

Homework 7

The following are due on Friday, October 19:

§5.2 #6, 11, 17.

§5.3 #12, 15, 18.¹

§5.4 #6, 17.

§5.5 #1, 11, and write all six iterated integrals representing the volume of the region

$$R = \{(x, y, z) \in \mathbb{R}^3 : 0 \leq x \leq 1, 0 \leq y \leq x, 0 \leq z \leq 2y\}.$$

(For example, set up the integral $dzdydx$, then set it up $dydzdx$, etc.)
Then, **compute its volume using one of the ways you wrote.**

¹For 18: if you don't think it's true, try to find a counterexample.