# Math Kangaroo Bulletin

The bulletin of Math Kangaroo in USA, NFP

Volume VI, Issue 1 - Fall 2014

www.mathkangaroo.org



KANGOUROU SANS FRONTIERES

Maria Omelanczuk, CEO

Enrollment to Math Kangaroo 2015 is in full swing on our <u>web page</u>. During the first month 6,500 students got registered. Registration is in progress until December 15; however <u>several places</u> are already full. Next Math Kangaroo Day is on March 19, 2015.

Math Kangaroo is an <u>international olympiad in mathematics</u>, which invites students, regardless of their academic standing and encourages them to master mathematical skills – on almost each continent now, with around 7,000,000 participants worldwide. It takes place annually, on third Thursday in March.

In USA we have been hosting the event since 1998.

In the following paragraphs you will find some statistics, names of the top winners and information about awards in Math Kangaroo 2014. When your read what students say, you will know where enthusiasm for our work comes from.

Our newest development is collection of Video Solutions in <u>Media Library</u>. Math Kangaroo questions from several previous years along with their solutions are presented on videos to our participants for free and the library is still growing. Teachers serving our organization use the videos in their classrooms.

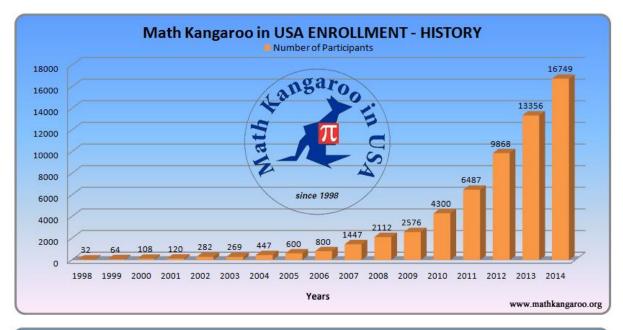
Schools are welcome to join us until December 1 (there is no cost for school).

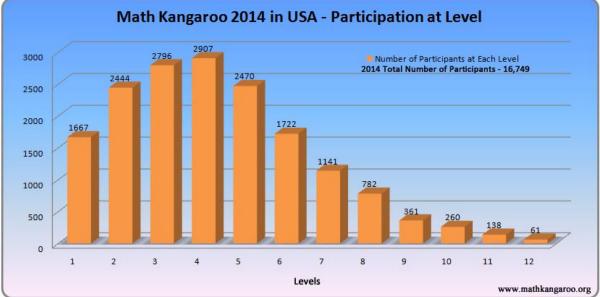
Teachers, parents, observers send us feedback which we address and implement if possible. Please keep sending us your opinions and continue your support. Your volunteer help allows us meet expectations of families and grow.

Sincere thanks go to our managers and developers for their tireless effort of developing Math Kangaroo in USA. Together with families of participants they are helping students love math nationwide.

If time allows, please share this bulletin with your students and kindly  $\label{eq:like} "like"$  us on Facebook.

Thank you for reading ...





More metrics...



### Izabela Szpiech, CFO

With a growing number of participants at every level, taking part in Math Kangaroo becomes very competitive. Our philosophy is to recognize every student who decides to challenge him or her in our test.

In addition to a Math Kangaroo t-shirt and a frisbee received by every contestant at the day of Math Kangaroo this year, at each level we awarded students with 20 top results nationally and 3 top results in every state.

1254 contestants received a MK cap and a blue, red or white ribbon, according to places they won in their states.

For the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> places nationally 92 gold, 31 silver and 72 bronze medals were given. Winners were also rewarded with Best Buy gift cards of the value of \$20.00, \$30.00, \$50.00, and \$100.00, depending on numbers of the same results at each level and the rank.

The 8 most consistent and winning participants from high school levels were given iPad Minis. A group of four students was sponsored to attend Mathematica camp, organized by Wolfram Research at Bentley University. Seven contestants were awarded with a two-week trip to Poland where in Zakopane they joined winners from other countries at the International Math Kangaroo Camp.

