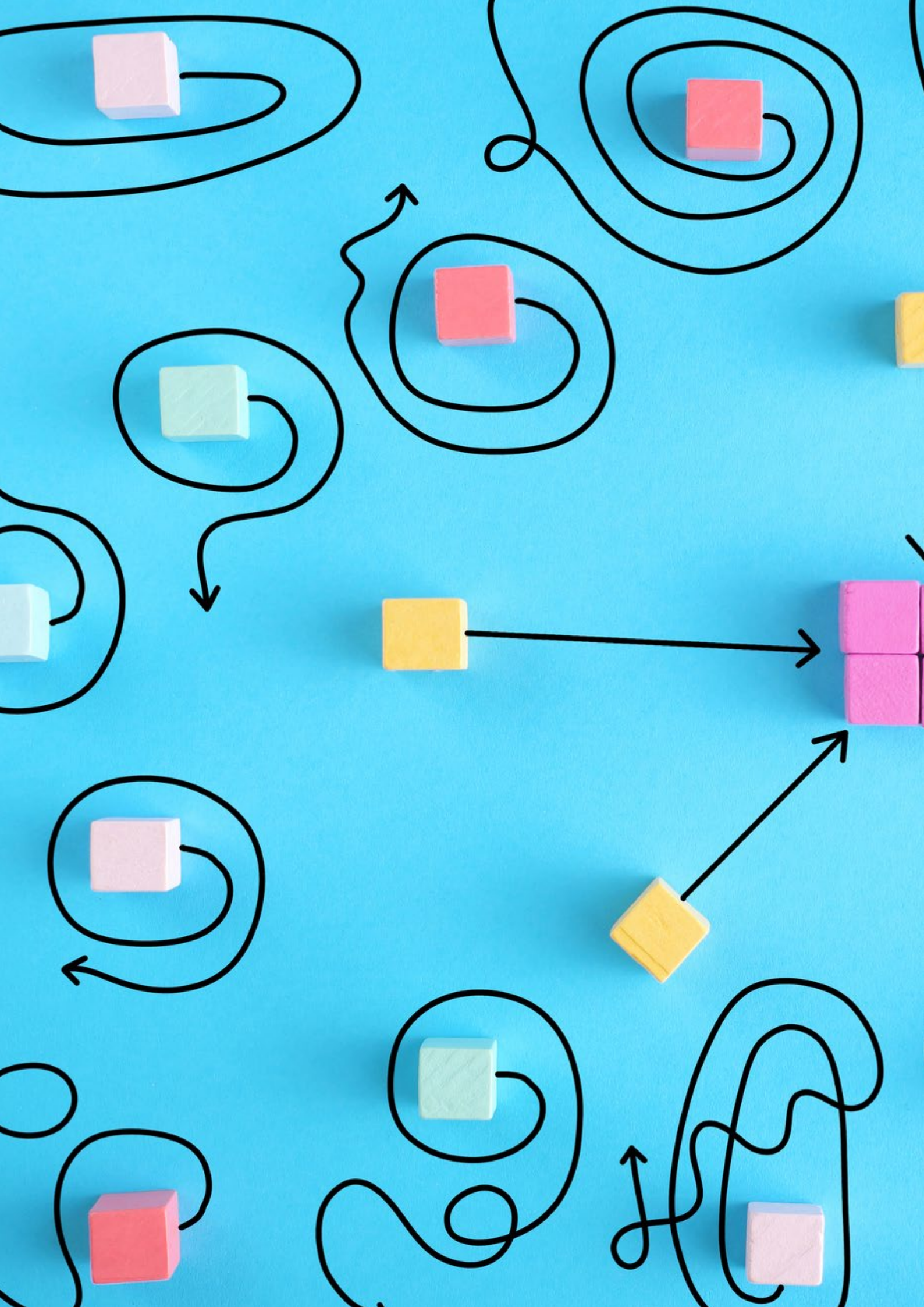




2025 Annual Report

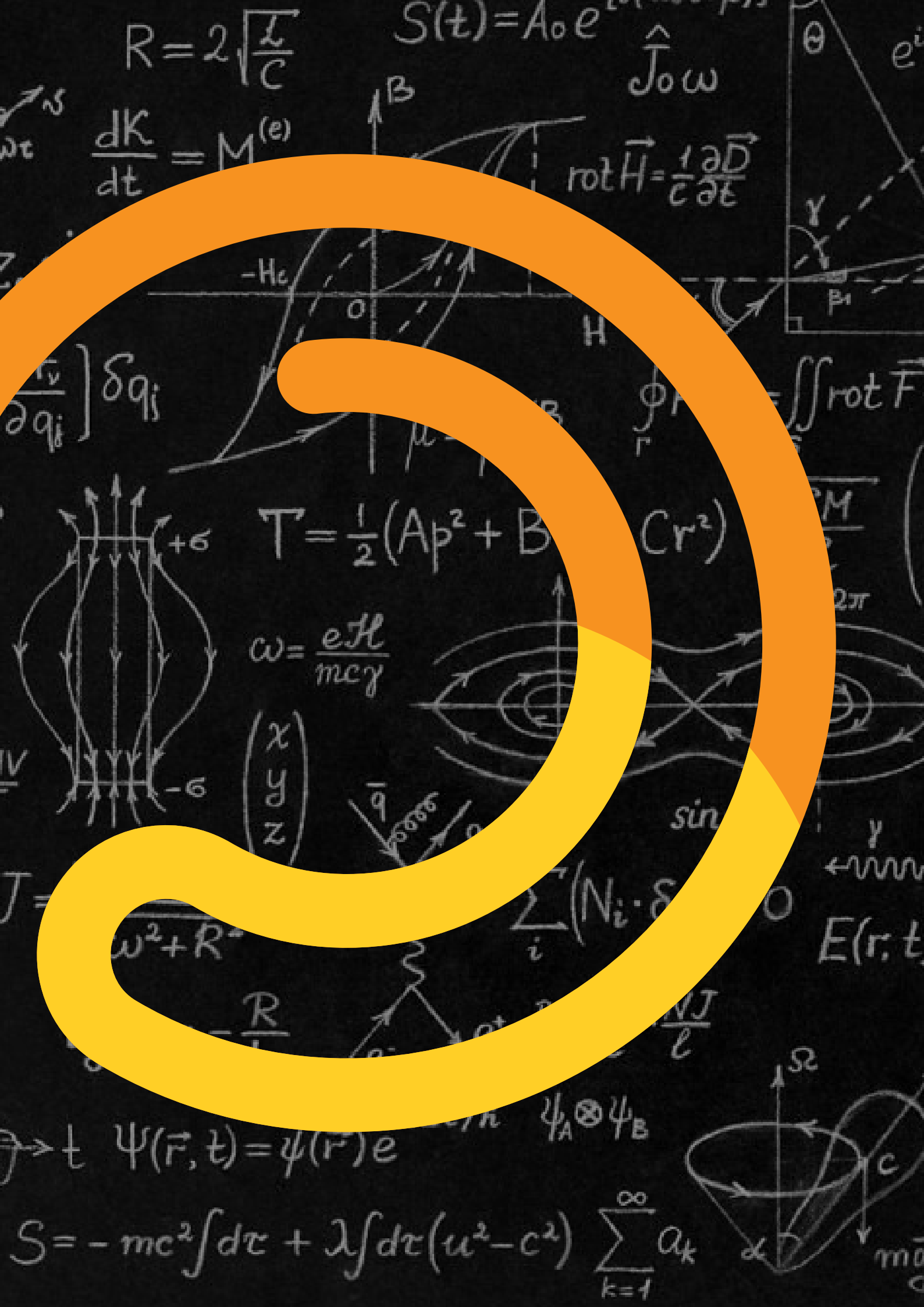


AUSTRALIAN MATHS TRUST



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FROM THE CHAIR

I am pleased to present the Australian Maths Trust Annual Report for 2025, a landmark year for the Trust and for mathematics education in Australia.

A defining achievement: IMO 2025

The successful hosting of the 66th International Mathematical Olympiad on the Sunshine Coast stands as one of the most significant milestones in the Trust's history. After several years of preparation, Australia welcomed the world's leading young mathematicians in an event that showcased not only exceptional talent but also our national capability in mathematical education and problem solving.

IMO 2025 brought together participants from over one hundred countries and created a focal point for mathematics across Australia. The Board's priority has been to ensure that this event delivers a lasting legacy—strengthening student aspiration, deepening participation and elevating the profile of mathematics nationally.

The Board extends its sincere thanks to our partners, sponsors, volunteers and, in particular, our staff, whose professionalism, commitment and sustained effort over several years were critical to the successful delivery of a complex and world-class event.

Leadership and renewal

2025 also marks an important transition in leadership with the appointment of Mathieu (Mat) Meriaux as our new Chief Executive Officer. Following a comprehensive search, the Board is confident that Mat brings the strategic clarity and capability required to lead the Trust into its next phase.

The Board would like to acknowledge and thank the interim leadership team for their stewardship during this period of transition, particularly Mike Clapper as Interim Chief Executive Officer and David Williams as Deputy Chief Executive Officer. Their leadership ensured continuity of operations and maintained organisational momentum during a critical period.

