

Logistics

Remember: the exam is Monday, February 6, starting at 6pm (**sharp**, not Michigan time) in Lorch 140. You will be sitting in the section of the auditorium with the rest of our section, with at least one open chair between every student. (Find the classroom before Monday. Come early, get comfortable.) Make sure to bring:

- pencils
- your graphing calculator
- your student ID
- if you want, a 3" by 5" notecard (any larger and we'll take it away), with anything you want written on it, both sides allowed

The exam will cover the following sections: 5.1-5.4, 6.1, 6.2, 6.4, 7.1, 7.2, 7.5, 8.1, 8.2, 8.4, 8.5. Please note that, in general, we will probably not be able to answer your questions on the exam—do your best in interpreting the problem as it is stated. (Of course if you think there is an error, let us know.)

Tips for Studying

- Reread the textbook. (Work out the examples on your own, and double-check.) Note: there could be things in the book that I didn't dwell on in class that might be on the exam, although I tried to emphasize what's most important. There's review material at the end of each chapter, which might be helpful.
- Look at old exams on main course website. Each exam is different—don't expect it to be the same thing!—but this should give you an idea of what sorts of questions might be on there. (There might be topics on the first exams from previous semesters that we haven't covered yet, especially since they changed the order of material a few years ago. I have also posted on the section webpage a list of questions from old exam 2s that are on material that is covered in this exam. The general schedule hasn't changed too much in the past two years, so exam 1s from the past four semesters will likely consist entirely of problems in these sections.) I recommend trying to take at least some of these exams in exam situations: 90 minutes, closed book. Then look at your book and work on the problems. Finally look over the solutions, but not before you've tried hard first. Perhaps discuss them with others. (In class on Thursday and Friday, or in office hours, I can go over how to solve these problems.)
- Do more practice problems! There are tons in the book, in addition to all the old exam questions.
- Make your own review sheet—it's helpful in reviewing, but probably just as importantly, the process of writing the review sheet will help you master the material. (Deciding what should be on your index card also helps you review the material!)
- Explain the material to others. You learn best by teaching.
- In particular, study with friends, have group review sessions.
- Come to the review session class periods with questions.
- Ask me at office hours, or go to the math lab. I can hold extra office hours if there is demand—let me know.

- Get a good night's sleep the night before the exam! (And the night before the night before the exam.)¹

The quiz questions I've given have been modeled on exam questions, so you should expect questions at this level of difficulty. Note that these questions are designed to see if you can apply your understanding of the concepts to different situations. You really need to understand the material well; simply memorizing cookie-cutter techniques for solving a few types of problems will not suffice.

Tips during the exam

- If there's a problem that you're stuck on, skip it and then come back to it. Use your time wisely!
- Read the questions carefully! What are they asking you for? What are you supposed to solve?
- Make sure you are answering the questions. Give units when necessary. Give your answer in the form asked for.
- If you have time, check your work.
- Use your graphing calculator in a smart way: use it to double-check your answer (graph it, does it seem reasonable?).
- There can be partial credit on questions—if you know how to start a problem, write that down at least, and you might get partial credit. In multiple part questions, if you get the wrong answer on the first part, you might still be able to get credit on later parts, if you do those parts correctly based on your incorrect earlier answer. (This is not always the case; it depends on the problem's rubric.)
- If the graders can't read what you've written, they'll mark it wrong. Try to write as neatly as you can! (The graders² are trying to do their best to grade everyone consistently and fairly, but it's good (in this course, throughout college, and in life) to be aware of the realities of human psychology: it's much easier to grade something that's written clearly, or where the order of your steps is clear, or where you've circled the final answer.)
- If you need to use the back of the exam pages or write an answer somewhere different (e.g., in extra space on another page), write clearly near the question where you have answered it.
- It's very easy to make small errors in your calculations. Be careful about signs, parentheses, etc., when doing things like integration by parts.
- Remember that the basic idea of most of chapter eight has been to estimate something by chopping it up into slices where we can approximate well, and then turning this into an integral in the limit. Think about which slices are best, about how to represent the slice, and about what your variables are.

Above all, try to keep things in perspective: work hard, study hard, do your best, but don't stress out too much. Take a deep breath and try to relax.

¹Please note that the Super Bowl is the day before the exam. Keep this in mind as you schedule your studying, if that may cause a distraction.

²I won't be grading any of your exams (I'll be grading other sections); it will be a collection of other GSIs. There's a standard rubric for each question.