Math 31BH Winter 2018 Written Homework 2, due 1/26/2018 in HW box in the basement of AP&M by 4 pm

Reading

Read Finish reading Chapter 2 and begin to read Sections 3.1-3.2.

Exercises to submit on Friday 1/26

Exercises from the text

Write out each answer as a careful proof, in full sentences.

Section 2.3: #1, 2, 3, 4, 5, 7(b), 12, 13

Comments and hints: The proof of #4 is quite similar to the proof that the limit of a dot product is the dot product of the limits, which is the second half of the proof of Theorem 3.2 in the book. We did not present that proof in class, so you should read it in the text and use it as a model for your proof of #4.

For #13, the author doesn't specify a domain. You should assume that $f : \mathbb{R}^n \to \mathbb{R}^m$ is defined on all of $\mathbb{R}^n$ in this problem.