

Problem Set 1**Calculus 2****Due 9/11/06**

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. Among all functions of the form $f(x) = b - x^2$, there's one for which the area bounded between f and the x -axis is exactly 7. Which value of b makes this happen?
2. Do #48 in Stewart §6.2.
3. Do #52 in Stewart §6.2.
4. Suppose that a bead is made by drilling a hole with radius 1 through the center of a sphere with radius 3. What is the volume of the resulting bead?