

You may turn this homework in physically or electronically. To submit it physically, hand in a copy at the start of class before the weekly quiz. To submit electronically, please email a PDF (**not** a Word document!) to the course grader, Yue Zhao, at zhaoy28@uw.edu.

The homework problems are from Sundstrom's *Mathematical Reasoning*, available here:

<https://scholarworks.gvsu.edu/books/9/>

Throughout the course, you should imagine that you are writing your proofs so that they can be understood by someone who is also taking Math 300 at the same time. For these problems, you should be writing paragraph proofs. You may now be less formal in your algebraic manipulations; for example, you don't have to tell me every time you're using the associative property of addition.

For this assignment, please solve:

- Chapter 4.1, page 180–182, problems 3, 8, and 15.
- Chapter 4.2, page 196–197, problems 1, 3, and 6.
- Chapter 4.3, page 207, problem 2de

For extra practice, I recommend completing the progress checks in chapters 4.1, 4.2, and 4.3. (Don't hand in the progress checks. Just think about the problems on your own. You can look up solutions in the back of the book.)