Name_____

Find the volume of the described solids.   Set-up the integrals and then use your calculator to find the volume.

     1) The solid lies between planes perpendicular to the x-axis at x = - 2 and x = 2. The cross sections perpendicular to the x-axis are circular disks whose diameters run from the parabola $y = x^2$ to the parabola $y = 8 - x^2$.

     2) The base of a solid is bounded by $y = x^3$, $y = 0$, and x = 3. Find the volume if the cross-sections taken perpendicular to the y-axis are squares.

     3) The base of a solid is the region between the curve y = 5cos x and the x-axis from x = 0 to x = π/2. The cross sections perpendicular to the x-axis are isosceles right triangles with one leg on the base of the solid.