



In This Issue:

Articles of Interest

- President's Message p. 1
Past President's Message p. 2
Board Chair Report p. 2
ICTM Awardees and Scholarship Recipients p. 4
ICTM Board Members p. 10

Classroom Activities

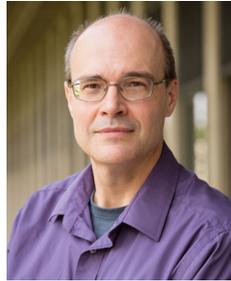
- Scalar Multiplication in Grades K-5 p. 6-7
Geometry and Coding p. 8-10

Information to Share

- Regional Conferences p. 3
ListServe Update p. 3
NCTM Reminder p. 3
Math Musings... p.3
2015 Conference Corner p. 5
ICTM Membership Application p. 13

Calls for Information

- Scholarship Nominations p. 4
Award Nominations p. 4
Call for Speakers p. 5
Call for Articles p. 12



President's Message

April 2016 by George Reese, ICTM President

Happy Spring to everyone in ICTM and to all math teachers who read this! There is change in the air at

ICTM, and I hope that it helps us all to move toward achieving a that growth mindset. Here are some of the changes that you can readily see in our organization:

Membership

You have probably noticed the new look of the ICTM.org website. We are still working out the kinks, but you can now easily check your membership status and renew through the site. This was our main goal in transitioning to a new system.

Elections

The election for Directors on the ICTM Board is open the first week of April. Be sure to Login and VOTE!

The ICTM list and email blasts

If you are receiving emails from ictm@lists.mste.illinois.edu, then you are on the ICTM listserv. Being on the list DOES NOT mean that you are a member of ICTM. That list has been active for the past thirteen years and over that time many people have signed up to find out what ICTM is doing or to get the updates on mathematics education that Jerry Becker posts regularly to his very large list of individual and group recipients. At times, there are discussions of events and posts on ideas, but it has not been active as a discussion forum.

We hope that all members of that listserv will join ICTM, and I will post reminders and encouragements to do so from time to time. However, if you ARE a member of ICTM, you will be the first to receive important information about the organization through the email blasts that are sent out by our membership chair, Eric Bright. These go only to the current ICTM members. The Board has agreed that these should only be sent at a rate of once or twice per month unless there is an urgent need for more updates.

On a personal note, I had the chance to attend the MMC (Metropolitan Math Club) conference for workshops for the first time this year. I attended a wonderful session on Number Talks and another on Diversity in the Math Classroom. I especially remember the flash talks in the afternoon, where, in ten short minutes, I learned the Russian Peasant Algorithm for multiplication from Paul Christmas. I was inspired too, to model a growth mindset, by trying something new and joining the MathTwitterBlogosphere (MTBOS). You can follow me on Twitter @mstegeorge. ICTM's Twitter handle is @MathICTM.

Past President's Message



by Bob Mann
ICTM Past President

Hello and welcome to Spring! This is always an exciting season when Robins play in the park and the PARCC plays out in our classrooms. It is also a time when the March Madness of basketball has reached its suspenseful conclusion and baseball begins in earnest. So, I thought it would be appropriate to fill this message

with a poem about one of my favorite baseball players:

Golden Boy

The score was tied at 1 to 1
The Math Team needed just one more run
Up to the plate walked Fibonacci
Spitting chew and itching crotch

He took the count to 3 and 2
5 total pitches was too few
So he fouled two back to get to 8
Called for time and stepped off the plate

The number 13 across his back
Age 21 and talking smack!
34 homers so far this year
55 total in his career

The pitch flew in at 89 miles per hour
He sent it right with lots of power
144 feet and it's still going
At 233, it started slowing

At 377, it cleared the fence
And the Golden Boy had passed this test
A batting average of .618
Fibonacci is Gold and Great!

