

# Math 131A Lecture 2

## What can I expect on the final exam?

### What did I expect on midterm 1?

Midterm 1 covered lectures 1-10. This included the two sets of introductory notes on the webpage as well as the material in the book from sections 1, 2, 3, 4, 7, 9. This excluded Theorem 2.2.

### What did I expect on midterm 2?

Midterm 2 covered lecture 11 through the first part of lecture 19. This included sections 10, 11, 14, 15, 17. This excluded Corollary 11.4, Theorem 11.8, and Theorem 14.9. Also, we used the standard  $\epsilon/\delta$  definitions of a limit and continuity rather than the sequential versions in the book.

### What have we covered since midterm 2?

The material we covered since (the cutoff for) the second midterm was in the second part of lecture 19 through (what we will cover on the last day of class which is) lecture 27. This includes sections 18, 19, 28, 29, 32, 33, 34. This excludes Corollary 18.3, Theorem 18.4, Theorem 18.5, Theorem 18.6, Theorem 19.4, Theorem 19.5, Theorem 19.6, Theorem 29.8, Theorem 29.9, Definition 32.6, Theorem 32.7, Definition 32.8, Theorem 32.9, Theorem 33.4, Theorem 33.9, and the proofs of Theorems 33.3, 33.5, 33.6, 33.8, 34.2, 34.4.

### What should I expect from the final exam?

I am planning to make the final exam 8 questions. This will be twice as long as each midterm, but you have more than 3 times as long to complete the test. So I am hoping that time pressure will not be an issue. Probably there will be 1 question from the material covered on Midterm 1, 1 question from the material covered on Midterm 2, and 6 questions on the material covered since Midterm 2. Since each midterm was 25% of your final grade and the final exam is 40%, this gives a 30% contribution from each portion, which seems fair enough since there were 10/8.5/8.5 lectures devoted to each portion and (at least according to the official course outline) some of the material from the first midterm was “remedial”. The final exam problems will be similar in difficulty/type to those on the midterms. If I have time and can think of enough good problems I may post a practice final exam/solutions.