Problem Set 4 Calculus 2 Due 1/18/2005

You are encouraged to work in groups of two to four on this assignment and make a single group submission. Each problem is worth 5 points. For full credit indicate clearly how you reached your answer. All work must be legible and submitted on clean paper without ragged edges.

1. Find the center of mass of a right triangle with legs of lengths a and b.

2. Find the surface area of the portion of a sphere of radius r which lies between two planes separated by a distance of h units.

3. Find the surface area of the torus from problem set 3.

4. Find the surface area of Gabriel's Horn from problem set 3.