I hope these silly couplets bring a smile to your face and possibly a brief diversion during this often hectic season and maybe, if you get the time, you can share this poem with your students and generate discussion on the relationship of these numbers and the legend of Fibonacci!

May you have a golden season and a bright end of the school year.

Dr. Bob Mann
ICTM Past-President

Board Chair Report



by Jackie Murawska, *ICTM Board Chair*

Happy spring, ICTM members! At the February 13, 2016 board meeting, which was held virtually, the board had a wonderfully productive meeting which focused on nominations, NCTM affiliate news, the 2016 ICTM Annual Conference, membership, and progress toward ICTM becoming an official PDH provider through ISBE. First, a motion

to approve the slate of nominees for the April 2016 ICTM elections passed, and a motion that the nominations committee finalize the nominations process also passed. Then, the board was fortunate to have Jean Lee, Central 1 Representative of the NCTM Affiliate Services Committee, join the conversation and update the ICTM board on upcoming events and opportunities available through NCTM.

Next, the board discussed details for the 2016 ICTM Annual Conference to be held in Peoria, IL on Oct. 7-8, 2016. Marshall Lassak, ICTM Conference Chair, joined the conversation and provided a summary of conference planning and logistics, and the coordination with ISTA (Illinois Science Teachers Association). Since the NCTM Regional Conference will be held in Chicago Nov. 29-Dec. 1, 2017, ICTM will not be holding a state conference in 2017. Thus the board is looking ahead to finalize the location for the ICTM 2018 Conference. The board also heard from Carol Nenne, ICTM Contest Chair, who provided a summary of the regional contest plans.

Membership functionality provided by the new MemberClicks service was also discussed again during this meeting to continue to iron out details in the transition to this service. A subcommittee on MemberClicks and Technology was formed to examine a few remaining issues and report back to the board at the next meeting. Similarly, a subcommittee on Membership was formed to discuss broader issues of membership strategy as related to ICTM's vision and mission and will also report back to the larger group at the next board meeting. Lastly, an Advocacy subcommittee was formed to address state and national issues of advocacy and ICTM's potential role in these issues. These ad hoc subcommittees/task forces will allow the board to continue addressing important issues between scheduled meetings.

Progress has been made regarding ICTM's application to become an official PDH provider through ISBE, and the necessary paperwork is being compiled. The next board meeting will be in Bloomington, IL and is scheduled for April 30, 2016.

PLAN NOW:

ATTEND
YOUR
LOCAL

ICTM

Regional Conference

SIU-Carbondale

Thursday
February 18, 2016

For more information, contact:
jbecker@siu.edu

WIU-Macomb

Friday
April 8, 2016

For more information, contact:
d-lafountain@wiu.edu

www.wiu.edu/cas/math/teachers_conference

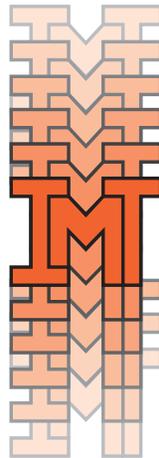
Illinois Mathematics Teacher Journal

call for articles

The editors invite submissions from both new and experienced authors, and accept articles on a range of topics, including:

- innovative classroom activities and lessons
- applications to the classroom of pedagogical research and best practices
- examples of implementing standards
- reviews of recent books on pedagogy
- any other articles that will support the professional development of ICTM members

Please send submissions to imt@ictm.org.



ICTM List Serve Update

Do you receive e-mails from the ICTM List Serve? If you answered no, then consider subscribing today. Subscribing to the List Serve is one benefit of your ICTM membership. E-mails sent through the List Serve often give information about upcoming conferences, details about professional development opportunities, information about ICTM awards and scholarships, links to math related websites and news articles, and questions/announcements from other math teachers around the state. All subscribers to the List Serve can send out messages to the recipient list. To sign up, visit www.ICTM.org and sign-in to the member login on the left hand side. You can create a new account if needed using your ICTM member number. Once logged in, select "List Serve" under the Membership tab. Here you will find simple directions about subscribing and how to send messages. Subscribe today!

