

THE
RATIONAL ROADRUNNER
A PERIODIC NEWSLETTER
OF THE
DEPARTMENT OF MATHEMATICS
AT
UT SAN ANTONIO



Department of Mathematics
1 UTSA Circle
San Antonio, TX 78249

April/May 2026

On the cover: New monitor outside the Math Department office in FLN 4.01.10.

Chair's Message

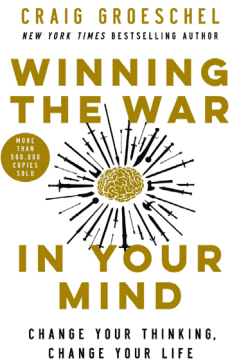
Summer - it can't come quick enough and it better not come too quick as there's a lot to do beforehand!!!



These last few weeks of the semester are often the difference between grades that are good and those that are mid. Or maybe even mid vs. bad (but hopefully not!) Now's the time to lock in and do your best to end on a night note, showing what you really know of the course material.

However, before you know it, summer will be here and your planning and decisions about summer will then take effect. What?! You didn't plan anything?! Well...then you should have read the last newsletter! Here's what I said and it still applies: *We all need a break but, students, consider a break in a constructive direction: you need a study break and your choices are TikTok or thinking about what you want to do this summer; maybe you can aim for a 25%-75% balance (in that order)? Whether you choose to do nothing this summer and give yourself a mental break, go work 40+ hours/week to save up for next school year, find a professor or program where you can do research and work on math, or take some classes here, your choices or lack thereof start to shape your next few years. There is no wrong or right answer but instead a cautionary tale to seek advice from faculty and maybe advanced students or graduates and be proactive now instead of reactive later.*

All is not lost if you haven't started thinking about summer yet! Summer program deadlines have likely passed but the other options are there. Ask older classmates or grad students for advice and suggestions if you're not sure. Faculty can have ideas on this too! I only encourage you to be proactive instead of reactive.



If your default plan is to bed rot, I encourage you to think beyond that. Maybe go "old school" and read a couple of books. I was recently told about two good reads! (Maybe they can even help you along to prevent the lazy days of summer from taking full charge.)

Winning the War in Your Mind: Change Your Thinking, Change Your Life by Craig Groeschel.

Hidden Potential: The Science of Achieving Greater Things by Adam Grant.

Two things to remember: help, and help. Seek out classmates to work on homework with, seek out help at the **Math Gym in Flawn 3.02.08**, go to Student hours with your professor, and use the new math study space on the 4th floor at the east corner of Flawn to gather and work (and maybe play cards occasionally)! That's the help on the academic side of things. A decent portion of getting your degree is mental as well. If the stress levels have you at your wit's end, we have resources on campus to help out: a search for "utsa wellbeing counseling" (QR code to the right) will connect you to folks that can help. We want you here for the long haul!

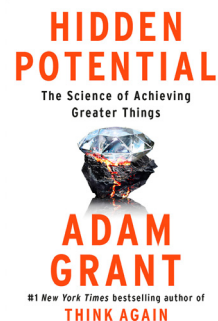


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Integral Bee Highlights!!

Our Integral Bee was a great success! There were 23 students participating in Division A (current Math 1223/1224 students) and 11 students participating in Division B (completed Math1223/1224). iPads, Beats headphones, and Amazon gift cards were earned!!

Division A

First Place: Kolbe Chan

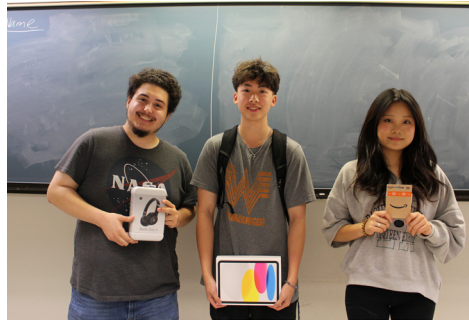
Dept: Economics; Professor: Reza Aghayan

Second Place: Julian Romero

Dept: Biochemistry; Professor: Tatiana Ivanova

Wildcard Winner: Grace Lin Shao

Dept: Business; Professor: Jason Jia



Division B

First Place: Ivan Garcia

Dept: Physics & Astronomy; Professor: Mostafa Fazly (Past)

