

- Targeted invitations to Asian students in grades 3-8 who have won Gold, Silver and Bronze Award and above in Math Mangaroo
- Dr. Meike Akveld, president of ASKF, in attendance
- Compete with global elites in various individual and group challenges
- 3 group level suitable for different grades
- Various workshops cultivating math thinking in games
- Diverse academic socializing: Math Carnival | Math Trail | Math Bazaar |Talk Show

Date: Jul. 18<sup>th</sup>, 2024 – Jul. 23<sup>rd</sup>, 2024 (6 days) Location: Boao Forum for Asia, Hainan, China

Language: English & Chinese Deadline: Jun. 18th, 2024



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## **Math Kangaroo International Camp Introduction**

Math Kangaroo was proposed by Peter O'Halloran, an Australian mathematician and teacher, in the 1980's. In 1991, this idea was taken up in Paris, France. Very quickly, it spread throughout Europe. The competition began to be called "Kangaroo" because of its Australian origin.

The main purpose of Math Kangaroo is to promote mathematical thinking and stimulate an interest in math, by providing students with an opportunity to compare their abilities against the abilities of other students, from different countries around the world. Math Kangaroo is now the largest math competition for school students in the world. To promote the elites' communication, deepen the dissemination of the "Association Kangourou sans Frontières", and aim to nurture future mathematicians, Math Kangaroo hosts the International Camps globally every summer, inviting participants who achieve medalist. Being selected to the Math Kangaroo Camp will be a very rare international honour and a very exciting maths learning experience to the participants. The content modules of Math Kangaroo International Camps across continents are generally consistent, with slight adjustments based on the mathematical resources of the host country.



### Math Kangaroo Thailand

KMT 2024 has given three thousands students in Thailand the chance to showcase their mathematical problem solving skills. We wish to applaud the great and tireless work of the teachers and schools.

We salute you all! This competition should not be seen as a one-off. We would like to stay in touch with you, and see how we can move forward together for the betterment of our students.





### Math Kangaroo Asia Camp Acitivity Module

### · · · Keynote Speech: History and Charm of Math Kangaroo · · ·

Dr. Meike Akveld, President of the Association Kangourou sans Frontières (AKSF).

will explore the history and charm of Math Kangaroo together with students, creating a "Kangaroo Without Borders" Asian Camp together, aiming to transform mathematics into a bridge connecting the world.

President of AKSF | President of Kangaroo Switzerland Association | Vice
President of World Federation of National Mathematics Competitions (WFNMC)
| Professor at the Department of Mathematics, ETH Zürich | Co-Chair of the
GoMath Committee at the Department of Mathematics. ETH Zürich



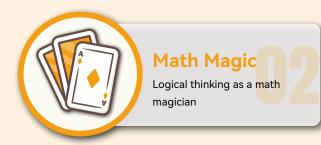
Keynote speaker: Dr. Meike Akveld

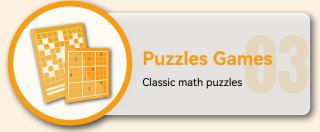
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### • • • • • • • Math Workshops: Immersive Learning

Break free from traditional learning methods, forget about dull textbooks and rigid thinking, embrace new approaches! Students will challenge the limits of logical thinking through cooperative inquiry, competitive games, and presentation showcases. To be a mathematical explorer, no longer receiving knowledge passively but actively engaging in real-world scenarios! Let's show our mathematical magic together!













<sup>\*</sup> Themes between different groups will be coordinated based on difficulty, with the final schedule subject to pre-trip arrangements.



### Math Kangaroo Asia Camp Acitivity Module



### Math Challenges: International Competition

Compete with math enthusiasts all over the world! Individual challenges provide an opportunity to show independent mathematical power. Students will also have the chance to work as teams with other medalists to solve mathematical problems. In this clash of titans, who will seize the moment of glory?



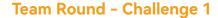
### **Individual Round**

The individual round provides opportunities for each student to showcase their talents, fostering their confidence and independent thinking abilities. Students will individually solve a series of mathematical questions or challenges within a limited time. This is not just about simply learning mathematical knowledge but also provides an opportunity to experience the practical applications and joys of mathematics in everyday life.



#### **Team Round**

Call the collective wisdom into full play! Students will form teams of 4 with other awardees (full marks or medalists). Within a limited time, they will undertake challenges from problem-solving to puzzles, seeking a chance for awards, which not only test students' mathematical abilities but cultivate their teamwork, communication, and problem-solving, laying a solid foundation for their future learning and life endeavors.





This challenge requires the team to complete a set of questions, showcasing the team's strength and cohesion through teamwork.

### **Team Round - Challenge 2**



The team will be divided into two groups in Mathematical Crossword Challenge. One fills answers vertically, while the other fills horizontally.



#### **Guts Round**

Guts Round, following the classic format of the Harvard-MIT Mathematics Tournament, is an intense battle against time, aiming to test the team's quick response and efficient problem-solving abilities. There are 9 sets of questions, each containing 3 questions. Teams can only access the next set after completing and submitting a set. The scoreboard will be updated in real time. To achieve better results, team members need to brainstorm, completing each set of questions as fast as possible.



