

#### **MISSION**

To research and develop model programs and self-sustaining learning communities that engage students from all backgrounds in doing mathematics at a high level.

Mathworks is a center for innovation in mathematics education at Texas State University. We research and develop model programs in the following areas:

- Summer Math Programs
- Teacher Professional Development
  - Curriculum Research and Development

# SUPPORT MATH LEARNING

<u>Donate to Mathworks today!</u>

#### **ALUMNI?**

Have you recently moved? Started graduate school? Landed a new job? Written a book? Received an award? Or simply want to reconnect? We would love to hear what Mathworks alumni are doing!

We invite you to email mathworks@txstate.edu and share your story.

#### **CONTACT US**

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# **PROOF**Points

**FALL 2022** 

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- Thank You



#### STEP UP FOR STATE

#### October 12 - 13, 2022

Mathworks is again participating in Step Up For State, a campaign to support scholarships and fellowships for Mathworks' different programs. Our goal is to raise \$50,000 which last year would have made us the top fund-raising program in the university. **Any funding given or pledged to be given by the end of the fiscal year (August 31, 2023) will count towards the goal**, as long as we receive an email by October 13 at 3:39 pm. Last year we raised \$23,270, which was the third highest amount in the university.

To make a pledge, you can send an email to max@txstate.edu, and copy Kaelie at kaelie.garcia@txstate.edu.

We plan to use the funds raised to:

- 1. Provide scholarships for our Junior Summer Math Camps (JSMCs) and Honors Summer Math Camp (HSMC).
- 2. Fund graduate student fellowships to teach in the JSMC.
- 3. Support Mathworks Fellows to assist in the JSMC and attend a seminar where they get an early introduction to teaching.



#### MATHWORKS MATH CONTEST

The Mathworks Math Contest (MMC) is a free opportunity for middle school students (Grades 6-8) to explore mathematics and be challenged by high-level problems. The MMC is a 15-question test that is proctored by math teachers and coaches at their respective locations.

Please send completed MMC tests to Mathworks for scoring. Mathworks will grade and share test scores with proctors.

#### Timeline for the 2022 MMC:

- October 26: MMC test sent out via email to math proctors
- November 2: Day of contest
- November 4: Tests must be postmarked and returned to Mathworks
- November 11: Tests must be received by Mathworks
- December 5 9: Test scores released to proctors

If you would like to proctor the exam, please register by visiting our website.

## **SUMMER 2022**

#### **Junior Summer Math Camp - Half Day**

Campers: 162

Female: 76, Male: 86

Teachers: 18

Master Teachers: 11 Graduate Students: 5 PD Teachers: 2

Fellows: 19

"This math camp has helped me visualize and produce a picture in my head that will help me recognize all of the formula in a more visual way"

#### **Junior Summer Math Camp - Residential**

Campers: 69

Female: 38, Male 31 Counselors: 17

"JSMCR is very different from school math in the way that schools prioritize on getting the right answers, while JSMCR focuses on the path to the answer."

"Thanks to camp, I have realized how interesting and fun mathematics can be."

#### **Honors Summer Math Camp**

Campers: 78

Female: 43, Male: 35

Counselors: 21

Research Mentors: 12 Research Projects: 14

"Math camp has definitely taught me how to think and reason in a way that school math has not. I think that a big aspect of math camp is that it has taught me about the importance of embracing failure in order to be successful. When I write proofs, I often have to pursue several different ideas before I find something that works, so I have to be able to see an unsuccessful attempt not as a "failure," but as an opportunity to be creative and come up with a new idea that maybe was not apparent to me at first."

# **PROOF**Points

#### **Graduate Students Conduct Research and Teach at JSMC**



Five Texas State doctoral students in mathematics education received funding from Mathworks to conduct research and teach in the 2022 JSMC during the month of June. Carlos Acevedo, Lino Guajardo, Micah Swartz, Elizabeth Wrightsman, and Holly Zolt taught Level 4 or Level 5 classes and conducted research on activities designed and implemented in their classes. They drafted manuscripts for the National Council of Teachers of Mathematics (NCTM) journal, *Mathematics Teacher: Teaching and Learning PK-12*.

### **Remembering Esteban Salinas**

Esteban Salinas, age 76, passed away on Wednesday, September 14, 2022, at his home in Weslaco, Texas.

"Esteban taught for over 20 years at the Texas State University Mathworks Junior Summer Math Camp (JSMC) in San Marcos. He was an incredible master teacher, inspiring students and colleagues with a love of mathematics and a passion for learning." - Max Warshauer

### **PUZZLE CORNER**

Brian writes down a three-digit positive integer. He then doubles this number, adds 1, and writes down the result. He then doubles this new number, adds 1, and writes down the result. He then doubles this new number and adds 1; when he writes down the result of this final calculation, he writes the digits 6, 7, 8, and 9 in some order. What was the original three-digit number Brian wrote down?