

Math 102, Spring 2025 — Homework 5

Tim Chumley

Due March 14 at 5:00 pm

Instructions. This problem set contains problems from Week 5 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 8.2: 4, 6, 8, 10, 16, 18
- Section 8.5: 16, 18, 20, 22, 26b (note that pounds (lbs) are a British unit of force; this means there is no need to multiply by a gravitational constant when computing work in these problems)

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 8.2: 1-17 odd
- Section 8.5: 13, 17, 19, 21, 23, 25

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