David Williams has now returned to the AMT Board and has resumed his role as Chair of the Finance, Audit and Risk Management Committee, where his expertise continues to strengthen the Trust's governance and financial oversight.

The Board also acknowledges the dedication of the broader staff team, whose adaptability and commitment ensured continuity of delivery during a period of significant organisational change.

The Board strengthened the Finance, Audit and Risk Management Committee during the year, with the appointment of Justin Koonin, Amy Love-Nath and Andrew Kwok. Amy's engagement with this committee while being based in Qatar highlights the increasingly global nature of the AMT community. The involvement of Justin and Andrew also reflects the ongoing commitment of our alumni community, whose continued support plays an important role in sustaining and enriching the work of the Trust.

During the year, the Board also noted the resignations of Robyn Owens and Elisa Martinez-Marroquin. On behalf of the Board, I thank them both for their valuable contributions to the work of the AMT and for their commitment to the organisation during their tenure.

This transition builds on the strong organisational foundations established in recent years, including improvements in governance, systems and operational effectiveness. The Board is focused on supporting the CEO to expand the Trust's reach, strengthen its impact and position the organisation for sustained growth.

Expanding participation and pathways

The Trust continues to extend its reach through its competitions and programs. Building on the momentum of recent years, we have continued to broaden access to high-quality problem-solving opportunities for students across Australia and internationally.

It has been particularly encouraging to see strong growth in participation in the Kangourou sans Frontières (KSF) and the continued integration of both KSF and Bebras into the Trust's regular annual competitions. Together with our long-standing Australian Mathematics Competition and Computational and Algorithmic Thinking competition, these programs strengthen the AMT's ability to engage students at different stages of their problem-solving journey and help create clearer and more accessible pathways into our broader mathematics and informatics offerings.

In parallel, the AMT has taken early steps in developing a coding challenge offering, bridging between the conceptual and coding aspects of our informatics pathway. While still at an early stage, this initiative has generated strong interest and represents an important opportunity to broaden engagement and deepen capability in algorithmic thinking. The Board is enthusiastic about how this offering will evolve over time.

Looking forward, the Trust will be prioritising greater inclusion—particularly in regional and remote communities, and among students from under-represented backgrounds—working to ensure that mathematical potential can be identified and supported wherever it is found.

Excellence and diversity in Olympiad pathways

Australian students continue to perform strongly on the international stage, reflecting both the depth of talent in this country and the strength of the Trust's training programs.

Equally important has been the continued progress in broadening participation in these pathways. Initiatives supporting young women in mathematics and informatics are delivering sustained results. These efforts are strengthening both equity and excellence within Australia's high-performance programs.

From 1 January 2026, the Australian Maths Olympiad Program (AMOP) is implementing a revamped structure to enhance selection rigour, pathways and student preparation for international competition. A new exam sequence now leads into the November Maths School of Excellence and onward to the IMO and EGMO Team Selection Tests, with the AMO Winter and AMO Final replacing earlier selection mechanisms, and the AMO Summer replacing the former Australian Mathematical Olympiad for April school selection. Training camps have also returned to a fully in-person model with Senior and Junior streams, while responsibility for the pre-junior stream has transitioned to AMOC State Directors, reinforcing collaboration across the national mathematics community.

Strengthening capability and community

The AMT remains a community of educators, volunteers, academics and supporters working together to build problem-solving capability. This community is central to everything we do.

A highlight during the year has been the strong enthusiasm for the AMT State Award ceremonies held across each state and territory. These events continue to play an important role in recognising student achievement and increasing connections with schools, families and the broader mathematics community. It has also been particularly valuable to reintroduce workshops alongside many of these ceremonies, providing students and teachers with opportunities to engage more deeply with problem solving and enrichment activities. This combination of recognition and engagement is enhancing the impact of these events and reinforcing their role as an important touchpoint in the AMT calendar. We thank all the people that worked so hard to make these events a success.

During 2025, the Trust has continued to invest in the quality and accessibility of its programs, in teacher engagement and resources and in the systems required to support scale. The expanding role of algorithmic thinking within our offerings reflects the evolving nature of problem solving and the increasing importance of these skills.

AMT Alumni

Another important development during the year has been the formal launch of the AMT Alumni Network at IMO 2025. This initiative brings together past participants in our Olympiad programs, many of whom have gone on to make significant contributions in mathematics, science, technology and related fields. The passionate engagement of this community reflects a strong and enduring connection to the Trust that underpins the quality of the educational experiences we can provide.

Financial sustainability

The Board remains focused on ensuring the long-term financial sustainability of the Trust. The 2025 financial outcome was significantly stronger than expected, with revenue exceeding budget by approximately 9 per cent and expenditure contained around 4 per cent below budget. This performance reflects disciplined cost control and careful management of expenditure.

Looking ahead

Following the success of IMO 2025, the Trust is well positioned to build on this momentum. The focus now turns to translating this global event into enduring national impact—deepening engagement in schools, strengthening student pathways and expanding Australia’s contribution to the international mathematics and informatics communities.

The success of IMO 2025 has already begun to deliver tangible legacy outcomes. In early 2026, the Trust secured significant sponsorship support from Jane Street, now our Major Sponsor of the Olympiad programs, and renewed the long-running sponsorship from Optiver. These partnerships reflect the increased international profile of the Trust and the strength of Australia’s problem-solving ecosystem. Further to this they provide an important foundation for the continued growth of our programs.

On behalf of the Board, I thank our staff, volunteers, partners and the broader AMT community for their commitment and contribution. Their collective effort continues to enable the Trust to fulfil its mission of building a nation of creative problem solvers.



Geoff Shuetrim
Chair, AMTT Board Ltd



FROM THE 2025 CEO

For the AMT, 2025 began with a degree of uncertainty following the resignation of both the CEO and the Board Chair late in 2024. However, the history of the Trust is that people have always stepped up in times of need. We were fortunate that board member Geoff Shuetrim was prepared to step in as Board Chair and another board member, David Williams, was prepared to step down from his board position to take on an immediate acting leadership position to assist us through a period of potential instability. I was asked to commence as CEO for 2025 whilst the search for a longer-term solution began and David agreed to continue as Deputy CEO for the year. I wish to thank both Geoff and David for their preparedness to step up and for the support they have given to me during the year.

It was always going to be a big year in the history of the Trust with our hosting of the IMO in July. Fortunately, it has turned out to be a very good year, with a successful IMO, an increase in numbers in almost all competitions and the completion of the OneAMT project, which aimed at rebuilding community trust and developing a robust alumni network. Many people have contributed to this project but I would particularly like to thank Laura Stuart, who led the project, and incoming board member Sally Tsang, who provided great drive and assistance in the setting up of the alumni program.

A sad counterpoint to the year's successes was the passing of two of the AMT's greatest contributors, Warren Atkins and Bruce Henry. Whilst more substantial eulogies have appeared elsewhere, I would like to briefly acknowledge them here. Warren was an inaugural member of the committee which set up what has become the Australian Maths Competition and was the Chair of the Problems Committee for many years, as well as editor of the World Federation of National Mathematics Competitions

journal. From a personal perspective, Warren invited me onto the Primary AMC problems committee in 2003 and supported me as I took over from him as Problems Committee Chair in 2012. Bruce Henry was the initial AMC state director for Victoria and was also largely responsible for setting up the Maths Challenge for Young Australians program, being Chair of the Challenge committee and the Australian Intermediate Mathematics Olympiad problems committee for many years. Both men have played a very large part in the development of the AMT and, appropriately, both have received Erdős awards (an international award for outstanding contribution to mathematical enrichment).

Returning to the IMO, what a thrill it was to host students from 111 countries, along with their leaders and support teams, and to manage this with so many of our own mathematicians and other volunteers. Particular thanks to Ben Kirk, who was the project manager for the IMO and has worked tirelessly on this event over the last few years; to Norm Do, who managed the difficult task of chairing the jury with great aplomb and to Ivan Guo, who led the problems committee and managed the co-ordination of marking. The venue proved to be spectacularly successful and the whole event was managed well within budget parameters. It is also pleasing that Australia performed well, with all of our six competitors obtaining medals. Details of this and our success in other Olympiad competitions during 2025 are contained elsewhere in this report but my congratulations to all our team members.

From a personal perspective, I have been pleased to see the re-introduction of student workshops in association with the end of year presentation events, and it was also good to see a successful workshop conducted in China early in the year, setting a precedent for this to become a regular occurrence.

Much of the Board's time was spent searching for a new CEO and it has been a delight to welcome Mat Meriaux back to the Trust in this position. I am confident that Mat will provide outstanding leadership for the future.

Apart from Mat, there have been several staffing changes this year, with Abhishek Gupta joining us at the start of the year, Tina Stevens replacing Julie Graber midway through the year, Louise Bilston, Wendy Elliott and Conor John leaving and Jerry Li replacing Angus Ritossa as Director of Training for Informatics. To those who have left, my thanks for their service to the Trust. Those joining have already made their mark!

