

Oxford interviews – Mathematics 2013 entry

	1 <sup>st</sup> interview - SJC	2 <sup>nd</sup> interview	General comments (+ what I've learnt by talking to other people at SJC)
Given something to look at before interview?	No	No	I've heard that some colleges do give some questions beforehand. I think it was Worcester? But this only applied to those who chose those colleges as their 1 <sup>st</sup> college.
Personal Statement + General Questions?	<ul style="list-style-type: none"> <li>✓ Why Oxford?</li> <li>✓ UMS for each (maths) module? → Don't know why they've asked that because I've mentioned all of mine on UCAS</li> <li>✓ You have your 2<sup>nd</sup> interview at another college later this afternoon, right?</li> <li>✓ Do you read many maths books?</li> </ul> <p>They've said before the interview that they're going to ask about general things to make you less nervous. They specifically said that they carry no weight at all.</p>	<p>They weren't really questions. He mentioned my PS and brought up things I've written, then said two things: "I can see that you really love maths" and "You've lived in England for quite a while now."</p> <p>Then he asked me if I like Oxford (city).</p> <p>No mention of books or anything.</p>	<p>I think it carries about 0.001% weight, if not 0%.</p> <p>Not important and definitely not difficult if you've written your own personal statement and know what you've written!</p>
Question types	2 interviewers: Dr David Stirzaker and Professor Paul Tod	It was opposite to my 1 <sup>st</sup> interview. This one was like a tutorial. He made me stand and write things on the board. He taught me new	<p>There seems to be 2 types across all the colleges:</p> <ol style="list-style-type: none"> <li>1. Applying what you've learnt at A-</li> </ol>

	<p>1. Easy puzzle type maths which led to a more difficult one, which then led to next question.</p> <p>2. Open-ended maths question. Like a discussion. → Bit unusual for maths but it was my favourite. It can be asked so don't be too surprised if you get open-ended maths question!</p> <p>3. Logic/thinking/probability question which didn't require maths above GCSE.</p> <p>Dr Stirzaker didn't say anything throughout the whole interview. He just looked at me and Professor Tod and kept writing things down.</p>	<p>concepts not in A-Level maths/ further maths. Then asked me some questions on it. After that, he looked at his watch, said we got some time left and asked me to prove something.</p> <p>Atmosphere was extremely casual.</p> <p>1 tutor + another person who looked like a PhD student</p>	<p>Level. Make sure you know what you did in year 12. Many questions seem to have been on integration. I've met one person who got a question on Mechanics. I don't think they usually do. So if you have time, maybe go over that just in case.</p> <p>No one I've talked to got questions on Stats (apart from probability of course).</p> <p>2. Questions that require near zero knowledge in maths (maybe GCSE knowledge). For this, you can't really prepare. Just think carefully. If you get stuck, they'll probably help you out.</p>
<p><b>How would you rate your performance?</b></p>	<p>Difficult to say</p>	<p>Difficult to say</p>	
<p><b>How well did your mock interviews prepare you for this?</b></p>	<p>Difficult to say</p> <p>It depends. They helped me a lot in the sense that I was perhaps tiny bit less nervous in the real one. But the questions I got asked were of different styles.</p>	<p>Same as 1<sup>st</sup> interview.</p>	<p>Attend mock interviews – they'll be designed to feel like a real one.</p>
<p><b>How do you think that you could have been better prepared for this interview?</b></p>	<p>n/a</p>	<p>Nothing maths related. But if I was told that interviews can be like a tutorial, I would have been less nervous/ surprised.</p>	

**Some other things...**

People at SJC only got 1 interview at St John's (+1 at different college). I think most other colleges, if not all, had 2 interviews for people who've chosen them as their 1<sup>st</sup> choice (+1 at different college so 3 in total). I think it was because there were too many people at SJC and not enough time. So expect at least three interviews.

