2010 National Mathematics Summer School
Nomination by MANSW Member school

Use this form to nominate a student from your school to be considered for the 2010 National Mathematics Summer School. Students nominated would usually be in Year 11, currently studying Mathematics Extension 1, and capable of successfully undertaking Mathematics Extension 2.

Student Name:	

Place a tick in any one or more of the boxes to indicate your reason(s) for nominating the student. Please add comments if you wish.

The student:	**Tick**	**Comment (optional)**
• seeks out additional challenge problems and puzzles		
• demonstrates understanding of concepts, rather than just the application of algorithms		
• demonstrates creativity and depth of thought in solving problems		
• enjoys spending their spare time doing mathematics		
• reads mathematical literature		
• has achieved a high result in the Australian Mathematics Competition or the Australasian Schools Mathematics Assessment		
• has achieved a high result in other competitions, such as the Mathematics Challenge series		
• has achieved a high result in Mathsearch, conducted by MANSW		
• has participated in gifted and talented mathematics programs		

Overall comment and priority ranking if you are submitting more than one nomination	
School:	
Nominating teacher:	
Teacher contact phone	
Teacher contact email:	

Please fax this form to the MANSW Office on 9878 1675 or complete the MANSW website online version. Nominations required by July 31, 2009

Some students' comments on the National Maths Summer School

During the holidays, we attended the National Mathematics Summer School (NeMeSiS) in Canberra. We were invited to participate in the school along with 75 other Year 10, 11 and 12 students from all around Australia. Staying at Bruce Hall at the Australian National University (ANU), the two weeks that were spent in Canberra went by in the blink of an eye after a slow start. For both of us, this camp was a surreal experience learning about mathematical concepts that we would never have thought about before.

Nearly every day followed the same routine. Three different people lectured us over the 2 weeks, each teaching a different course. The most important of these was Number Theory and Algebra, lectured by Terry Gagen, recently retired as Professor of Mathematics at the University of Sydney. The other courses were Knot Theory, taught by Ben Burton, and How To Do Things - Algorithms, taught by Tom Korner.. Some of the concepts we learnt was modular arithmetic; which included Euclid's Algorithm and solving diophantine equations and also the work of Fermat, Euler, Gauss, Euclid and Hardy.

Of course the camp wasn't completely maths oriented and the social aspect of it proved a great asset. During the 2 weeks we participated in volleyball and table tennis competitions between the States, a maths relay, on Saturday night were lectured about possible careers in mathematics, visited Telstra Tower, Questicon, and Mt. Stromlo Observatory, went ice skating and to Zone 3.

NMSS students 2006 North Sydney Girls High School

When I left for NeMeSiS I was filled with feelings of apprehension and trepidation about what lay ahead. Was I actually going to a maths camp? Of course, once I arrived I could see there was no need to fear, everybody was friendly and welcoming and I soon settled in. Terry Gagen and the tutors and lecturers were always ready to offer some help on a problem or just to join in a game of cards.

The lectures themselves, whilst complex and at times hard to follow, always had some fun in them too, and, although we were working hard, we always had a few laughs too. Knot theory, a topic that originally seemed quite absurd, turned out to be new, interesting and amazing. Number theory was challenging, but rewarding when you finally solved a challenging problem that had been troubling you for ages. Algorithm lectures showed us some of the more practical sides of maths and were great to listen to.

Of course, NeMeSiS wasn't just maths; it was also valuable to see what living on a university campus and getting lectures was like. However the best part was meeting other people who enjoyed maths and think the same way you do. NeMeSiS was an amazing experience and has given me friends and memories that will last a lifetime; it created an atmosphere of community that made it unforgettable to all involved.

NMSS student 2006

When I told my friends (well, if I told my friends) I was going to voluntarily spend two weeks of my summer holidays in Canberra doing maths, there were the expected jokes. And to be honest, most of them were pretty close to the mark. But, anyone who thinks two weeks of intensive lectures and tutorials isn't going to be fun clearly doesn't know what they're missing out on.

One great thing about the people you meet at NMSS is that any two people are guaranteed to have at least one thing in common. It's not hard to find a second thing, and from there I've made great friends and I feel like I know pretty much everyone here on this camp, and that most of them know me. It's a really supportive community, tutors and lecturers included.

Both the content and style of the courses studied are very different to anything studied at school, but one can easily imagine that that might be a good thing. Number Theory, Knots, and Algorithms were fascinating, but at the same time infuriatingly difficult. It was satisfying by the end of the two weeks to see how they were interrelated – now that I actually comprehend what was going on.

NMSS student 2006

Where can I find out more?

You can download a fact sheet on NMSS from the AAMT website: www.aamt.edu.au
You can also visit the NMSS website: www.nmss.org.au
Further information may be obtained by emailing the director of the school, Associate Professor TM Gagen at gagen_t@maths.usyd.edu.au