As every year, we had senior students who participated for the very last time in Math Kangaroo. This year, two of them received grants of \$1,000 each as recognition for being the best every year, and what is important, for their consistency and commitments to our competition for several years. 1050 students were prized with Magic Loop Puzzles for being 11<sup>th</sup> to 20<sup>th</sup> nationally. Those who nationally won places from 4<sup>th</sup> to 10<sup>th</sup> received books, wooden puzzles, or sports back packs. For more specific numbers of prizes and winner's names please visit our home page. **Congratulations to all Math Kangaroo champions and to all participants, you did it!** 

I also would like to highlight the importance of financial contribution we receive every year from American Express, AT&T employees and Advance Micro Devices, and from parents-donors. Thanks to their generosity we are always able to accommodate students whose families suffer from financial hardship.

Others who contribute to our common success are volunteers whose even smallest tasks help to make Math Kangaroo possible. **Thank you all!** 



### Magdalena Teodorowicz, From Development Team

The following students were awarded with Wolfram Mathematica Camp at Bentley University in Massachusetts in July.

First Name	Middle Name	Last Name	Level	City	State
TUSHAR		DWIVEDI	10	AURORA	IL
ANNE		ZHOU	11	HOUSTON	ТΧ
MILLIE		CHEN	11	WEST COLUMBIA	SC
CHELSEA		CHEN	11	WEST COLUMBIA	SC

Article about the camp...

The following students were awarded with the International Math Kangaroo Camp in Zakopane, Poland in August.

First Name	Middle Name	Last Name	Level	City	State
DANIEL	BEALE	CHIU	9	HILLSBORO	OR
COLIN		TANG	9	BELLEVUE	WA
RIONNA		FLYNN	9	MOUNTAIN VIEW	CA
ELBERT	J	DU	9	CHICAGO	IL
YIJIA ( CECI)		CHEN	10	NEWTON	MA
VAHID		FAZEL-REZAI	12	GRAND FORKS	ND
BRYAN	FRANCIS	BRZYCKI	12	FULLERTON	CA

Photos from Zakopane...

First Name	Middle Name	Last Name	Level	City	State
DAVID	WALTER	STONER	11	WEST COLUMBIA	SC
YELENA		MANDELSHTAM	11	IRVINE	CA
ANNA		ELLISON	11	NEWTON	MA
EMILY		MU	11	AURORA	IL
ΤΙΜΟΤΗΥ	L	NGOTIAOCO	11	FREMONT	CA
LURAN		HE	12	STONY BROOK	NY
SARAH	RACHEL	SILCOX	12	OGDEN	UT
WEN		SUN	12	CENTERVILLE	VA

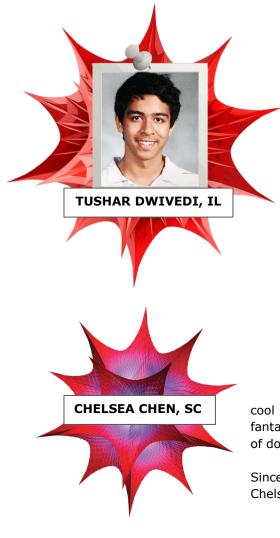
The following students were awarded with mini iPad.

The following students were awarded with \$ 1000 grant.

First Name	Middle Name	Last Name	Level	City	State
AARON	S	LIN	12	NEWARK	CA
PAWEL		STRZEBONSKI	12	MAHOMET	IL

The list of all awards can be found on 2014 Awards page.

### MEMORIES from 12 Days Mathematica - Wolfram Research Camp at Bentley University in Massachusetts



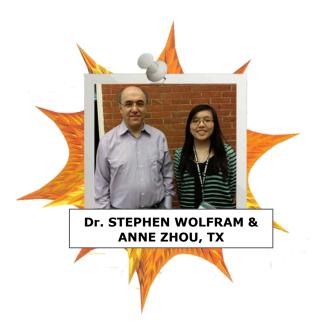
My experience with the Wolfram Mathematica Summer Camp was amazing. I was somewhat hesitant coming into the camp with a limited knowledge of the Mathematica language; however, in about two weeks I had gained the ability to code in Mathematica.