This year has been a very special one for me and I thank all the staff and volunteers whose contribution, and generosity has supported me in my brief return to leadership of this great organisation.



Mike Clapper

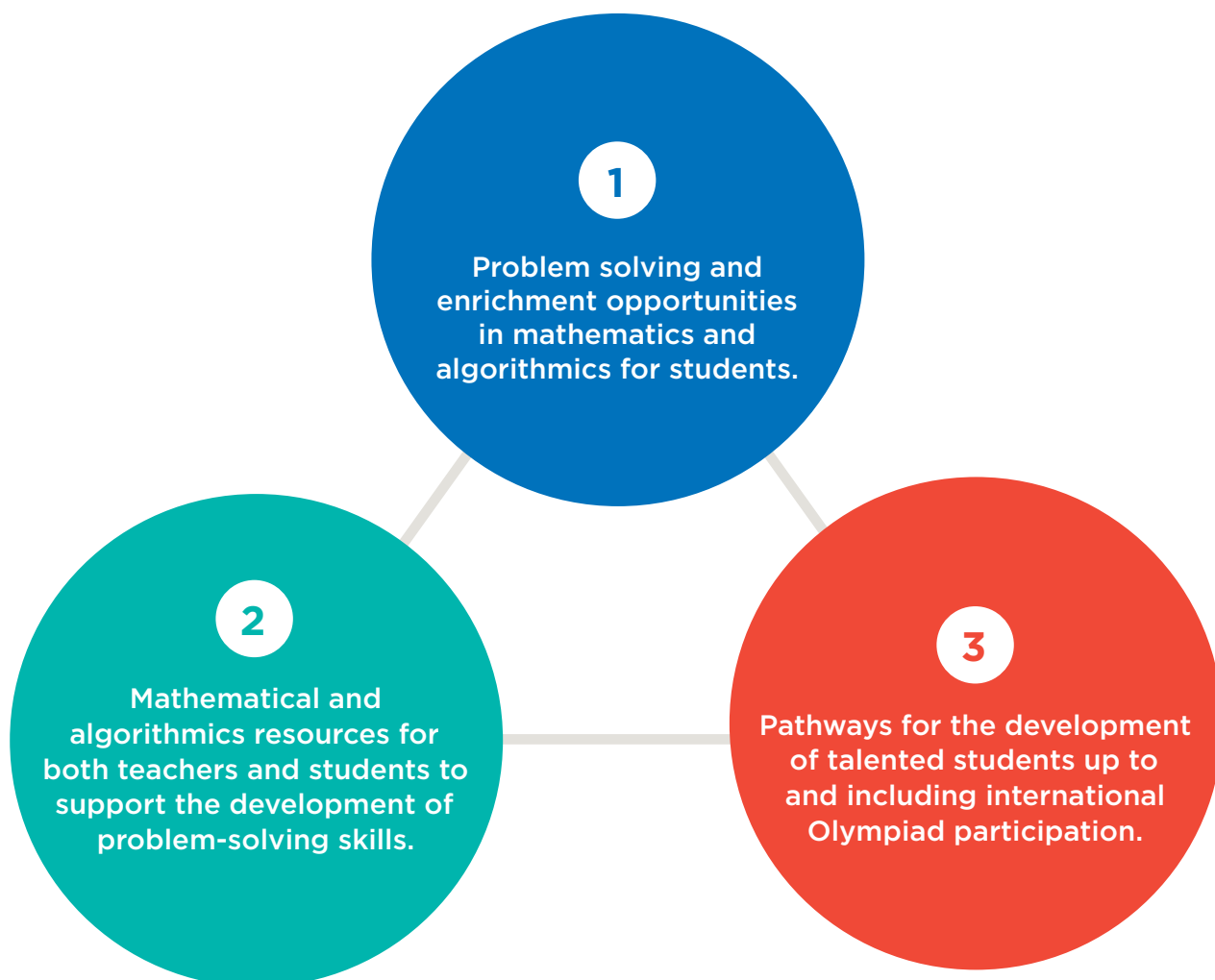
Mike Clapper
2025 Chief Executive Officer



AMT COMMUNITY



THE AUSTRALIAN MATHS TRUST (AMT) IS A COMMUNITY, WHICH WORKS TOGETHER WITH THE AIM OF PROVIDING:



Most members of this community are mathematicians, informaticians or educators who develop competitions and resources and provide training for talented students. They are supported in their endeavours by a dedicated team of competition managers, publishing personnel and other administrative staff, which provides the infrastructure needed to:

- 1** Ensure the effective delivery of competitions and programs and the integrity of competition materials.
- 2** Provide design skills and publishing support to create high-quality resources.
- 3** Facilitate problem committee meetings and other meetings in pursuit of the above aims.
- 4** Ensure a safe environment for all participants in the programs of the AMT.

The AMT is a not-for-profit organisation governed by a Board of Directors.

ABOUT US





OUR MISSION AND VISION

MISSION

To be a leader in helping young Australians realise their problem-solving potential using maths and algorithmics

VISION

A nation of creative problem solvers

OUR FOCUS AREAS

①

Enriching and extending student learning

②

Building teacher capacity

③

Enabling the problem-solving community

IMO 2025

Make Australia the centre of mathematical problem solving for young people in 2025. With the IMO competition as centrepiece, deliver nationwide events and programs to inspire and galvanise the next generation of Australian problem solvers.

STRATEGIC PRIORITIES

- a. Revitalise student engagement: Enrich and develop our current programs to maximise student participation.
- b. Inspire teachers: Work with systems, schools and teachers to enhance the teaching of problem solving.
- c. Activate the community: Use our staff and volunteer expertise to lead the development of an active community of problem solvers.

STRATEGIC ENABLERS

- a. People: Attract, develop and retain a high-performing staff and volunteer team.
- b. Internal systems: Address critical system and operating gaps.
- c. Financial stability: Conduct our business in a financially sustainable way.

BUILDING COMMUNITY

We develop collaborative relationships with trust, openness and accountability

STRIVING FOR EXCELLENCE

We apply our experience and expertise to unlock quality learning and achievements

OUR VALUES

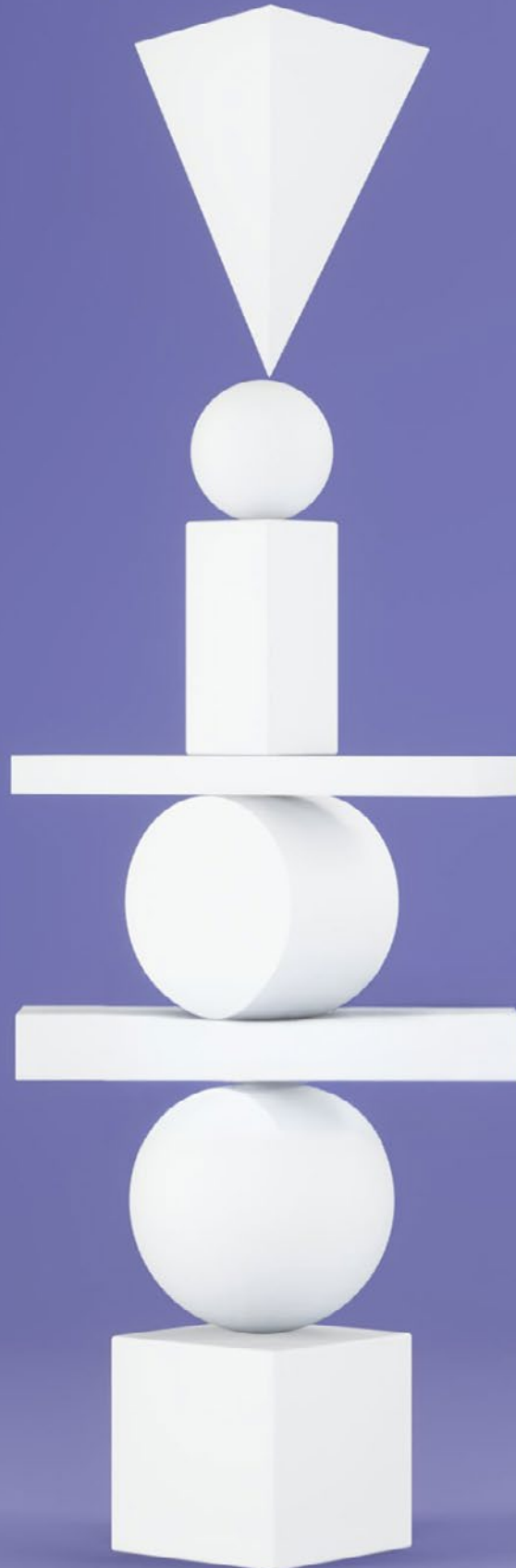
GROWING THROUGH INNOVATION

We value our past and adapt for the future

CREATING ENJOYMENT

We enrich education through a positive and supportive environment

OUR PARTNERS AND SUPPORTERS



CORPORATE PARTNERSHIPS

AMT's work is amplified through meaningful partnerships that align with our mission to nurture mathematical talent and build a vibrant, connected community. In 2025, we were proud to strengthen and expand collaborations with corporate and institutional partners who share our commitment to excellence, opportunity and long-term impact.

