Math 225: Calculus III Quiz 8 November 6, 2003

1. Find the volume of the solid bounded by the cylinder, $x^2 + y^2 = 1$, and the planes z = 0 and z = x + 1.

2. Calculate the integral $\iiint_E (x^2+y^2+z^2)^{\frac{3}{2}} dV$ where E is the ball $x^2+y^2+z^2 \leq 4$.