

Newsletter No. 209

October, 2004

Inside

Page 2

From the President

Page 4

MTQ

NMTQ

Page 5

*Problem of the Month
Web Review*

Page 6

Games Days

Page 8

*Publication Application
Form*

M.A.V. Publications
61 Blyth Street
Brunswick VIC 3056
ABN: 34 004 892 755

Telephone: 03-9380 2399
Facsimile: 03-9389 0399

Email: office@mav.vic.edu.au
Website: www.mav.vic.edu.au

Office hours: 8.30am – 5.00pm
Monday to Friday

President: Mr Ray Peck

Print Post Approved Publication
No: PP32803/00103

2 & 3 December 2004 Annual Conferenece

“Towards Excellence in Mathematics”

**Monash University
Clayton Campus**

BOOK NOW!

Registrations are now open for the 2004 MAV Annual Conference. Places for sessions fill fast so get your registration form to the MAV office ASAP. You can view the available sessions online and download any forms you need at www.mav.vic.edu.au/pd/confs/index.html. If you need a copy of the Synopsis book mailed to you or have any queries, then contact Julie or Kristen at the MAV Office on 03 9389 0303. Completed registration forms can be faxed to the MAV on 03 9389 0399.

THAT'S ENTERTAINMENT!

Do you have any budding entertainers in your school that would love to showcase their ability at this year's conference? There are a number of entertainment opportunities at the conference and we are looking for outstanding performers. Jugglers, actors, gymnasts, musicians, dancers, and singers – we want YOU! Auditions will be held in late October, early November for all those interested. Don't worry we'll come to you! Register your interest with Kristen at the MAV office on 03 9389 0310 or kmorton@mav.vic.edu.au

CALLING ALL ARTISTS!

The MAV Conference is a great way to show off your artwork to an audience that appreciates and respects your work. Art comes in many forms – paintings, sculpture, tapestry, etc. The Games Hall of the Sporting Complex will be the heart of the conference and it is here that we want to showcase your work. Tea and Coffee, Lunches and the Gala Dinner will be held in this room. To register your interest contact Julie at the MAV office on 03 9389 0303 or jallen@mav.vic.edu.au.

2005 PD Planning

Members are encouraged to put forward their suggestions regarding the content for programs, as well as volunteer their schools as possible venues. Free places at the PD are offered in exchange for venues! Please contact Simon Pryor on 03 9380 2399 or email spryor@MAV.vic.edu.au.

2005 Membership Renewal

All MAV members will receive a tax invoice to renew their membership for 2005 in November. This letter will consist of three items:

1. Membership Renewal Invoice
2. Contact Information sheet
3. Notification of your memberships username and password, to enable access in 2005 to our members' area on the web.

The Contact Information sheet will outline the present information we have on you/your institution and we ask you to take the time to assist in getting our database up-to-date with any changes to your details.

2004 VCE Trial Exams

MAV 2004 Trial Exams are now available and all back orders have been sent out to schools. If you haven't ordered your copy, do so now!

Cost: \$45 p/exam or \$240 for the complete package (6 exams); \$300 for the complete electronic package (all prices include GST, no postage payable). Order your copy today! To download an order form, go to:

<http://www.mav.vic.edu.au/pubs/index.html>

From the President - Successful AGM held -

Public Lecture Sets the Scene

How fortunate we are to have Dr Burkard Polster and Dr Marty Ross in Victoria. On Saturday, Burkard (or should I say Count Count) gave the last of the 2004 Public Lectures. This was held in The Age Auditorium of the Melbourne Museum prior to the AGM and was well attended by the public and members of the MAV.



Burkard's presentation was world class. He brilliantly introduced the audience to the mathematics of knots (hence the title, Count Count and the Knotty Knots). The talk contained humour, history, mathematics at just the right level and even music (on his knotted didgeridoo). Burkard's use of technology has to be seen to be believed.

Three Farewells and Two Welcomes



Thank you to Vivien Willis for acting as Returning Officer. The meeting noted the resignations of three Councillors (Vice President Anna Austin, Kelly Sharp and Eleni Goulas). Anna Austin had served a 5-year term during which she held many roles and served on most committees. Anna's contribution will be sadly missed. The meeting welcomed two new councillors: Linda Baron (Chirnside PS) and Anna Scorsonelli (Killester College).

Special Thanks

The meeting was able to thank Jeff Castles who for many years oversaw the MAV selection process for the National Mathematics Summer School, Duncan Rasmussen who is one of the longest serving MAV members and keen to contribute to the 100th celebrations, Gail Costello who is one of four AAMT awarded Highly Accomplished Teachers of Mathematics and Barbara Martin who convenes the very successful Outer Eastern branch and is the Editor of Prime Number.