Math Musings with Martin

The worst part of a sin x infection is that it comes back periodically.

NCTM Reminder:

Help your professional organizations support each other! When renewing your *National Council of Teachers of Mathematics* Membership online, don't forget to checkmark the *Affiliate Rebate* box and designate ICTM as your affiliate organization. NCTM's Affiliate Rebate program provides a per-member rebate to ICTM based on this feedback. Your attention to this detail helps provide support for your local professional organization.

ILLINOIS COUNCIL OF TEACHERS OF MATHEMATICS SCHOLARSHIPS IN MATHEMATICS EDUCATION

Do you know someone deserving of an ICTM Award?

My name is Eric Bright, newly elected ICTM Board Member and ICTM's Excellence in Middle School Mathematics award winner for 2012. I just want to tell you that being the recipient of that award changed my life. Really! Besides the honor of being selected for the award, my career path changed as I realized that ICTM was a place for me to be an agent of positive change for mathematics education in Illinois. Receiving that award emboldened and empowered me to not just change my classroom for the better but to strive for positive changes in the world at large. I've been working on that ever since.

The ICTM award really just meant the world to me, and you can bestow that same honor and affirmation on another deserving educator. And there's an award for everyone at every stage in their career. There are awards for excellence in mathematics teaching at the elementary, middle school, secondary,

and post-secondary levels as well as a Promising New Teacher Award. The Max Beberman Award honors someone who directly contributes to mathematics education by training future teachers, writing curriculum, or performing educational research. The Lee Yunker Award is for exemplary leadership in mathematics education. The Fred Flener Award honors those who provide opportunities for students to explore mathematics outside of the classroom. Finally, the Distinguished Lifetime Achievement Award is for those who have dedicated their life's work to this great profession.

You can find all of the specific criteria for each award on the ICTM website, and the nomination process is quick and simple. Nominate that special mathematics educator in your life to show them that they truly have made a difference! The award criteria, nomination process overview, and application form can be found at: <https://ictm.memberclicks.net/ictm-awards>

ILLINOIS COUNCIL OF TEACHERS OF MATHEMATICS **SCHOLARSHIPS IN MATHEMATICS EDUCATION**

As Scholarship Co-Chairs, one of our favorite things to do is give away scholarships to promising young mathematics teachers either in their first year of teaching or their senior year in college. They apply in the spring while they are still juniors or seniors if they are mathematics majors or elementary education majors with a concentration in mathematics.



Maria Christina Gianni

This year we awarded \$1500 each to Maria Christina Gianni from the University of Illinois at Champaign-Urbana teaching her first year at Gombert Elementary in Aurora, and Amy Wieting from Illinois State University where she is a senior. These deserving young ladies show a great deal of potential to become future ICTM stars.

The scholarship committee would like to thank everyone who donated to the scholarship fund as well as members who assisted in collecting donations. Without your support, ICTM could not give these awards to deserving college junior and seniors. We also would like to thank our readers who help evaluate the applications.



Amy Wieting

If you did not donate and would like to, please send a check payable to ICTM Scholarship. The check can be mailed to Sue and Randy Pippen, 24807 Winterberry Lane, Plainfield, IL 60585.

Applications for scholarships may be made by visiting <https://ictm.memberclicks.net/ictm-scholarships> and click on scholarship. All application information and forms are downloadable. Please reach out and encourage college juniors and seniors to apply for the ICTM Scholarships, due each year in March. There is a downloadable application with fill-in blanks to make it easier.

CONFERENCE CORNER

ICTM 65th Annual Conference:

What's **MATH** Got to Do With It?

WOW, what an event! Thank you to all who attended the ICTM 65th Annual Conference. Jo Boaler and Eli Luberoff gave a dynamic start to two days of professional development, networking and engagement to reinvigorate your math teaching. We hope you enjoyed the event as much as we did!