With this knowledge, I was able to create a project that was published in the Wolfram Mathematica Demonstrations Project. Aside from programming and learning from a variety of lectures on mathematics from the counselors, guest lecturers, as well as Stephen Wolfram himself, I also had a great time making new friends from France, Russia, and other countries. Since the camp was small, it encouraged interaction and fostered a sense of community among students who shared a common interest in math.

Thanks, Tushar Dwivedi

**I absolutely enjoyed the camp** because of all the cool things I learned and the brilliant people I met. It's also fantastic that I did something I didn't think I was quite capable of doing. So overall it was an awesome experience.

Sincerely, Chelsea Chen



### I really enjoyed my time there!

It was an incredible experience being able to work with and learn from talented programmers all around the world. All the counselors were knowledgeable and helpful, and the guest speakers and lectures were informative and intriguing, including a mini-class on graph theory. All the activities we did were challenging, but still fun. Although Mathematica has a bit of a learning curve, I feel that it is a versatile and useful language. I highly recommend this camp to anyone interested in mathematics or computer science.

Thank you so much for the opportunity to attend Mathematica Camp.

Sincerely, Anne Zhou

### MEMORIES from 10-days Math Kangaroo International Math Camp at Zakopane, Poland

### The trip to Poland was very enjoyable.

We spent the first few days in Krakow, where we toured the city and its attractions and learned a lot about Polish history and culture. We also visited several science and engineering museums with fun hands-on demonstrations. In between excursions, we were able to observe the streets of Krakow, buy souvenirs, play cards with each other, and eat at a variety of restaurants.

Afterwards, we stayed in Zakopane for the Math Kangaroo International Math Camp for over a week, during which we went on a few hikes and trips



VAHID FAZEL-REZAI, ND

to destinations including markets, a ski jump, salt mines, lakes within the mountains, and a museum. When we weren't outdoors, there were math lectures and problems, puzzles, games, and barbecues to keep us busy.

> The whole time we were in the safe hands of Magda and Bogdan, who looked after us very well, bought us treats, and were always available in case we needed anything.

> The great memories, meeting people from many different countries, and good food all made for a tremendous experience, and I missed camp as soon as I got home.

> > Thank you! Vahid

### This trip was a great experience, and I had tons of fun.

Spending a few days in Krakow was fantastic, too (even if the one-person room felt kind of small), since it was a chance for us to see even more of Poland. All the museums and places we went to -- Wawel Castle, the salt mine, the Garden of Experiences, and more -- were interesting and even educational.





**BRYAN BRZYCKI, CA** 

The camp itself in Zakopane was also really fun. Getting problems everyday at breakfast and thinking about them throughout the day was always something to look forward too, and the hikes were worth all the walking, once we reached the top of the hills, the mountains, the lakes.

I made great friends during this trip, and I'd do it again in a heartbeat.

Thanks so much for everything! Bryan

#### The Math Kangaroo Zakopane camp was a wonderful experience for me.



YIJIA (CECI) CHEN, MA

It is my first international camp and I'm glad to have met new friends. The first few days at Krakow was fun and also educational, since we visited multiple museums. The hikes were rough but the view at the peak was beautiful. Classes were challenging and I learned a lot.

The camp was really organized and always has something planned such as funny mathematics, barbecues, and movies. Despite the language barrier with students from other countries, we were able to become friends during our game of Mafia and Mao. Magdalena and Bogdan took really good care of us. They planned our trip meticulously and were always there to help us.

Thank you, Magdalena, Bogdan, and the rest of the US team for an unforgettable trip!

Ceci Chen

## Participating in the International Math Kangaroo camp was an unforgettable experience.

From the grand Wawel Royal Castle in Krakow, to the majestic Tatra Mountains near Zakopane, to the beautiful Wieliczka Salt Mine, we saw many historic sites of Poland. I met campers from many different countries. Although it was sometimes difficult to communicate because we spoke different languages, we were able to play games and discuss mathematics together.

