

MU ALPHA THETA NEWSLETTER

NATIONAL OFFICERS:

PRESIDENT

Todd Taylor
Vestavia Hills High School
Vestavia Hills, AL 35216
taylortg@vestavia.k12.al.us

PRESIDENT-ELECT

Betty Hood
Brentwood High School
Brentwood, TN 37027
bettyh@wcs.edu

TREASURER

John Albert
University of Oklahoma
Norman, OK 73019
jalbert@math.ou.edu

GOVERNOR REGION 1

Triscia Hochstatter
Moses Lake High School
Moses Lake, WA 98837
thochstatter@mlsd.wednet.edu

GOVERNOR REGION 2

Doris Parrino
Baton Rouge High School
Baton Rouge, LA 70808
dparrino@ebschools.org

GOVERNOR REGION 3

Rita Ralph
Fairfield Christian Academy
Lancaster, OH 43130
rralph@fairfieldchristianacademy.com

GOVERNOR REGION 4

Kim Woolfenden
Tampa Bay Technical HS
Tampa, FL 33610
Kim.Woolfenden@sdhc.k12.fl.us

NCTM REPRESENTATIVE

Laura Entrek
Hoover High School
Hoover, AL 35244
LEntrek@hoover.k12.al.us

SIAM REPRESENTATIVE

Terry Herdman
Virginia Tech
Blacksburg, VA 24061
Terry.Herdman@vt.edu

AMATYC REPRESENTATIVE

Kathy Mowers
Owensboro Community
& Technical College
Owensboro, KY 42303
kathy.mowers@kctcs.edu

MAA REPRESENTATIVE

Steve Dunbar
MAA AMC Director
Lincoln, NE 68588
sdunbar@maa.org

EXECUTIVE DIRECTOR

Kay Weiss
University of Oklahoma
Norman, OK 73019
matheta@ou.edu

NEWS FROM THE PRESIDENT

A new school year has begun, and on behalf of Mu Alpha Theta, I welcome you back to school. I hope you had an enjoyable summer with family and friends! I was lucky enough to begin my summer vacation by attending the USAMO awards ceremony in Washington, DC, and ending my vacation at the Mu Alpha Theta convention in Orlando, Florida. In between the two, I attended the AIME workshop at the University of Nebraska that was sponsored by the MAA. In addition to my school's summer math team practices, I'm pretty certain I've never done so many math problems over the summer in all my life!

I would like to thank Rob Snow, Lisa Herron, and Brandi Hillard for hosting a wonderful and entertaining convention. Having hosted before, I know the work that is involved in pulling off such an event. I would like to congratulate Buchholz High School for winning their eighth consecutive Sweepstakes award! Start making plans now to attend the 2015 National Convention in Salt Lake City, Utah. The venue will be the former Olympic village on the campus of the University of Utah. Dr. Thom Morris will serve as the convention host and his conventions always exceed expectations.

Beginning this fall, the Mu Alpha Theta newsletter will move to a monthly format. This will allow you to stay on top of upcoming scholarship and activity deadlines and will also be a source for chapter activities. Feel free to submit your favorite activities to matheta@ou.edu!

Registration for the *free* Rocket City Math League has begun, and registration for the (*also free*) Log1 Contest will begin in October. Be sure to check out our website for other activities for your chapter.

I hope you all have a great school year. If you have any questions or concerns, please do not hesitate to contact your region's governor or Kay Weiss at the National Office.



President Todd Taylor with USAMO finalists Scott Wu and David Stoner in Washington, DC

Todd Taylor

Mu Alpha Theta President

NATIONAL OFFICE NEWS *from Kay Weiss*

Welcome to a new school year. I hope you are settling back into your daily routine. Mu Alpha Theta also has a laid-back summer schedule and then lots of new activity when schools open again. I know many of you are facing Common Core issues, possibly new ways of teaching, and may be even busier this fall than in past years. If we can be of any help with getting your new members registered, just let us know. Remember that the sooner students are listed in the database, the more services we can provide them.

