Note to tutors

This year the syllabus of Complex Analysis has changed a little bit. In particular, Möbius transformations part is reduced slightly and moved to the Metric Spaces course. Also, the Metric Spaces course has a theorem that the existence of continuous partial derivatives implies differentiability which allows us to prove that Cauchy-Riemann equations together with the continuity of partial derivatives imply holomorphicity. I am also trying a new format for the problem sheets and using a few new problems. This is still a work in progress so any feedback is appreciated.

One of the things that I want to achieve is to make the mandatory part of the problem sheets a bit shorter but also have some questions that might challenge stronger students.

The first problem sheet is based on the first three lectures, so it should be possible to have first tutorials in week 2 without asking students to read far ahead. Next two sheets will cover four lectures each. The last sheet will be a bit longer and will cover the last 5 lectures. It should be possible to cover it in week 8 but then students will have to read

There are three types of questions: normal questions and questions marked as 'extra practice' or 'extra challenge'. Normal questions should be sufficient to learn standard techniques. 'Extra practice' questions are similar and just give a chance to practice these techniques a bit more. In particular, they could be easily swapped with some normal questions. 'Extra challenge' are optional questions for those who want a challenge and want to learn more. These questions are not part of the syllabus, so exam questions will not assume that students are familiar with their solutions.

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