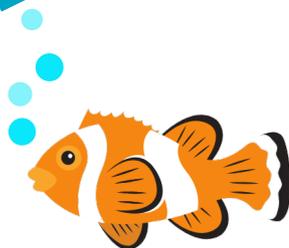


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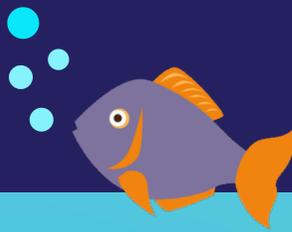
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MATHCOUNTS LAUNCHES THE NEW MATH VIDEO CHALLENGE



MATHCOUNTS announced 4 major changes to the *Math Video Challenge* to incorporate feedback from team advisors and students and provide extra resources for teams.

- 1** There is **no public voting!** Every video will advance to the judging rounds in the contest.
- 2** MATHCOUNTS restructured the awards to give more teams recognition and give **more rewards** to quarterfinalists and semifinalists in the contest.
- 3** Team advisors will receive a **Producers Kit** containing a hard copy of the *2019-2020 Math Video Challenge Playbook* and a smartphone tripod for filming.
- 4** MATHCOUNTS created a resource landing page so teams can access all online program resources, guidelines and forms in the same place: mathcounts.org/mvcteams.

Four finalist teams will win an all-expenses-paid trip to present their videos at the 2020 Math Video Challenge Finals in Orlando. The 224 Competition Series finalists at the National Competition will vote to determine the winner.

This program is still completely free! Registration is open at mathcounts.org/mvcreg. All videos must be submitted by March 6, 2020.

MORE ONLINE RESOURCES ADDED TO THE NATIONAL MATH CLUB

The MATHCOUNTS team listened to club leader feedback to make the National Math Club program even better this year. Club leaders now have free online access to **over 40 games, explorations and problem sets**. They also receive a mailed Club Kit with a poster, 2 decks of playing cards and a guide with a suggested activities calendar to make it easier for club leaders to plan their club meetings.

"I'm grateful we can count on our club leaders not only to inspire students by leading a math club, but also to be engaged partners in our constant efforts to make this program the best it can be," said Kristen Chandler, MATHCOUNTS executive director. "Dedicated, passionate educators are such an important part of this program's success."

Active clubs are eligible for prizes like pencils, pennants, cash prize drawings and an all-expenses-paid trip to the 2020 Raytheon MATHCOUNTS National Competition in Orlando. Educators at schools and non-school groups can register all year for free at mathcounts.org/clubreg.

REGISTRATION OPEN FOR MATHCOUNTS COMPETITION SERIES



Regular registration is open for the **MATHCOUNTS Competition Series**. The 2019-2020 **MATHCOUNTS School Handbook**—the perfect preparation resource—is available online and features 200 problems mapped by difficulty and math concept. Registered coaches also receive another 50 handbook problems, plus step-by-step solutions. The handbook, plus dozens of other free resources, are available at mathcounts.org/coaches.

**REGISTER BY
DECEMBER 1ST!**

*Schools that register after December 1st
will be charged with a late fee.*

MATHCOUNTS.ORG/COMPREG

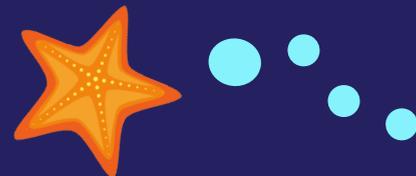
Coaches have access to the 2020 School Competition, which is both a practice resource and tool for determining the students who will advance in the program. Following chapter and state competitions in February and March, the top 4 Mathletes from each state will advance to the **2020 Raytheon MATHCOUNTS National Competition**, May 10–11 in Orlando.

Thanks to sponsor support, MATHCOUNTS continues to provide new resources for competition schools, with extra support for low-income schools in 15 states and new coaches. “We are committed to providing excellent math opportunities to all students,” said Kristen Chandler. “Because of our sponsors, we are able to ensure the Competition Series is affordable and effective for every school.”

MATHCOUNTS.ORG/DONATE

TOGETHER WE CAN BRIDGE THE DIVIDE

between star Mathletes and the resources they need to succeed. Donate to MATHCOUNTS on Giving Tuesday to help us sponsor 1,500 bright MATHCOUNTS students from low-income schools!



NEXTTHOUGHT BRINGS BACK ONLINE COURSE FOR MATH COACHES

NextThought has partnered with MATHCOUNTS and Art of Problem Solving to develop an online course for coaches of middle school math teams. Modeled after the Competition Math for Middle School course offered previously, this 10-week program aims to provide coaches with new strategies for teaching competitive math while fulfilling their ongoing education requirements. Learners can connect with other MATHCOUNTS coaches to share questions, ideas and challenges.