This past summer we had a great convention in Orlando, FL with over 800 mathletes, teachers, and chaperones attending - one of our largest groups in years. In 2015, we return to a university campus. While using hotels and convention centers provide great space and lots of fancy extras, having our summer participants in the residence halls on a major university campus provides an opportunity for students to have first-hand experience in a great educational environment. I hope you will think of joining us in July in Salt Lake City. Note that there are Convention Grants available to help new schools attend. **We have money to provide support for the asking!** Students from our chapter in Stuttgart, Germany attended on a Convention Grant in 2014, and I overheard numerous stimulating conversations between their students and our stateside participants. What a great opportunity to share stories about life at a military base school, and what it is like to live in a foreign country, especially when a parent may be actively deployed.

UPCOMING DATES

Sept 1: RCML registration now open

Oct 1: Log1 Contest registration opens

Oct 20-31: RCML Interschool Test

Nov 1-16: ARML Power Contest Round 1

Dec 1-31: Log1 Contest Round 1

So far in 2014, we provided over \$337,000 worth of scholarships, grants, awards, prizes, and support for our members, sponsors, chapters, and math competitions around the United States. With over 103,000 active student members enrolled in Mu Alpha Theta by last June, we are truly spreading the word that spending time with mathematics is fun, stimulating, and worth the effort. Thank you for giving your time to provide this experience for your talented students. The pay is not what it should be, the hours can be demanding, but the rewards for affecting the lives of our young are great. What you do **DOES** make a difference.

In this coming school year, we are hoping to get more information online about club activities. We would love you to share with others what you do during chapter meetings, how your club runs, what the students love to do the most, and for you to provide ideas to other sponsors. We will be sending out a questionnaire during the year to gather this information from you so we can post it online. Have a favorite fund raising activity to share? A favorite speaker that comes and the topic they cover? The best field trip you went on with your members? A fun game or the best meeting you ever ran to write about? Let us share your ideas.

Interested in getting together with other chapters in your area? If you log in online, you can always click on the "Find a Chapter" link. **This link in the log in area is different than the one for the general public that is on the main home page.** Your link, after logging in, will give you details on every school that has an active chapter of Mu Alpha Theta. You can find the address, phone

number, and sponsor's name and email address. How about running a joint activity for other chapters in your area? All the needed data is here.

Lastly, remember we have money to support your activities. Chapter Grants will provide you reimbursement for those special activities. We would **LOVE** to help fund these!

As always, remember that the National Office is closed during most national holidays. From Monday through Friday, we are usually open from 9:30 AM through 6:30 PM Central time. We will typically answer emails over the weekends, after, or before hours.

Remember to read the whole newsletter and watch for our monthly reminders coming this year. We have much to offer you and your students.

RECENT CHANGE IN ADDRESS

Mu Alpha Theta recently moved to a new location on the University of Oklahoma campus. Please make sure to update all contact information for Mu Alpha Theta to:

**Mu Alpha Theta
c/o University of Oklahoma
3200 Marshall Ave, Suite 190
Norman, OK 73019**

It is important to include "c/o University of Oklahoma" for all mail sent to the National Office. It should also be noted that although our physical location has a 73072 zip code, the 73019 zip code should still be used in order for mail to be received by the University's Central Mail. If your school bookkeeper needs an updated W9, please email us at matheta@ou.edu.

GOVERNING COUNCIL DECISIONS *from the* JULY MEETING

- Up to eight convention grants of \$3,200 each will be available for the 2015 Salt Lake City Convention.
- Starting this school year, there will be one application for the Kalin Award and Mu Alpha Theta High School Scholarships. The new application is currently available for download online.
- The Classroom Teacher Grant eligibility was extended to the first, second, or third year of teaching.
- The Rubin Award was changed from a convention grant to a \$2,500 chapter cash award and a plaque.
- The Paul R. Goodey Scholarship was established. This \$5,000 scholarship will be given to a student who has participated in a mathematics related research project while a member of Mu Alpha Theta.

SPONSORS

new! CLASSROOM TEACHING GRANT

The Mu Alpha Theta Educational Foundation has begun offering Classroom Teaching Grants. Any former Mu Alpha Theta member, who has begun a mathematics teaching career, can apply for up to \$1,500 during their first, second, or third year of teaching.