Optiver continued its longstanding support as a partner of the Olympiad program, demonstrating sustained confidence in AMT's mission and programs. Their ongoing involvement provides stability and continuity, enabling AMT to plan and deliver high-quality experiences for students across Australia year after year.

UNSW has likewise remained a valued and stable partner, particularly through its support of AMT's informatics program. This collaboration underscores the importance of strong links between secondary mathematics education, tertiary institutions and advanced problem-solving disciplines and we are exploring further collaborations into 2027 and beyond.

The delivery of IMO 2025 was made possible by XTX Markets, a philanthropy-focused leading algorithmic trading firm, whose trust in AMT to deliver an exceptional event was the basis of what became a foundational relationship for the organisation. XTX provided AMT with the ability to resource the event with exceptional clarity and confidence – we could not have hoped for a better partner.

Looking ahead to 2026, we can assure our community of viability, sustainability and success in partnerships.

Trading firm Jane Street has joined AMT in late 2025 as the major partner of the Olympiad program and as a partner of the AMT Alumni Network, and Optiver has reaffirmed their support for the Olympiad program – both in long-term arrangements that provide confidence in our financial stability. Both of these partnerships have developed through a sense of community – it is the relationship behind the arrangement that is valued by both parties.

AMT is deeply grateful for the trust and engagement of its partners. We continue to seek out relationships that are not merely transactional but genuinely collaborative – partnerships that help drive forward our programs, extend opportunity, and strengthen the national and international community of mathematicians that AMT serves. Together with our partners, we are building something enduring: a connected, supported, and thriving mathematics and informatics community.



Members of AMTT Ltd



UC is Australia's fastest rising university, and one of the fastest rising in the world. It is also #1 in the ACT for full-time employment and starting salaries for three years running.



To advance Australia as a nation that embraces scientific knowledge and whose people enjoy the benefits of science.

Major Partner of the AMT's Olympiad Program



Jane Street is a quantitative trading firm active on over 200 trading venues across 45 countries. As a liquidity provider and market maker, we help form the backbone of global markets. Our approach is rooted in technology and rigorous quantitative analysis, but our success is driven by our people.

Olympiad Program Partner



National sponsor of the Australian Informatics and Mathematical Olympiad programs

As a global market maker, Optiver works to make the world's markets fairer, more transparent, and more efficient for everyone.

Major Sponsor of IMO 2025



IMO 2025 was made possible by AMT's Principal Supporter XTX Markets, the leading algorithmic trading firm, and proud donor to maths education globally.

Government Supporters



Australian Government
Department of Education

Curious Minds is funded by the Australian Government Department of Education through the Women's Economic Security Package 2018.



Australian Government
Department of Industry,
Science and Resources

Our maths and informatics Olympiads are supported by the Australian Government Department of Industry, Science and Resources through the Science Competitions: Mathematics and Informatics Olympiads grant opportunity. Our EGMO initiative is supported by the Australian Government Department of Industry, Science and Resources through the Inspiring Australia - Science Engagement Program.

Higher Education Supporter

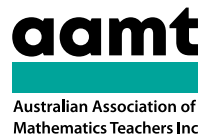


The University of New South Wales is a strategic higher education partner of the AMT, with a focus on expanding and improving the informatics (computer science) high performance pathway.

Sector Partners



Australian Science Innovations delivers challenging science extension programs for high school students that aim to broaden horizons, identify capabilities and build Australia's scientific community.



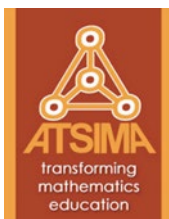
The leading organisation that supports and promotes mathematics education in schools in Australia, including professional learning, collaborative research and projects, advocacy, events and journals.



The collaborative enterprise of Australia's mathematical sciences. It exists to give independence to these disciplines and provide infrastructure so that they can take initiatives on the national and international stage.



The national society of the mathematics profession in Australia. Its mission is the promotion and extension of mathematical knowledge and its applications. It represents all professional mathematicians in Australia, both pure and applied.



The Aboriginal and Torres Strait Islander Mathematics Alliance (ATSIMA) is an Indigenous-led charity, and the only national organisation specifically committed to creating ways of teaching and learning mathematics that connect to Aboriginal and Torres Strait Islander histories and cultures.



A not-for-profit organisation whose goal is to improve mathematics education across Western Australia.

MAWA is a vibrant organisation that provides support for anyone with an interest in mathematics including teachers, parents and students.

OPEN COMPETITIONS



COMPETITION OVERVIEW

In 2025, overall participation of Australian students across AMT competitions increased, with registrations growing across all offerings (between 2% and 58%), except for Bebras (which transitioned from free to paid) and the Maths Challenge (which had a marginal decline of less than 1%). The number of Australian schools participating also increased across most competitions (up 5 – 74%).

KSF recorded the strongest growth of all the open offerings at 58%, reinforcing its position as a mature entry level product within the maths pathway. Bebras delivered strong participation in its second year, despite transitioning from free entries to being a paid model. The Coding Challenge (formerly OUCC) achieved significant growth (237%) following its free delivery in 2025 in line with UK partner requirements. Maths Enrichment registrations increased by 9.85% and AIMO grew by 16.75%. Participation in the AMC remained stable domestically, with the strongest growth occurring via international agents, including solid growth in China (5.56%) and substantial expansion across other agent markets (50%). The AMC continues to be highly regarded internationally.

Domestic entries

	2024	2025
KSF	11687	18497
AMC	183331	186944
OUCC	1444	4870
CAT	16484	17201
CHA	11919	11836
ENR	6272	6890
AIO	758	858
AIMO	2847	3324
BEBRAS	45041	14163
BEBRAS Week		3883



PROBLEMS

We are blessed with a vast network of creative and passionate volunteers and staff who create our content each year. Enjoy this sample of problems.

2021 Maths Challenge, Junior Problem 4 – Diginacci

Author: Warren Atkins (1938 – 2025) and Chris Wetherell

Warren Atkins' contributions to the Australian Mathematics Competition are the stuff of legend. As a member of the AMC Problems Committee for a remarkable 44 years, and Chair for much of that time, it is likely he is the most prolific contributor of published questions in the AMC's long history. This is not one of those questions! An otherwise worthy idea, there just wasn't room in the 2018 papers for this nice variation on the Fibonacci theme. Seeing its potential as a deeper investigation, Chris Wetherell adapted the problem and brought it to the Challenge Committee on Warren's behalf. Some three years and many refinements by the committee later, this version appeared in the Junior division of the Maths Challenge. Another version appeared in the Intermediate division. Nice to see good ideas not going to waste!

Problem

A *Diginacci* sequence is created as follows.

- The first two terms are any positive whole numbers.
- Each of the remaining terms is the sum of the *digits* of the previous two terms.

For example, starting with 5 and 8 the Diginacci sequence is

$$5, 8, 13, 12, 7, 10, \dots$$

The calculations for this example are

$$5 + 8 = 13, 8 + 1 + 3 = 12, 1 + 3 + 1 + 2 = 7, 1 + 2 + 7 = 10.$$

- List the first 26 terms of the Diginacci sequence above.
- Find, with explanation, two starting terms for a Diginacci sequence so that its 2021st term is 11.
- Find, with explanation, a Diginacci sequence that has no term equal to 11.
- Find, with explanation, a sequence with two different starting terms which contains five consecutive terms that are even and not all identical.

2025 Maths Enrichment, Newton Problem 1**Author:** Emily Peterson – AMC Primary Problems Committee Chair

Before joining us in the Canberra office in January 2026, Emily worked remotely from Launceston, some 4 hours north of Bruny Island. The island name *Lunawuni* is from *palawa kani*, the language of the Tasmanian Aboriginal people. The protagonist Leigh is named in honour of Leigh Maynard, who held and shared the creation story ‘the Creation of Trowenna’ from the Neunone people of Lunawuni. Emily presented a workshop about this problem at the Aboriginal and Torres Strait Islander Mathematics Alliance’s biennial conference in October 2025, which coincidentally was held on the very same island!

Problem

Leigh is learning about the endangered swift parrot. These birds breed in summer on the Tasmanian island of *Lunawuni*, also known as Bruny Island.

- a. The island is made up of North Bruny and South Bruny, joined by a skinny piece of land called ‘The Neck’. To approximate the island’s area, Leigh draws two rectangles over a map of the island, using the map’s scale to work out the sizes of the rectangles.

The North Bruny rectangle measures 2.5 cm by 6 cm. The South Bruny rectangle measures 6 cm by 12.5 cm. The scale reads ‘1 cm = 2 km’.

What is the approximate area of the island, in square kilometres?

- b. Leigh maps out twelve regions on the island, each of area 1 square kilometre. On Monday, he visits the first region, and hides among the foliage to watch for birds. He records the number of swift parrots that he sees. On Tuesday, he visits the second region, and so on, until he has visited all twelve.

This is his record of swift parrot sightings from the twelve regions:

1, 2, 4, 1, 3, 3, 0, 2, 4, 1, 1, 2.

