

Information on Second Midterm

The midterm is Wednesday, May 23, in class. *You must take it in the class at the time you are officially enrolled.* Please arrive early to ensure you get the full 50 minutes.

It includes the material we covered in lecture through Monday, May 14, emphasizing material subsequent to the coverage of the first midterm. This corresponds to homeworks 4–8. (Only part of homework 8 is eligible for inclusion, as indicated below.)

Study your lecture notes and the homework problems. For practice problems, look in the same sections of the book where the homework was assigned from, and do problems similar to the assigned ones. You can also make up practice problems by changing the numbers in other problems.

Please bring your student ID, approved calculator, pencils, and erasers. We'll supply a test book, so you don't need a blue book or scantron.

“Cheat Sheet”: You may bring one **1-sided** sheet of notes, $8\frac{1}{2}'' \times 11''$. It must be written by hand by you in pen or pencil; it may not be produced by any other means (computer, photocopying, etc.). No other resources are permitted.

Homework #8, Due Thursday, May 24

10.5# 25, 35, 39, 40 (“normal” means “perpendicular”)

10.5.5# 1, 2, 3, 9, 12, 20

and problem H-13.

- Section 10.5.5 will not be covered on midterm 2, but the rest of this homework is eligible.
- Sections 10.5.5 and 10.5.6 are in a supplement to the book, written by the book's author. If you missed class the two days it was handed out, go to Prof. Tesler's office hours. The supplement is *not* available on-line.

Problem H-13. On this contour map (or a copy of it), draw the following things:

- The path of steepest ascent starting at P .
- A possible gradient vector at Q .
- A possible negative of the gradient vector at R .
- A direction that makes the directional derivative equal 0 at S .