If you missed this year's ICTM Annual Conference, mark your calendar and start planning now to attend next October 7-8, 2016, when we return to Peoria. Stay tuned to www.ICTM.org for updates and breaking news on highly-anticipated Guest Speakers for the 2016 Annual Conference!



TELL US WHAT YOU THOUGHT!

If you haven't already responded to an email invitation to complete a conference survey, you can do it now at http://eiu.co1.qualtrics.com/SE/?SID=SV_eOMbNRJn89Ca5UN

Call for Speakers:



Illinois Council of Teachers of Mathematics

The Premier Organization of Mathematics Educators in Illinois

Take Advantage of the Opportunity to Present!

In 2016 the ICTM annual conference will be held at the Hotel Pere Marquette in Peoria, IL. Mathematics education has encountered considerable change in recent times and ICTM is here to provide comprehensive effective insights, practices, and activities to effectively deal with these changes.

Please consider joining over 100 other mathematics professionals who are presenting either a 60-minute talk or a 90-minute workshop in Tinley Park. A featured speaker will provide a keynote presentation to open the conference on Friday morning. Presentations and workshops will follow.

66th Annual ICTM Conference October 7-8, 2016, Peoria, IL

Be part of this exciting program and contribute to the mathematics education profession by visiting the ICTM website (<http://www.ictm.org>).

Deadline for proposal submission is March 15, 2016

Access the Speaker Proposal Form at :
<http://www.ictm.org/SpeakerProposal.htm>.

Be a part of this great event. Submit your proposal today!

Scalar Multiplication in Grades K-5

Denise Brown

Carruthers Elementary School
Murphysboro, IL

dbrown@mhs.org

Students in kindergarten through fifth grade must develop an understanding of multiplication in a variety of contexts. This understanding leads to successful problem solving in middle school and high school mathematics. Often problems given to lower grade students focus on multiplication as an additive operation. When a student's understanding of multiplication is limited to understanding multiplication as an additive operation they can become very confused years later in advanced math courses. In fact, I believe it handicaps students as soon as 5th grade when they are expected to multiply fractions by fractions and cannot extend this additive understanding to the task because it does not apply. One of the ways, we as elementary teachers can help correct this problem, is to give students opportunities to explore other meanings of multiplication. A very useful context for multiplication is scalar multiplication (one factor scales or sizes another). An understanding of scalar multiplication sets the stage for student success in Algebra and beyond.

This set of problems for k-5 students gives examples of appropriate scalar multiplication problems at each grade level. Although the CCSS standards do not address multiplication until grade 2, younger students are capable of understanding multiplicative concepts if given the opportunity. These problems are intended as an example of the k-5 continuum for scalar multiplication. Please read through all the problems thinking about the connections between grade levels and how your students' work will connect to the next grade level.

Kindergarten and 1st grade:

Present k-1 students with problems that explore the concept of twice as much and three times as much. Introducing students to the language at this age is most important. Some students this age are not ready to think multiplicatively; however, many are ready. By providing the language and opportunities for young students to develop this type of thinking students will develop a deeper conceptual understanding of place value and operations. Keep problems simple and concentrate on the action of the problem. Look for students who understand that they don't have to individually count but can copy the original quantity to arrive at a solution.

Kindergarten

Tomas has one tootsie roll. His sister Mya has twice as many tootsie rolls. How many tootsie rolls does Mya have?

Sydney is having a birthday party. Her mom said she can invite 3 friends. She wants to invite twice as many friends. How many friends does Sydney want to invite?

First Grade

If Mrs. Beckman's room is 25 floor tiles wide and Mrs. Kilquist's room is twice as long as Mrs. Beckman's. How many tiles long is Mrs. Kilquist's room?

