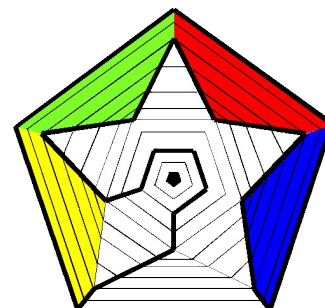


SHORT CIRCUIT

Canberra Mathematical Association Inc.

VOLUME 15 NUMBER 7

JULY 2024



NEWS AND COMMENT

The 15th International Congress on Mathematical Education ([ICME-15](#)) will take place on 7-14 July 2024 at the International Convention Centre in Sydney

At the same time, [NAIDOC](#) Week celebrations will be held across the country.

Page two of this edition of Short Circuit has been given over to cultural matters. Readers are warmly invited to submit or suggest items of a similar kind for future editions.

CMA is now a members of the Aboriginal & Torres Strait Islander Mathematics Alliance. This follows the ATSIMA/AAMT initiative which saw three representatives from CMA attend a summit in Adelaide in April.

In a similar vein, we announce that Samara Cummings (Indigenous Liaison Officer, Gungahlin College) has agreed to be CMA's Cultural Integrity

Advisor. We look forward to working with Samara.

MEMBERSHIP

Memberships run from **1 Jan** to **31 Dec**. each year. Membership forms may be downloaded from the CMA website:

[http://
www.canberramaths.org.au](http://www.canberramaths.org.au)

The several benefits of Membership of CMA may be found on the website.

NEWSLETTER

The CMA newsletter, Short Circuit, is distributed monthly to everyone on our mailing list, free of charge and regardless of membership status.

That you are receiving Short Circuit does not imply that you are a current CMA member but we do encourage you to join.

Short Circuit welcomes all readers.

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CMA council 2024—p. 4

**CANBERRA
MATHEMATICAL
ASSOCIATION**

THINGS TO READ, SEE AND HEAR

There exist books that contain no mathematics beyond an increasing sequence of page numbers. Yet some of them can benefit mathematics education, particularly when they tell the stories of the families of the students in our classrooms and so feed the kind of relationships between teachers and students that lead to learning.

1. Gordon, H. 1962. *The Embarrassing Australian - the story of an Aboriginal warrior*. Lansdowne Press, Melbourne.

This is the story of Reg Saunders, mostly focusing on his army service from the 1940s and ending at the time the book was written. Saunders was a competent soldier and leader, and he became a commissioned officer, something previously unheard of for a person with Aboriginal ancestry. He achieved hero status in the public eye. Saunders left the army after the Korean war but his skills were ignored by potential civilian employers and his circumstances became increasingly difficult. The author, Harry Gordon, conveys genuine sympathy for Reg Saunders. Yet the language of the writing contains unmistakable marks of the thinking that bedevilled black - white relationships then and perhaps still now. The 'civilized' versus 'primitive' dichotomy, a European construct of doubtful validity, drifts by unexamined. But, despite the book's faults, there are things to be learned from it, from several angles.

2. At the National Gallery of Australia there is currently an exhibition of works by [Vincent Namatjira](#), great grandson of Albert Namatjira. While Albert Namatjira made images of his country, Vincent prefers to place people in the landscape - often famous people including sporting heroes, politicians, musicians and royals. There is in the exhibition a reminder of the Reg Saunders story in a series of portraits called *Unknown Soldiers 2020*, based on Namatjira's research into Aboriginal soldiers who volunteered in the Australian Army in the First World War, hiding their Aboriginal heritage in order to be permitted to do so. In Vincent Namatjira's words, 'A lot of young

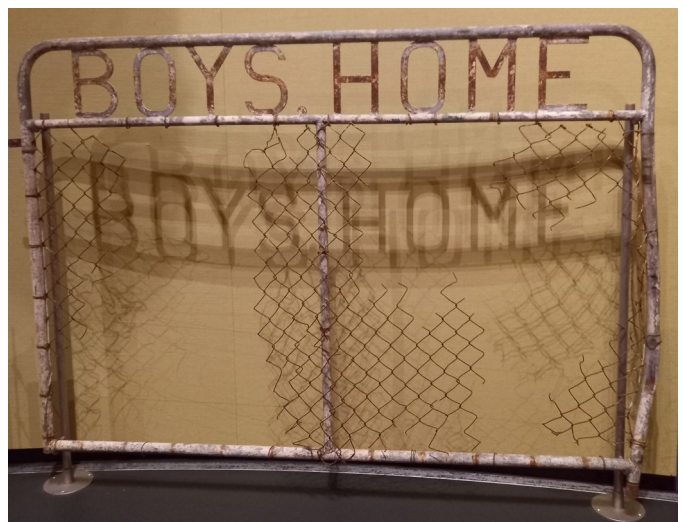
Aboriginal men fought for this country ... even though they weren't treated with dignity and respect at the time. Despite the huge sacrifices these men made, their stories remain hidden, camouflaged in history'.

