



VOLUME 34, ISSUE 1 FALL 2013

The Official Alexosletter of the Association of Teachers of Alathematics in Alassachusetts an affiliate of the Alational Council of Teachers of Alathematics

A Message from the President, Steve Rattendi

I must admit that I am definitely one of those teachers that starts off dreading the end of the summer. The ability to go to sleep late because I want to rather than because I need to get some grading done, waking up naturally rather than to an alarm, and getting errands done during the daylight hours on a weekday are some of the many aspects of summer that I enjoy. Not to mention that the end of the summer also gets me thinking about all those grand plans that I did not quite accomplish; there is always next summer.

However, once I am in the school building for even just a short period of time it doesn't take long to become excited for the start of the year. Seeing my colleagues, discussing mathematics and, of course, meeting students on the first day of school quickly get me back into the role that I love – the role of a teacher.

At its heart, that role should be focused on the student. What is it that my students will need from me and from themselves to reach a high level of success in learning mathematics? What lessons about mathematics and life will I be able to help them learn this year, and which ones will they teach me? How to I instill confidence and a passion for learning?

Anyone who thinks the role is easy has never done it. The myriad of acronyms and phrases (e.g., RETELL, PARCC, the New Evaluation, etc.) sometimes seem to get in the way of the our work by producing more paperwork or taking time away from learning. The key to not becoming trapped by them is to ask "what about them can I take and use to better the learning of my students?"

The Mathematical Practices in the Common Core are one place that can and must lead to better learning by students. The Practices are not about skills and content, but rather process and concepts. The Practices, as their name implies, must be practiced. Students must be engaged in problem solving to become perseverant problem solvers; students must be actively searching for patterns to begin to see them on their own; students must be asked to use, through explaining and listening to or reading the explanations of others, the need for precision and accuracy when using mathematics. **continued page 2**

Who Wants to Be a Mathematician National Contest

Qualifying for the 2014 National Who Wants to Be a Mathematician contest, which will take place in in January in Baltimore at the 2014 Joint Mathematics Meetings, is starting soon. This year the qualifying tests will be online thanks to our sponsor Maplesoft and its online testing system Maple T.A.

There will be two rounds of online tests. The first round is tentatively scheduled for Sept. 14-27. Teachers who'd like to request passwords so their students can take the first-round qualifying test should email the AMS Public Awareness Office, paoffice at ams dot org, with the subject line "National WWTBAM" (before Sept. 27). In the body of the message, include your name, school, contact information, and courses taught this year. Students who score well on the first-round test will move on to the second round (in mid-October). The top prize in the contest is \$5000 for the student and \$5000 for the math department at his or her school. There is no fee to participate.

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Dates to Remember:	

NCTM Regional Conference Baltimore, Maryland October 16-18

ATMNE Fall Conference: Getting to the Core Killington, Vermont October 24 and 25

NCTM Annual Meeting New Orleans, Louisiana April 9-12, 2014

"Like us on Facebook to stay updated on upcoming ATMIM events!"



Welcome Sheri Flecca and Alison Mello to the ATMIM Board

Submitted by Neelia Jackson

ATMIM is pleased to welcome and introduce to you your two newly elected board members.

Sheri Flecca has recently relocated her teaching skills from Framingham to Newton. Alison Mello, in addition to working in Foxborough, was recently elected to serve with MassMate. Sheri has been in the middle school classroom for 11 years, the last 9 of which have been in Framingham, working with well-established programs to help students increase their mathematical understanding through a blend of innovation and persistence. She has collaborated with teachers throughout the Commonwealth in programs such as RTTT and Backward Design. Her educational philosophy stresses working collaboratively, both in and out of the classroom, establishing a community where relationships are built on mutual trust and acceptance to allow both teachers and students to feel comfortable, to express themselves and to take risks. Sheri stated, "It is imperative to use data as a guide to evaluate the effectiveness of instruction and adapt it to attend to individual learning needs, behaviors and experiences."

