

## Math 15300/14 Homework 6

Due date: Thursday, February 20, 2020, 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.

### Wolfram Alpha

Wolfram Alpha is a very useful tool. Check it out if you have not used it before: <http://wolframalpha.com>. For example, try entering the following text into Wolfram Alpha:

- plot  $y = \sin(1/x)$  ([direct link](#))
- integrate  $x/(x^2+2x+5)^2 dx$  ([direct link](#))
- eevee curve ([direct link](#))

### February 13

Goals:

- Practice with equations of lines and planes

#### Section 13.5:

- 1, 3, 9, 13, 15, 17, 19, 21

#### Section 13.6:

- 3, 5, 15, 17, 53
- (Hints: For 15 and 17, look at page 683. For 53, you can do it by trial and error.)

### February 18

Goals:

- Practice sketching level curves

#### Section 15.3:

- 1, 3, 13 (Also, highly recommended: Plot these functions on Wolfram Alpha.)

**This is all for HW 6.**