

Calendar Semester 1, 2008	
<b>March</b>	
18	Extension 2 Long Inservice Starts, Ashfield
19	Extension 1 Long Inservice Starts, Hornsby
<b>April</b>	
11	Newsletter 3 copy to Editor
<b>May</b>	
2	Mathsearch entries due
2	Talented Students' Day: expressions of interest due
7	Extension 1 Long Inservice finishes
16	Newsletter 4 copy to Editor
20	Extension 2 Long Inservice finishes
<b>June</b>	
6	HSC Lectures Day ticket applications due
13	Talented Students' Day lecture choices and payment due
27	Newsletter 5 copy to Editor
30	Investigating: Mathematics entry forms and fees due
<b>July</b>	
7	HSC Lectures
25	Investigating: Mathematics entries due at MANSW Office
25	Talented Students' Day, UTS Broadway

## From the President

Here we are, well into Term 1 2008, and we find ourselves fully occupied taking care of business—as usual. To our new members, a special welcome. I know that some of our new members are in their first year of teaching, and I wish them well. As teachers we all need to keep listening for news about hot topics. For teachers of senior school one such topic is progress of the Stage 6 suite of new courses, reportedly well into the writing stage: draft syllabus in schools on 1 May this year. Two MANSW Forums are planned to collect a host of opinions and pass them on to the Office of the Board of Studies. These Forums are taking place at the MANSW 'residence' in the school hall of Kent Road Public school, just 1.5 km south of Macquarie University. That's two separate Forum days, one for General courses and one for the Calculus-related courses, both Saturday afternoons and both several weeks after the release of the draft

syllabus in schools. The flier in this newsletter has more details. Come and have your say. Have your opinions registered; come and see how many others share your opinions.

Another topic is National Mathematics Day, 23 May 2008. This event is popular with mathematics teachers from early Stage 1 to Stage 6. We use it to raise awareness of mathematics in the wider community and to have a focus on our teaching and learning for one whole day at school. A range of related activities can be found on the AAMT website.

The Annual HSC and SC Feedback and Advice day on 23 February 2008 was well attended as usual. I would like to express my sincere gratitude to the many volunteers and to the MANSW office staff who helped to make it a success. Special recognition goes to the presenters who brought their detailed knowledge of the sorts of misconceptions that candidates presented in the 2007 examination. Actual marking schemes remain confidential and this is a requirement of the Office of the Board of Studies. Very special thanks to Greg Murty, who organized the event from start to finish. Each year when we mention this day our far flung MANSW secondary members wish they too could have the luxury of this detailed knowledge; as I mentioned in the last newsletter, we trialled the videotaping of sections of the day and the MANSW executive will decide whether it is of suitable quality to stand up to editing, production, and distribution. I remind members that markers' notes are available on the Board of Studies website, and you'll find in those notes a summary of what was said on the Feedback and Advice day.

Who does MANSW represent really? I hear this question from time to time. The answer is most definitely both government and non-government teachers. I am referring to the MANSW website now, where you will find the list of MANSW Executive members (all volunteers). We have six teachers from six different government schools, three teachers from three different non-government schools, three academics, and two not

attached to a school or university. Our professional officer, Bernice Beechey, also attends. There will always be a variation in the ratio of government to non-government schools being represented according to the makeup of the executive but this is the current team, and it remains our aim to represent all.

Also in this newsletter please find fliers about our fantastic Annual Conference in Wollongong, where the local staff cater very well for MANSW members. There is also an advertisement for Investigating: Mathematics, a membership form, and Luna Park excursion details. Our PAM Committee has provided information about the next inservice course, called 'take a chance'. MANSW *e-news* is growing in popularity. If you are not receiving it, and would like to, it's as simple as providing us with your current email address on your membership renewal. Should your email address change during the year please advise our MANSW office staff.

If you need to contact MANSW about the National Summer School for talented year 11 students, or you want details about Talented Students' Day, or the Term 1 competition Mathsearch, please consider checking our website—you'll find up-to-date information waiting for you.

I hope that the rest of Term 1 2008 goes according to plan, perhaps I'll see some of you at a MANSW event soon.

DAVID KEANAN-BROWN

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## Items of Interest

### Premier's Genworth Financial Mathematics Scholarships

Each year, the NSW Government awards a number of *Premier's Teacher Scholarships* to teachers working in any school or TAFE in NSW. Two scholarships, for teachers of Mathematics in primary or secondary schools or TAFE NSW Institutes, of \$10 000 will be awarded in 2008, with one of these specifically designated for a teacher in non-metropolitan NSW. The purpose of the Premier's Teacher Scholarships Program is to promote teaching excellence in NSW by providing travel scholarships to NSW teachers to undertake a study tour overseas or in Australia. In 2008 Mathematics is again one of the areas being targeted for these scholarships thanks to the generous support of Genworth Financial. Applications close on 2 May 2008 and must include a detailed study proposal of 1000 words or less setting out how the proposed study will

promote teaching excellence in NSW. For further information, see <https://www.det.nsw.edu.au/awards/scholarships/index.htm>

We hope many MANSW members will consider applying.

### International Statistical Literacy Competition

So far, students have registered from South Africa, Portugal, Italy, China, Brazil, Argentina, New Zealand, Spain, Mexico, Chile, USA, Colombia, Costa Rica, Sri Lanka, Indonesia, Nigeria, and Russia—but none yet from Australia! Entry is free and open to students from 10 to 18 years.

