Consortium for Mathematics and Its Applications

Mathematical Contest in Modeling (MCM®)

Interdisciplinary Contest in Modeling (ICM®)

12th January 2026 | Information Session | Online

COMAP Webinar Recording Policy

- COMAP is recording the webinar.
- We retain the right to show it again and to distribute it.
- By participating, you are agreeing that your contributions become part of the recording.

Panelists

- Ben Galluzzo – Executive Director
- Amanda Beecher – Director of Contests & Outreach
- Steve Horton – MCM Director
- Kayla Blyman – ICM Director

  Saint Martin's University
- Keith Erickson – Incoming MCM Director

  Georgia Gwinnett College

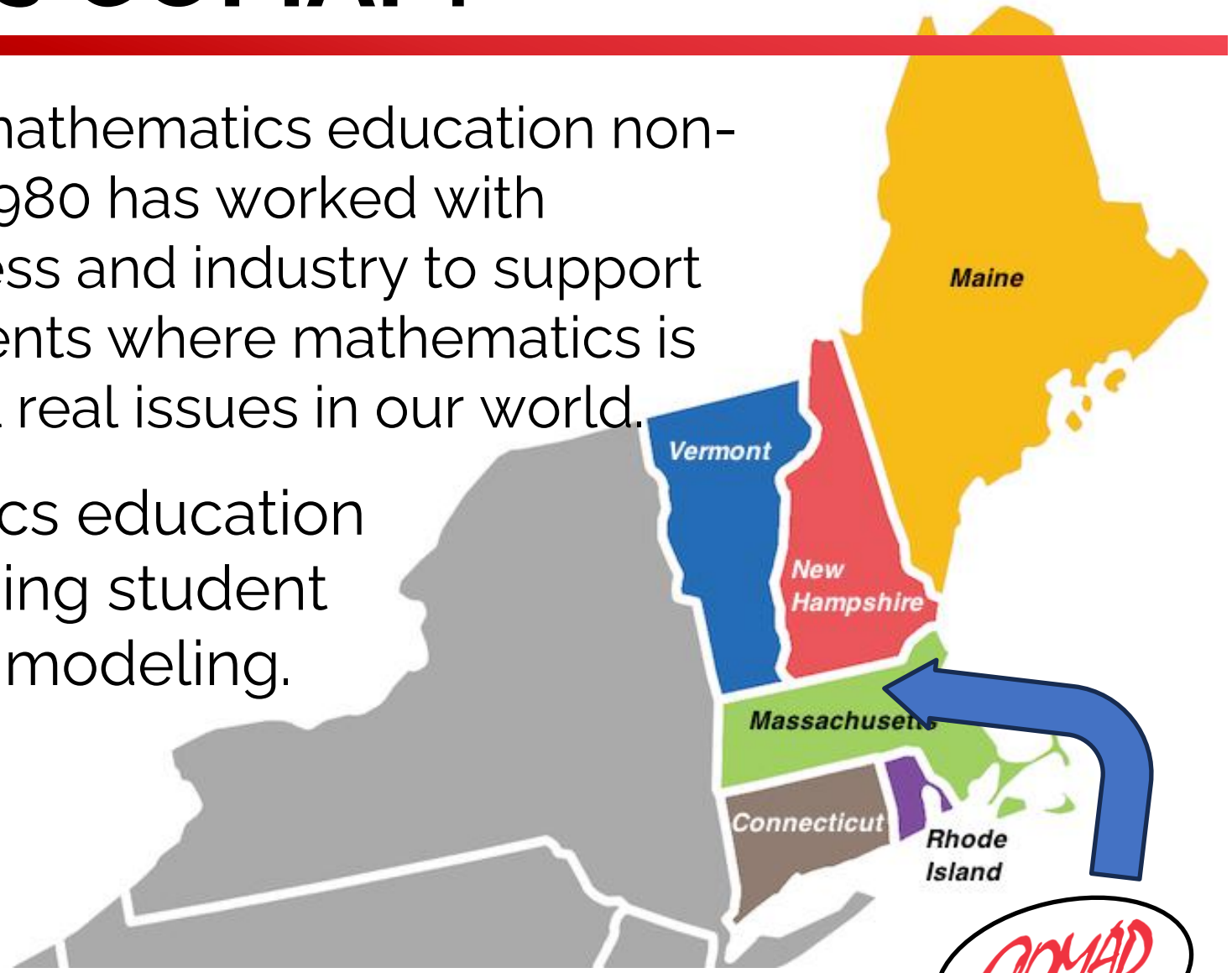
Welcome

- What is COMAP?
- Overview of MCM and ICM
- Benefits to Students and Advisors
- History of the Contests
- Sample problems
- Contest Outcomes and Awards
- Resources
- Q&A

What (& where) is COMAP?