We went on many scenic hikes to different mountains and lakes; although the hikes were long and challenging, RIONNA FLYNN, CA

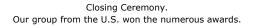
we were richly rewarded by the breathtaking views of southern Poland and the Tatras. We took part in nine challenging mathematical lectures and received daily problems that were interesting and stimulating. When not hiking or doing math, we participated in activities such as "Funny Mathematics," various tournaments, and barbecues.

> Our team leaders were very kind and took good care of us. When my cell phone charger cord stopped working, they went out and got a new charger cord for me! Our US team got along well with each other, often discussing math or playing games together. During the trip, we celebrated one of our team member's birthday. All of us spontaneously chipped in, giving gifts such as 10 zloty and bread. :) Through this camp, I made many friends, learned new math, and saw many sights. These two weeks I will always remember!

> > 1

~Rionna

On the way to Nosal Hill. From the left: Colin Tang , Elbert Du, Daniel Chiu, Rionna Flynn, Ceci Chen, Vahid Fazel-Rezai and Bryan Brzycki.









### I had an incredible experience at the Math Kangaroo Zakopane camp.

I made a lot of new friends and interacted with people from many countries around the world, learning games and a few customs, and eating new food. Of course, there was more learning going on. The math aspect of the camp was both engaging and challenging, and I learned quite a bit in this regard.

Together, we went to many historic sites and museums, notably including two science museums and a 650 year old university. There were multiple hikes which, although difficult, invariably ended with a wonderful sight. For example, we went to Morskie Oko, called one of the five most beautiful lakes in the world.

Magda and Bogdan were superb guides who always had another exciting excursion planned and would accommodate any request, making sure each student was fully comfortable. I made many memories and bonds, and I know this was an experience I will always remember.

Thank you!

Daniel

### This camp was really fun!

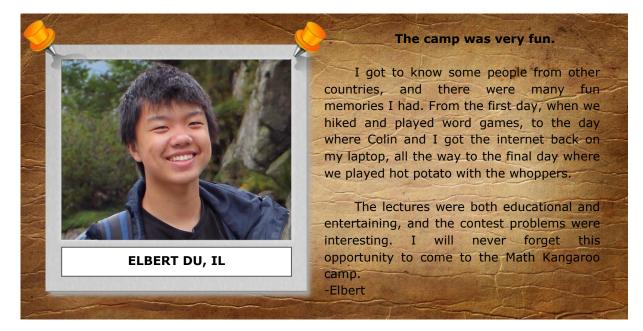
I got to meet new friends interested in math and learned new problem solving techniques. The math competition problems were engaging and the chess tournament, barbecue, and "funny mathematics" were also fun. Many memories: teacher "giving" a marker to a student not paying attention, teammates knocking on my door and leaving, teammates inventing variations on the games in the "funny mathematics" room (three-way chess, where third player gets captured pieces; and a game where one throws blocks at structures built out of blocks), teammate playing games in the lobby,...

**COLIN TANG, WA** 





DANIEL CHIU, OR



### **Reflections about Math Kangaroo Competition**



AARON LIN, CA

I first took Math Kangaroo in sixth grade, when I first realized math could actually be a bit interesting and when I was first exposed to competition math. Although it wasn't the first contest I had taken, I really enjoyed the flavor of Math Kangaroo problems. Unlike practice AMC and Mathleague problems, I loved being challenged by simplelooking problems that only required minimal computation despite complex and very pure logical reasoning. They reminded me of the kind of logic puzzles I really enjoyed solving as a child.

I've taken Math Kangaroo every year since sixth grade and was always impressed with the problems. (In particular, I absolutely loved the last problem on this year's 12th grade contest – very beautiful.)

# 30. In the forests of a magical island three kinds of animals roam: lions, wolves and goats. Wolves can eat goats, and lions can eat both wolves and goats. However, because this is a magical island, if a wolf eats a goat, the wolf turns into a lion. If a lion eats a goat, the lion turns into a wolf. If a lion eats a wolf, the lion turns into a goat. Originally, there were 17 goats, 55 wolves and 6 lions on the island. What is the highest possible number of animals remaining on the island after it is no longer possible for any animal to eat another?