He uses his data to estimate the swift parrot population on the island. What is Leigh’s estimated population?

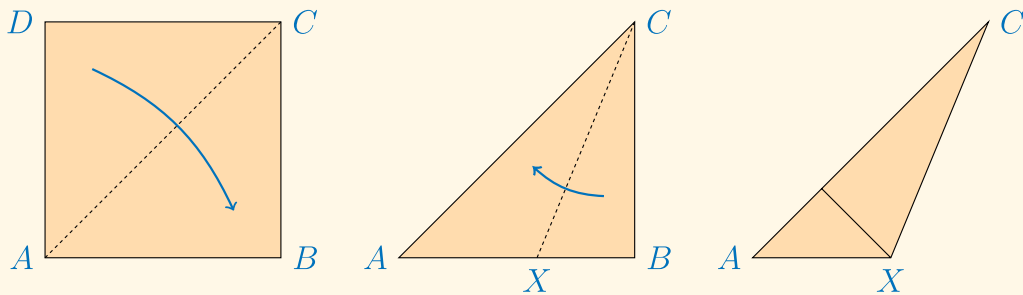
- c. An ornithologist tells Leigh that the swift parrot population on the island is expected to fall to about 120 birds in six years time. If Leigh goes back to his twelve regions in six years, how many birds would he expect to see in total?

2025 Kangourou sans Frontières, Intermediate Question 7 – Origami angle**Author:** Andrew Kepert – AMC Problems Committee Coordinator

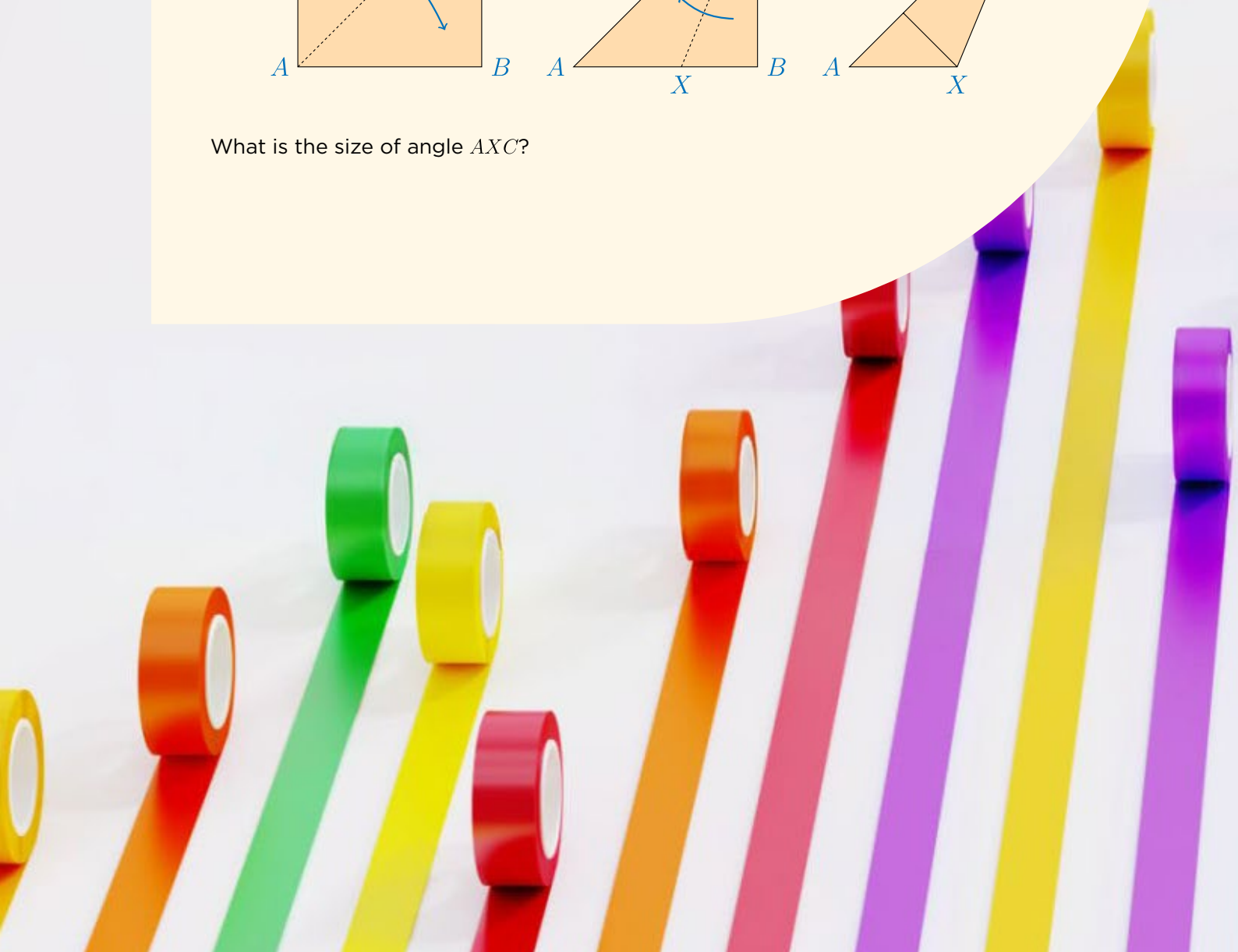
Andrew Kepert, Problems Coordinator of both the Primary and Secondary Problems Committees for AMC, submitted the original version of this problem for the Intermediate division of AMC in 2023 (plus an area variation for the Senior division). It was one of nine paper folding questions submitted that year across all divisions ... suffice to say we couldn't use them all! Mike Clapper, Chair of both committees at the time and also AMT's representative for Association Kangourou sans Frontières, revived this problem as part of our submission to AKSF's international problem-setting meeting in 2024, which was held in Santos, Brazil.

Problem

Min folds a square piece of paper in half along a diagonal to make a triangle. Then he folds the paper again, making the smaller triangle shown.



What is the size of angle AXC ?





INVITATIONAL PROGRAMS



OLYMPIADS OVERVIEW

The Australian Maths Trust delivers invitational programs for talented young problem solvers in mathematics and algorithmics and partners with Australian Science Innovations to deliver the Curious Minds program.

AMT's Olympiad program provides students with opportunities to develop advanced problem-solving skills and demonstrate their abilities both nationally and internationally. As part of this program, AMT offers multiple invitational competitions designed to identify and challenge high-performing students. In 2025 these included:

- AMOC Senior Contest (ASC)
- Australian Mathematical Olympiad (AMO)
- Australian Invitational Informatics Olympiad (AIIO)
- French Australian Regional Informatics Olympiad (FARIO).

Performance in these competitions informs selection for two annual training programs in both the mathematics and informatics streams:

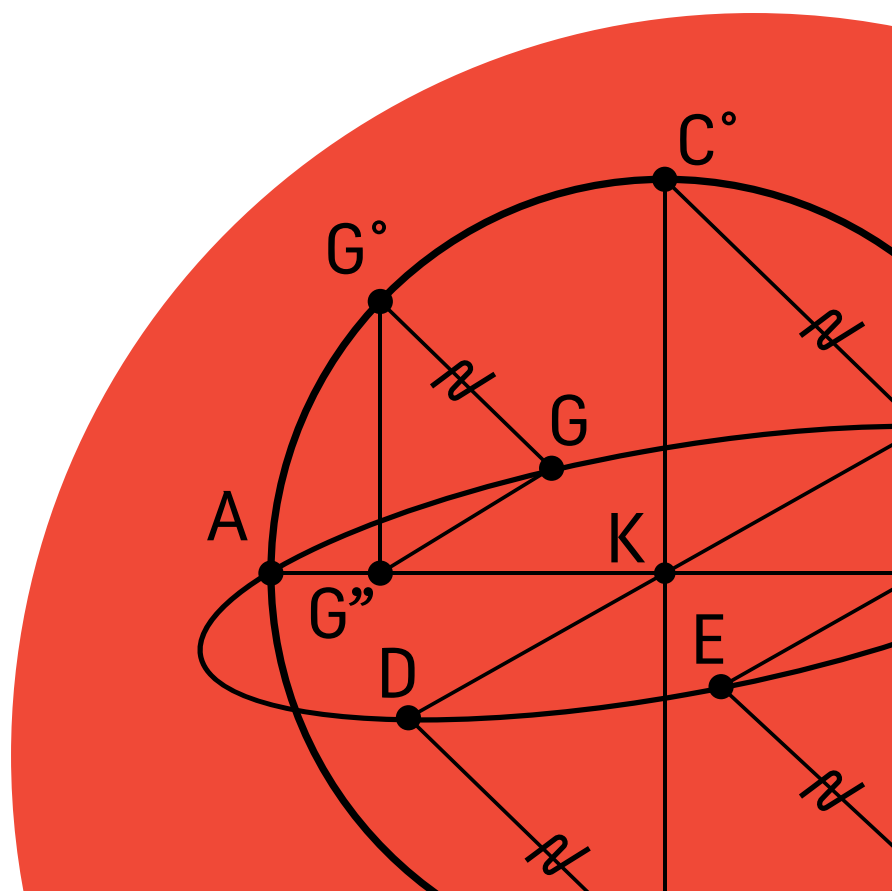
- Schools of Excellence (held in November and December)
- Selection Schools (held in April).