Alison has been an educator for 17 years in New York and Massachusetts at both elementary and middle school grades. In 2003, her passion for math led her to move from the classroom into a Math Specialist role. Alison is currently the K-8 Math/Science Director for Foxborough Public Schools. In this role, she works to provide leadership, support, and professional development to teachers and staff.

President's Message continued from page 1

As one of my colleagues wrote to me in an email recently, these are exciting times to be an educator. Assessments are beginning to explore how to assess process as well as content. Materials and resources are becoming more and more easily accessible to meet the challenges proposed by the Common Core and, before that, by NCTM's Principles and Standards. I encourage you to take advantage of professional development opportunities offered by organizations such as ATMIM, and I encourage you to do so with a colleague. Keep searching for ways to engage your students, and share the techniques you find with others at your school.

Above all, as you begin the academic year remember to stay focused on the ultimate goal - the student.

NCTM Affiliate Leadership Conference July 2013

On Friday, July 26, Katie Aspell and Donald Cameron, members of ATMIM's Executive Board flew to Annapolis, Maryland for a three-day conference conducted by NCTM for the state and regional affiliates of NCTM. In attendance were leaders and representatives from nearly 35 states across the country. There was a wide range of age and experience in the attendees. The theme of this year's conference was using social media to: communicate with its membership; expand affiliate membership; and explore new ideas and activities for affiliates to consider.

With that in mind, we examined how one can make better use of social media such as Twitter, Facebook and GoogleDocs to accomplish the goals of the NCTM affiliates. To that purpose, the leaders of the conference used several different forms of social media to distribute information about the conference, to create a compilation of the information created and shared by conference attendees and to allow attendees to instantly communicate thoughts and ideas to other conference attendees as we progressed through the day's events. Frankly, both Katie and Donald (and most other conference attendees) were a bit overwhelmed by the constant flow information through these several different channels but were reasonably successful at grasping and assimilating the major concepts. Another facet of the conference introduced or refamiliarized conference attendees with the contents of the NCTM website and with all of the guidance, help and information that NCTM provides its affiliates and its individual members. The site

is extraordinarily deep, interesting and rich—we should all spend an hour or so going through it and viewing what the site has to offer.

Perhaps the best part of the conference was the ample time given to us so that we could have conversations with members of other affiliates. Here we learned that many of the affiliates have similar concerns such as shrinking membership and finding ways to successfully implementing the Common Core Standards; similar goals such as new practices that can encourage growth and expansion of membership and other useful offerings of the affiliate; and similar visions such successfully reaching out to teachers (especially new teachers) and forging paths that will result in stronger and more stimulated students of mathematics. Katie and Donald will be bringing to the summer retreat of the ATMIM Executive Board a host of ideas for consideration. From this experience and the ideas it generated, we hope to create a stronger ATMIM. We realize, however, that the strength of ATMIM greatly depends on the interest, energy and thoughts of its members. In that regard, we encourage all of you to be more aware of the opportunities and information that ATMIM offers and to take a small step towards more involvement in and engagement with ATMIM. We, in turn, will commit ourselves to becoming better communicators about what ATMIM is and does.

Hall of Fame Inductees

submitted by John Bookston

Attending the Hall of Fame dinner in June was an inspiring experience. We have two more very worthy inductees. Here are excerpts from the two nominating speeches. Congratulations to Regina and Guy. It is an honor to be your colleague. And thanks to Patricia and Leanna for their nomination speeches.

Dr. Regina Panasuk - MA Mathematics Educators Hall of Fame Inductee submitted by Patricia Davidson

Dr. Regina Panasuk (B. S. in Electrical Engineering, M.S. Mathematics, Ph. D. in Mathematics Education) is currently Professor of Mathematics Education at the University of Massachusetts Lowell. She was a high school mathematics teacher and Mathematics Chairperson at a high school in Leningrad, Russia, where she was recognized for Excellence in Teaching by the USSR Ministry of Education. In 1986 Regina became an Assoc. Prof. of Mathematics Education at Leningrad Institute of Education where she won a prestigious Medal of Excellence.

