Quiz 5 Calculus 3 10/6/2009

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Set up a double integral for the volume of the region bounded by the coordinate planes and the plane 3x + 2y + z = 6.

2. Set up a double integral for the volume of the solid bounded by the cylinder $x^2 + y^2 = 4$ and the planes x = z, y = 0, and z = 0 in the first octant.