3. Stolen Generations Survivor Cecil Bowden on [YouTube](#).

On 13 February 2008, Prime Minister Kevin Rudd offered an apology to Australia's Indigenous peoples, particularly the Stolen Generations. However, the stories of many of those who were removed as children from their families are yet to be told and the ongoing consequences are yet to be fully understood. In this video, Cecil Bowden tells his story. He was born in Cowra in 1939, one of ten children. They were all taken away and separated by the NSW Government while their father was away fighting in the Second World War. The children's father had himself been removed from his family as a child.

4. Kinchela gate

Cecil Bowden speaks of his life at the Kinchela Aboriginal Boys Home, Kempsey, where he was sent at age ten. Kinchela received a new front gate around 1950 and the old one was discarded. It was found on the bank of the Macleay river in 1990 by a community member and has since found its way to the National Museum, Canberra. The [museum quotes](#) former resident Manuel Ebsworth: 'This is what kept us in, kept us from our culture. Going through that gate, it was going into hell'.



REPORT OF GOVT. INQUIRY

The ACT ED Literacy and Numeracy Review Report has been published. Use this [link](https://www.education.act.gov.au/literacyandnumeracyinquiry) to access it: <https://www.education.act.gov.au/literacyandnumeracyinquiry>

RESEARCH INVITATION

From Corrine Robinson

I am a PhD candidate from UNSW. I am conducting research on mathematics education and would like to request that it be advertised to the mathematics teachers' community associated with the mathematics association.

Research Study Title: **Assessment to support learning in Mathematics**

Please find attached my [official request](#) ...

[Clicking on the link will take you to the survey, etc.]



STRENGTH IN NUMBERS

It is just over a year since AAMT began publishing its Strength in Numbers podcasts. There are now around 19 episodes. This [link](#) will take you there.

PUZZLES

1. Age of chess

The East Derwent Chess Club's first division team of 20 players made the finals in the annual competition. On the day before the tournament, one of their players, 90-year old Isaac Smith, fell ill and had to withdraw. A new, younger player was chosen as a replacement, reducing the average age of the team by four years. How old was the new player?

2. Prime locations

There are 168 prime numbers unevenly distributed with decreasing density between 1 and 1000. If a number in this range is randomly selected, what is the probability that it will be a prime number?

3. Implication

Given that there are 168 prime numbers between 1 and 1000, how many days are there in one week?

4. Sharp gamble

A student is asked to invent a game of chance that appears to favour the player. She proposes, 'What if two dice are thrown and the player wins if both dice show numbers greater than two?' Who wins?

5. Half cut

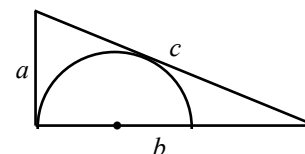
A circular hole sits somewhere wholly inside a rectangular plate. Find a line that passes across the plate that is guaranteed to divide it into two equal regions.

6. Route 66

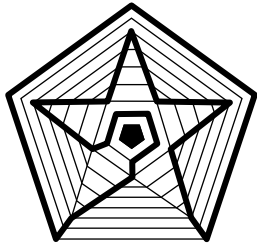
Two concentric circles have radii 8 and 14 units. A chord passes through both circles in such a way that the inner circle cuts the chord into three equal parts. How long is each part?

7. Hidden radius

A semicircle is drawn inside a right-angled triangle as in the diagram.



Find an expression for the area of the semicircle in terms of the lengths a , b and c .



**NEWSLETTER OF THE CANBERRA
MATHEMATICAL ASSOCIATION INC. INC**

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We're on the Web!
<http://www.canberramaths.org.au/>

THE 2024 CMA COMMITTEE

President	Bruce Ferrington
Vice President	Aruna Williams
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	Theresa Shellshear
	Heather Wardrop
	Andrew Wardrop
	Yuka Saponaro
	Jo McKenzie
	Jenny Missen
	Morgan Murray
	Bernadette Matthew

Theresa Shellshear is CMA's COACTEA representative.

Bruce Ferrington is CMA's AAMT representative.

The Canberra Mathematical Association (Inc.) is the representative body of professional educators of mathematics in Canberra, Australia.

It was established by, among others, the late Professor Bernhard Neumann in 1963. It continues to run - as it began - purely on a volunteer basis.

Its aims include

- * the promotion of mathematical education to government through lobbying,
- * the development, application and dissemination of mathematical knowledge within Canberra through in-service opportunities, and
- * facilitating effective cooperation and collaboration between mathematics teachers and their colleagues in Canberra.

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Brindabella Christian College
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Australian Catholic University

Melba Copland Secondary School
ACT Education Directorate
Lake Ginninderra College
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Mother Teresa School



Find us on Facebook

Short Circuit is edited by Paul Turner.

ISSN 2207-5755



CMTQ - Canberra Maths Talent Quest

Get thinking about what your class will do for the CMTQ this year. Students can enter individually, as a small group or as a whole class.

See CMA [website](http://www.canberramaths.org.au) for details www.canberramaths.org.au

CMA was there:

28th May

National Reconciliation Week Ceremonial Lighting Event.

Image projected onto the parliament house facade:

Kerurah Zimran OAM, *Puli Puli - The Rocks (2019)*



Bruce Ferrington

Yuka Saponaro

Paul Turner