Life Members

It was wonderful to see so many of our life members make it again to the AGM. The meeting was able to congratulate Gary Asp who was overseas last year when made a Life Member. Other Life Members in attendance were Win McDonnell OAM, Ken Evans OAM, Rob Money, Max Stephens, Robin Borland, Margaret Thom and Graham Willis.

Office Bearers

Congratulations to Dave Tout who has accepted the nomination as Vice President.

Office Bearers for the new Council are:

President:	Ray Peck
Vice Presidents:	Colleen Vale & Dave Tout
Secretary:	Sharon Taylor
Treasurer:	Jeff Capuano



Lunch at La Notte

Following the AGM, the meeting adjourned to La Notte in Carlton for lunch. Max Stephens gave a most interesting talk about his recent experiences in Japan, presentations were made to Burkard, Marty, Geoff and Anna and many terrific ideas were generated for the forthcoming 100-year celebrations.

100 Years

If you would like to contribute to the planning for this event or be involved in the research, please register interest at the MAV with Simon Pryor on 9389 0302. An initial planning meeting will be held shortly.



Marty and Burkard 'On the Road' in 2005. Interested?

The MAV hopes to support Drs Marty Ross and Burkard Polster to take the show 'on the road' to country and outer metropolitan centres in 2005.

Burkard and Marty gave four wonderful public lectures this year

1. Escher and Beyond: Art, Maths and Magic (Burkard)
2. The Maths is Right! Or How to Win Game Shows (Marty)
3. Numerology by Amateurs and Professionals (Marty)
4. Count Count and the Knotty Knots (Burkard)



If you are interested and can provide a venue and at least 200 students, we'd love to hear from you. Burkard and Marty can engage all ages. They are

also very keen to do 'Maths in the Pub'. Please call Simon Pryor on 03 9380 2399 to register interest or find out more.

Committees

New committees are being formed in October. If you would like to contribute to your Professional Association in a real and practical way, then please think about Committee membership. This is a great way to meet other teachers, use your creativity and contribute to the MAV 2005 programme. Committees are: Professional Development, Publications, Annual Conference, Student Activities, Membership and Marketing. Contact Simon Pryor on 03 9380 2399.

Publications

Do you have an idea? Are you aware of a need? Are you an author looking for a publisher? Then come and talk with our Publications Committee.

Individual Membership

While your school has Institutional membership, you may not be aware that you can be a member in your own right. This entitles you to all member benefits including newsletters, journals, discounted rates for publications, PD and conference attendance. Membership is tax deductible and looks good on that CV! The MAV exists to serve its members. You need us and we need you. Membership of the MAV also gives you AAMT entitlements. The MAV Council believes that all teachers of mathematics (especially secondary) should seriously consider becoming individual members. You can find a membership form on the website at www.mav.vic.edu.au

Ray Peck
President

2004 MAV Maths Talent Quest

Bookings for the Awards Ceremony close on Friday, 8th October. Please contact us **urgently** if any further seating is required.

Awards Ceremony

Where: Union Hall, La Trobe University, Bundoora

When: Thursday, 28th October, 2004

Display

Where: The Odeon, Union Building, La Trobe University, Bundoora

When:

Saturday, 23rd October 12 - 4pm (Display only – no bookings required)

Sunday, 24th October 12 - 4pm (Display only – no bookings required)

Display and Maths Trail

On the following days you can also take part in the Maths Trail around the University.

Monday, 25th October 9am - 3pm (Bookings required for school groups)

Tuesday, 26th October 9am - 3pm (Bookings required for school groups)

The Trail is suitable for upper primary and lower secondary students.

Please note: Bookings are essential for viewing the MTQ displays and the Maths Trail; contact the MAV office on 9380 2399. Group Bookings limited to 25 students.

2004 National Maths Talent Quest

The MAV is hosting the judging and Presentation Ceremony of the National competition this year. Judging was held on Saturday, 2nd October and the Presentation Ceremony will be held on Saturday, 30th October.

All State finalist entries will be on display for **teachers only**:

When: 4pm to 8pm, Wednesday 13th and Thursday 14th October.

Where: MAV, 'Cliveden', 61 Blyth Street, Brunswick

Bookings are essential – please specify day and time to dforrest@mav.vic.edu.au

Problem of the Month

- a) Given that the number $5913d8$ is divisible by 12, what is the sum of all the digits that could replace d ?
- b) Given that $\frac{1}{8}$ of a number is $\frac{1}{5}$, what is $\frac{5}{8}$ of the number?
- c) The area of a nine metre square is how much larger than the area of a square containing nine square metres?
- d) Find the product of all composite numbers less than 10. What is special about this number?
- e) In any twelve-hour period, how many times will the digits of a digital clock be in strictly increasing order? decreasing order?