Emigrating to the U.S. in 1990, Dr. Panasuk taught at UMass Boston and Salem State College, before joining the faculty at UMass Lowell in 1993. She teaches mathematics and mathematics education to graduate students and has developed several original courses and works with local school districts to direct professional development and develop curriculum and teaching materials. She conducts research on human cognition, teacher preparation in mathematics, and the relationship between planning and classroom decision-making.

Dr. Panasuk became the initiator in 1995 of the Annual Symposium on Education Research and Practice and has been director ever since. She is the editor of 18 volumes of the Colloquium Journal, which includes presentations at the colloquium, plus further related research articles. She has obtained over one million dollars of grant money, all focused on projects to enhance student learning, provide teacher training, and conduct research to impact mathematics education. In 2010, Dr. Panasuk developed a twelve-credit "Graduate Certificate in Teaching Elementary Mathematics".

Regina has worked with the Methuen Public Schools, has conducted numerous workshops in the greater Boston area and given 28 invited presentations including papers at the Mathematical Association of America Conference, the Annual International Conference on Technology in Collegiate Mathematics, and the Conference of Applied Statistics in Ireland. From 1998 to 2000 she consulted on teacher education and professional development at Playanto Ancha University in Chile. Furthermore, she has been on eleven panel discussions. Dr. Panasuk is a prolific writer and has 48 peer-reviewed articles in a wide variety of prestigious journals including curriculum and methodological guides for teachers and twelve research articles.

She has led projects sponsored by the Board of Higher Education, the Department of Elementary and Secondary Education, PALMS, and the NSF Noyce Foundation. She is a member of William Sadlier-Oxford Publisher's Executive Committee of the National Advisory Board and is currently at work on a textbook series.

At UMass Lowell, Dr. Panusak won the Distinguished University Professor Award in 2011. Professor Jay Simmons, Faculty Chair in the Graduate School of Education at the University of Massachusetts Lowell, wrote, "I know of no educator who has done more than Regina Panasuk to develop and disseminate knowledge and to improve the ability of others to do the same."

In summary, Regina Panasuk's total devotion and dedication to mathematics education makes her a stellar addition to the Massachusetts Mathematics Educators Hall of Fame.

Guy Roy - MA Mathematics Educators Hall of Fame Inductee

submitted by Leanna Russell Guy Roy comes to us from Maine, earning his undergraduate degree from the University of Maine at Orono {B.A. in both Mathematics and Education) with a minor in Biology. Upon graduation, he joined the Plymouth, Massachusetts, (then Plymouth-Carver) school district teaching 8 years at the high school, and 8 years at the middle school. In 1987, Guy became Plymouth-Carver's K-12 Mathematics Curriculum Coordinator, a position he held until he partially retired from it in 2004.

Guy has had a huge impact on mathematics teachers in Plymouth and throughout the state. Kevin Sawyer, now Silver Lake's Mathematics Coordinator was an inexperienced, long term substitute when he joined the staff at Plymouth North High School. He remembers how Guy was supportive, empathetic and encouraging. Kevin noted, "Guy was respected by his department for his knowledge of mathematics and his ability to lead teachers in a direction of improved instructional practices, always committed to instruction that engages students, regardless of age or academic ability, in rich content using mathematical modeling, manipulatives and critical thinking."

Last year at the Mathematics and Computer Science Collaborative Conference Guy presented a workshop Rates and Ratios explaining how these topics evolve in middle school. He demonstrated how to align this curriculum with Common Core by showing their relevance in many activities. Guy has presented many good ideas at local, state, regional and national mathematics conferences and expresses them so well. Perhaps that is also why Guy is so sought after as a mathematics consultant in his "retirement" years. Over a dozen school districts have benefitted from long-term P.D. time with Guy.