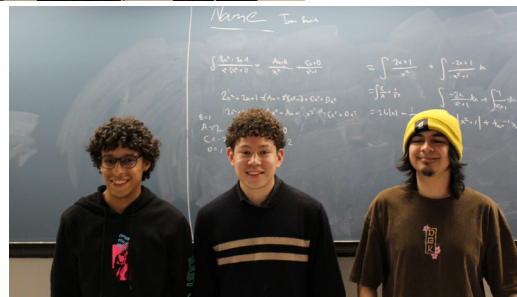
Second Place: Ezekiel Galvez

Dept: Mngmt Science & Statistics; Professor: Floran Kacaku

Wildcard Winner(s): Alex Hernandez and Vicente Salazar

Dept: Computer Science (AH);

Dept: Mechanical Eng (VS); Prof: Armando Arciniega



A very special thanks to all those that made this event possible:

Faculty sponsors: Glenn Lahodny (main organizer) together with Cynthia Roberts and Matthew Schurmann (the latter two donated the Amazon gift cards!). **Faculty volunteers:** Reza Aghayan, Darlene Arvizu, Sean Beatty, Sage Bentley, Yuriy Bulka, Hadley Debrine, Christi Duffer, Jessica Gehrtz, Qiuchen Hai, Tatiana Ivanova, Jason Jia, Sandy Norman, Cody Olsen, Cindy Roberts, Matthew Schurmann, Ben Sencindiver. **Office staff:** Iliana Salazar, Alejandra Vicencio, Ilse Rosales Cooper, and all student workers. **Student volunteers:** Sean Amaya, McCrea Black, Jake Borawski, Manuel Candanoza, Gavin Cruz, Gavin Cunningham, Garrett Delong, Alex Hernandez, Terrence Iwuala, Kayla Livingston, Marissa Martinez, Jordan Miller, Cristobal Padilla, Kyana Ross, Eloy Santos, Maximillian Serafine, Josiah Sparks, Gabriella Valdez, Ruben Vallejo.

Now for the bonus question: Show $\int_0^1 \frac{-\ln(1-x)}{x} dx = \frac{\pi^2}{6}$ Enjoy!!!

Math Study Space, FLN 4th floor

As you may have seen in person or mentioned in the last newsletter, we have a **new study space**!! Initiated by the previous chair, Dr. Gutiérrez, we finally have a study space in the **east corner of FLN**! Please **utilize the boards and the space** for studying and gathering. It is not only for math students but you were the catalyst for creating this. If things need to temporarily be moved that is acceptable but things must be put back in place when you are finished. If we cannot follow the **rule of putting the furniture back** where it came from, facilities may decide to bolt them to the ground!





From the Math GAR

What advice would you give a student thinking about a career that uses math?

Build your path. Here are some practical tips:

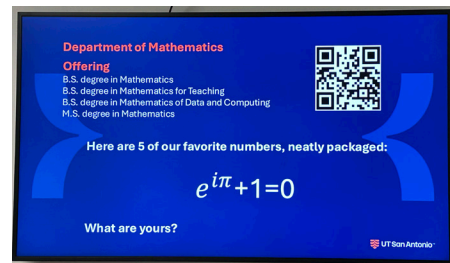
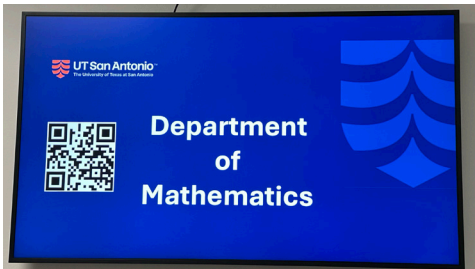
1. If you like a particular class or a particular area of mathematics, talk to the professor and arrange with them to learn beyond what is presented in the course.
2. If you would like to have a course offered about a particular area of mathematics, gather enough students who are interested and talk to the experts in the department so that a Special Topics course can be offered.
3. Attend seminars and conferences; if you like research, attend research seminars, and if you like teaching, attend teaching seminars.
4. If at all possible, take advantage of study-abroad programs.
5. Nourish the mind and the body, and develop a strong mind-body connection.

If you are an senior reading this, keep in mind that the deadline to apply for our MS in Mathematics degree is June 1.

If you are in your first year in the graduate program, the updates to the catalog are now official. You may do a search for "UTSA graduate catalog" and find the MS degree. It will give the text version of the flowchart from our website.