Someone from SJC got 5 interviews! I kept in touch with her and know that she got an offer in the end. Be aware that this can happen. You got more chance to show them what you are like. Funnily, she also happens to be someone who wrote a title of the book wrong in her PS. They brought it up in SJC interview. She still got a place (at a different college) so don't be too worried if you make a similar mistake.

Both MAT and interviews are important. When a college says, for example, 'MAT is more important and interview does not carry much weight', they don't mean what they are saying. I know this because one Hampton student I know also applied to St John's. We talked about MAT and he got nearly everything correct (just couldn't do one last bit of the question on one of the questions). However he 'completely messed up' SJC interview. He got 2 more interviews after that and got a place at his second college, but not at St John's. Just by looking at MAT mark, his mark would have definitely been in the top. So do your best in both interviews and MAT! And remember, one bad interview doesn't mean you are not getting an offer.

Enjoy.

↳ These are my opinions. They are not facts.

## Oxbridge Interview Report

Please answer in as much detail as possible. Your responses will definitely help other Surbiton girls to win a place at Oxford or Cambridge.

Name: Victoria Lee

University: Oxford University,  
St Anne's College.

Subject: Mathematics

Written test sat when at Oxford or Cambridge: Of what did it comprise? MAT

Mathematics Aptitude Test ⇒ C1, C2 syllabus with some creative thinking problems

How, out of 10, would you rate your performance in this written test? 6-7 out of 10?!  
I passed, still!

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### First Interview

College: St Anne's college

Subject, if applying for joint honours: Mathematics

Names of Interviewer(s) and / or position within College, if known (e.g., Admissions Tutor):

Dr Belyaev, Dr Nelson (Mathematics course tutors)

Were you given anything to look at before going into the interview? If so, please give as many details as possible (including how long you were given to prepare).

Nope

If you were given something to prepare, what did they ask you about it once in the interview room?

Not given

To what extent was the interview based around your personal statement- none / a bit / quite a lot (underline one)? Please give some examples of questions asked about your personal statement.

- a bit eg. ① Connection in music & math, Golden ratio - How Debussy used it?  
② Why have I lived in various countries, Hong Kong, Netherlands, UK?  
③ Have I studied English continuously in South Korea?

↳ During my first interview, they seemed to ask about my Korean education and my A level & references.

Were you required to send written work to the university before interview? Yes / No (underline one). If "Yes", to what extent was the interview based around it- none / a bit / quite a lot (underline one)? Please give some examples of questions asked about your written work.

Nope

Please write in the space below as many other questions as you can remember not covered above.

1. Draw  $x^2 - ny^2 = 1$

2. Sketch graphs, identify given graphs and interpret them.

6 of them, Are they polynomials? Yes/No, explain why.

Which question or kind of question did you find the most difficult to answer?

First one, as they didn't want algebraic attempt, just straight graph sketching was required.

How, out of 10, would you rate your performance in this interview? 6-7 out of 10

How well did your mock interview(s) prepare you for this one? (Please underline one of the following.) No use at all / A bit useful, but not much / Useful preparation / Extremely useful- it felt very similar indeed.

Lastly, how do you think that you could have been better prepared for this interview?

Perhaps some more graph sketching?

But we did cover enough :)

### Interview 2

College: St. Anne's

Subject, if applying for joint honours: Mathematics

Names of Interviewer(s) and / or position within College, if known (e.g., Admissions Tutor):

Professor Priestly / Mr Reuss

↳ Graduate development scholarship

Were you given anything to look at before going into the interview? If so, please give as many details as possible (including how long you were given to prepare).

Nope

If you were given something to prepare, what did they ask you about it once in the interview room?

Nothing

To what extent was the interview based around your personal statement- none / a bit / quite a lot (underline one)? Please give some examples of questions asked about your personal statement.

a bit

1. Again, about my international background

2. Why Maths, Why Oxford? What do you want to do in the future?

- Nothing academic really -

Were you required to send written work to the university before interview? Yes / No (underline one). If "Yes", to what extent was the interview based around it- none / a bit / quite a lot (underline one)? Please give some examples of questions asked about your written work.

