Part 1.

I wish you to write up a proof of a theorem. To choose a theorem you could use some theorem/proof that you remember liking. Pythagorus? Some other geometric proof? Linear Algebra? Counting? Number Theory?

I want a clear statement of the theorem (i.e. hypotheses and conclusions). I want a well written, complete proof. You can assume some basic facts but I would recommend that you state what facts/definitions you are using. Any motivation of the result or proof would be a bonus. The proof should be in your words. I’m not interested in copied proofs. Cite any sources you used for the proof.

I will mark by a variety of criteria. Clarity of the exposition will be the main focus. I will also look towards Mathematical interest. Would it make a nice but short exposition in a talk to a Mathematically interested audience? The criteria of clear exposition will be marked more aggressively as the term progresses. While using few words can be helpful, I’d make extra sure that you have carefully stated the theorem and conveyed the proof. Part one will form 2/3 of assessment of Assignment 2.

Part 2.

I will hand you (in groups of 2?) a proof an elementary problem taken from a 3rd year majors level problems course I took some decades ago. You will receive (by Thursday Jan 16) the statement of the problem and an outline of the proof. I will expect your group to write up a solution on the blackboard on Jan 21. We will discuss in class aspects of the written solution (style, clarity, etc). Part two will form 1/3 of assessment of Assignment 2.