Funds may be used to reimburse the teacher for classroom supplies, math society meeting registration, or professional memberships. If you know of a former member that has become a mathematics teacher, let them know about these grants and encourage them to apply.

Applications are available online under Grants > Classroom Teaching Grants.

FREE! TI CALCULATORS

Mu Alpha Theta has a very limited number of TI-89 graphing calculators left to give away this year. Due to this fact, the National Office is only able to provide one calculator to schools to give away as a prize at a competition it is running, to a special club member, or to auction off to raise money for their chapter.

Only chapters that have not received calculators in the past are eligible to receive a free calculator this fall.

If your chapter has never received any in previous years and is interested in receiving one, please email matheta@ou.edu today!

TEST WRITERS NEEDED!

Mu Alpha Theta is looking for additional math test writers and editors for its National Conventions. At the end of this newsletter is an application for those interested in helping out. Each summer, we offer 30 different topic tests, a ciphering exam, three levels of individual exams, a Hustle speed topics test, and others. Tests are written either for Mu, Alpha, or Theta level students. Most tests are multiple choice, but writers provide both test questions and complete solutions.

The Educational Foundation pays an honorarium for each test written or edited. Payment is made in the year the test is used and exams become the intellectual property of Mu Alpha Theta. Questions must be clear, well written, unambiguous, and level appropriate. Examples of past tests can be found at our website under National Convention > Past Tests. Numerous years of examples are available there.

If you are interested in helping, please fill out this application and email back to matheta@ou.edu. You may also FAX to 405-325-7184.

CHAPTER RULES FOR MEMBERSHIP

All chapters should have written criteria to present to students who apply for membership. These should include math grade point average required, math level needed, other criteria, and cost to join. A sample membership application can be found at the back of the *Sponsor's Handbook* – online at http://mualphatheta.org/Chapter_Resources/July2013Handbook.pdf (page 78). If your chapter has requirements for remaining a member-in-good-standing, these should also be presented to the student at the time they join. Note that **we have no rules at the national level for a member to remain in good standing**. Some chapters have specific rules on who will be allowed to wear our honor cord at graduation. If so, make sure everyone knows these long before the spring of the student's senior year. You can avoid bad feelings and calls from upset parents if all the rules and requirements are written and presented to members.

Note that our listed eligibility rules online are the minimum allowable for membership in Mu Alpha Theta. Each chapter can set higher standards, such as a higher math GPA or membership only for juniors or seniors. This being said, at the National Office we prefer chapters not require too many “hoops” for the student to jump through. The sooner a talented math student becomes a member of Mu Alpha Theta, the more support we can give them. If you want to provide an incentive for staying active, we suggest making the wearing of the honor cord dependent upon those extra requirements. We have found this is often enough for the students to fully participate. Many students around the country spend four years as a member.

*Did you
know?*

Mu Alpha Theta
reached 103,000
student members
for the first time this
past school year!

We have had a number of chapter sponsors calling us to ask how they can remove a student member. We DO NOT mandate any rules at the national level for this procedure. We assume each school will decide these rules locally. If your club constitution does not include these rules and you want the flexibility to deny continued membership to a student, the chapter will need to vote on new rules.

We suggest the sponsor(s) meet with their officers to discuss under what circumstances a member can be removed from the chapter. Some chapters include being caught cheating, with alcohol, drugs, or cigarettes on campus, etc. Rules should be written up and then presented to active members at a meeting. When the vote is taken, most chapter constitutions state that they can be changed if 2/3rds of those active members at the meeting vote for the changes. Again, your local constitution may have a different procedure listed for editing your rules. If you have no copy of a written chapter constitution, you should download the sample online under Teacher Resources and edit it to meet your needs.

If you have no written rules, then parents can take exception to decisions you make. With written rules, everyone knows what is expected of them.

SALT LAKE CITY NATIONAL CONVENTION



The 45th Annual Mu Alpha Theta National Convention will be held July 19-24, 2015 in Salt Lake City at the University of Utah. The convention will include an outing to Park City.

