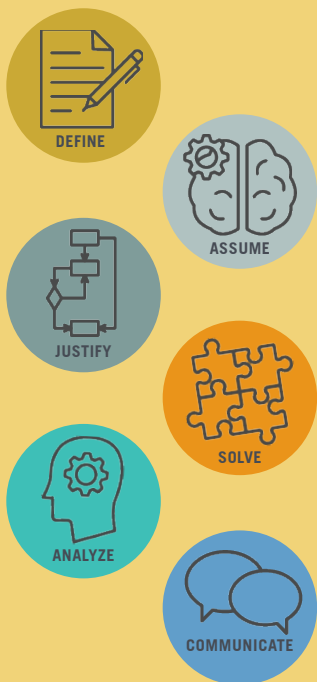


# M3 MathWorks Math Modeling Challenge

A program of **siam**.

## \$100,000+ in SCHOLARSHIPS



Register teams by February 23, 2024  
Challenge weekend: March 1–4, 2024

- Free and 100% internet-based
- High school juniors and seniors in U.S. and sixth form students in U.K.
- Form a team of 3–5 students with one coach
- Choose your 14-hour worktime and location
- Submit a solution to the open-ended modeling problem
- Additional prizes available for teams submitting code
- Finalists get all-expense paid trip to New York City

During Challenge weekend, teams are given 14 hours to use the math modeling process to represent, analyze, make predictions about, and provide insight into an open-ended, real-world problem. High schools in the U.S. (including territories and DoDEA) and schools with sixth forms (age 16–19) in England and Wales (including British Schools Overseas) are eligible to participate in M3 Challenge 2024.

A Program of

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 MathWorks



# M3Challenge.siam.org

# PREPARE to MODEL!

## THIS COULD BE YOU!

Thomas Jefferson High School for Science and Technology in Alexandria, Virginia won the top prize of \$20,000 in college scholarships in M3 Challenge 2023 and an all-expense paid trip to New York City to present their paper.

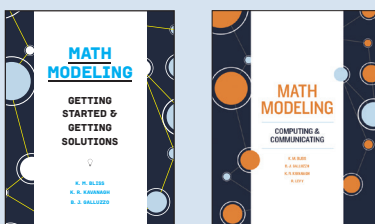
The team was comprised of Rishabh Chhabra, Om Gole, Rishabh Prabhu, Jerry Sheng, Laura Zhang, and coach Quinn McFee.



## FREE RESOURCES at [m3challenge.siam.org](https://m3challenge.siam.org)

### Read the Modeling Handbooks

Written by M3 problem writers and judges, *Math Modeling: Getting Started and Getting Solutions* is a terrific introduction to the modeling process. *Math Modeling: Computing & Communicating* goes beyond the basic process of mathematical modeling to technical computing using software platforms and coding.



### Practice your skills

Past problems and practice problems will help you prepare for the Challenge problem.

### Watch the Math Modeling video series

Seven 2–3 minute episodes that provide instruction and insight about each component of the modeling process.

### Access free software

You can request MathWorks' MATLAB or Wolfram software for free! Look for details on the “Technical Computing” and “Access Software” pages. Use of software, coding, and technical computing is not required to participate or win, but using them makes you eligible for the M3 Challenge Technical Computing Award.

### Teach (or learn!) modeling using the GAIMME report

“Guidelines for Assessment and Instruction in Mathematical Modeling Education” (GAIMME) is a great resource for coaches!

### Peruse the “Tips and Guidance” webpage

Suggestions from past participating students, coaches, judges, and from organizers of the Challenge.

## Technical Computing

Teams that use a programming platform other than spreadsheets (Excel or other) in an outstanding way will be eligible for an additional distinction—the M3 Challenge Technical Computing Award.

## More Winning Strategies

**Check out the archives** to see past Challenge problems, winning solutions, judge perspectives, and presentation videos organized by year.

**Go on a YouTube binge** to familiarize yourself with all aspects of the Challenge ([go.siam.org/m3challenge](https://go.siam.org/m3challenge)) and for a curated list of resources ([go.siam.org/m3challengeresources](https://go.siam.org/m3challengeresources)).

**TEACHERS AND STUDENTS: Take steps to ensure greater success in M3 Challenge!**