Nope

Please write in the space below as many other questions as you can remember not covered above.

1. What is log? Then, explain loge?
2. Sketch the graph  $y = \left| \frac{\ln x}{\sin x} \right|$
3. Draw another graph.. (can't remember)

Which question or kind of question did you find the most difficult to answer?

Graph drawing was again a bit challenging

How, out of 10, would you rate your performance in this interview? 4-5 out of 10 :c

How well did your mock interview(s) prepare you for this one? (Please underline one of the following.) No use at all / A bit useful, but not much / Useful preparation / Extremely useful- it felt very similar indeed.

Lastly, how do you think that you could have been better prepared for this interview?

Perhaps, some more discussion about simple but abstract piece of mathematics?

### Interview 3

College: Wadham College Subject, if applying for joint honours: Mathematics

Names of Interviewer(s) and / or position within College, if known (e.g., Admissions Tutor):

Were you given anything to look at before going into the interview? If so, please give as many details as possible (including how long you were given to prepare).

Dr Conion, Mr Enciso (Mathematics course tutors)

If you were given something to prepare, what did they ask you about it once in the interview room?

Nope

To what extent was the interview based around your personal statement- none / a bit / quite a lot (underline one)? Please give some examples of questions asked about your personal statement.

Nope As it was an outgoing interview, it only lasted for 15 minutes whereas others lasted for 25 minutes.

Were you required to send written work to the university before interview? Yes / No (underline one). If "Yes", to what extent was the interview based around it- none / a bit / quite a lot (underline one)? Please give some examples of questions asked about your written work.

Nope

Please write in the space below as many other questions as you can remember not covered above.

1. Sketch  $y=x$ ,  $y=x^2$ ,  $y=x^3$ ,  $y=\sqrt{x}$  at the same axes, with interceptions which two of them are related and why?

2. Differentiate  $\sin(\sin(\sin x))$

3.  $\frac{1}{a} + \frac{1}{b} + \frac{1}{c} = 1$

Prove 3 sets of integers, and explain why.  
(a, b, c)

Which question or kind of question did you find the most difficult to answer?

Differentiation question. I knew it was chain rule, but I think I panicked as I haven't seen before..

How, out of 10, would you rate your performance in this interview? 6~7 out of 10

How well did your mock interview(s) prepare you for this one? (Please underline one of the following.) No use at all / A bit useful, but not much / Useful preparation / Extremely useful- it felt very similar indeed.

Lastly, how do you think that you could have been better prepared for this interview?

Perhaps, more thinking-based preparation would have been more helpful!

But again, I value our preparations and thought they all helped!

→ The interviewers seemed to know our thinking process, rather than what we already knew. They helped and guided me through to come to the solution.

→ I thought personal statements weren't that important. They hardly asked, unless you connected other subject with it in a unique area.

→ Our college interviewers were friendly and said they are only going to test on mathematics, not asking current news or about other subjects.

## Oxbridge Interview Report

*Please answer in as much detail as possible. Your responses will definitely help other Surbiton girls to win a place at Oxford or Cambridge.*

Name: Zoe Yang

University: University Of Oxford

Subject: Mathematics

Written test sat when at Oxford or Cambridge: Of what did it comprise ?

No written test.

How, out of 10, would you rate your performance in this written test ?

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### **First Interview**

College: The Queen's College

Subject, if applying for joint honours: Mathematics

Names of Interviewer(s) and / or position within College, if known (e.g., Admissions Tutor):

Dr Capdeboscq

Were you given anything to look at before going into the interview ? If so, please give as many details as possible (including how long you were given to prepare).

I got a question sheet on Sunday afternoon. I was given a night to prepare a solution to one of the questions.