Before April 1: at most \$500 Early Registration
After April 1: at most \$550 Regular Registration

Sponsors requesting single rooms will need to pay an additional \$270. All registration must be postmarked **by May 15th**. Visit www.mualphatheta.org for more information!

RUBIN AWARD CHANGES

The Governing Council has voted to change the prize for the Rubin Award. Starting in the 2014-2015 school year, the Rubin Award winner will be given a \$2,500 cash prize rather than the previous \$2,500 Convention Grant. A plaque will continue to be presented to the winner at the National Convention, but a representative of the chapter need not be present to win.

The Rubin Award was established in 2004 by the Governing Council of Mu Alpha Theta in honor of Diane Rubin who worked tirelessly at the National Office of Mu Alpha Theta for twenty years, before her retirement in December 2003. The award is presented to a Mu Alpha Theta chapter which has a history of outstanding mathematics service to its community or its school for at least two years. This service must promote interest in mathematics and benefit a group other than its own chapter. No school may receive the award more than once in a five year period.

For more information, please download the application found on our website.

ARML POWER CONTEST GIVEAWAY

Mu Alpha Theta has four free ARML Power Contest registrations to give away. The first four chapters to email matheta@ou.edu requesting free registration will get the \$50 fee waived.

To learn more about the ARML Power Contest, go to <http://staff.imsa.edu/~fogel/ARMLPower/> or contact Micah Fogel at fogel@imsa.edu.

new! CHANGES TO THE NEWSLETTER

The Mu Alpha Theta newsletter is changing to a monthly publication! Please watch your inbox at the beginning of each month for news, updates, and offers. The newsletter will also be available on www.mualphatheta.org. Past editions can be found in the Newsletter Archive.

SCIENCE AND ENGINEERING FAIRS

Have your members participated in a local or regional science and engineering fair? Mu Alpha Theta continues its ongoing support of a special Mu Alpha Theta Award at regional and international competitions. Mu Alpha Theta also provides \$6,000 in cash awards each year at the Intel International Science and Engineering Fair in May and provides judges for the event.

The Mu Alpha Theta Award is given to the most challenging, thorough, and creative investigation of a problem involving mathematics accessible to high school students. Components of the investigation may include, but are not limited to, mathematical proof, mathematical modeling, statistical analysis, visualization, simulation, and approximation.

The 2014 International Science Fair Award Winners were:

Vinay Sridhar Iyengar: \$1,500

Oregon Episcopal School in Portland, OR

Hybridized Characteristic 3 Galois Field Arithmetic for Elliptic Curve Cryptography, Phase III

Nirali Kunjan Thakor: \$1,500

Shepton High School in Plano, TX

A Novel Mathematical Simulation to Study the Dynamics of CD4 Cells, CD8 Cells, and HIV Viral Load

Sarah Lee Shader: \$1,000

Laramie Area High School in Laramie, WY

Catalan Numbers and Their Divisibility Properties

Sasank Venkata Vishnubhatla: \$1,000

duPont Manual High School in Louisville, KY

Winning the War against Hackers: A Hybrid Asymmetric Cryptographic Algorithm for Safe and Secure Data

Noah Christian Pritt: \$1,000

Pritt Home School in Walkersville, MD

Indoor Navigation with Maximum Likelihood Classification of Wi-Fi Fingerprints

PARTNER WITH A CHI ALPHA MU CLUB!

Do your members want to make a difference? Has your chapter considered working with local middle schools? Mu Alpha Theta encourages chapters to partner with their local middle school to form a Chi Alpha Mu math club.

Chi Alpha Mu is the National Junior Mathematics Club for Middle Schools and Junior High Schools. Founded in 1967, the organization was reactivated by Mu Alpha Theta in 2008 to promote enjoyment and understanding of mathematics by middle school students.

Mu Alpha Theta members could serve as mentors, provide tutoring, run Mini Mu competitions, or host math fun days. To see if a Chi Alpha Mu club currently exists near you, email matheta@ou.edu. For more information on Chi Alpha Mu, go to www.chialphamu.org.

