

## 1. ASSIGNMENT 1

This is the beginning of an ongoing process we will utilize in our study of Real Analysis.

In this process,

- The class will be given a list of definitions and theorems (but no proofs) in the form of a LaTeX monograph (amsbook)
- Collectively, our task is to fill in the proofs. This will be done as a joint exercise.
- You may work individually or in groups of your choosing, which need not be permanent.
- Anyone may work on any of the proofs.
- As proofs are obtained and validated, they will be added to the monograph.
- Prior to inclusion in the monograph, each proof must be presented to the class. If the proof is deemed to be correct, it will be included in the monograph.

To prevent this from being an exercise in copying from a source, *you should not look at the text or any other sources for the proofs.*

The idea is for the class, working together or individually, to come up with proofs for all of the theorems and lemmas in the monograph.

In addition to the proofs, the monograph will include credits indicating the members of the team that supplied the proof.