If you were given something to prepare, what did they ask you about it once in the interview room ?

I was asked to explain my answer to one question on the sheet.

To what extent was the interview based around your personal statement- none / a bit / quite a lot (underline one) ? Please give some examples of questions asked about your personal statement.

Were you required to send written work to the university before interview ? Yes / No (underline one). If “Yes”, to what extent was the interview based around it- none / a bit / quite a lot (underline one) ? Please give some examples of questions asked about your written work.

Please write in the space below as many other questions as you can remember not covered above.

The interviewers asked me to compare two fractions and then find the shortest route between 4 points.

Which question or kind of question did you find the most difficult to answer ?  
Their difficulties were similar.

How, out of 10, would you rate your performance in this interview ? 6-7

How well did your mock interview(s) prepare you for this one ? (Please underline one of the following.) No use at all / A bit useful, but not much / Useful preparation / Extremely useful- it felt very similar indeed.

Lastly, how do you think that you could have been better prepared for this interview ?  
Maybe try to practice explaining my solution which I have done in advance.

## **Interview 2**

College: The Queen's College

Subject, if applying for joint honours: Mathematics

Names of Interviewer(s) and / or position within College, if known (e.g., Admissions Tutor):

Dr Papazoglou

Were you given anything to look at before going into the interview ? If so, please give as many details as possible (including how long you were given to prepare).

No

If you were given something to prepare, what did they ask you about it once in the interview room ?

To what extent was the interview based around your personal statement- none / a bit / quite a lot (underline one) ? Please give some examples of questions asked about your personal statement.

They asked me if I can remember a proof I mentioned in my personal statement.

Were you required to send written work to the university before interview ? Yes / No (underline one). If “Yes”, to what extent was the interview based around it- none / a bit / quite a lot (underline one) ? Please give some examples of questions asked about your written work.

Please write in the space below as many other questions as you can remember not covered above.

The interviewer introduced me some new mathematical terms and then asked me to prove a statement using the new things we just discussed. Proof by induction and logical thinking were involved in the questions.

Which question or kind of question did you find the most difficult to answer ?

Those logic-based questions as they often take me some time to fully understand the question. For example, it took me quite a long time to realise where the contradiction is in one of the interview questions.

How, out of 10, would you rate your performance in this interview ? 5

How well did your mock interview(s) prepare you for this one ? (Please underline one of the following.) No use at all / A bit useful, but not much / Useful preparation / Extremely useful- it felt very similar indeed.

Lastly, how do you think that you could have been better prepared for this interview ?  
I don't I can prepare for this kind of interview as they taught me some new stuff.

### **Interview 3**

College: Wadham College

Subject, if applying for joint honours: Mathematics

Names of Interviewer(s) and / or position within College, if known (e.g., Admissions Tutor):

Dr Hodges

Were you given anything to look at before going into the interview ? If so, please give as many details as possible (including how long you were given to prepare).

No

If you were given something to prepare, what did they ask you about it once in the interview room ?

To what extent was the interview based around your personal statement- none / a bit / quite a lot (underline one) ? Please give some examples of questions asked about your personal statement.

Were you required to send written work to the university before interview ? Yes / No (underline one). If “Yes”, to what extent was the interview based around it- none / a bit / quite a lot (underline one) ? Please give some examples of questions asked about your written work.

Please write in the space below as many other questions as you can remember not covered above.

I can't remember the exact questions. Binomial expansion and double angle formula were involved in the questions.

Which question or kind of question did you find the most difficult to answer ?  
All of the questions were maths based. Their difficulties were similar.

How, out of 10, would you rate your performance in this interview ? 6-7

How well did your mock interview(s) prepare you for this one ? (Please underline one of the following.) No use at all / A bit useful, but not much / Useful preparation / Extremely useful- it felt very similar indeed.

Lastly, how do you think that you could have been better prepared for this interview ?  
Perhaps improve the speed of solving simpler problems.