Monitor outside the Math Department!!

We have a new monitor outside the Math Department office, FLN 4.01.10! It will cycle through a number of slides with various information. You can find info on the latest successes and opportunities for math students and faculty, information about upcoming events and seminars, and previous Student and Faculty spotlights as well as other items. Please be sure to spend a few minutes watching some slides as you walk by.



Math SQUAD - a Canvas page exclusively for undergraduate and graduate students - COMING SOON!!

Math SQUAD is a Canvas page currently under construction. In the fall semester, all students registered for one of the math degrees (the MS or any of the 3 BS) will be enrolled. Information will be posted here regarding opportunities, information, and other items that will help minimize the number of emails we send you. More to come!



Tutoring Possibilities. I routinely receive requests from parents asking if I can connect them with a tutor. I would like to compile a list of undergraduates math majors who may be interested in tutoring. If you are interested, please send me, stephen.wirkus@utsa.edu, your (1) name, (2) expected graduation date, (3) math topics/level you are willing to tutor, (4) tutoring experience, if any, (5) contact email address, (6) tutoring rate per hour (you may leave this blank if you don't know). When I'm contacted in the future, I will forward the list I've compiled.

Join the Problem Solving Club!

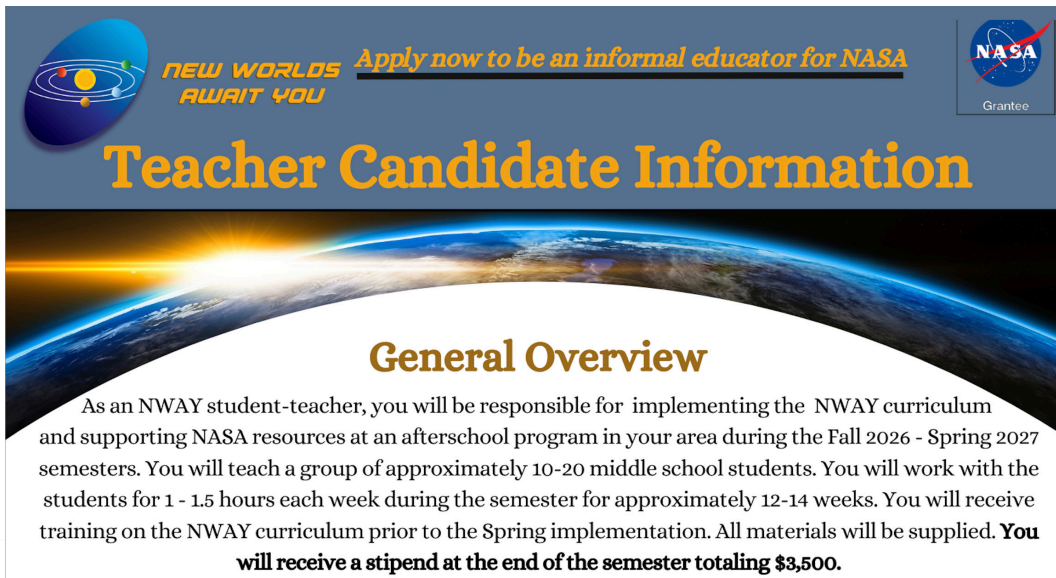
This is a great way to see math outside of the normal classroom setting. The Problem Solving Club is open to all UT San Antonio students (not just math majors). Bring a friend or come by yourself. Enjoy free pizza!



Meetings are **every Tuesday from 5:00PM-7:00PM. Meeting location: MS 2.01.06.** To be added to the Problem Solving Club contact group, scan the QR code and fill out your information!



UTeachSA



NEW WORLDS AWAIT YOU Apply now to be an informal educator for NASA

Teacher Candidate Information

General Overview

As an NWAY student-teacher, you will be responsible for implementing the NWAY curriculum and supporting NASA resources at an afterschool program in your area during the Fall 2026 - Spring 2027 semesters. You will teach a group of approximately 10-20 middle school students. You will work with the students for 1 - 1.5 hours each week during the semester for approximately 12-14 weeks. You will receive training on the NWAY curriculum prior to the Spring implementation. All materials will be supplied. **You will receive a stipend at the end of the semester totaling \$3,500.**

For further details and to register, contact [carey.walls at utsa.edu](mailto:carey.walls@utsa.edu)

Teaching training date:
August 2026



General Requirements

- Enrolled in the Fall 2026 semester and seeking a teaching certificate at UTSA.
 - *UTeach program students are preferred*
- Be in good standing at the university, with a minimum GPA of 2.75.
- Have reliable transportation.
- Available for a 2-hour block between 2:30 pm – 7:00pm, Monday–Friday during fall/spring semesters.
- Specific days and times are dependent on the local programs, to be determined soon.
- No criminal history and eligible to work in a public-school setting.
- Be available for a 2-day training session in Summer 2026.
- Provide feedback to the NWAY program through short interviews and/or questionnaires.

