



COMAP ANNOUNCES THE TWENTY-FIRST ANNUAL  
HIGH SCHOOL MATHEMATICAL CONTEST IN MODELING<sup>®</sup>



**HIMCM<sup>®</sup>**  
**2018**

**November 9–19**

This contest offers students the opportunity to compete in a team setting using applied mathematics in the solving of real-world problems.

Additional support provided by the National Council of Teachers of Mathematics (NCTM),  
the Mathematical Association of America (MAA),  
and the Institute for Operations Research and Management Sciences (INFORMS).

**Dear Colleague:**

I invite your school's participation in COMAP's Twenty-first Annual High School Mathematical Contest in Modeling (HiMCM). The HiMCM is designed to provide students with an opportunity to work as a team in a contest that will stimulate and improve their mathematical problem-solving proficiency as well as develop their writing skills.

The competition takes place with teams consisting of up to, but no more than, four students working on a real-world problem during the contest period November 9–19, 2018. Each team has a faculty advisor to guide them and submit their work. Papers are submitted to COMAP for judging by a panel of mathematics educators.

I wish to encourage the teachers and students at your school to form a team or teams. More data is in this flyer, and further detailed information is online at [www.himcm.org](http://www.himcm.org). Teams must be registered by 2:00 pm EST on November 9, 2018. I look forward to your participation in this exciting and challenging adventure.

Best wishes,



Kathleen Snook  
Contest Director

The High School Mathematical Contest in Modeling is open to all secondary schools. This flyer presents an overview of the contest. Detailed information is available online at: [www.himcm.org](http://www.himcm.org)

**CONTEST FEES:** \$100 per team. Fees must be paid at online registration.

***Please register only the teams that will take part in the contest. Registration fees are not refundable.***

**Contest Date and Time:** The 2018 contest must be accomplished at a local facility, during the contest period 3:01 pm EST on Friday, November 9 and ending at 8:00 pm EST on Monday, November 19, 2018.

Faculty advisors must ensure that no alterations of any form are made after the 8:00 pm cutoff. All papers must be emailed and received at COMAP by 9:00 pm EST on November 19, 2018.

**The Contest Materials:** The contest Website contains all the guidelines, requirements, registration, judging criteria, and suggested procedures for the submission of solution papers, including step-by-step instructions.

No materials will be available in any other form.

On Friday, November 9, 2018 at 3:00 pm EST, the contest problems will be posted on the contest Website.

**The Role of Advisors:** The advisor informs students about this competition and encourages the formation of teams.

Advisors guide and prepare the team(s) prior to the beginning of the competition.

During the competition, students are expected to develop all of the substantive analysis without the help of others. Advisors ensure that students have access to computers and graphing calculators.

Advisors distribute guardian consent forms and have them signed prior to the contest.

**Registration of Teams:** All teams must register online on or before November 9, 2018 at 2:00 pm EST.

Each team may consist of up to four students who are enrolled in the same school at the time of the contest.

There is no limit to the number of teams an advisor can sponsor, or a school may enter.

Team members do not need to be named at the time of registration, but they must be determined prior to the start of the contest.

**The Contest Problems:** Teams will choose one of two modeling problems that will be posted on the Website at 3:00 pm EST on November 9, 2018.

Data, if needed, will be attached to the problem, or available on the Website.

Sample problems from other years are available online at: [www.mathmodels.org](http://www.mathmodels.org). Unabridged versions of all the Outstanding papers, as well as HiMCM Consortium judges' commentaries are available to Mathmodels.org members.

**The Report:** Participants may use all the technology available such as computers, libraries, software packages, Internet, or any other inanimate sources.

Problems are designed to be open-ended and are unlikely to have a unique solution.

Attention must be focused on clarity, analysis, and design of the solution. The narrative section of the solution papers must be typed and in English. Partial solutions are acceptable.

**HiMCM is now all electronic submission!**

**Send electronic copy of solution paper by email:**

Each team is required to submit an electronic copy of its solution paper by email to [solutions@comap.com](mailto:solutions@comap.com). Any team member or the advisor may submit this email.

Your email MUST be received at COMAP on or before the email submission deadline of 9PM EST on November 19, 2018. Failure by a team to submit a solution via email by 9 pm EST on November 19, 2018 constitutes a violation of the contest rules and will result in that team's disqualification.

**Send signed contest forms by email to COMAP:**

After the signed contest forms are prepared, email them to: [forms@comap.com](mailto:forms@comap.com).

The contest forms must be received by COMAP no later than 5:00 pm EST on Friday, November 30, 2018. COMAP is not responsible for contest forms received after that date.

For detailed instructions please visit the HiMCM website at: [www.himcm.org](http://www.himcm.org).

**Results:** Judging will be completed in January, 2019.

The solutions will be recognized as Outstanding, Finalist, Meritorious, Honorable Mention, Successful Participant, or Unsuccessful.

The results will be posted on COMAP's Website after February 1, 2019.

Certificates and a press release will be mailed or emailed in February 2019.

All successful participants will receive a certificate.

Select, Outstanding teams will have their solution papers (or their solution abstracts) published in *Consortium*. For detailed information on all of the above, please go to the HiMCM Website at: [www.himcm.org](http://www.himcm.org).

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Mathematical Contest in Modeling (MCM)<sup>®</sup>, High School Mathematical Contest in Modeling (HiMCM)<sup>®</sup>, Interdisciplinary Contest in Modeling (ICM)<sup>®</sup>, and The International Mathematical Modeling Challenge (IM<sup>2</sup>C)<sup>®</sup> are registered trade marks of COMAP, Inc.

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