Math 225: Calculus III Quiz 7 Mar. 26/28, 1996 Name:______ Section:______

1. Find the centroid of the region inside the unit circle in the first quadrant.

2. Compute the average value of the function $f(x, y, z) = x^3 y$ over the solid region bounded in the first quadrant by the planes x + z = 2 and y = 3. The volume of the region is 6.