

Comments on Writing Proofs for Homework

Please follow all guidelines as described in the “Homework” section of the course syllabus. In addition, please use Claim/Proof format when writing up solutions to any problems that ask for proofs.

A Note Regarding the Write-Up of Proofs: When writing proofs, you will often need to first do work on scratch paper and then write up your final solution once you have figured out how to do the proof. You should only hand in the final result — not the scratchwork. The write-up that you hand in should be written neatly and legibly. Also, when you are writing proofs remember that the standard rules of English usage still apply; in particular, you should use complete sentences and proper punctuation. As in any class that requires writing assignments, your grade will be based in part on your ability to write clearly, convincingly, and correctly.

When writing up proofs, you should write out the statement you are proving followed by your proof. For example, if a problem asked you to show that A and B imply C , then you should write

Claim: If A and B , then C .

Proof: Since A and B hold we see that . . .

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By doing this, you begin with a statement of your assumptions and with a carefully worded statement of the result to be proven. This will help you keep track of what you are allowed to assume and what you are trying to show.

Finally, remember that while you can talk about the problem with other students, your write-up should be done independently and in your own words only.