MAT 319/320: Basics of Analysis, Spring 2019 Homework Assignment 1

Please read Chapter 1 of Ross's textbook thoroughly before starting on the problem set below.

Optional supplementary reading for MAT 320: Chapter 1 of Rudin's book

Problem Set 1 (due before the start of recitation on Wednesday, 2/6):

 $1.5, 1.12, 2.3, 3.4, 3.6, 4.11, 4.12, 4.15, 5.1^*, 5.2^*, 5.6$

*These (5.1 and 5.2) are *answer only* which need to be in the following form:

	5.1	$5.2 \inf$	$5.2 \mathrm{sup}$
(a)			
(b)			
(c)			
(d)			

You may either fill in this table and hand in this sheet as part of your solutions or recopy this table. *No* credit will be awarded for answers in any other format.

Please write your solutions legibly; the graders will disregard solutions that they do not find readily readable (you are encouraged to type up your solutions, especially if your handwriting is not absolutely immaculate). The problems on your solutions must appear in the assigned order; out-of-order problems will not be graded. All solutions must be stapled (no paper clips) and have your name (first name first) and HW number in the upper-right corner of the first page.

NO late homework will be accepted

Once the TA starts the recitation in which a homework assignment is due, he will no longer accept this assignment. The TA has no discretion in this matter; please do not even ask him to break the explicit instructions he has been given. Late homework will **not** be accepted under *any* circumstances; you will not receive a response to any email asking for an extension. If there is *any* chance of you arriving late to the recitation at which a homework is due or if you will be out of town when it is due, you can turn it in (give to the instructor/TA or slip under the TA's office door) any time before it is due (which you are always welcome to do). If something completely unexpected comes up, then you'll benefit from the *lowest homework score dropped* policy.