SIGN UP FOR THE STUDY BUDDY TUTORING PROGRAM THIS YEAR!



Study Buddy is the nation's only online peer-to-peer volunteer tutoring program designed to address low math and science scores of underperforming middle and high school students. This homework assistance program utilizes online collaborative technology to bring students from different locations across the country together for online math, physics and chemistry homework help. Study Buddy relies solely on volunteers like you to help struggling students.

StudyBuddy

Study Buddy is excited to start another year of partnership with Mu Alpha Theta. Last year your students brought free online math homework help to over 15,000 students and this year we expect to reach many more! Our 2014-2015 tutoring program commences September 7th, 2014 and we are excited to greet this new school year with program enhancements that your tutors will benefit from including the popular Study Buddy TestPrep service (www.studybuddyhelp.org/testprep)! Please visit our website for details about our 2014-2015 program.

Here is why Mu Alpha Theta chapters love volunteering through Study Buddy:

Convenience – Volunteering from your computer after school or at home, in the evening and/or on the weekend, the ability to schedule yourself in half hour segments and having the flexibility to choose when you wish to help makes Study Buddy an easy volunteer option. This year Study Buddy will be accessible on your tablet and smart phone for even more convenience!

Make a real impact outside of your own school – Mu Alpha Theta students will be paired with students who are struggling and may not otherwise have access to a tutor due to economic and/or geographic reasons. Student tutors commit to tutoring one hour per month. Participation will be tracked by software and will serve as community service credit hours. A unique tutor log book tracks each tutor's community service hours and saves each tutoring session automatically. Tutors have the ability to view an online summary of their volunteer community service hours at any time.

Study Buddy TestPrep! Study Buddy offers SAT, ACT and AP review courses for all of its participants. As volunteer tutors, your students are invited to attend online test review courses taught by expert and experienced classroom teachers, offered throughout the year. Don't miss out on this excellent opportunity! This popular service is offered free of charge to our active tutors.

Teachers - We encourage you to enroll your Mu Alpha Theta members in Study Buddy and can do so with minimal effort! Detailed reports of your tutors' activity will be emailed to you once a month and enable you to monitor your students' participation in the program and award community service hours at your discretion. As a way of thanking your school for participating, we will make Study Buddy free online tutoring available to your school's entire student population. That means that by signing up your chapter to volunteer, your entire school can benefit from free Study Buddy online tutoring! Our staff is here to help you register the students at your school for tutoring as quickly and seamlessly as possible.

2015 Mu Alpha Theta Convention Grant – Study Buddy is proud to announce the fifth annual Mu Alpha Theta Convention Grant. NSTEP will cover the registration fee and a small stipend for transportation for three students and their teacher sponsor to attend the National Convention in July 2015 to be held in Salt Lake City, UT. All chapters participating in Study Buddy are eligible to compete for this grant. Congratulations to Bergen County Academies in Hackensack, New Jersey, winner of the 2014 Convention Grant!

Please email gmartin@studybuddyhelp.org to sign up your chapter today!

<http://www.studybuddyhelp.org>

CHAPTER NEWS

PATCH HIGH SCHOOL HOLDS MIGHTY MU DAY

Patch High School in Stuttgart, Germany held Mighty Mu Day, a Math Superhero Themed Day, at their local elementary school this past spring. Members presented the students with math mysteries to solve and they were able to bring in a lot of energy, enthusiasm, and creativity to make math and solving crime exciting for the students.

Some of the mathematics superhero and villain names were: Dr. Derivate, the Denominator, the Integrator, the Phantom Number, the Number Cruncher, the Number Scrambler, Math Mayhem, Radical Chick, the Infinitrio of Sign - Co-Sign - and Tan-Agent, Mighty Mu, Terrific Theta, Amazing Alpha, Factorus Prime, Captain Quadratic, and the Radical Rambler.



Thank you for all you do and for helping us to serve you better!!

CONTESTS & COMPETITIONS

LOG1 CONTEST

This is an excellent opportunity for schools to participate in a mathematics competition similar to our National Convention contests. Schools compete against other schools from across the country and the world, while staying right at their own school.

