

Math 128-Homework Set 4, Fall 2026, Due: Wed, Oct 28

Solve problems 1-4 at the end of Chp 4 (page 153).

Write up your solutions neatly, and show your steps clearly.

Pay attention to the following clarification and correction on Problem 4.

- For Problem 4, make sure you give a geometric argument (not an algebraic one) to prove the algebraic identity.
- There is a typo in the second part of problem 4. It should read: Draw your diagram to prove that

$$\sqrt{a} - \sqrt{b} = \sqrt{a + b - 2\sqrt{ab}}$$

At the end of your hmw, please write me a short message, anything from a few words to a paragraph.

Homework Rules

- You can get help from a) your professor, b) the tutor for this course, and c) your classmates provided you follow the [Math Department's Guidelines](#) on Healthy Collaboration
- Any use of AI is strictly prohibited on homework assignments