These training programs aim to further develop students' problem-solving capabilities, identify candidates for future competitions, and select teams to represent Australia at major international Olympiads, including:

- European Girls' Mathematical Olympiad (EGMO)
- European Girls' Olympiad in Informatics (EGOI)
- International Mathematical Olympiad (IMO)
- International Olympiad in Informatics (IOI).

The Olympiad programs are supported by the Australian Government Department of Industry, Science and Resources through the Science Competitions: Mathematics and Informatics Olympiads grant opportunity. Additional support is provided by Optiver, AMT's National Sponsor of the Australian Informatics and Mathematical Olympiads, and the University of New South Wales (UNSW), AMT's Strategic Higher Education Partner.

The Curious Minds program is funded by the Australian Government Department of Education and delivered in partnership with the Australian National University (ANU).



Olympiads - Informatics

European Girls Olympiad in Informatics

The European Girls' Olympiad in Informatics (EGOI) is a prestigious international programming competition that has provided young women with a platform to showcase their skills and knowledge since its launch in 2021. In 2024, the Australian Maths Trust (AMT) marked a significant milestone by sending its first-ever Australian team to compete and in 2025 we stamped our mark on the world stage with our first gold and silver medals.

On Tuesday 3 June, four talented students were announced as Australia's 2025 EGOI team in a virtual event led by Team Leader Shayla Nguyen. The announcement featured former EGOI Deputy Leader, Angeni Bai who wished the girls the best of luck and congratulated them on making the team.

The 2025 competition was held in Bonn, Germany from 14 - 20 July, bringing together over 200 participants from around the world. Competitors tackled a series of complex challenges designed to test their technical ability, critical thinking and creativity.

The whole team were awarded medals, delivering an exceptional performance:

- Christina Chen (Korowa Anglican Girls' School, VIC) - Gold Medal (4th place)
- Alexa Wu (Pymble Ladies' College, NSW) - Silver medal (24th place)
- Ayana Fridkin (Caulfield Grammar School, VIC) - Bronze Medal (74th place)
- Jenny He (Pymble Ladies' College, NSW) - Bronze Medal (80th place)

The Australian Maths Trust extends its sincere thanks to Team Leader Shayla Nguyen, Deputy Team Leader Honey Raut, Observer C Donna Priol and Director of Training for Informatics Angus Ritossa for their tireless efforts and ongoing support in preparing the team. Their dedication played a vital role in equipping these students with the skills and confidence to compete internationally and continue developing their abilities.

The European Girls' Olympiad in Informatics is now an established and integral part of the Olympiad program, providing a strong and sustained international pathway for young women in informatics.



From Left to Right: Donna Priol, Jenny He, Alexa Wu, Christina Chen, Ayana Fridkin, Shayla Nguyen, Honey Raut

International Olympiad in Informatics

Australia's top-performing students in computer programming achieved outstanding results at the 2025 International Olympiad in Informatics (IOI), held in Sucre, Bolivia from 27 July to 3 August. The team returned with two silver and two bronze medals, reflecting the strength of Australia's informatics training program on the global stage.

Informatics combines mathematics and computer programming to solve complex algorithmic problems. The IOI is the world's premier pre-tertiary competition in this field, with 330 students from 84 countries competing in 2025.

Australia was represented by four students:

- Matthew Lin (Scotch College, VIC) - Silver Medal (37th place)
- Nathan Zhou (Knox Grammar School, NSW) - Silver Medal (40th place)
- Ron Xue (Scotch College, VIC) - Bronze Medal (91st place)
- Justin Goh (Christ Church Grammar School, WA) - Bronze Medal (119th place)

These results highlight the continued success of Australia's Olympiad pathways in identifying and developing exceptional talent in informatics, and in preparing students to compete at the highest international level.

The Australian Maths Trust acknowledges the outstanding contribution of Informatics Director of Training and IOI Team Leader Angus Ritossa, IOI Deputy Team Leader Jerry Li, and Observer C Abhishek Gupta in guiding and supporting the team throughout their preparation. Their knowledge, mentorship and commitment were central to developing the students' problem-solving ability and ensuring they were well prepared for international competition.

The Trust extends its appreciation to Angus Ritossa for his leadership and lasting impact on the Olympiad program during his tenure. We also welcome Jerry Li as he steps into the role of Informatics Director of Training and IOI Team Leader and look forward to his ongoing contribution to the continued success of Australia's informatics pathway.



From Left to Right: Matthew Lin, Nathan Zhou, Justin Goh, Ron Xue.

PROBLEM

2025 Australian Informatics Olympiad, Problem 5 - Pairing Cards

Author: Jerry Li - Director of Training (Informatics)

Jerry Li took on the role of Director of Training for the Olympiad program in Informatics in August 2025. He has made a big impact in that short time. This problem comes from the Trust's first major programming competition, the AIO. Jerry gave an inspiring guest speech to a mixed audience of budding mathematicians and informaticians at the AMT State Awards for NSW in November.

Problem

You have found an unusual deck of N cards, where N is an even integer. Each card has an integer value written on it, and the i th card has the value A_i .

Your task is to rearrange the N cards into $\frac{N}{2}$ pairs, such that each card belongs to exactly one pair.

However, you are only allowed to pair two cards with values A_i and A_j if at least one of the following conditions holds:

- The absolute difference of their values is equal to D . That is, $|A_i - A_j| = D$ Or,
- The sum of their values is equal to S . That is, $A_i + A_j = S$.

You are given the integers D and S as part of the input.

Determine whether it is possible to divide the cards into $\frac{N}{2}$ valid pairs according to the rules above.

Input

The input follows a specific format:

- The 1st line contains the integers N , D and S .
- The 2nd line contains N integers describing the values on the cards. The i th of these is A_i .

Output

Your program must output YES if it is possible to divide the cards into $\frac{N}{2}$ valid pairs, and NO otherwise.

Olympiads – Mathematics

European Girls' Mathematical Olympiad

Australia achieved an outstanding result at the 2025 European Girls' Mathematical Olympiad (EGMO), placing third overall at the competition held in Pristina, Kosovo from 11-17 April 2025.

EGMO is the premier international mathematics competition for young women, bringing together leading students from around the world to solve complex and creative problems over two examination papers. In 2025, a total of 219 contestants from 56 countries participated.

The Australian team delivered an excellent result, earning three gold medals and one silver medal. Amber Li was the highest-performing Australian student, placing fourth overall.

The team results include:

- Amber Li (Pymble Ladies' College, NSW)
Gold Medal (4th place)
- Xiangyue Nan (Fintona Girls' School, VIC)
Gold Medal (14th place)
- Olivia Sun (Lauriston Girls' School, VIC)
Gold Medal (21st place)
- Zihui Zhang (Clayfield College, QLD)
Silver Medal (42nd place)

This outcome continues Australia's strong record at EGMO, following a second-place finish in 2024 and third place finishes in 2023 and 2022. These results reflect the strength of the Olympiad pathway in supporting high-performing students in mathematics.

The Australian Maths Trust acknowledges the contribution of EGMO program staff, Team Leader Michelle Chen, Deputy Team Leader Elizabeth Yevdokimov, Observer A Grace He and Observer C Melanie Hugg in preparing and supporting the team. Their expertise and commitment were instrumental in helping students prepare for the competition and excel on the world stage.



From Left to Right: Team guide, Grace He, Amber Li, Zihui Zhang, Xiangyue Nan, Olivia Sun, Michelle Chen, Melanie Hugg, Elizabeth Yevdokimov.

International Mathematical Olympiad

Australian students achieved outstanding results at the 2025 International Mathematical Olympiad (IMO), held on the Sunshine Coast, Queensland from 10–20 July. Competing against 630 students from 111 countries, the Australian team of six students earned two gold medals, two silver medals and two bronze medals, placing Australia 15th overall.

The IMO is the world's premier mathematics competition, bringing together the highest-performing young mathematicians globally to solve complex and creative problems across two examination papers held over consecutive days.

Australia delivered a fantastic result on home soil:

- William Cheah (Scotch College, VIC)
Gold Medal
- Jayden Pan (Shore School, NSW)
Gold Medal
- Xiangyue Nan (Fintona Girls' School, VIC)
Silver Medal
- William Liu (The King's School, NSW)
Silver Medal
- Justin Tran (Sydney Grammar School, NSW)
Bronze Medal
- Zihui Zhang (Clayfield College, QLD)
Bronze Medal

The 2025 competition marked the second time Australia has hosted the IMO, following the first hosting in 1988 in Canberra. Hosting duties on the Sunshine Coast were made possible through the support of principal sponsor XTX Markets, along with the Sunshine Coast Council and Visit Sunshine Coast.