Answer to September Issue - "Problem of the Month"

Appetiser:

\$12 for the pencil and
\$10 for the pen

Main Course:

10 minutes

Dessert:

The grandchildren each get
\$5 000, the son gets \$20 000,
and the widow gets \$32 000



Web Review

Create Your Own Interactive Games

<http://www.oswego.org/staff/cchamber/techno/games.htm>

This site has two sections:

Design Your Own Games – Make great interactive games to suit the individual needs of your students. Each section has full directions and a 'teacher set-up' page where you can enter your requirements into a pre-set format with the headings: Matching, Terms, Graphic Match, Drag Match, Drag Term and Quiz Time. You can save the game on the link and edit it at any time.

Pre-Made Games - A wonderful variety of pre-made interactive games with titles such as Ghost Blasters, Fraction Flags, Splat Squares, Spooky Sequences, and lots more. These games cover a multitude of skills such as estimation, number patterns, counting on and counting back, coordinates, angles, all four operations, problem solving and lots more.

This is a great site for practising skills with automatic feedback and positive reinforcement – an ideal addition to group activities.

Games Day - Genazzano FCJ College Year 6 Interschool Maths Games Day

On Friday the 27th of August the Genazzano FCJ College Mathematics Club hosted its annual Year 6 Maths Games Day. The mission of the Mathematics Club is to raise the profile of mathematics as a broad, creative and entertaining pursuit and promote mathematical activity throughout the Genazzano FCJ College community.

One of the ways it is pursuing this objective is through the hosting and organisation of a Year Six Interschool Mathematics Games Day. The aims of this activity are:

- 1. To foster the enjoyment of mathematics*
- 2. To provide a fixture in primary school mathematics with a focus on mathematical problem solving*
- 3. To provide opportunities for students to assist with the planning, logistics and running of such an occasion and in doing so develop their leadership skills.*

The girls in the Maths Club planned and ran each session. They displayed incredible initiative in generating ideas and creating and assisting the participating students to complete the activities. The success of the day belongs to them!

Twenty-six schools from across Melbourne were in attendance. We are also happy to report the involvement of schools from the Mornington Peninsular, Sunbury and Moe! A special mention goes to Our Lady Mt Carmel Primary School from Sunbury who had a pupil free day. Their students were still very keen to participate even though they had the day off!

Alphington Grammar	Overnewton Anglican Community College
Bialik College	P.E.G.S-Essendon Campus
Brighton Beach	P.E.G.S-Moonee Ponds Campus
Camberwell Grammar School	Presbyterian Ladies' College
Chirnside Park Primary School	Seaford North Primary
Genazzano FCJ College	Solway Primary School
Good Shepherd Lutheran Primary School	St Mary's Primary School
Killara Primary School	St. Catherine's School
Loreto Mandeville Hall	Surrey Hills Primary School
Malvern Central School	The Peninsula School
Malvern Primary School	Wesley College
Mornington Primary School	Yinnar Primary School
Our Lady Mt Carmel Primary School	Xavier College Kostka Hall

The mathematical activities included:

A series of problem solving tasks which involved students working in their teams on a series of problems, one-on-one games of strategy and luck which had individual team members competing against one another and floor games which incorporated physical activity where teams competed directly against one another.

*A big thank you goes to our sponsors for the day in **Landmark** who provided vouchers to the winning schools and **Abacus** who provided a Texas Scientific Calculator to each member of the top three placed teams.*

Our congratulations to all participants, in particular the top three placed teams who were from Presbyterian Ladies' College, PEGS Essendon Campus and PEGS Moonee Ponds Campus.

Mr Phillip Tascone
Curriculum Leader, Mathematics
Genazzano FCJ College, Kew

Yinnar Primary's trip to Genazzano FCJ

Our two teams, the Superior Subtractors (Andrew, Jake, Emily and Melanie) and Dominating Denominators (Jelinda, Kate, Craig and Jack) left Yinnar (20 minutes south of Morwell in the Latrobe Valley) at 7.30 am to head to Genazzano College, in Kew, for a Grade 6 Interschool Maths Games Day. Our teacher, Miss Smethurst, had heard about this



day and thought we'd enjoy ourselves playing maths games all day. The girls travelled with Miss S. and the boys travelled with Andrew's Dad, Mr Jenkins.

