

Math 3345 - Winter 2020 - Taylor Proof Journal

Now that you have been introduced to some basic logic and proof techniques, you can start creating your *Proof Journal*. This will be a collection of proofs that you will write each week with each entry including a theorem, the proof of the theorem written as a bulleted list of steps, a re-write of the proof in your own words, and your favorite example (either from class, the text, or another source) of an application of the theorem.

Your proof journal entries will each be worth 10 points. Homework assignments 1-5 were each worth 20 points, all future homework assignments will be worth 30 points (20 to homework and 10 to proof journal).

Expectations and Instructions:

- **Content:** Only one entry per paper. Each entry consists of: a Theorem, a proof of the theorem (should be written as bulleted key points list*), a re-write of the proof in your own words, and your favorite example (either from class, the text, or another source) of an application of the theorem. You may also highlight the key ideas in the proof.
- **Presentation:** Each entry should be neatly written on an 8.5×11 sheet of computer paper or notebook paper with a clean edge. You can use Latex or hand-written. In case your entry is hand-written, it should be clean and legible. You may need to re-write your entry after making a draft. This re-writing helps to make the Theorem your own and remember it.
- **Grading:** Each entry will be collected along with your homework.
- **Back up your work:** If you are using Latex, then backup your work. If you are neatly hand-writing, then scan or keep a copy of your work. You can expect to use your proof journal to study for the final exam, and so we want to help prevent the situation where someone loses all their work before the final.

*I will provide you with examples.