

Name: _____

Panther ID: _____

Worksheet 11/01 MAC-2313

Fall 2018

This is a homework due Tuesday, Nov. 6.

1. (5 pts) Let G be the solid tetrahedron in the first octant bounded by the coordinate planes and the plane $3x + 2y + z = 6$. Using a triple integral, find the volume of G .

2. (5 pts) Find the mass of a spherical ball of radius a if the density is inversely proportional to the square of the distance from the center. That is, the density function is given by $\delta = \frac{k}{\rho^2}$, where k is a constant of proportionality. Use spherical coordinates.