(A) 1	(B) 6	(C) 17	(D) 23	(E) 35
@ Math Kang	garoo in USA, NFP	,		www.mathkangaroo.org

I will be attending MIT in the fall. Although I may not be majoring in math, Math Kangaroo has done more than just teach me to enjoy logical problem solving, but has also connected me with good friends from abroad (via the Zakopane camp) and, this year, awarded me with a very generous grant for college next year, for which I truly appreciate. Thank you for running Math Kangaroo.

Sincerely, Aaron Lin



SARAH SILCOX, UT

Math Kangaroo has always been a very rewarding math competition. In 11th grade, I got to go on a fantastic trip to Poland where I met international mathletes and made strong friendships.

In 12th grade, I received an iPad mini. The competition problems are well written and creative. Thanks to my involvement in Math Kangaroo and other math competitions I'm attending Harvey Mudd College this fall.

Sarah Silcox



PAWEL STRZEBONSKI, IL

Math Kangaroo is a competition that sets itself apart from other math competitions. It does not usually require solving textbook-style problems which test only whether you have learned a certain concept. Instead it tests the ability to find a concept that fits the problem and which can then be used to translate it into a set of equations or a logic problem which you can then solve with your math knowledge. Also, the prizes/awards are another unique feature that makes Math Kangaroo a competition to remember.

Now, I am studying electrical engineering at the University of Illinois.

Pawel Strzebonski

### Math Kangaroo 2015 Poster Contest

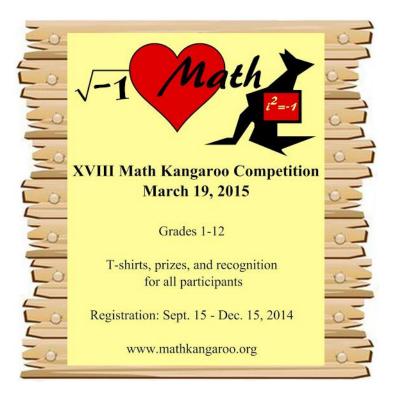


Joanna Lasek-Matthiesen, CIO

Submission for our annual Math Kangaroo Poster contest ended April 20. This contest aims to promote the Math Kangaroo Competition for students from grades 1 to 12. We are grateful to all participants that took the time to create a submission for the Math Kangaroo 2015 poster. We received <u>several thoughtful posters</u> this year and it is exciting to note the enthusiasm of both students and adults in this event, which is an extension of the Math Kangaroo Competition.

It was difficult to choose just one entry as all posters were created with such obvious creativity and heart. The youngest participant was at the kindergarten level, and also there were four adult submissions.

The award for Best Poster 2015 went to Pawel from Mohomed, IL, who recently graduated from high school. In addition to rewarding Pawel with a \$250 Amazon gift card, all participants received a \$10 Target gift certificate as an expression of our gratitude for the heartfelt participation.



Congratulations to Pawel for his winning entry and a special thank you to the following participants: Veronica, Anmol, Gabriel, Emily, Anika, Marites, Preethi, Sujit, Julia, Lily, Phoebe, Karen, Rae, Joanna, Bilska, Nnikita, Michal, Lukasz, Dawid, Parv, Valencia, Thomas, Nicolas, Peter, Nandita, Oskar, Kasia, Katelyn, Annie, Przemek, Nicolette, Supriya, Suraj, Rohin, Pujita, Prithvi, Rafal, Kaashvi, and Pawel. Please see their creative work here: <u>POSTERS 2014</u>.

Watch for flyers featuring Pawel's poster. This year's winning design will be used to promote the 18<sup>th</sup> Annual Math Kangaroo Competition to be held on March 19, 2015.

Again thank you to all students and adults that showed the commitment and interest in this event. The **2016 Math Kangaroo poster contest** will open for submissions in the fall of this year. Please remember to check our website!





### We would like to thank our friends and promoters.

### Please contact us at <u>info@mathkangaroo.org</u> if you or your organization are interested in supporting our endeavor.

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Earlier bulletins