

Math 13100 – Homework 2

due 2016-01-21

Please read section 0.6 and sections 1.1 through 1.3 in the textbook. (We'll skip section 0.7, on trigonometric functions, since it is not in the purview of this course.)

Please also do the following problems. Make sure to show all details of your work.

Also, please give at least some thought to each of the extra credit problems – they should be fun and stimulating intellectual exercise, regardless of whether you want to submit solutions for them.

From 2016-01-08

- From Problem Set 0.5: problems 2, 7, 8, 10, 14, 42

From 2016-01-11

- From Problem Set 0.5: problems 16, 18, 20
- From Problem Set 0.6: problems 2, 4, 12, 16, 18, 33
- For extra credit: Can you think of any function $f : \mathbb{R} \rightarrow \mathbb{R}$ that is **both** even and odd?

From 2016-01-13

- From Problem Set 1.1: problem 31, and for extra credit, problems 39, 42

From 2016-01-15

- From Problem Set 1.2: problems 11, 13, 16, 20, 32

(For Problem 32, it may help to review the material on quantifiers in section 0.1.)

- I've already given the reading assignment in the instructions at the top of this page, but I want to emphasize the importance of understanding the examples in section 1.2. The kind of reasoning those examples demonstrate is critical to the rest of the course. Please read these examples in depth and come to me or the tutors with any questions.