2nd-3rd grades:

Students at this age are typically taught that multiplication is repeated addition. However, this conceptualization interferes with understanding other contexts of multiplication. For example, in fifth grade students must learn to multiply fractions. What addition are they repeating to solve $\frac{1}{10}$ times 100? The repeated addition conceptualization will handicap students in later grades by limiting their understanding of multiplication. Giving students in second and third grade problems which also explore scalar multiplication will help them develop the

ability to understand higher level problems involving multiplication. Continue to develop the language of three times as many etc.

Solving problems which require doubling or tripling the length of a rectangle and relating this change to the area would help develop these concepts as well as the problems below involving fractional amounts.

2nd Grade

Mr. Winters is two times taller than his daughter Aubrey. If Aubrey is 3 feet tall, how tall is Mr. Winters?

If Mrs. Brown's dog Skippy is two and half feet tall and Mrs. Brown is twice as tall as her dog, how tall is Mrs. Brown?

3rd Grade

If one story of a building is ten feet, how many feet tall is a 10 story building? How many feet tall is a 15 story building? 40 story building? How do you know? Write a number sentence to represent your thinking.

If a building is 350 feet tall and each story(floor) is ten feet, how many floors does the building have?

4th-5th grades

By the end of 5th grade students are expected to fluently add, subtract, multiply, and divide with whole numbers, fractions, and decimals. And, by the end of sixth master ratio and proportionality. It is crucial that 4th and 5th grade teachers develop student understanding of scalar multiplication in order for sixth grade students to develop ratio and proportional conceptual understanding. The following problems will help students develop this understanding as one factor is scaled by tenths, hundredths and thousandths.

4th Grade

The St. Louis Gateway Arch is 630 feet high. Your assignment is to construct a model of the arch which is one hundredth of the original size. How tall will the model be? How do you know? Explain the process you used to arrive at your solution. Show your mathematical thinking with a number sentence representing your work.

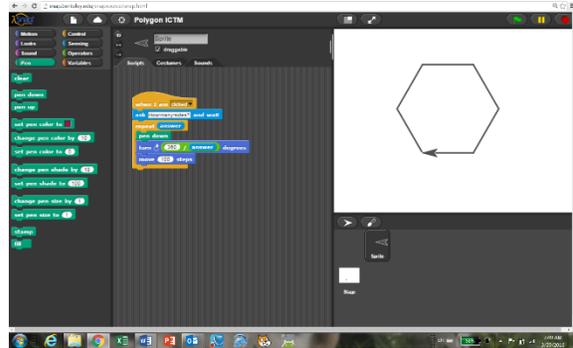
5th Grade

Joanne is building a model of the Bank of America tower in New York City that will fit on her desk at school. The skyscraper is 1,200 feet tall. She is planning to use 3 inch toothpicks to create her model. She is trying to decide whether her model should be $\frac{1}{10}$ of the original or $\frac{1}{100}$, or $\frac{1}{1000}$? Calculate how tall each size model would be if scaled down. Which size model do you think would best fit on her school desk? Why? Explain the process you used to arrive at your solution. Write a number sentence(s) that support your reasoning.

Geometry and Coding

Martin Funk

Here is an activity that gives students an opportunity to use simple, free coding tools to explore computer science in the context of geometry. This lesson was inspired by my colleagues Kris Kelsh and Julie Bar.



0. Prerequisites

Students should be familiar with regular polygons and exterior angles. They do not necessarily need to have any prior coding experience.

1. Coding Environment

We will be using a block-based coding environment, either Scratch or Snap. Both of these free softwares can be used in a web browser, but students need to create a (free) account if they want to save their work. At my school, we used Snap in the classroom because it works with iPads (and Scratch did not), but you can Scratch in the computer lab. For simplicity, this lesson will be written to be coded using Snap but can very easily be reworked for Scratch.

