

Math 102, Spring 2025 — Homework 1

Tim Chumley

Due February 7 at 5:00 pm

Instructions. This problem set contains problems from Week 1 of class. The problem numbers refer to our textbook, *Calculus*, by Hughes-Hallett et al, 7th edition.

Problem 1. Please do the following textbook problems:

- Section 5.4: 13, 16, 18 (make sure to draw a picture; use Desmos if necessary), 30, 34, 54.
- Section 6.2: 46, 48, 50, 52, 54, 77, 78, 82. *Note: in problems 77, 78, 82, when asked for an area, this means you're asked for the unsigned area which is a positive value, regardless of whether the region lies below the x -axis. Make sure to draw pictures.*

Problem 2. If you liked the problems above or want more practice, our textbook has more great problems. The odd-numbered ones have solutions in the back. Here are some that I recommend (as optional, not to be turned in):

- Section 5.4: 13-19 odd, 29-37 odd, 73-77 odd
- Section 6.2: 7-33 odd, 80, 81, 83, 105-11 odd

Feel free to try others, including the problems in the main sections, which include full explanations.