ATMIM Membership Initiative

submitted by Joan Martin

As we start the 2013-2014 school year, ATMIM has 355 active members, including individuals, college students, and elementary school building memberships. This is a good time to encourage fellow teachers of mathematics and student teachers to join. The reduced fee for students is only \$5.00. What a wonderful, economical way to introduce aspiring teachers to our supportive organization! Maybe you will have a student teacher this year and maybe you will consider gifting a nATMIM membership.

While ATMIM is devoted to the improvement of mathematical education of students, in Massachusetts (pre-K through grade 12 and beyond), the majority of ATMIM members are focused on middle and high school. Elementary teachers often are unaware that they can become members of ATMIM through a building membership. ATMIM conferences and events provide specifically

focused workshops and sessions for elementary school teachers. The elementary building membership costs \$25.00 and allows elementary school teachers the same benefits as individual members of ATMIM. This is a cost-effective way to engage elementary staff in mathematics conversation. With the implementation of the Common Core, approaching new state assessments, and greater teacher accountability, there is an increased need for elementary teachers to have a wider support base for their mathematics teaching.

Spread the word about our ATMIM! By attracting additional, enthusiastic and diverse members to our organization, the richer our conversation and the better mathematics education of our students.

Math and Technology

submitted by Susan Weiss

The latest revised software is Scratch 2 which is a project of the Lifelong Kindergarten Group at the MIT Media Lab. http://scratch.mit.edu/. With Scratch, you can program your own interactive stories, games, and animations. It is appropriate for 2nd grade and up. With work, you can use this program to introduce many math topics such as coordinates or variables. It is all web based at this point which means you do not have to download anything and all the projects are saved in a gallery. It is a way to integrate other disciplines with math. Once the children start using Scratch they do amazing things. I will say that can be a problem because they get lost in quick way of making changes and as a teacher you have to make sure of the mathematics behind each of the rules (procedures).. If you are looking for STEM curriculum then look at the older Scratch 1.4 which is compatible with different external components (https://www.sparkfun.com) that allow programing using external boards for sound, touch, and light, where you can see graphs and do scientific emulations. Great for children who enjoy challenges and does not cost anything.

The scratch website has wonderful explanations for everything plus lesson plans. Also you will see samples from everyone's galleries. It is not always helpful with the development of various math concepts but certainly fun and rewarding to use. I know that I will be finding ways of finding projects that emphasize the development of math concepts such as combinations and geometric concepts. Still have questions? Just contact me. susan.weiss@gmail.com

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But that's not all. Guy Roy has been a leader in the Massachusetts Mathematics Frameworks. In the early years of MCAS, Guy was on assessment committees that established our model system of accountability, striking a balance between what theorists demanded and what teachers thought possible. He continued this role as a valued member of the Southeastern Massachusetts Mathematics Chairpersons Association. Over the years, DESE requested input from SMMCA. Guy provided a wealth of knowledge and insight in those responses.

In closing, tonight we recognize the contributions of a man who has made a positive impact on students and teachers, departments and districts. In shaping the content and pedagogy knowledge of teachers, he has helped to bring the understanding, appreciation and maybe even for some, the love of mathematics to those who worked with him. For these reasons, we joyfully induct Guy Roy into the Massachusetts Mathematics Educators Hall of Fame.

Problems to Ponder

submitted by Polina Sabinin

The problems below are from the President's corner of www.NCTM.org. We are notproviding solutions. Enjoy exploring with your students. [some editorial license exercised]

Elementary School

1. How many different triangles are in the figure below? (Don't miss the various sizes and and those that "point down".)



Extension: Note that this is a 10 by 10 by 10 triangular grid. What if it were N by N by N, then how many triangles would there be? (February 2011)

2. In a neighborhood café there are 10 seats in a row at the counter. In the morning, customers enter the café for their morning coffee. They don't really want to have a conversation, so they prefer not to sit next to one another at the counter. Two people enter the café when it opens. How many different ways can these two customers sit at the counter so that they are not next to each other? (September 2010)

Extension: What if there were 3, 4 or 5 such customers?