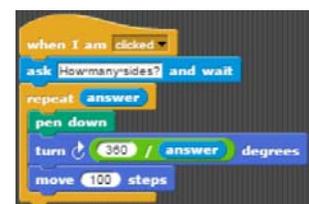
- <http://snap.berkeley.edu/> -- start by scrolling down and clicking the *Run Snap Now* button.
- <https://scratch.mit.edu/> -- start by clicking the *Try it Now* button.

2. Coding Shapes

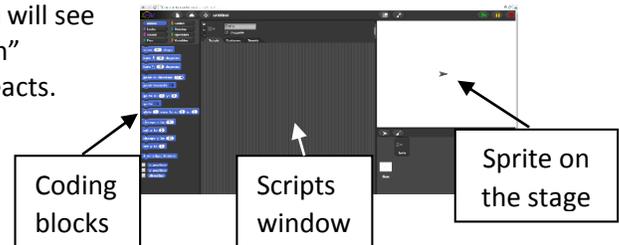
Help students open the program on their computers. This lesson is written as a guided discovery activity. In the following worksheet, students do the lesson by trying the activities and answering the questions.

Here are the answers to the questions posed in the lesson:

- The sprite moves 10 steps forward in its current direction**
 - Same as before, the sprite moves 10 steps forward in its current direction**
 - The sprite turns then moves. It seems to be following a circular path.**
 - The sprite still turns then moves. It now makes a large square path.**
 - The path of the sprite becomes visible. A square is drawn.**
 - Four times**
- Repeat 6 times to make 6 sides**
Turn 60 degrees (not 120 degrees).
The sprite turns through the exterior angle, not an interior angle.
So $360/6 = 60$ degrees
 - Repeat 8 times to make 8 sides**
Turn 45 degrees (exterior angle: $360/8 = 45$ degrees)
 - Repeat 5 times to make 5 sides**
Turn 72 degrees (exterior angle: $360/5 = 72$ degrees)
 - Since $360/n = 15$ gives us $n = 24$, we will need to set the repeat to 24.**
- The solution to the extension is block of code is at the right.**



1. Getting Started: Open the coding environment on your computer. When you open the program, there will be a sprite in the middle of a blank screen (the sprite is the arrowhead image that we will be writing code to move about the stage). On the left, you will see a panel with coding blocks, currently showing blue “Motion” options. Click on these blocks and notice how the sprite reacts.



- a. What happens when you click on the “move 10 steps” block?
- b. Drag the “move 10 steps” block into the scripts window, between the blocks and the stage. What happens when you click on the “move 10 steps” block there?
- c. Add a “turn right 15 degrees” block to the scripts window (the “right” turn is indicated by a curving arrow). Join the “move 10 steps” block to the bottom of the turn right 15 degrees block by matching the notches in the blocks. Click the block pair several times. What happens?
- d. Change the value on the turning block by replacing the number 15 with the number 90. Also, change the number of steps from 10 to 100. What happens now?
- e. Switch the blocks window from blue *motion* blocks to teal *pen* blocks. Drag a “pen down” block into the scripts window and attach the block pair from the previous step to the bottom of the “pen down” block. How does this change the program?
- f. Switch the blocks window from teal *pen* blocks to gold *control* blocks. Drag the control block “when I am clicked” into the scripts window and attach the previous blocks to it. This causes the code to run whenever the sprite is clicked.

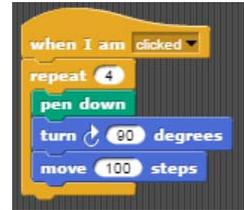
We will now complete drawing the square. Rather than bring three more pairs of turning and stepping blocks in, we will repeat the ones that we have.

How many times will this pair of turning and stepping need to run?

- g. Drag a “repeat 10” block into the scripts window. Change the 10 to 4. Remove the block trio of pen down, turn and move blocks from their current position and put them inside of the “repeat” block. Attach this repeat block to the “when I am clicked” block.

