

MATH 220: CALCULUS I
WORKSHEET 22
APRIL 11, 2013

1. Find the volume of the solid obtained by rotating the region defined by $y = x$, $y = 0$, $x = 2$, and $x = 4$ about the line $x = 1$.

2. Let \mathbf{R} be the finite region bounded by $8y = x^2$ and $x = y^2$. Set up, **but do not evaluate**, the definite integral which represents the volume of the obtained by revolving the region \mathbf{R} about the line $x = 10$. (The integral should contain a dy . Why is that?)

3. Using the region from the previous problem, how might you set up an integral with respect to x ?