Recommended Skills

- Strong leadership and communication skills
- Interest in working with middle school students and school teaching staff
- Reliable and trustworthy with classroom friendly disposition
- Interested in teaching space science concepts and math
- Bilingual (English and Spanish) is helpful but not required

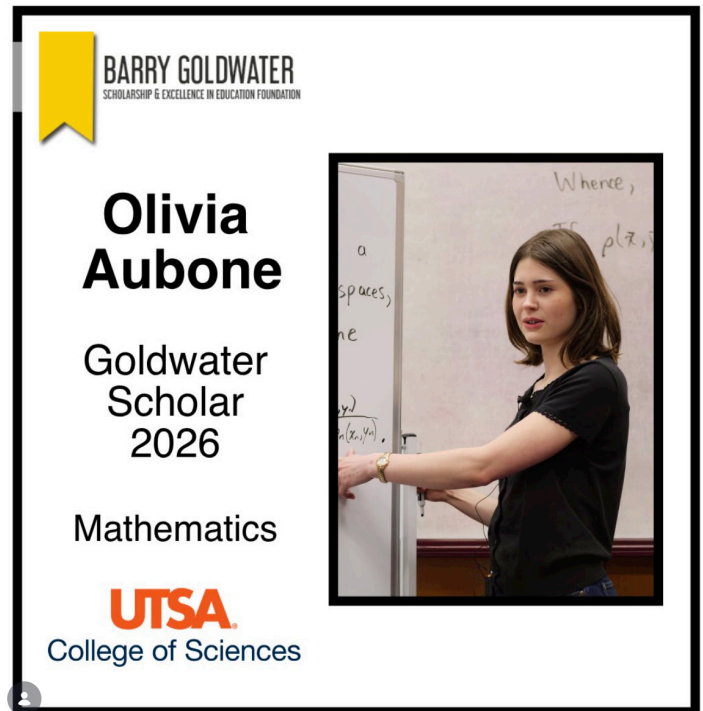
Course Requirements

Successful completion of Step 1 & 2 in the UTeachSA program

Shout Outs!

Congratulations to Olivia Aubone, 2026 Goldwater Scholar - one of two UT San Antonio students to win this year. Olivia was selected as one of 454 new scholars this year nationally out of almost 1500 applicants. Olivia conducts research on model theory with Drs. Duenez and Iovino and plans to pursue a PhD in Mathematics, conducting research in pure mathematics. Olivia is the first ever Math major from UT San Antonio to win a Goldwater Scholarship!

Olivia deserves a lot of credit for her work to achieve this! To use an appropriately modified African proverb: *It takes a department to train a student*, I also wanted to acknowledge just a few of the faculty members in the department that helped along the way - Jose Iovino and Eduardo Dueñez were working on research with her at the time of the award and for the year before while others like Sean Beatty (Algebra and Number Systems) and Igor Halfin (Calculus II) taught her early in her UT San Antonio career. Igor, in particular, gave the idea of applying for the Goldwater Scholarship! Thanks to all who contributed along the way and keep up the great work, Olivia!



We have three students graduating with a Master's degree this semester!!

Marissa Martinez earned her MS in Math with a math ed concentration. Her advisor was Priya Prasad on her thesis topic *"It Definitely Made Me Feel Some Type of Way": An Intersectional Analysis of How Latina STEM Majors Feel in their Calculus Courses and How it Affects their Identities*.

Ariana Castoreno earned her MS in Math with a math ed concentration. Her advisor was Ben Sencindiver on her thesis topic *Factors Impacting Students' Use of Technology when Solving Systems of Equations: Preferences, Experiences, and Mathematical Knowledge*.

