

Your job for the day is for the entire class to complete these problems and turn in *one* set of well-written solutions for the entire class. Slide the solutions under my office door along with a sheet that everyone who is here today has signed.

1. Problem #1 from Wednesday
2. Problem #2 from Wednesday (notice there is a change to part b)
3. Find the volume of each three dimensional object described below.
 - (a) The solid formed when the region bounded by $y = x^2 + 1$ and $y = -3x^2 + 9$ is rotated about the line $y = 12$
 - (b) The solid formed when the region from (a) is rotated about the line $x = 17$
 - (c) The sphere of radius r
Hint: The circle of radius r is described by $x^2 + y^2 = r^2$
 - (d) A right circular cone with height h and radius r