

Homework may be typed or handwritten. Either way, it's due at the start of class on March 13th. If you type your homework, it is preferred that you print it out and physically hand it in. However, if you're unable to print it out you may email a PDF (*not* a Word document!) to your grader at yc75@uw.edu before the start of class.

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. At this point you can basically assume anything you want about basic algebraic manipulations, without citing any of our axioms or theorems.

For this assignment, please solve:

- 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.
- Chapter 9.2, pages 473–474, problems 1 and 2.
- Chapter 9.3, pages 486–488, problem 1ac

For extra practice, I recommend completing the progress checks in chapters 6.4, 6.5, 9.1, and 9.2. (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.)