Math 15200/14 Homework 8

Due date: **TUESDAY, November 26, 2019**, 5pm (in my mailbox in Eckhart basement)

Please present your solutions clearly and in an organized way. Think of it this way: if you show it to another student in this class, he/she should be able to understand it without needing to ask you questions.

November 21

Goals:

- Practice integration by parts

- Practice integration by parts some more

- Do some trigonometric integrals using the Pythagorean identities.

Exercises 8.2:

- 1–29, just the odd problems

- 41, 42

Exercises 8.3:

- 1, 4, 5

If you get stuck on the integration by parts problems, here is some advice:

- Look at the examples in the textbook and the ones from class. See if you find some technique that could work.

- Rules of thumb: LIPET or LIATE (look them up). Note that these might not always work.

- Try out several different substitutions.

- Keep in mind that integration by parts is not easy. I expect most people to have difficulty with these problems. Struggling through these exercises is how you get better, so don't become disappointed if it feels frustrating.

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- If you get stuck, don't be afraid to ask on Piazza. If you ask about an integral, let me know which substitutions you have tried already. I'll do my best to help without giving away the answer.

This is all for HW 8.