Middle School

1. How many different polygons of area 2 can you construct on a 5 x 5 geoboard? (March 2012)

2. If we pick any two distinct points on a circle, and connect them with a chord, the chord will divide the interior of the circle into two distinct regions intersecting only along the edge. If we pick three distinct points on a circle and connect each pair, we form four such distinct regions. What is the maximum number of such regions that can be formed by selecting four distinct points on a circle and connecting all pairs of them? By selecting five distinct points? Six distinct points? And of course, then, n distinct points?

(11/11)

3. You are staying at a rural cabin, and the only method to get water is to draw it from a well. A 4-gallon bucket and a 9gallon bucket are the only containers for carrying water to the cabin. In one trip to the well explain how you could measure out and bring back to the cabin any whole number of gallons from 1 through 13. No other markings are on the pails and you can't estimate.

Extension: What if you had a 4-gallon bucket and a 10gallon bucket? What if you had an n-gallon bucket and an m-gallon bucket? (October 2011)

High School

1. How many zeroes occur at the end of the expanded numeral for 100 factorial?

[100 factorial means (100)(99)(98)...(2)(1)] How many zeros for n!? (December 2011)

2. Which whole numbers can be expressed as the difference of two perfect squares? (July 2011)

3. Suppose that the circles in the figure below are tangent to one another. The radius of the circle centered at A is one unit, and the radius of the circle centered at B is two units. What are the radii of the circles centered at O and P? (May 2011)



Send your class solutions (including the thinking process) to any of these problems to polina.sabinin@bridgew.edu. The most interesting solutions will be posted on the ATMIM website and the classes will get a contribution certificate.



The Association of Teachers of Mathematics in New England's Fall 2013 Conference, "Getting to the Core!" will be held at Killington, Vermont on October 24-25, 2013. The Vermont Council of Teachers of Mathematics is a co-sponsor of the conference.

The program is designed to provide professional development for all levels of education from Pre-K through 12 and beyond. Sessions are focused on ways in which mathematics educators can implement the Common Core State Standards in Mathematics (CCSSM) as well as explore assessment of the skills and mathematical practices in the CCSSM.

Plan on coming to join colleagues from throughout New England to meet, learn and share about mathematics during the Fall Foliage season in Vermont!

For registration and other information go to <u>www.atmne2013.com</u>.

Keynote Speakers include Jason Zimba – Lead CCSSM writer and Founding Principal of the Student Achievement Partners

Shelbi Cole – Director of Mathematics at Smarter Balanced Assessment Consortium

Hayley Freeman - Partnership for Assessment of Readiness for College and Careers -Core Leadership Group and Massachusetts Department of Elementary and Secondary Education

Getting to the Core!

submitted by Janice Kowalczyk

As the summer begins to wind down, take some time to plan your fall. Registration is now open for "Getting to the Core!" the Fall Conference of the the Association of Teachers of Mathematics in New England.

This year's conference program designed for Pre-K through 16 educators will be focused on ways in which mathematics educators can implement and assess the CCSS in mathematics.

The conference will be held in beautiful Killington, Vermont on October 24-25, 2013. For more information and registration go to atmne2013.com

We are trying to spread the word so please forward this to your colleagues and other teachers who might be interested.

ATMNE Fall Conference October 24 & 25, 2013 Killington Grand Resort Killington, VT Call for Volunteers

The success of the 2013 ATMNE Fall Conference in Killington, VT depends on committed volunteers. Several committees have been established to handle various aspects of this conference. Volunteers, who are not ATMNE members, will be able to register for the conference at member rates. We urge you to consider volunteering two hours of your time at the conference. It certainly could be a rewarding experience as you provide a needed service for all conference participants. You will also have the opportunity to work with members of our educational community from different geographical areas.

The committees are:

Equipment & Technology: works with the co-chairs and equipment supplier to ensure that audiovisual and other equipment is available at the correct locations and times;

Exhibitors: works with co-chairs to ensure that exhibitors needs are met;

Hospitality: provides on and off-site assistance, i.e. directions, special functions, etc.

