

Homework Guidelines

These guidelines are here for two reasons: to make it easier for me to grade your homework, and to help you begin to develop good habits of mathematical writing. Not following them will definitely have an adverse effect on your grade!

Collaboration: I strongly encourage you to work with other students on the homework. Discussing problems and ideas with your classmates is one of the best ways to learn the material. But when writing up solutions to hand in, you must *write your own solutions in your own words*. It is not acceptable to copy from someone else's homework paper, even if you worked together on solving the problems.

Due Date: Each written assignment has a due date; the assignment should be turned in *at the beginning of class* on that day. Homework turned in after the first ten minutes of class will get a 10% deduction for lateness, and homework turned in after class will not be accepted except in extraordinary circumstances (with advance permission) or medical emergencies (with appropriate documentation).

Identification: Make sure the first page of each homework packet is clearly labeled with your name, the course number (Math 300), and the assignment number.

Staple: Staple all the pages of your assignment together.

White space: Leave one-inch margins on all four sides of your pages, and leave at least one blank line between consecutive problems. Don't be stingy with white space.

In order: Arrange your solutions in the order the problems were listed on the assignment, with each problem number clearly labeled. Problems that are out of order might not get credit.

State each problem: Begin each problem by stating what you've been asked to do. You don't have to copy the complete problem statement verbatim; just write enough so that I'll recognize which problem you're solving. If you're asked to prove something, write what you're going to prove in the form of a *theorem statement* ("There are infinitely many prime numbers"), not in the form of a command ("Prove that there are infinitely many prime numbers").

Answers, explanations and proofs: For any homework problem that asks for a short answer (such as a true/false question or a question that asks you to write the negation of a mathematical statement), you can just write the answer (and make sure it's clearly identifiable); you don't need to show your reasoning unless you want it to be considered for partial credit. If a problem asks you to "explain" or "analyze" something, give a cogent and convincing explanation; it doesn't need to be a rigorous proof. If a problem asks you to "prove" or "show" something (both words mean the same thing), write a complete, rigorous mathematical proof, in complete sentences, making sure that the justification for each step is clear.

Proofread: Don't forget to read over what you've written before handing it in. You'll be amazed how many silly mistakes you can catch that way.

Legibility: If you write by hand, make sure your writing is neat and legible, not too small, with as few erasures or crossouts as possible. Be sure to distinguish clearly between similar symbols, such as a/α , $b/6$, C/C , ϵ/ε , $g/q/9$, h/n , $I/l/1$, $s/5$, $t/+$, u/v , U/U , x/\times , $y/4$, $z/2$, and uppercase/lowercase letters. Unless mathematical ideas spring fully and impeccably realized from your pen, your first draft is not likely to be acceptable. I won't grade your paper if I have to struggle to understand what you've written.

Word processing: I welcome computer-typeset submissions from those who are comfortable producing mathematical homework assignments by computer. If you do use a computer, please print out your solutions and turn in paper copies. For those who decide they'd like to typeset their homework assignments, I've posted a link to some mathematical typesetting resources on the course web page.