## Math Kangaroo Asia Camp Acitivity Module



### Math Challenges: International Competition

### **Examples of Math Challenge Questions**

#### Questions Close to Life

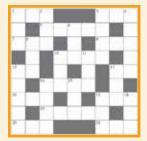
John is in a race that takes him 30 minutes to complete. After he has started, his smartwatch reports his heart rate to him every 2 min 20 sec. How many times does his smartwatch report his heart rate, during the race?

\* Example of Junior Group

#### **■ Diverse Problem-Solving Forms**

Complete the puzzle based on the clues on the crossboard and the answers of your teammates

\* Example of Intermediate Group





### • • Math Social: Mental and Physical Exercise • • • • • • •



#### **Math Carnival**

Every site is a fascinating mini-math challenge for both mental and physical exercises. Collect stamps to win kangaroo Prizes at each site!

Make 24

Sure Shot

Fast Finger

Tic-Tac-Toe

Math Bingo

Math Maze



#### **Math Trail**

The Math Trail originated in the UK and Australia. Students will follow a map-guided route to checkpoint different locations and solve any mathematical questions along the way. Engage in a real-world math problem-solving journal!

King's Reward

City Estimation

Time Traveler

Pixel Geometry

Architecture Aesthetics of Golden Ratio



#### **Math Bazaar**

The topics will be announced two weeks before the curiosity exhibition. Students can show their mathematical knowledge through multimedia, drawings, models, posters.

Sample Topics:

Symmetry and Reflection in Geometry through Papercutting Art

Solving the Tower of Hanoi with Programming

Fibonacci Sequence in Nature



## Math Kangaroo Asia Camp Special Activities

■ BBQ Buffet: Mathematics and Cuisine Revelry



■ Island Party: Dance with kangaroos with Island Dress.





# Math Kangaroo Asia Camp Agenda

Date	Morning 9:00-12:00	Afternoon 14:00-18:00	Evening 19:00-21:00
Jul. 18 <sup>th</sup>	Pickup at HAK / BAR / Bo'ao High-speed Railway Station, Arrive and Check in		
Jul. 19 <sup>th</sup>	Opening Ceremony and Guest Speeches Individual Round	Math Workshop 1  Math Trail	Team Show
Jul. 20 <sup>th</sup>	Team Round	Math Workshop 2  Math Carnival	BBQ Buffet
Jul. 21 <sup>st</sup>	Guts Round	Math Workshop 3 Preparation for Math Bazaar	Island Party
Jul. 22 <sup>nd</sup>	Math Bazaar	Math Bazaar	Talent Show Closing Ceremony and Award Ceremony
Jul. 23 <sup>rd</sup>	Check out and Departure, HAK / BAR / Bo'ao High-speed Railway Station Drop-off		

<sup>\*</sup>The schedule may be slightly adjusted according to student's group, with the final schedule subject to pre-trip arrangements.



# Math Kangaroo Asia Camp Awards

Awards of Individual and Group Challenges

- Top Gold: Top 10%
- Gold Award: Top 30%
- SilverAward: Top 50%
- Bronze Award: Top 80%
- \* Individual Round, Team Round and Guts Round in each group will be awarded separately.

#### Awards of Math Activities

- Math Star: Top 5% in Math Bazaar for Teams
- Talent Show Award: Students selected for the Talent show
- \* Call for Talent Show links will open two weeks before registration
- \* The prizes of the Math Carnival and Math Trail can be redeemed at the event.



## Math Kangaroo Asia Camp Family Vacation Time

Leisure Time at the Five-Star Resort Hotels (Boao Forum for Asia Hotel & Boao Forum for Asia Dongyu Island Hotel)















# Math Kangaroo Asia Camp Registration Details

**Date:** Jul. 18<sup>th</sup>, 2024 - Jul. 23<sup>rd</sup>, **2024dline:** June. 18<sup>8h</sup>, 2024 **Location:** Boao Forum for Asia, Hainan Province, China

Qualification: Open to students in grades 3-8, who achieve medalist in levels B, C, and D

Team requirements: 4-member teams, students in the same group can team up together, not cross-group teams.

\* B, C and D grades correspond to the three groups of Kangaroo Asia Camp Junior, Intermediate and Senior respectively, please refer to the registration success email for more details.

#### Academic Event: 17,100 THB per person (Exclude VAT)

Inclusive of all academic event expenses and BBQ buffet, light lunch and dinner during the camp; exclusive of round-trip airfare, accommodation expenses, and other personal leisure and expenditures.)

#### Logistics (optional): 17,300 THB per person (Exclude VAT)

\* Include: 5 nights' stay at the five-star Bo'ao Forum for Asia Dongyu Island Hotel (Jul. 18<sup>th</sup> - Jul. 22<sup>nd</sup>, 5 nights, share a standard room), buffet breakfast, light lunch and dinner during the camp, HAK / BAR / Bo'ao High-speed Railway Station pick-up and drop-off service. Parents are welcome to accompany, please refer to the logistics manual after registration for the adult accompaniment logistics Instruction via email.