The Australian Maths Trust acknowledges the efforts and support of the IMO Team Leader Haydn Tang, Deputy Team Leader Michelle Chen, Observer A Jongmin Lim, Observer B Charles Li and Observer C Andy Tran. Their expertise and steady guidance helped support students throughout their training and competition experience.



From left to right: William Liu, Zihui Zhang, Xiangyue Nan, Jayden Pan, William Cheah, Justin Tran.

Australian Olympiads Team Announcement (AOTA)

Twenty-seven students from across Australia were announced as members of the 2025 Australian Olympiad teams during a ceremony at Australian Parliament House in June. The cohort represented schools across New South Wales, Victoria, Queensland and Western Australia, reflecting the national reach of Australia's STEM pathways.

Students travelled internationally in July and August to compete across six Olympiads:

- Biology
- Chemistry
- Earth Science
- Informatics
- Mathematics
- Physics

Among the 2025 Australian team members were a number of students with exceptional prior international achievements, including Xiangyue Nan (Fintona Girls' School, VIC), a multiple-time gold medallist at the IMO and EGMO, and William Cheah (Scotch College, VIC), a four-time IMO participant and multi-medallist.

The 2025 Australian IMO team comprised:

- William Cheah (Scotch College, VIC)
- William Liu (The King's School, NSW)
- Xiangyue Nan (Fintona Girls' School, VIC)
- Jayden Pan (Shore School, NSW)
- Justin Tran (Sydney Grammar School, NSW)
- Zihui Zhang (Clayfield College, QLD)

The 2025 Australian IOI team comprised:

- Justin Goh (Christ Church Grammar School, WA)
- Matthew Lin (Scotch College, VIC)
- Ron Xue (Scotch College, VIC)
- Nathan Zhou (Knox Grammar School, NSW)

Australia also hosted the International Mathematical Olympiad (IMO) on the Sunshine Coast in 2025, marking the first time the event had been held in Australia since 1988. Hosting the IMO represented a significant milestone for Australia and provided a unique opportunity for students to compete on home soil.

The Australian Science, Mathematics and Informatics Olympiad programs are funded through the Inspiring Australia initiative, contributing to the Australian Government's vision to engage all Australians with science. The Maths and Informatics Olympiad program is also supported by Optiver and the University of New South Wales.

IMO 2025

The International Mathematical Olympiad 2025 (IMO 2025) was an extraordinary milestone for the AMT, showcasing not only mathematical excellence on the world stage but also the strength, generosity, and spirit of our community.

Delivered through the tireless efforts of an exceptional volunteer and staff cohort, IMO 2025 was, in the words of IMO President Gregor Dolinar, “one of the best Olympiads ever staged.” This praise reflects the extraordinary care, professionalism, and enthusiasm shown by everyone involved – from problem selection and coordination of the mathematical event to planning, logistics, hospitality, and student support.

At the heart of the event was a deeply collegial spirit that carried across the AMT community. Volunteers worked side-by-side with staff in a culture of mutual respect, shared purpose, and good humour. Many gave months of their time to ensure the event ran seamlessly, often juggling these commitments alongside full professional and personal lives. Their dedication exemplified the very best of AMT.

IMO 2025 was more than a competition. It was a coming together of the global mathematical community in a setting that celebrated curiosity, challenge, and connection. The warmth extended to students, team leaders, observers, and international guests alike left a lasting impression and reinforced Australia’s reputation as a gracious and capable host.

These gatherings strengthen our community, deepen connection across generations of mathematicians, and reaffirm the central role AMT plays in bringing people with a shared love of mathematics together.





Welcome to the

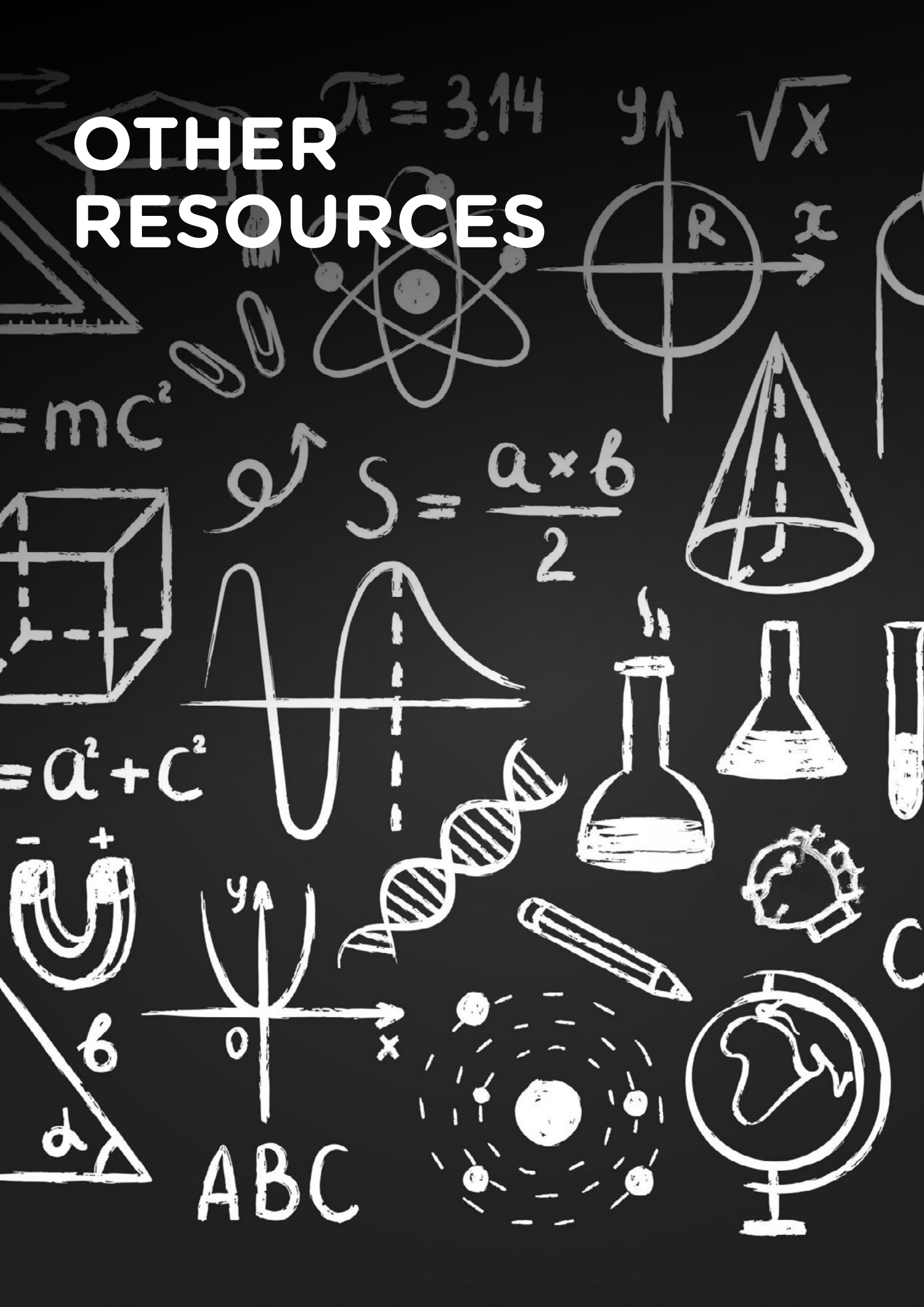
International Mathematical Olympiad 2025

10 July – 20 July 2025

Sunshine Coast QLD, Australia



OTHER RESOURCES



Problememo

POWERED BY
AUSTRALIAN MATHS TRUST

Making Maths Meaningful



Problememo is the AMT's online problem solving platform for teachers, offering a treasure trove of high quality mathematics resources for students in Years 3-12. The platform brings together an extensive library of problems supported by detailed lesson cards, comprehensive solutions, enabling and extending prompts, curriculum strand and topic classifications, suggested year levels and difficulty ratings.

Problememo gives teachers flexibility in how they use content, allowing them to curate their own problem sets or draw on existing collections, display problems in the classroom, create online quizzes or download PDFs for offline use. Established in 2020, Problememo is available through a range of free and paid plans designed to meet the needs of schools, individual teachers, university students and coaching clinics.

It remains the AMT's primary digital resource for teachers, drawing on a rich collection of more than 800 problems sourced from past AMC and CAT competitions. To support accessibility and choice, the platform offers tiered subscription options that vary in content access and functionality.

As in previous years, Problememo also hosted practice and solution sets for KSF, CAT and AMC, enabling teachers and students participating in these competitions to engage directly with the platform and experience its broader capabilities.

SHOP AMT.

The AMT also has a wealth of resources in the AMT Shop. There are books for every level, from students practising for AMC and CAT competitions, through to advanced Olympiad Problem Solving.

There is also an international section which includes books from various Olympiad competitions from around the world.



Curious Minds

The Curious Minds program started in 2015 and has been delivered to thousands of students. The program empowers highly capable female students to pursue STEM careers, build confidence, interest, and skills to encourage them to continue STEM studies into the future.

