

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/>

For this assignment, please solve:

- Chapter 6.2, pages 303–305, problems 2, 5, and 8.
- Chapter 6.3, pages 318–253, problems 2, 8, 12, and 15.
- Chapter 6.4, page 332, problem 7. **Note: Part (g) is probably supposed to say:
The function g is not a surjection, but the function $g \circ f$ is a surjection.**
- Chapter 6.5, pages 345–347, problems 6, 9, and 12.

For extra practice, I recommend completing the progress checks in chapters 6.1, 6.2, 6.3, and 6.4. (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.)