Enrollment is open at [competitionmath.org](https://www.competitionmath.org) for \$199. Sign up now! Discount rates end December 1st.



5 MATHCOUNTS ALUMNI EARN PRESTIGIOUS PRESIDENTIAL AWARD

At least 5 MATHCOUNTS alumni received the Presidential Early Career Award for Scientists and Engineers (PECASE), one of the government's highest honors. PECASE recognizes individuals who have made significant contributions to the advancement of science, technology and education early in their career. At the time of printing this newsletter, 5 MATHCOUNTS alumni had been identified among PECASE winners.



Hugh Churchill (STE 97) is an assistant professor of physics at the University of Arkansas, where his research group explores quantum devices fabricated with low-dimensional materials—work that could be applied to real-world challenges in logistics, artificial intelligence and other fields.

Stephen Jordan (STE 94 & 95) works in the quantum computing group at Microsoft and is an adjunct professor at the University of Maryland. He previously spent 7 years researching quantum computing at the National Institute of Standards and Technology.

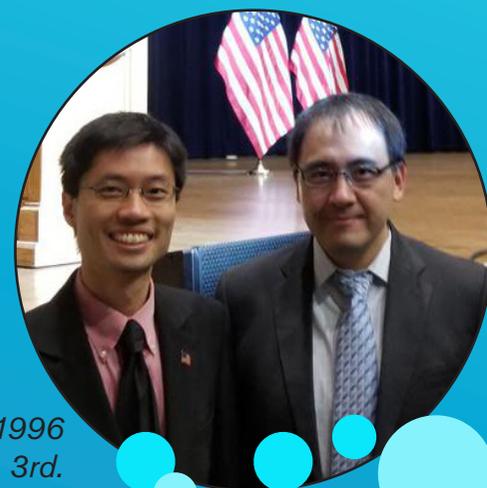


Percy Liang (STE 95 & 96) is an associate professor of computer science at Stanford University. His research focuses on making machine learning more robust, fair and interpretable and making computers easier to communicate with through natural language.

Po-Shen Loh (NAT 95 & 96) is a social entrepreneur, a math professor at Carnegie Mellon University and the national coach of the USA International Mathematical Olympiad team. He is the founder of expii.com, a social enterprise supported by his series of online math courses that reinvent the middle school math curriculum with a focus on creative thinking.

David Zhang (NAT 95 & 96) is an associate professor of bioengineering at Rice University. His research group explores the biophysics of nucleic acid hybridization to develop noninvasive cancer diagnostics. His work has led to 4 awarded U.S. patents and helped catalyze the launch of the startup NuProbe.

Po-Shen Loh and David Zhang (pictured at right) reunited at the PECASE award ceremony. During the 1996 Countdown Round the two competed against each other, with Zhang winning 2nd Place and Loh placing 3rd.



ALUMNUS RITHVIK GANESH INSPIRES AT TEDx TALK

At a TEDx Palo Alto College event in October 2019, former national competitor Rithvik Ganesh told young innovators there was no age requirement for research and innovation.

Rithvik himself exemplifies this idea, having won numerous accolades for his research at age 15. A finalist in the 2017 3M Young Scientist Challenge, he is one of the youngest people to publish a paper on dementia. Rithvik (pictured second from right with his Texas teammates when they won the Spirit Award) is no stranger to inspiring his peers: as a member of the 2018 First Place MATHCOUNTS Team, he was recognized not just for his achievement in math, but also for his team's sportsmanship and enthusiasm.

MATHCOUNTS was by far one of the best experiences of my life and has opened the door for so many other opportunities.

[Click here to watch Rithvik's TEDx Talk.](#)

“ The challenge of MATHCOUNTS introduced me to a new way of thinking about math...rather than relying on memorized or practiced techniques. ”

—Po-Shen Loh discussing how his experiences as a Mathlete influenced his career





IN THE FIRST **10.5 FT** OF
A DIVE, ROSA USED

$2\frac{2}{3}$ UNIT/FT

OF OXYGEN. IN THE NEXT
28 FT SHE USED

$3\frac{5}{8}$ UNITS.

IN THE LAST **3.5 FT** SHE USED

4 UNITS/FT.

HOW MANY **INCHES**, ON AVERAGE, DID
ROSA DIVE PER UNIT OF OXYGEN USED?

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