The 2024–2025 program was the fifth year of the 2020–25 Government Grant agreement and continues the established hybrid delivery model, combining both in-person and online training components. During this cycle, the December summer camp was delivered in person, while the July winter camp was conducted online. The summer program was delivered across two locations:

- East camp held at the Australian National University in Canberra from 1–6 July
- West camp hosted at the University of Adelaide from 8–13 July.

During the camp, students participated in a series of subject specific “Supercharge” sessions designed to deepen their understanding of key scientific concepts through hands-on learning.

For example, students:

- explored evolution and genetics through enzyme function (lactase), DNA modelling, and hominid skull comparisons
- investigated core biological concepts including digestion, inheritance, and human evolutionary adaptation
- conducted environmental chemistry testing of urban waterways, including Sullivans Creek and the River Torrens
- measured key water quality indicators such as pH, nutrient levels, dissolved oxygen, and conductivity, as well as examining ecosystem health impacts

- modelled Earth systems in Earth and Environmental Science using geological time scales, plate tectonics and climate change discussions
- designed and built functional robots in Engineering using Micro:bits, integrating mechanical construction, electronics, and coding
- explored Physics concepts through hands-on experiments involving light, heat, and electricity, including optics, thermodynamics, and electromagnetism.

Across the camp, students also participated in a wide range of enrichment activities. These included visits to scientific facilities such as Mt Stromlo Observatory and Questacon in Canberra, and the University of South Australia’s Mawson Lakes campus, where they engaged in soldering, programming, VR experiences, and environmental experiments. Additional activities included Ozobot City, a particle physics board game, laboratory tours, and hands-on technology experiences.

Curious Minds students also took part in a communication workshop focused on developing science storytelling and presentation skills, equipping them with strategies to effectively communicate scientific ideas using visuals, structure and engaging delivery techniques in preparation for their final presentations.

In exciting news, the program’s funding has been extended through to the end of August 2026. This ongoing investment will help the program reach and support more young women by expanding access to STEM opportunities and providing clear pathways into problem solving. The program continues to play a vital role in encouraging more students to explore and pursue studies and careers in STEM fields.

Science



Science

FINANCIAL OVERVIEW



Australian Mathematics Trust
ABN 39 120 172 502

Statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2025

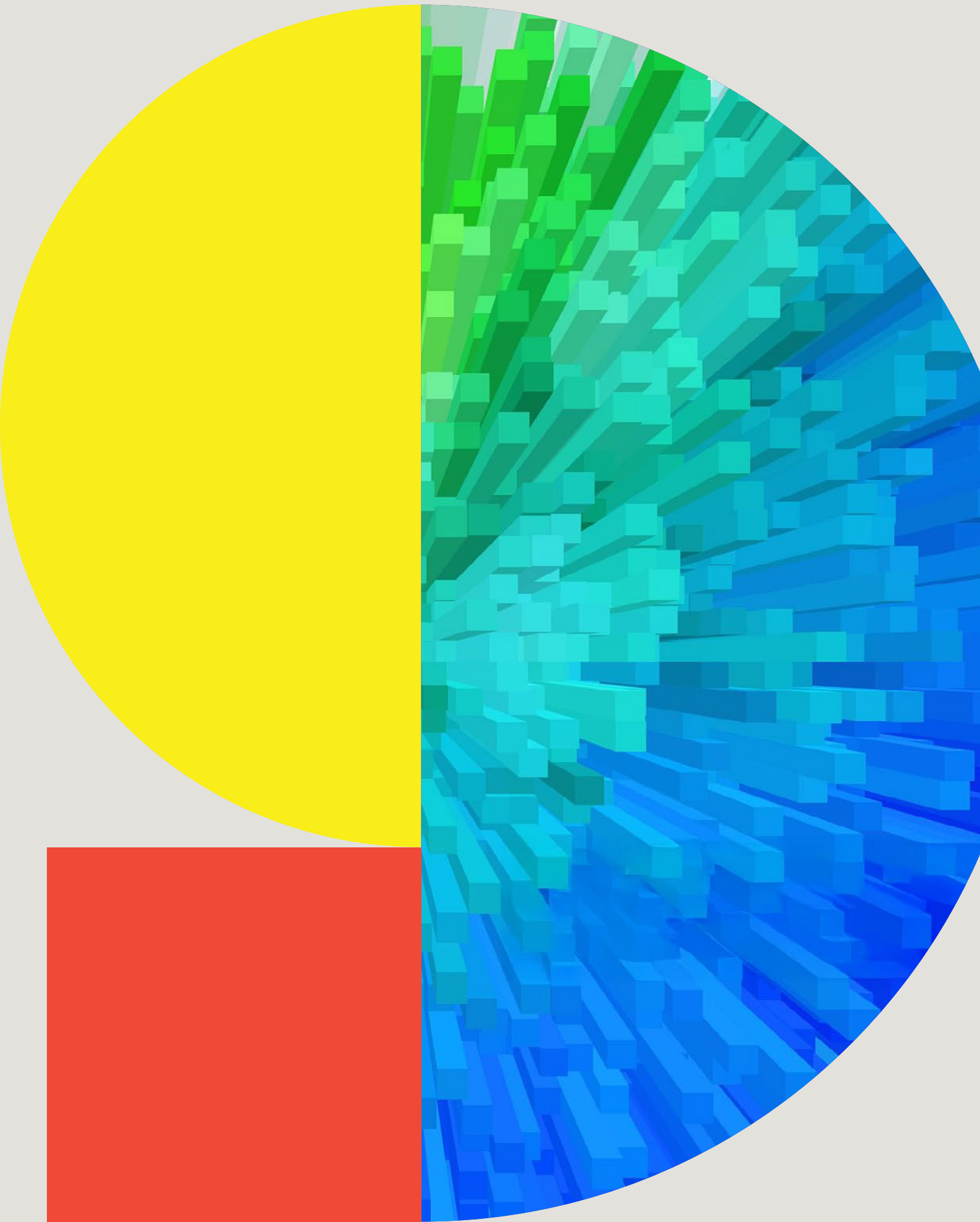
	2025	2024
	\$	\$
Revenue		
Revenue from competition and workshop fees	4,623,688	3,591,940
Revenue from Problemo Plus subscriptions	94,529	80,597
Revenue from publications	185,014	200,928
Grants and sponsorship	5,295,728	2,068,442
Investment income	907,892	835,303
Profit on disposal of motor vehicle	-	13,396
Total revenue from operations	11,106,851	6,790,606
Expenses		
Accounting and legal	55,174	187,360
Advertising and promotion	379,351	481,281
Amortisation of intangibles	76,369	97,806
Bad debts	24,343	-
Consultants	505,194	484,560
Write down of inventory	-	68,805
Depreciation	17,950	12,458
Directors Fees	-	34,105
Insurance	46,277	38,674
Interest expense	-	(31)
Investment manager fees	47,039	41,813
Software licence fees	478,284	387,203
Meals and entertainment	106,380	139,794
Medals, prizes and awards	13,533	4,213
Office accommodation costs	63,723	60,521
Olympiad registration fees	50,312	62,184
Other expenses	556,672	187,619
Printing, postage and stationery	322,204	270,146
Repairs and maintenance	74,491	130,377
Salaries and contractors	3,690,393	3,096,346
Sponsorship	3,000	12,545
Superannuation	325,221	284,015
Travel and accommodation	3,486,380	878,810
Web and shop site hosting	91,153	127,316
Total expenses from operations	10,413,443	7,087,920
Surplus / (Deficit) before income tax	693,408	(297,314)
Income tax expense	-	-
Net surplus / (deficit) from operations	693,408	(297,314)
Other comprehensive income		
Net realised and unrealised gains / (losses) on financial assets	378,047	1,314,194
Total comprehensive income / (loss) for the year	378,047	1,314,194
Total comprehensive surplus / (deficit) for the year	1,071,455	1,016,880

Australian Mathematics Trust
ABN 39 120 172 502

Statement of Financial Position

As at 31 December 2025

	2025	2024
	\$	\$
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	3,954,209	2,087,917
Trade and other receivables	875,852	105,627
Financial assets	2,000,000	2,523,096
Other assets	234,248	1,124,327
TOTAL CURRENT ASSETS	7,064,309	5,840,967
NON-CURRENT ASSETS		
Financial assets	13,647,949	14,884,576
Plant and equipment	63,223	43,130
Intangible assets	-	76,369
TOTAL NON-CURRENT ASSETS	13,711,172	15,004,075
TOTAL ASSETS	20,775,481	20,845,042
LIABILITIES		
CURRENT LIABILITIES		
Trade and other payables	1,213,444	513,978
Employee benefits	296,986	259,402
Income received in advance	1,172,392	3,022,771
TOTAL CURRENT LIABILITIES	2,682,822	3,796,151
NON-CURRENT LIABILITIES		
Employee benefits	31,628	59,315
TOTAL NON-CURRENT LIABILITIES	31,628	59,315
TOTAL LIABILITIES	2,714,450	3,855,466
NET ASSETS	18,061,031	16,989,576
EQUITY		
Financial asset reserves	1,562,554	1,472,725
Retained earnings	16,498,477	15,516,851
TOTAL EQUITY	18,061,031	16,989,576





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