MATH 2415 Test 4   Name: _____

1. Find $\iint_T xy\,dx\,dy$ where T is the interior of the triangle with vertices $(0,0)$, $(6,0)$, and $(6,6)$. (This triangle has a vertical edge and a horizontal edge. So, your choice of vertical or horizontal slicing should work just fine.)

2. Find the average value of y^2 in region B below. Assume density $dm/dV = z$.
$$B = \{(x, y, z) \mid 0 \leq z \text{ and } 9 \leq x^2 + y^2 + z^2 \leq 16\}.$$