The 2014-2015 Log1 Contest will again be run by the Hoover High School Math Team in Hoover, AL. The contest is supported by a grant from Mu Alpha Theta. The contest consists of three rounds. In the first round, students take a topic test, either Circles & Polygons or Applications. These will be available for download on **Dec 1, 2014**. Each Topic Test will consist of fifteen open-answer problems to be solved without a calculator in thirty minutes. The second round includes either Logarithms or Probability and will be available for download on **Jan 1, 2015**. The third round is an individual test of general mathematics knowledge and will be available for download on **Feb 1, 2015**. Problems will range from easy to difficult in an effort to provide confidence and challenges to all students.

In addition to other awards, Mu Alpha Theta will award 100 e (\$271.82) to each of the top ten schools in each region, for a total of \$10,872.80 in prize money.

The Log 1 contest is FREE, but participation is restricted to schools with an active Mu Alpha Theta chapter. To register or for more info, see the *Contests* section of www.mualphatheta.org.

ROCKET CITY MATH LEAGUE

The RCML is a free, year-long, international math contest open to all middle, high school, and two-year college students enrolled in Pre-Algebra through Calculus or above math courses. It is administered by the students at Grissom High School in Huntsville, AL and supported by a grant from Mu Alpha Theta.

Participants are placed into one of five divisions based on the level of math courses in which they are enrolled. Each division will be given three, 10 question tests lasting 45 minutes. A two-level, interschool team test is also available. Tests are sent to registered schools via email before each round, and scores are entered into an online database. Trophies are mailed to the top-ranked students and schools at the end of the year. Mu Alpha Theta also provides other prizes as well. Testing dates for the 2014-2015 competition are:

- **Interschool Test: October 20-31**
- **Round One: January 12-23**
- **Round Two: February 9-20**
- **Round Three: March 9-20**

Register at www.rocketcitymath.org. For more info, visit the contests section at www.mualphatheta.org.

MATHEMATICAL MINUTES VIDEO CONTEST

The Mathematical Minutes Video Contest continues this year. We are looking for chapters to make a 2–5 minute math video that teaches a math idea or shows an interesting math problem in an entertaining way. Last year's winners can be found online under *Contests > Mathematical Minutes > Finalists*.

Eight finalists will be posted online for other chapters to view and vote on their favorites. Up to \$3,000 will be split between the winners, amounts to be determined by the Governing Council.

Videos need to be posted on YouTube before midnight EST, **February 28, 2015**. To view guidelines and a short video presentation about the contest, go to www.mualphatheta.org.

ARML POWER CONTEST

The American Regions Mathematics League (ARML) offers a two test Power Contest to be worked on by a team at the students' high school. The Power Contest provides a group problem solving situation similar to the power question found at ARML Competitions.

The mathematics level of the contest problems has been geared so that students in an honors class, in a math club, or on a math team can have a unique problem solving and mathematical writing experience. There is no limit to the size of the team working on each Power Contest problem set, but the time for solving the problem set is limited to 45 minutes. Coaches will receive the contest materials at least one week prior to contest dates and may schedule the contest anytime during the designated week and a half. After completing the contest, student solutions are then mailed back and are graded using a forty point rubric. Trophies are awarded to the top ten scoring teams. The cost is \$50 per school, but the first four schools to email matheta@ou.edu can compete for free.

2014-2015 Testing Dates:

Nov 1–16, 2014

Jan 24–Feb 8, 2015 (subject to change)

Questions: contact Micah Fogel at fogel@imsa.edu.

