

PRESENTING MATHEMATICS

Writing and speaking clearly about mathematics is as important as solving mathematics problems. Papers should be written with the same care given to English or history papers, and oral reports should be smooth and well-rehearsed. The homework problems and classroom discussions give you a chance to practice your written and oral communication skills, and the course projects are the time to show off your skills.

Grading Criteria:

1. Written papers should:

- a. Elevate Understanding: (Provide background research as a springboard to understanding; effectively explain (in own words) something new and mathematically significant; convey the importance of the new information/results.)
- b. Be Well-Organized: (Have a logical structure governed by the goal of the paper; contain sentences and paragraphs that each add to the reader's understanding and follow each other logically.)
- c. Be Professional: (Grammar, spelling, sentence construction, and word choice should facilitate clarity of discussion, explanation, and importance.)

2. Oral presentations should:

- a. Elevate Understanding: (Provide background research as a springboard of understanding; effectively explain (in own words) something new and mathematically significant; convey the importance of the new information/results.)
- b. Be Well-Organized: (Have a logical structure governed by the goal of the talk; include clear and smooth transitions between topics/ideas; consistently work towards the goal of the talk.)
- c. Be Professional: (Grammar and use of language should facilitate clarity of discussion, explanation, and importance; body language and voice should engage audience; pacing should stay within the timelines while allowing audience to absorb material.)
- d. Answer Audience Questions: (Think quickly to produce coherent answers; show that you know more than exactly what was in the presentation)

Tips: Always have a friend proof-read your papers! Practice your oral presentations alone, with your groups, and/or with friends! Never give any public presentation without rehearsing!

Audience: Always assume, for written papers and oral reports, that the audience is your class. This means, for example, that previously used terms need not be defined, but any new terms should be defined. Examples and proofs should be explained at a level appropriate for this course.