

## WRITING ASSIGNMENT 2, 18.100C

**Submission details.** Send your ordered preference of problems via email to `ormsby@math.mit.edu` by Tuesday (September 27) night. Your paper (1.5-3 pages) is due on Stellar by Thursday, October 6, 11:59P.M.

**Goal.** Most mathematics writing is done for other mathematicians. In this assignment, you will present your work on an interesting analysis problem to your peers.

**Assignment.** Choose one of problems 4, 7, or 13 from the review sheet. Write a 1.5-3 page solution to the problem in which you not only present a proof but also introduce and motivate the problem. If space allows, include interesting examples and extensions of your work.

Your audience is a fellow 18.100 student, though you should imagine that they have no familiarity with the problem. Feel free to assume facility with all the material covered thus far in class. Carefully explain the logic of your solution so that your work is both comprehensible and interesting. Use guiding text to help your audience understand your argument.

This paper will be reviewed by your peers and thus will be available for them to download via the Stellar site. In order to facilitate an even distribution of problems, you must send your topic preference via email to `ormsby@math.mit.edu` by Tuesday (September 27) night; on Wednesday I will announce topic assignments.

You are encouraged to collaborate on these problems, but please cite any peers, instructors, or resources you use when working on your problem.

**Technical details.** Write your paper in  $\text{\LaTeX}$  in the `amsart` document class, 11-point font. Do not manually alter any of the formatting, but do use theorem and proof environments to help with the readability of your document.

Submit both `.tex` and `.pdf` files via Stellar. Your grade will be based on clarity of exposition, mathematical correctness, and readability of  $\text{\LaTeX}$  in the final version of your paper. The assignment is worth 35 points.

**Note.** This writing assignment is due two days after Exam 1, but the problems are review problems for the exam. I highly recommend preparing a draft of your paper before the exam as it should be good preparation for the test.