

Name: _____ (20 points total)

1. (20 points) Consider the region R bounded by $x = 1$, $y = 2$, and $y = \sqrt{x}$.

(a) Give a definite integral which computes the volume of the solid generated by rotating R about the x -axis. Do not evaluate the integral.

(b) Give a definite integral which computes the volume of the solid generated by rotating R about the y -axis. Do not evaluate the integral.

(c) Evaluate your integral from part (a).