Registration:: provides member services and information; assists conference attendees in becoming members of ATMNE and its affiliate groups; distributes exhibitor badges; provides registration assistance;

Session & Workshop Support: assists session, workshop, and mini-course presenters;

Signs & Printing: creates and places signs and other printed materials

If you are interested in volunteering, please email Jackie Mitchell at jadamitchell@aol.com, Mary Calder at calder50@comcast.net or William Bowdish at bilbowdish@gmail.com.

Include your name, email address, phone number, and the committee on which you would like to serve. You will be contacted by the appropriate chair.

Updates on PARCC in Massachusetts

submitted by Mark Healy

This summer has been busy with updates from PARCC, and from the Massachusetts Department of Elementary and Secondary Education (DESE). Below are some updates to keep you informed on the latest developments:

• PARCC released the final grade- and subject-specific performance level descriptors (PLDs) in English language arts/literacy (ELA) and mathematics. Performance levels, sometimes referred to as "achievement levels," are the broad categories used to report student performance on an assessment, and the PLDs further describe what that performance means. For more information, FAQs or to view the PLDs, visit http://www.parcconline.org/plds.

 \cdot PARCC released the first edition of the accessibility features and accommodations

manual for the assessments currently being developed. The manual is a comprehensive policy document that outlines the accessibility features and accommodations that will be available for all students, especially students with disabilities, English learners and English learners with disabilities. For more information or to view the policies, visit http://www.parcconline.org/parccaccessibility-features-andcontinued on page 8

PARCC continued from page 7

accommodations-manual.

· PARCC recently released pricing for the summative components of the assessment. The cost to states will be \$29.50 per student. In Massachusetts, cost isn't the most important factor in looking ahead to the new tests, since the state currently spends more than the PARCC tests are projected to cost, said education Commissioner Mitchell D. Chester. But, the pricing announcement, and rising public concern about the Common Core Standards, have led to Georgia, Oklahoma, Pennsylvania, North Dakota, Indiana, and Alabama deciding to either drop or scale back their participation in the PARCC consortium. Florida's education commissioner is mulling a similar decision.

 \cdot A representative sample of about 10 percent of Massachusetts' students in

grades 3-11 will field test the PARCC assessments in the upcoming 2013-14 school year. Over the summer, DESE will notify schools selected to participate in this spring 2014 field test. They will also share additional information related to testing windows, technology requirements, a paper-and-pencil option, and other details. For more information, visit http://www.parcconline.org/field-test.

• The Massachusetts DESE envisions a transition period to move from MCAS assessments to PARCC. Later this fall, the Board of Elementary and Secondary Education will discuss and vote on a transition plan with the understanding that, as the Governor and Commissioner have committed from the outset, the state will only adopt PARCC if it proves to be as good as or better than our current MCAS assessments.

• The Massachusetts DESE has announced that at least through the class of 2017, the current MCAS high school graduation requirement in English Language Arts (ELA), Mathematics, and Science and Technology/Engineering (STE) will remain in effect. This means that students in the classes of 2014, 2015, 2016, and 2017 must continue to pass the grade 10 MCAS tests and/or retests in ELA, Mathematics, and STE in order to meet the state's Competency Determination (CD) requirement. High school students in those classes will take MCAS (rather than PARCC) to satisfy the CD requirement.

To keep up-to-date with PARCC's progress, visit

http://www.parcconline.org/news or sign up to receive updates on the PARCC homepage, http://www.parcconline.org/.

ATMIM Board Summer Retreat

Submitted by Nancy Johnson

On Monday, August 12, the ATMIM Board of Directors met in Brewster, Massachusetts for the annual summer retreat. The ATMIM retreat started at 9:30 and ended at 3:30. The day began with the introduction of new members, Alison Mello and Sheri Flecca. The meeting was led by our new president, Steven Rattendi. Two board members have new positions for this coming year; Susan Weiss will take over the position of NCTM representative and Neelia Jackson will be assuming a new role of Liason to Post-Secondary Education Programs.