Caleb Mickelson earned his MS in Math with an applied math concentration. His advisor was Vu Hoang on his topic *Quantum Dynamics: A Dilation-Based Approach (Finite-dimensional dilations of reduced quantum dynamics)*.

We also have undergraduates who will be graduating with BS degrees this semester!

Cesar Castillo, BS in Mathematics for Teaching

Carolina Argueta, BS in Mathematics for Teaching

Brooke Turner, BS in Math of Data and Computing

Katherine Karr, BS in Math of Data and Computing

Natalie Redding, BS in Mathematics

Ariyan Govind, BS in Mathematics

Jenn Karleskint, BS in Mathematics

Congratulations on completing this important step of your academic journey!!!

Department of Mathematics

END OF SEMESTER CELEBRATION!

ALL MATH STUDENTS ARE WELCOMED TO HELP US COMMEMORATE OUR GRADUATING MATH MAJORS

LUNCH ~ RAFFLE ~
CELEBRATE WITH FACULTY & PEERS

RAFFLE PRIZES



MUST BE PRESENT TO WIN PRIZE

THIS EVENT IS FOR MATH MAJORS ONLY

Location:

North Paseo
Building 5.140

Date & Time:

Wednesday, May 6th
11:30am-1:00pm



Math Gym Final Exam Schedule, Spring 2026

Spring 2026 Math Gym Final Exam Schedule

Thursday May 7th

FLN 03.02.08 10am - 5pm
Virtual Math Gym 6pm-9pm

Friday May 8th

FLN 03.02.08 10am - 3pm

Saturday May 9th

Virtual Math Gym 10am - 3pm

Monday May 11th

FLN 03.02.08 10am - 5pm
Virtual Math Gym 6pm-9pm

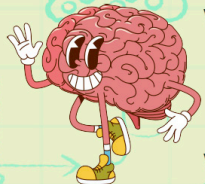
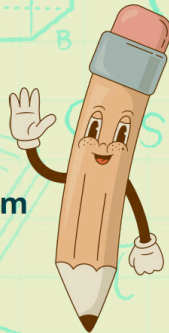
Tuesday May 12th

FLN 03.02.08 10am - 5pm
Virtual Math Gym 6pm-9pm

Wednesday May 13th

FLN 03.02.08 10am - 1pm

Note: FLN 03.02.08 will be closed Wednesday May 6th for Final Exam Targeted Workout Reviews



Final Exam Review

Targeted Workout Sessions

Monday May 4th FLN 04.02.20

11am - 12pm MAT 1093 Precalculus
2pm-3pm MAT 2213 Calculus III
3pm - 4pm MAT 1213 Calculus I

Tuesday May 5th FLN 04.02.20

10am - 11am MAT 1213 Calculus I
12pm - 1pm MAT 1133 Calculus for Business
1pm-2pm MAT 2254 Applied Linear Algebra
2pm-3pm MAT 1093 Precalculus

Wednesday May 6th FLN 03.02.08

9am - 11am MAT 1223 Calculus II
1pm-2pm MAT 1213 Calculus I
2pm-4pm MAT 1223 Calculus II



**UT San Antonio
Final Exam Schedule
Spring 2026**



STUDENT SPOTLIGHT

JENNA KARLESKINT

MAJOR: MATHEMATICS

HOMETOWN: SAN ANTONIO, TX

FAVORITE COLOR: BLUE

FAVORITE ARTIST: BRUNO MARS

**FAVORITE MOVIE: HARRY POTTER: PRISONER OF
AZKABAN**

FUN FACT ABOUT YOU: I AM A TWIN!



WHAT HAS BEEN YOUR FAVORITE CLASS SO FAR?

I WOULD HAVE TO SAY MY FAVORITE CLASS SO FAR HAS BEEN PROBABILITY AND STATISTICS. I REALLY ENJOYED LEARNING ABOUT THE STATISTICS WE READ ABOUT AND HOW IT IS USED IN THE REAL WORLD!

WHAT ARE YOUR CAREER GOALS?

I AM CURRENTLY PURSUING A GOAL OF WORKING IN UNDERWRITING!

**IF YOU COULD HAVE ONE SUPERPOWER, WHAT WOULD IT BE?
TELEKINESIS**

WHAT ADVICE WOULD YOU GIVE THE INCOMING FRESHMAN?

