Worksheet 2/15/2019

Find the volume of the following solids.

1. The solid formed when the region bounded by $y = x^2$ and $y = 2 - x^2$ is revolved about the x-axis.



2. The solid formed when the region bounded by $y = x^3$, the x-axis, and x = 2 is revolved about the x-axis.



3. The solid formed when the region bounded by $y = \sin(x^2)$, the y-axis, and y = 1 is revolved about the y-axis.



4. The solid (torus) formed when the disk of radius 1 centered at (3,0) is revolved about the *y*-axis. Only write the definite integral. Don't evaluate.

