

Interview Tips (3 pages; 27/11/17)

(1) Personal Statement (these points are generally relevant to the interview itself as well)

Begin by explaining why you have applied for the course.

- show that you have done some research into it
- say why certain aspects of the course appeal to you
- say what you hope to gain from doing the course; including career aspirations

Don't just list what you have done: explain what you have gained from the experience (eg increased understanding; involvement with other people; position of responsibility; learning to persevere).

Avoid negative statements (eg criticism of School, courses you don't want to do), or comparisons with other universities. (Don't do what Einstein did, and point out mistakes in a professor's published work.) Also avoid humour.

(2) What the interviewers are looking for

- Interest in the subject.
- Capacity to absorb and apply new ideas.
- Motivation and perseverance.

(3) During the interview

- Demonstrate that you are listening.
- Show your thought processes; keep the discussion going (so that the interviewers can help you).

- The interviewers will be interested in how you respond to hints.
- Don't dodge questions.
- Ask for clarification, if necessary.
- Don't talk for too long.
- Be able to talk about (mathematical) things that interest you - eg from reading or problems tackled. Expect questions.
- Avoid negative statements (eg criticism of School; courses you don't want to do), or comparisons with other universities.
- Avoid humour.

(4) Types of interview questions

- You may be given some mathematical problems to have a go at just prior to the interview.
- You will almost certainly be presented with a few (previously unseen) mathematical problems in the interview itself. A typical problem might be to sketch a non-standard function.
- it is quite usual to be given hints for these problems (to help you make progress), and the interviewers are interested in how you are able to take advantage of these hints. If stuck (as most people will be to some extent), explain your thought processes in tackling the problem.

(5) Preparing for the interview

- Be ready to expand on items in your Personal Statement (but probably less important for Mathematics though).
- Tutors are generally keen to see evidence of wider reading, and you could be asked what mathematical books you have read. (See the "General" page of

fmng.uk; also google "Mathematics Reading Lists" - provided by various universities and Oxbridge colleges.) A book that the interviewer hasn't read may be of more interest to them than, say, "A Mathematician's Apology" (though this is very short, so you might as well read it!)

- Standard questions:

(1) Why have you applied for this course / to this college / university?

(2) What do you know about this course / college / university?

(6) Miscellaneous

- Depending on the university, hobbies and non-mathematical interests may be more or less relevant. One Cambridge Admissions tutor (a mathematician) that I spoke to said that, if a candidate did have some hobbies "it wouldn't be held against them"! Make it clear (or at least give the impression) that your degree subject is more important to you than any extra-curricular activities you may get involved in.
- There are some videos of interviews (or mock interviews) on Youtube.