IT IS OK TO NOT KNOW WHAT YOU WANT TO DO! TAKE TIME TO EXPLORE, EXPERIMENT, AND JUST HAVE FUN! MAKE FRIENDS AND MAKE SOME MEMORIES!

STUDENT SPOTLIGHT

KIMBERLY ROE



MAJOR: PURE MATHEMATICS

HOMETOWN: SIOUX FALLS, SOUTH DAKOTA

FAVORITE COLOR: PURPLE

FAVORITE ARTIST: FLORENCE AND THE MACHINE, VINCENT VAN GOGH

FAVORITE MOVIE: I LIKE SCI-FI BUT DO NOT HAVE A SPECIFIC FAVORITE

FUN FACT ABOUT YOU: I WAS ONE OF THE FIRST WOMEN IN THE UNITED STATES TO SERVE ON A SUBMARINE.

WHAT HAS BEEN YOUR FAVORITE CLASS SO FAR (AND WHY)?

I HAVE TAKEN SO MANY GREAT CLASSES IT IS HARD TO PICK A FAVORITE. MY TOP THREE ARE QUANTUM LOGIC, MATH FOUNDATIONS OF AI, AND OPTIMAL CONTROLS AND THE CALCULUS OF VARIATIONS (OCCV). EACH OF THESE CLASSES HELPED ME CONNECT THEORY TO REAL WORLD APPLICATIONS IN WAYS I HAD NOT SEEN BEFORE.

WHAT ARE YOUR CAREER GOALS?

TO CONTINUE LEARNING AS MANY THINGS AS I CAN WHILE HELPING SECURE ACCESS TO EDUCATION FOR THOSE WHO WOULD NOT OTHERWISE HAVE IT.

IF YOU COULD HAVE ONE SUPERPOWER, WHAT WOULD IT BE?

TELEPORTATION SO I COULD TRAVEL TO MORE PLACES.

WHAT ADVICE WOULD YOU GIVE THE INCOMING FRESHMAN?

LEARN AS MUCH AS YOU CAN ABOUT AS MANY THINGS AS YOU ARE ABLE TO.

FACULTY SPOTLIGHT

JOSE IOVINO

Undergrad major: **Mathematics & music**

Graduate degree: **Mathematics**

What research and/or teaching interest(s) drive you?: **Finding bridges that connect different areas of mathematics.**

Favorite food: **The best food is food that has not involved animal suffering, and where both the earth and the persons who brought it to us were treated with veneration.**

Favorite non-academic activity: **I am an avid audiophile and music collector. I also enjoy cycling, and I have too many bikes.**

Favorite city that you've lived in or visited: **That's a tough one! I have loved every place where I lived. I love college towns in the Black Forest and medieval villages throughout Italy.**

Languages spoken: **My mother tongue is Italian, I speak Spanish natively, and I am proficient in German. However, the most beautiful living language to me is Farsi (Persian)**

What advice would you give a student thinking about a career that uses math? **Build your path. Here are some practical tips: (1) If you like a particular class or a particular area of mathematics, talk to the professor and arrange with them to learn beyond what is presented in the course. (2)**

If you would like to have a course offered about a particular area of mathematics, gather enough students who are interested and talk to the experts in the department so that a Special Topics course can be offered. (3) Attend seminars and conferences; if you like research, attend research seminars, and if you like teaching, attend teaching seminars. (4) If at all possible, take advantage of study-abroad programs. (5) Nourish the mind and the body, and develop a strong mind-body connection.



FACULTY SPOTLIGHT

CYNTHIA "CINDY" ROBERTS

Undergrad major: **Double Computer Science / Math**

Graduate degree: **Master's Mathematical Statistics / Minor Mechanical Engineering**

What research and/or teaching interest(s) drive you?: **The Calculus in Biology, specifically Neuroscience**

Favorite food: **Depends on the day but a good steak (medium rare a must) as well as Salmon are typically my go-tos.**

Favorite non-academic activity: **Playing guitar.**

Favorite city that you've lived in or visited: **Key West (everything moves at a slow pace "Island Time")**

Languages spoken: **English, East Texan**

What advice would you give a student thinking about a career that uses math?: **First, decide what you love (theory or application) whether it is to just "do math" or "solve problems with math". Start finding a mentor right away as this will make the big difference in your learning and future. There is so many areas in math but try to keep a focus and I highly recommend adding some type of programming language to your bag of tricks as this is what has helped me advance in my math career.**