COMAP is an award-winning mathematics education non-profit organization that since 1980 has worked with teachers, students, and business and industry to support and create learning environments where mathematics is used to investigate and model real issues in our world.

Mission Improve mathematics education with an emphasis on increasing student proficiency in mathematical modeling.

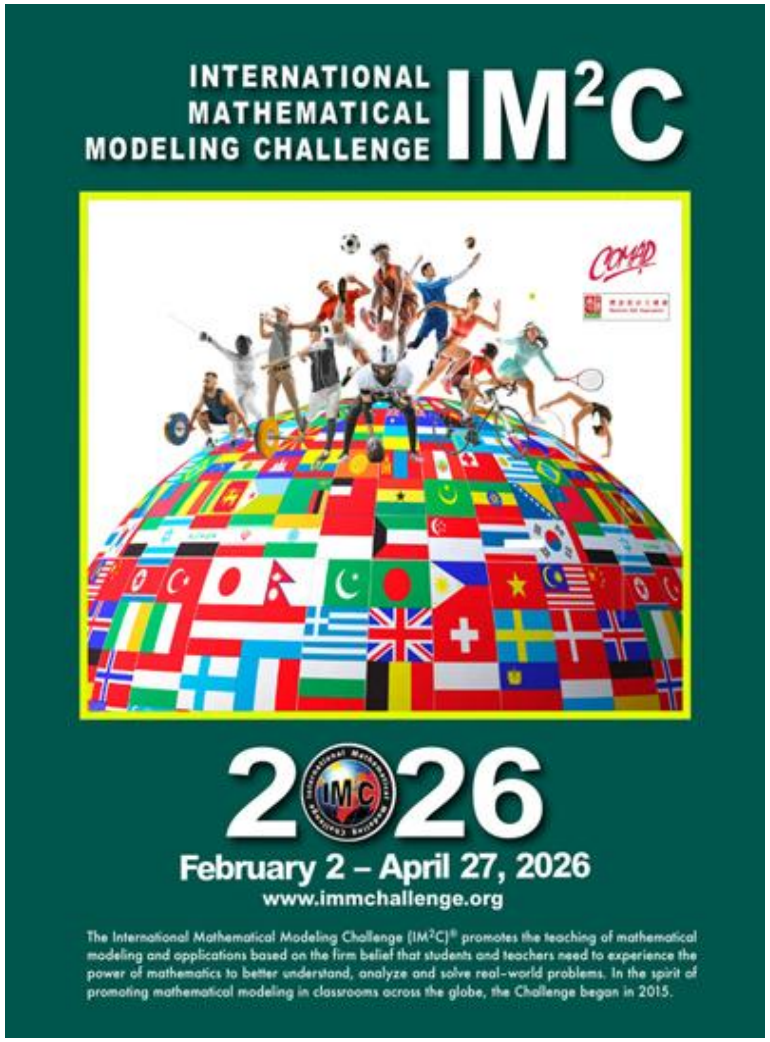


COMAP - overview of activities

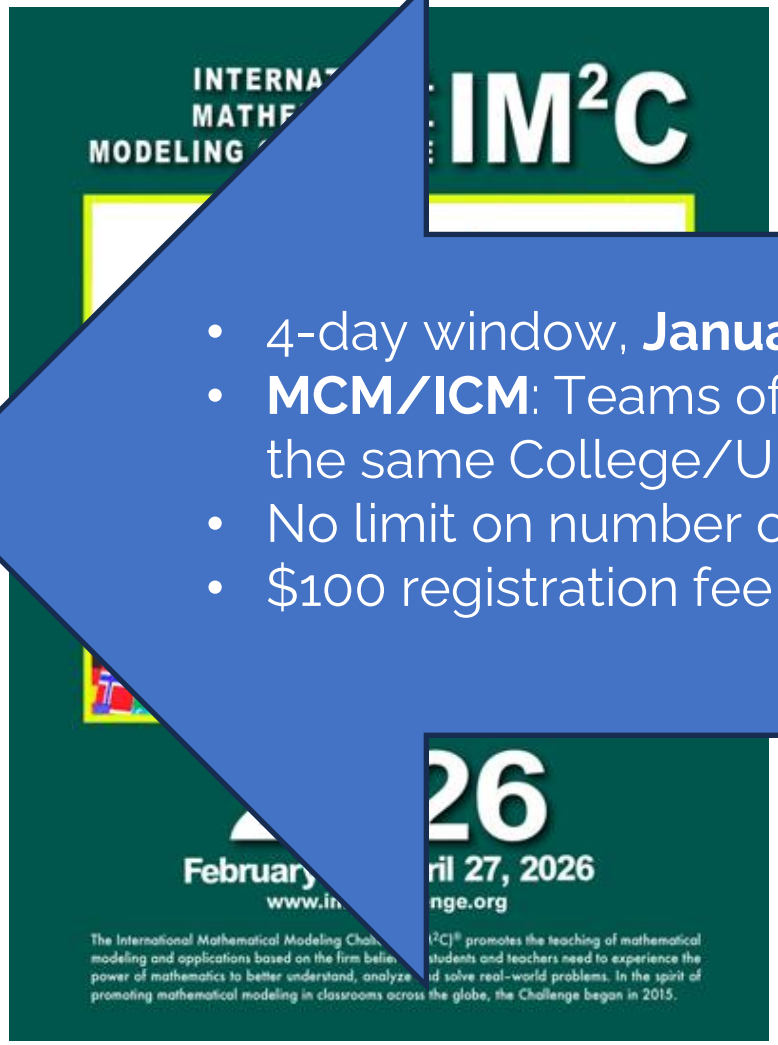
- 5 international mathematical modeling contests
- Publish *Consortium* and *UMAP* journals
- A large and expanding library of curricular resources
  - Books
  - Modules
  - Articles
  - Video series

