Name: March 26, 2015 MAC 2313.3122 Cyr

## Quiz 10

You must show all work to receive full credit!!

**Problem 1.** (5 pts) Evaluate  $\iiint_{\mathcal{W}} xzdV$  using cylindrical coordinates, where  $\mathcal{W} = \{(x,y,z) \mid x^2 + y^2 \leq 1, x \geq 0, 0 \leq z \leq 2\}.$ 

**Problem 2.** (5 pts) Evaluate  $\iiint_{\mathcal{W}} \rho^{-3} dV$  using spherical coordinates, where  $\mathcal{W} = \{(x,y,z) \mid 2 \leq x^2 + y^2 + z^2 \leq 4\}.$