We arrived at Genazzano just on 9.30 am and had plenty of time to look around. As

we entered the gymnasium, an opening speaker warmly greeted us while a presentation was being shown on a projector screen.

Then it began by team problem solving in which teams would work on different sheets to earn points. The Subtractors were fantastic at this and the Denominators tried hard but got stuck on one problem early in the session.

After a 45-minute lunch break, the teams returned to work in a team vs. team games challenge. The final stage of challenges was physical challenges in which competitors worked as a team to put their minds and physical ability to the test. We just wish we had more time at each activity especially at the Human Bingo.

Our school (coming all the way from the heart of the Latrobe valley) came up for a first time to see what it was like. One of the competitors said 'I feel it was the best and most organised interschool competition I have been to throughout my primary school years though I feel we didn't have enough time on the third session activities' another said 'it was a great day and I would go again if I had the chance' and one other concludes 'it had some of the hardest and best math problems you'll ever find'.



Thank you to Mr Phillip Tascone and the Genazzano Maths Club for all their work in putting together the Grade 6 Maths Games Day. Everyone from Yinnar Primary had a great day.

Written by Craig, Andrew and Jake



MLC Statewide Mathematics Games Day

The Year 10

Organised by:
Methodist Ladies' College and The Mathematics Association of Victoria

On Tuesday 27 July, 40 schools from around Victoria competed for the Vivienne Willis Cup.

Many mathematical conversations took place between the events and the most talked about problem is shown below.

Question 7 - Find the missing number.

8	2	3	1	8	4
9	2	3	2	0	?

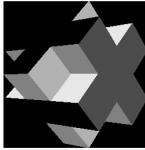
Our sponsors this year were Pearson Longman, Link Education, The School for Excellence, Jacaranda, The Age and the Compass Centre at MLC. Staff were kept entertained by Dr Jill Vincent from The University of Melbourne with her session on Car Jacks and Umbrellas.



First and second places went to Penleigh and Essendon Grammar. Third place was awarded to Camberwell Grammar. A number of other prizes were awarded throughout the day, including The School for Excellence \$100 vouchers for the hardest working students. These prizes were awarded to Peter McNulty, Penleigh and Essendon Grammar, Quinlan Nguyen, Cleeland Secondary College and Jeromy Drossinis, Bundoora Secondary College.

A special thank you must go to Mr Simon Pryor from The MAV, Mr Robert Anastasio from St Aloysius Catholic College, Mrs Kathy Harrison and Dr Jeff Castles from Methodist Ladies' College and Mr Paul Kelly from Marcellin College for helping with the scoring and the smooth running of the day and not to mention the Year 10 MLC student helpers!

Allason McNamara
Games Day Organiser



The Mathematical Association of Victoria

ABN: 34 004 892 755

Publications Order Form

To order, fill out the details below and return this form to the MAV at 61 Blyth Street, Brunswick, Vic, 3056 or by fax on (03) 9389 0399. Enquiries can be directed to the MAV on (03) 9380 2399 *International: Replace (03) with (613)* E-mail enquiries: office@mav.vic.edu.au

This form will become a **Tax Invoice/Receipt** when payment is received.

Contact Name: _____

School: _____

Address: _____

Suburb: _____

Post Code: _____

Phone Number: () _____

Fax Number: () _____

Please supply:

Item No	Quantity	Title	Total
<i>For orders less than \$40 P&H \$5.00</i> <i>For orders from \$41 to \$100 P&H \$7.00</i> <i>For orders over \$100 P&H \$10.00</i> <i>For overseas orders please contact the MAV office for rates</i>			Postage & Handling inc. GST
TOTAL PAYABLE INC. GST			

Method of Payment

Please note: orders will not be processed until we have received full payment or you have quoted your school's purchase order number below.

1. **Cheque:** I enclose my cheque/money order for \$_____ (made payable to the MAV)

2. **Credit:** Bankcard Mastercard VISA Expiry date: ____/____ (MM/YY)

Card Number:

Cardholder's name: _____

Signature: _____

3. **Purchase Order Number:** _____

CREDITS/RETURNS POLICY

All books and materials are supplied on a firm sale basis only. Returns are only acceptable in cases of incorrect deliveries, goods damaged in transit or faulty print and bind. Notification of incorrect supply, incorrect invoices or damaged goods must be made within 30 days of invoice date. Damaged and unacceptable goods will be replaced at the expense of The Mathematical Association of Victoria. Authority to return books must be obtained from The Mathematical Association of Victoria before books are returned. Credits will only be issued when necessary for agreed incorrect deliveries, damaged goods or incorrect invoices.