensional region in the yz plane is bounded by the circle of radius 1 centered at the origin, the circle of radius 2 centered at the origin, the 45° line through the origin, and the 30° line through the origin (see figure). This region is revolved about the z axis to form a three-dimensional region in the xyz coordinate system. Using spherical coordinates, find the volume of this region.