Dear all,

Welcome to Oxford and to Somerville!

I am the pure maths tutor at Somerville. I have met some of you during the interviews last December, and I'm looking forward to working with all you this coming year. In the meantime, please let me or the other tutors (cc'ed) know if you have any questions or if there is something we can do that is helpful.

One of the things we like to do to whet your appetite for the exciting world of university mathematics is to give you some summer reading and problems to discuss with you once you get here. The suggested problem sheets are posted here:

## https://www.maths.ox.ac.uk/study-here/undergraduate-study/practice-problems

but I've also attached them to this email for your convenience. Please read the instructions at the link above to know which problem sheets apply to you given your course, e.g., maths freshers are expected to also do the dynamics sheets, but not the M&C students etc. If you are a single-honors Computer Science student, you are not expected to do any of these problem sheets, this message is for your information only.

The first document (allsheets1.pdf) is easier than the second (allsheets2.pdf). It has 11 sheets. It is a mixture of revision and some new stuff. Please work your way through the problems in practice1.pdf and submit your solutions when you arrive in October.

You should also try to move on to the greater challenges in the 2nd set of practice sheets. We are primarily expecting you to work on allsheets1.pdf problems (and the dynamics sheets for M, M&S students), but we hope that you will at least try some of the problems in the second set of sheets as well. The website above also includes suggested reading that you may find helpful. If you don't have access to the book mentioned therein, please note that there are free books on these topics available online (e.g., through MIT's open courseware program).

When you arrive at Somerville in October, please turn in the summer work at the Porters Lodge and tell them to deliver it to me (Dan Ciubotaru). To help us with checking your work, please write your solutions to each problem sheet \*separately\* on letter size (A4) paper rather than notebooks and staple together the papers for the same problem sheets; mark clearly on the top of the first page which problem sheet it is.

Best wishes, Dan

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