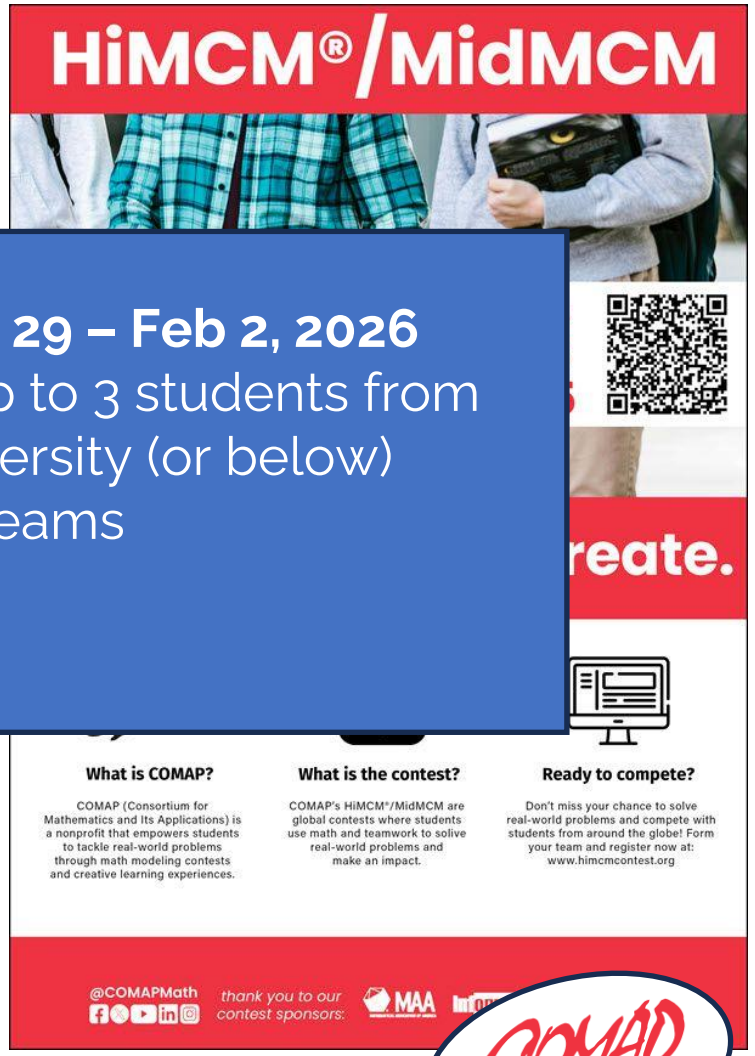
- Many resources available for free on Comap.org
- Develop, promote, and support math modeling education initiatives and communities

COMAP Contests



COMAP Contests





- 4-day window, **January 29 – Feb 2, 2026**
- **MCM/ICM**: Teams of up to 3 students from the same College/University (or below)
- No limit on number of teams
- $100 registration fee

MCM/ICM History

MCM Contest founded in 1985

- 70-90 teams in first several years; Small group of judges.
- Two problems: A (continuous) and B (discrete)

ICM Contest founded in 1999

- 40 teams first year.
- One problem

Contest in 2025

- MCM: Three problems, 21,092 teams, 300+ judges
- ICM: Three problems, 6364 teams, 250+ judges

Timeline for 2026 Contest

- **Registration Deadline**: Before 3:00 p.m. EST on Thursday, January 29, 2026.
- **Contest Starts**: 5:00 p.m. EST on Thursday, January 29, 2026.
- **Contest Ends**: 8:00 p.m. EST on Monday, February 2, 2026.
- **Solution Report Deadline**: 9:00 p.m. EST on Monday, February 2, 2026.
  - **Verify submission in the** Advisor Login link to ensure your team's Electronic Solution was received at COMAP.
- **Contest Results**: Results will be available on May 8, 2026.