Website: <http://staff.imsa.edu/~fogel/ARMLPower/>

AMC

AMC 8: **November 18**

AMC 10A/AMC 12 A: **February 3**

AMC 10 B/AMC 12 B: **February 25**

AIME I: **March 19**

AIME II (Alternate): **March 25**

USAMO: **April 28 & April 29**

For registration deadlines, please go to <http://www.maa.org/math-competitions/about-amc/events-calendar>

STUDENTS

MESSAGE FROM YOUR STUDENT DELEGATE PRESIDENT

NATIONAL STUDENT DELEGATE OFFICERS:

PRESIDENT

Nicolas Peña
Region IV
Western High School
Davie, FL
nicpena@rocketmail.com

VICE PRESIDENT

Lin Lin Pan
Region III
Vestavia Hills High School
Vestavia Hills, AL
linlinpandaa@gmail.com

SECRETARY/TREASURER

Blake Tillman
Region II
Bolton High School
Alexandria, LA
btilm305@gmail.com

PARLIAMENTARIAN

Maritza Armstrong
Region I
Moses Lake High School
Moses Lake, WA
onechocolate@gmail.com

I had quite the blast at this past National Convention! With 11 States attending and Germany flying in, I absolutely loved welcoming the rest of the world to my home State this summer. Even though I attended Nationals by myself, I took advantage of the independence by meeting as many of you awesome people as I could. Nothing makes the Convention what it is quite like the friends you make and memories you share with them.

Orlando hosted a [Harry Potter] world of memorable experiences. Ice cream lines (and speeches) were long but rewarding, ciphering tests “**mutated**,” DoubleTree service was excellent, and many enjoyed the pool in lovely Florida weather. Stairs were chosen over crowded elevators, the North and South towers buzzed as kids scrambled for curfew, Mr. Snow won an iPad from his own raffle, and the main ballroom seemed to run out of your Topic Test every time, but you did always eventually find one... or maybe that was just me.

With Wednesday set aside for pure recreation, Theme Park Day was plenty fun, too. It was great to see so much of the country enjoy the experience many dream of. And speaking of dreams and fun, thank you Thomas Jefferson High School for exemplifying team spirit at awards and elsewhere—we could all learn to bring the same flame!

We have Salt Lake City coming up this July, a new adventure and beautiful change of scenery for... pretty much all of us! I hear we'll be staying at the 2002 Winter Olympic Village, which is pretty cool (get it, Winter). For many of us, myself included, Salt Lake City may be the last place we see each other. Although this is true every year for some attending, it's important to remember to savor our time together. This makes the Convention as fun as it can possibly be!

Again, a huge thank you to the Mu Alpha Theta community that has given me this opportunity, I am beyond honored. I couldn't be much happier, and I hope it never sinks in—it definitely hasn't yet! Of course if you have any ideas, comments, questions, concerns, or any other version of the same thing as those I forgot to mention, feel free to contact me at nicpena@rocketmail.com. The more we all network, the better we will make the 2015 National Convention!

tldr: I love you guys, let's knock it out of the park in 2015 :D

Can't wait to see you all again. <3



Student Delegate President

For more information about the Mu Alpha Theta Student Delegate Assembly, see the About Us section of our website and click on Officers > Student Delegate Officers.

SUMMER GRANT EXPERIENCES

Each year, Mu Alpha Theta offers Summer Grants of up to \$2,000 for members to work on a mathematical research project or attend a summer mathematics course not available at their high school or two-year college. Would you like to participate in a program like those described below? Here are reports from two of last year's recipients:

Mingu Kim from David H. Hickman High School in Columbia, MO attended the Perimeter Institute for Young Physicists:

The International Summer School for Young Physicists (ISSYP) at the Perimeter Institute was an incredible experience, and I've had nothing like it before. Perimeter Institute is an amazing building full of physicists roaming around, writing all over the walls. Topics that we covered in our classes included special relativity, quantum mechanics, and general relativity. We also got to go to SNOLAB, a facility deep underground that is looking for dark matter. We broke off into small mentoring groups, and I was placed in a quantum information group, where we basically played games using classical and quantum strategies, looked into the basics with entanglement, and played around with quantum cryptography. There was so much math everywhere, and in my mentoring sessions we reached into complex matrix theory and tensor products, areas which I had never seen before. Besides all the math and physics, we also went bowling, visited Niagara Falls, played minigolf, and did lots of other social activities. All in all, it was one of the best times of my life!

Tiffany E. Pan from Klein Oak High School in Spring, TX attended AwesomeMath:

The two and a half weeks I spent attending the AwesomeMath program was a remarkable and enlightening experience. The courses, though rigorous, were made highly enjoyable by some of the most intelligent people I've had the pleasure of learning from.

