KFUPM/ Department of Mathematics & Statistics MATH 201/ Quiz 4/ 101-13/ ID # Name

1. [10pts] Sketch the region of integration and evaluate the integral  $\int_0^1 \int_y^1 x^2 e^{xy} dx dy$ .

2. [10pts] Find the volume of the solid region bounded above by the paraboloid  $z = 9 - x^2 - y^2$  and below by the unit disk in the xy-plane.