Benefits to Students

Develop	Develop problem-solving skills.
Collaborate	Work in a team environment.
Apply	Apply knowledge outside the classroom.
Solve	Use mathematics as a tool to solve interesting problems.
Learn	Learn more about a topic or issue facing our world today.
Research	Enhance research skills
Communicate	Communicate results to technical and nontechnical audiences.
Analyze	Analyze and use data effectively.
Demonstrate	Resume booster to demonstrate key skills desired by employers.

Benefits to Advisors

Showcase	Showcase the value of modeling.
Develop	Develop students as professionals.
Engage	Engage students outside the classroom.
Mentor	Mentor students.
Facilitate	Facilitate extra-curricular opportunities that match your interests.
Create	Create interdisciplinary partnerships with colleagues.
Celebrate	Celebrate students' success in solving complex problems.

MCM/ICM Problems

Students select from 6 problems in:

MCM
- **A: Continuous Math**
- **B: Discrete Math**
- **C: Data Insights**

ICM
- **D: Network Science or Operations Research**
- **E: Environmental Science**
- **F: Policy**

MCM Problem A – Continuous Math

Testing Time: The Constant Wear On Stairs

Can we tell how stairs are used by the way they have worn over time?

https://www.comap.org/membership/member-resources/item/testing-time-the-constant-wear-on-stairs

MCM Problem B – Discrete Math

Managing Sustainable Tourism

How can we ensure that tourism continues to support local communities financially in a sustainable way?

https://www.comap.org/membership/member-resources/item/managing-sustainable-tourism

MCM Problem C – Data Insights

Models for Olympic Medal Tables

How can we predict final medal counts for each country for the Olympics?

https://www.comap.org/membership/member-resources/item/models-for-olympic-medal-tables

ICM Problem D – Network Science/Operations Research

A Roadmap to a Better City

What are the most effective projects to improve the transportations systems in Baltimore, Maryland, USA?

https://www.comap.org/membership/member-resources/item/a-roadmap-to-a-better-city

ICM Problem E - Sustainability

Making Room for Agriculture

How do natural processes and human decisions affect the transition of land from forest to farm?

https://www.comap.org/membership/member-resources/item/making-room-for-agriculture

ICM Problem F - Policy

Cyber Strong?

What makes a strong national cybersecurity policy? How can you demonstrate its effectiveness?

https://www.comap.org/membership/member-resources/item/cyber-strong

Successful Submissions

Follow the Contest Rules

- Number of pages and type font
- No names of school or students

Presentation

- Coherent, Organized, Articulate, Well-Written
- Complete all problem requirements
- Communicate the solution clearly

Citations and References

AI Use Report

Contest Designations

Successful Participant indicates a successful submission and effort toward solving the problem.

Honorable Mention indicates an above average effort in addressing all problem requirements, showing sound and supported processes in modeling.

Meritorious reports are excellent in many aspects of modeling and problem solving, and clearly addressed and presented all requirements.

Finalist recognizes teams whose exemplary solution reports reached the final round of judging.

Outstanding designates the "Best of the Best" and the highest-level submissions in terms of exemplary student work in modeling, problem solving, analysis, and communication.

COMAP Partners and Contest Sponsors

COMAP Partners' Contest Prizes

COMAP Scholarship Award – Six (6) awards of $10,000 each to Outstanding Teams (Each student $3000 and Advisor $1000)

COMAP Awards – Named award from all (6) problems.

AMS – One Outstanding winning team from all (6) problems.

ASA – One Outstanding winning team from MCM Problem C (Data).

INFORMS – One Outstanding winning team from all (6) problems.

MAA – One Finalist or Outstanding winning team from all (6) problem.

SIAM – One Outstanding winning team from all (6) problem.

Helpful Resources

- **MCM/ICM Contest Website**

https://www.comap.org/contests/mcm-icm

- **Previous problems and resources for all contests**

https://www.mathmodels.org/membership/mathmodels-members

- **Results of MCM Contest**

https://www.comap.org/resources/free-resources/umap

Questions

@COMAPMath

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www.mcmcontest.org

MCM/ICM– Get Ready!

Compete.
Solve. Create.