MATH 251, Section _____   Quiz 9 (Sections 13.6, 13.8).
Thursday, Oct. 28, 2010   Dr. M. Vorobets

NAME (print): _____

Due Tuesday, Nov. 2 at the beginning of class.

No credit for unsupported answers will be given. Clearly indicate your final answer.

1. *[5 pts.]* A lamina occupies the region inside the circle $x^2 + y^2 = 2y$ but outside the circle $x^2 + y^2 = 1$. Find the center of mass if the density at any point is inversely proportional to its distance from the origin.

2. [5 pts.] Evaluate $\iiint_E z\,dV$, where E is bounded by the planes $y = 0$, $z = 0$, $x + y = 2$ and the cylinder $y^2 + z^2 = 1$ in the first octant.