Further information and registration for the competition can be found at the competition's website:

[www.stat.auckland.ac.nz/~iase/islp/competition](http://www.stat.auckland.ac.nz/~iase/islp/competition)

**CensusatSchool** is available throughout 2008

Data collection for 2008 is now open for your students to submit their responses to the questionnaire. You can access lots of real, raw data about Australian students. Over 12 000 students are in the database. This provides a wonderful resource of a large database of relevant, up-to-date data about Australian students, *free* online. Schools can register by completing and returning the Registration Form on the CensusatSchool website. *find out more* at [www.abs.gov.au/censusatschool](http://www.abs.gov.au/censusatschool).

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## Maths Education Conferences, 2008

### MERGA 31 Mathematics Education Research Group of Australasia conference

The theme of the 31st annual MERGA conference, 'Navigating currents and charting directions', takes advantage of Brisbane's image as the river city whilst investigating flow of mathematical education research.

**Venue:** University of Queensland, St Lucia

**Dates:** 28 June – 1 July 2008

**Note:** MERGA conference dates are earlier than usual to facilitate travel to ICME in Mexico. There are direct flights from Brisbane to Los Angeles that could bear investigation.

Further details on [addon.edu.au/merga31/](http://addon.edu.au/merga31/)

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### ICME-11 International Congress on Mathematical Education

Between 3000 and 4000 professionals in the mathematics education area from 100 countries will gather in Monterrey, Mexico, 6–13 July 2008.

The congress will:

- show what is happening in mathematics education worldwide, in terms of research as well as teaching practices;
- inform about the problems of mathematics education round the world;
- learn and benefit from recent advances in mathematics as a discipline.

More details, registration forms, and call for papers at [icme11.org/](http://icme11.org/).

### The 57th Korean Meeting of Mathematics Education

Korea will host the 12th International Congress on Mathematical Education (ICME-12) in 2012.

In preparation for ICME-12 the Korea Society of Mathematical Education (KSME) is opening the national meeting to international presenters and participants.

The meeting will be held at Seoul National University on 16–17 May 2008. The conference languages will be English and Korean

If you are interested in submitting a paper, written in English for oral delivery at the meeting, or a poster session contact Prof. Young H. Choe, [yhchoe1940@yahoo.co.kr](mailto:yhchoe1940@yahoo.co.kr) for further information.

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## Errata

Please note the following errata in your copies of past MANSW solution books. The corrected solutions will appear in this year's books (and in subsequent years).

*Note:* If you or your students notice mistakes in any of the MANSW Solution Books, please notify the MANSW Office by email, fax, or mail so that the relevant corrections can be made.

### General Mathematics: 2006 HSC Question 27(c)(ii) (page 10)

There is a typographical error in the question: the word 'seve' should be 'seven'.

### General Mathematics: 2006 HSC Question 23(c)(i) Solution (page 17)

The method described is just one of many possible methods.

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### General Mathematics: 2006 HSC Question 27(c)(iii) Solution (page 20)

The labels are missing from the axes in the graph. The vertical axis should be labelled 'Value' and the horizontal axis should be labeled 'Time'.

### Mathematics: 2006 HSC Question 5(b)(ii) Solution (page 8)

There may be some confusion in the first line owing to placement of equals signs and indentation. To alleviate this, parentheses should be placed around  $y = \tan x$  and  $y = x$ . The first line (without indentation) would now read:

Shaded area = area under  $(y = \tan x)$  – area under  $(y = x)$ .

### Mathematics: 2006 HSC Question 9(c)(ii) Solution (page 12)

Insert a negative sign at the beginning of the final expression on the last line of the page. The line on the page would now read:

$$= -\frac{4}{3}\pi a, \text{ but } a > 0$$

and the solution continues correctly on page 13.

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### Member of the Month

This month's lucky winner is Jodie Bennet of Warriewood. Congratulations, please contact the MANSW Office to claim your book-voucher prize.

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**Copy for Newsletter No. 3 is due by 4/4. Publication date is 28/4.**

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## Do you have your own copy of these resources?

Use your Personal Membership or your School's Membership to benefit from the member discount on these MANSW publications

**Cooperative Problem Solving in Mathematics by Peter Gould** Photocopiable sets of problems designed to enable students to work cooperatively in mathematics.

Members \$30.00                      Non-members \$40.00

**The Case of the Mystery Bone by Doug Clarke** An excellent teaching resource on measurement focusing on forensic medicine and mathematics of the human body

Members \$20.00                      Non-members \$25.00

**Teaching Ideas for Senior Mathematics—Book 1** Invaluable source of background, teaching approaches and student activities for Mathematics and Extension 1 courses

Members \$20.00                      Non-members \$30.00

**Teaching Ideas for Senior Mathematics—Book 2** Invaluable source of background, teaching approaches and student activities for Extension 2

Members \$20.00                      Non-members \$30.00

### **Enrichment Maths by Anne Joshua**

Designed to meet the needs of talented junior secondary students providing challenging material. Includes topics not usually covered such as pigeonhole principle, bases, congruences, and number theory

Members \$55.00                      Non-members \$70.00

A source of extra practice questions for your Year 12 students

- **HSC Mathematics Practice Papers and Solutions by Mark Arnold**

Members \$30.00                      Non-members \$40.00

- **HSC Mathematics-Extension 1 Practice Papers & Solutions by Mark Arnold**

Members \$30.00                      Non-members \$40.00

**The Motivating Maths Series: Probability by Anthony Mahoney** contains more than 25 practical, fresh activities and teaching ideas for Probability. All activities are able to be photocopied for non-commercial classroom use.

Members \$55.00                      Non-members \$70.00

Each of these resources is available from MANSW. Go to the MANSW Website [www.mansw.nsw.edu.au](http://www.mansw.nsw.edu.au) and download the Publications Order Form to place your order.