

Mathematics Department
The University of Georgia
Math 8100 Homework Assignment 3
Due Date: Oct. 24 in the class

Remarks on Homework The homework is an **important** part of this class. The homework is your best chance to learn the materials in the course. You should work together on the problem, but in the end you are responsible for understanding the material. I suggest that you try all the problems on your own before consulting others. Even false starts on problem will help you learn. Here is what I will be looking for in your solutions:

- The solutions must be written clearly. This includes reasonable handwriting and good English. If I have to struggle to read what you have written, I will not grade the problem.
- The solution should be complete and clear. A good rule of thumb is: if you have some doubt about your solution it is probably wrong or at best incomplete.
- Results that you use in your proof from undergraduate analysis or from the text book should be stated clearly.

Reading assignment: read section three: Differentiability of functions.

Exercises: **3, 4, 5, 6, 7, 8**

Problems: **1, 8**