In July, Katie Aspell and Don Cameron attended a leadership conference for NCTM affiliates. There they were energized with new ideas that were shared by the other affiliates concerning conferences, membership, and communication.

The group voted to increase the scholarship awards from \$250 to \$500 in an effort to receive more applications from mathematics teachers of high school seniors who excel in service or achievement in mathematics.

To support mathematics teachers throughout the state, the ATMIM Board decided to hold four Dine and Discuss meetings for the 2013 - 2014 year. The Dine and Discuss meetings will be held in four different geographical areas of the state and will focus on the new PARCC initiatives as well as the mathematical practices of the Common Core State Standards. The Dine and Discuss meetings will begin in late October or early November.

ATMIM will hold its spring conference for mathematics teachers of elementary, middle, and secondary schools on a Saturday in late March. The conference will again take place at Assabet Valley Regional High School. ATMIM would also like to remind its members that ATMNE (Association of Teachers of Mathematics in New England) will be holding its fall conference on October 24th and 25th in Killington, Vermont. For more information, check the ATMNE website. ATMIM is seeking:

i) new members for its presenter mentoring program;

ii) articles from first or second year teachers about their experiences;

iii) a boost in membership to serve more of the mathematics community; and

iv) activity on its new discussion boards accessible through atmim.net

Western Mass ARML Report

submitted by Beth Blumberg

The students picked a very bright pink as the team T-Shirt. They clearly stood out! This was a really hot year at Penn State (upper 90's)... We easily went through more than 300 bottles of water. The team had a great time at Hershey Park.

The Western Mass ARML A1 team came in 20th!! Our best place in many years. The top scorer was **Dhroova Aiylam** (going on to MIT, qualified for the tie breaker, but didn't quite make the top 20).

8 points:

Ziqi (or Jacky) Lu ((Worcester Academy 11th, first timer)

7 points:

Steven Homberg (Westborough, 11th)

Saarik Kalia (St. John's 12th, going to MIT) 6 points:

Vivian He (Shrewsbury, going on to Cal Tech)

Eric Nie (Westborough, 9th Grade)

5 points:

John Long (Mass Academy 11th, (from AMSA));

Zephyr Lucas (11th AMSA); (His mom teaches at Holy Cross)

Josep Rose (AMSA, 12th going to Assumption College (math major));

Meghana Vagawala (AMSA, 11th)

Lambert Wang (Mass Academy 11th, from Grafton) 4 points:

Nick Vea (AMSA, 12th)

3 points

Tommy Yu (Algonquin, 12th) Joshua Hyde (Westborough, 10th) 1 point: Jenny Yujie Ma (Algonquin, 11th)

B1 and B2 teams
3 points:
Curran Kalia, (St. John's, 11th, his uncle is Rakesh Anand)
Madeline Martin (Mass Academy 11th, from Wachusett) (father teaches at WPI)
Ben MacDonald (Mass Academy, 11th, from Wachusett)
Camila Menard (Wachusett, 11th)
Dongpeng Xia (Westborough, 10th)
Wentao (John) Zou, (Worcester Academy, 11th) first time at ARML

Throughouth the year, we held practice once per month at Holy Cross, typically about 50+ students were attending practices. The Western Mass ARML team came in 1st place at HMNT. We also particpanted in HMMT, PUMAC, ARML Local (4th place), and ARML Power, and Purple Comet, this year. We had Guest Talks by Former Western Mass ARML participants David Miller (Google) and Steven Ehrlich (Georgia Tech, grad student) as well as Sarah-Marie Belcastro. Coaches who came to practices, but did not travel to Penn State include: Alison Langsdorf (Coach & Teacher at Westin); Lauren Van Wart (Pearson); Maria Shkolnik; Yanping Hu.

MATH MURMURS

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