The jam-packed schedule consisted of a morning lecture and problem session followed by an afternoon lecture and problem session. We were able to choose two different classes to take among the four subjects (Algebra, Combinatorics, Geometry, and Number Theory). Combinatorics 2 covered various topics within Combinatorics and Probability including modeling, symmetry and recursion, as well as a bit of Statistics and Graph Theory. I was intrigued by the method with which the instructor explained the material. It had never crossed my mind that AIME/USAMO problems could be looked upon and solved with such simplicity. As the course progressed, I eagerly began to adopt organization and new methods of approaching problems. My afternoons in Number Theory 2 consisted of lessons and proofs in subjects such as Modular Arithmetic, Fermat's Little Theorem, and Euler's Theorem. The problem solving sessions were spent applying the various theorems, algorithms, and identities in mathematical proofs.

Aside from the intensive academic schedule during the day, the occasional evening game of pool with friends brought out our competitive sides as we put our geometry skills to test. Over the course of almost three weeks, I had not only found long-term friends but also experienced a growth in my mathematical abilities. I am extremely grateful to Mu Alpha Theta, my instructors, TAs, and RA for providing me with an unforgettable experience at AwesomeMath. I would strongly recommend this program for anyone seeking to improve in contests such as AMC, AIME, and USAMO.

CONGRATULATIONS TO THE 2013-2014 SCHOLARSHIP WINNERS!

MARY RHEIN MEMORIAL SCHOLARSHIP:

Albert Ho of Cypress Bay High School in Weston, FL: Princeton University

SALLIE SCUDDER MEMORIAL SCHOLARSHIP:

Karen Yang of Klein High School in Klein, TX: Yale University

MU ALPHA THETA HIGH SCHOOL SCHOLARSHIPS:

Kristen Adair: Purdue University
Broderick Allan: Brown University
Sanchit Bhattacharjee: MIT
Brad Bierdz: Rhodes College
Domenic Bottini: UC Berkeley
Dorothy Catey: University of Idaho
Steven Chen: MIT
Connor Davis: University of Alabama
Theo Diamandis: Stanford University
Lauren Elson: Harvard University
Seare Farhat: Hampton University
Jeremy Feltracco: Georgia Institute of Tech
Rowan Fiscus-McKee: University of Iowa
Taylor Foor: Florida State University
Mallory Harris: University of Georgia
Wei-Wen Hsu: Stanford University
Pamela Hu: UC Berkeley
Aditya Jain: Northwestern University
Nicholas Joseph: Rice University
Joyce Kang: Stanford University

Andy Le: New York University
Katherine Lemus: Florida International University
David Li: Cornell University
Catherine Ma: California Institute of Tech
Vinai Oddiraju: Duke University
Jin Park: UC Berkeley
Jonathan Park: University of Virginia
Steven Paul: University of South Florida
David T. Pham: Rice University
Allison Rychtanek: U.S. Coast Guard Academy
Corey Snider: Tufts University
Andrew Spitzer: University of Notre Dame
Mihir Thakkar: Rutgers University
Haoqing Wang: Harvard University
Li Wang: MIT
Jing Ya Wang: UC Berkeley
Nicholas Yang: Princeton University
Linda Zhang: MIT
Michelle Zhang: Stanford University
Brian Zhong: MIT

MU ALPHA THETA TWO-YEAR COLLEGE SCHOLARSHIPS:

Mackenzie Comer: Western Illinois University
Belle Moushon
Adrienne Renz Verga: New Jersey Institute of Technology
Larissa Villarruel Sanchez: University of Texas at Austin
Ryan Williams: Auburn University

2014 AWARD WINNERS

KALIN AWARD RECIPIENT

Joyce Kang of Brentwood High School in Brentwood, TN

SISTER SCHOLASTICA AWARD RECIPIENT

Daniel Coapstick of Patch High School in Stuttgart, Germany

HUNEKE AWARD RECIPIENT

Elizabeth Manning of Doral Academy Charter High School in Miami, FL