Math 2E — Suggested Homework 5

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Reading: Sections 16.2 and 16.3. This time you're responsible for everything in 16.2, including line integrals of vector fields. In section 16.2, ignore Example 3 and all the (awkward) derivations. In section 16.3, ignore the proof of Theorem 4. Also don't worry about simply-connectedness; it's more of a cultural thing and I won't trick you with that.

- Section 16.2: 8, 13, 17, 19, 22, 40, 41, 50
- **Section 16.3:** 3, 7, 12, 15, 20, 25, 29 (optional: 35)

Note: The Midterm Exam will take place on Friday, February 7 during the usual lecture time and in the usual lecture room. It counts for 30 % of your grade. You have to take the exam in the lecture you're officially enrolled in, not the one you usually go to. It covers everything from section 15.2 (Double Integrals) up to and including section 16.3 (The Fundamental Theorem for Line Integrals). There is a study guide and a practice exam on my website (including the midterm I gave in Fall 2018). I have office hours that week M 02/03 12-1 pm + Virtual OH 6:30 - 7+ pm, but please feel free to e-mail me with questions on the other days!

Important Note: I will be out of town again from Tu 02/04 until Thu 02/06 because of another on-campus interview. Lecture on W 02/05 is cancelled, and instead there is a make-up lecture on M 02/03 from 5 to 5:50 pm in SH 134. There will also be a YouTube video covering the material of the make-up lecture, in case you can't make it. I will also have extra office hours/virtual office hours on that day. Everything else (Monday's lecture, Tuesday/Thursday's discussion, and Friday's midterm) will take place as usual. For your convenience, here is the

schedule of this week:

- M 02/03: Lecture as usual 10-11 AM/11-12 PM, OH 12-1 PM, Make-up Lecture 5-6 PM in SH 134, Virtual OH 6:30 7+ PM
- Tu 02/04: Discussion section as usual
- W 02/05: No lecture/OH/Virtual OH
- Th 02/06: Discussion section + Quiz as usual
- F 02/07: Midterm