Your code should look like this:

The square should be drawn every time the sprite is clicked, even if it is moved to a new location. To clear out the square that have been drawn, click the “clear” block found in the *pen* blocks.



2. Drawing Polygons: Now that you know how to make a square, can you make other polygons?
 - a. Hexagon – what two changes will you need to make to your code to make a hexagon?

 - b. Octagon – what changes will you need to make to your code to make a octagon?

 - c. Pentagon – what changes will you need to make to your code to make a pentagon?

 - d. Change the angle to 15 degrees. How many sides will you need to complete the shape?

Run the code to verify your result. You may want to change the number of steps back to 10 to see the shape.

3. Extensions and challenges:
 - a. Play with the pen attributes by changing the pen width and color.
 - b. Let the program ask for the number of sides of the polygon it wants. In the light-blue *sensing* blocks, drag a “ask ‘what’s your name’ and wait” block in. Replace “what’s your name” with “how many sides?” The user’s answer will be stored in the “answer” block. Use this value to replace the number in the “repeat” block. The program will also need to calculate the angle of the turn. You can find in a division block with the green *operators* blocks to make this calculation.
 - c. Make a new group of blocks which will draw an isosceles right triangle. You may not want to create a loop for this, but you may need to calculate how to return to the starting position. Use blocks from the green *operators* blocks to perform the calculations.



Cryptography & Mathematics Middle-Grade Afterschool Project

Summer Leader-Training Workshops University of Illinois at Chicago

July 18 - 20, 2016

July 26 - 28, 2016

Teachers and afterschool leaders: Learn to be a CryptoClub leader! Cryptography, the science of secret messages, is an intriguing STEM topic and an important application of mathematics. Leaders need not be mathematics teachers – just enthusiastic about math.

About CryptoClub: A typical CryptoClub program lasts about 16-20 sessions and uses games, treasure hunts, and other informal activities to engage students in cryptography and mathematics. It applies topics from the middle school curriculum, such as decimals and percents, division with remainder, common factors, negative numbers and pattern recognition. It also includes computer cryptography games and other activities from the CryptoClub website.

At the workshop: The workshop will provide background in the mathematics and cryptography content and give leaders a chance to experience CryptoClub games and activities while discussing pedagogical issues of leading a program. No prior cryptography experience required.

Video Tutorial Training Workshop July 20-21: Participants at the July 18-20 workshop may opt to stay an additional day to learn about producing student-made tutorials in CryptoClub.

Registration: There is a \$150 fee for a Leader-Training Workshop and a \$50 fee for the Video Tutorial Training Workshop. For more information and to register for a workshop go to:

www.math.uic.edu/CryptoClubProject



The CryptoClub Project is funded by the National Science Foundation, Grants #0840313 and #1311977.

Your ICTM Board Representatives

George Reese (2015–17) President University of Illinois-MSTE	Sendhil Revuluri (2015–18) Director-at-Large University of Illinois at U-C	Martin Funk (2013–16) Director 9–12 New Trier High School	Carly Morales (2014–17) Director EC–6 Regional Office of Education #38
George Reese (2014–15) President-Elect University of Illinois - MSTE	Zachary Herrmann (2014–17) Director-at-Large Evanston Township High School	Jeremy Babel (2015–18) Director 9-12 Leyden HS	Denise Brown (2015–18) Director EC–6 Carruthers Elementary School
Marshall Lassak Conference Coordinator Eastern IL University	Craig Cullen (2013–16) Director, University/ Community College Illinois State University	Anita Reid (2014–16) Director 5–8 Lewistown Central High School	
Jackie Murawska (2013–16) Board Chair Saint Xavier University	Peter Wiles (2014–17) Director, University/ Community College Eastern Illinois University	Eric Bright (2014–17) Director 5–8 Charleston Middle School	

Please contact any of the following ICTM board members if you have any questions or concerns:

President

George Reese
MSTE Office
505 East Green Street
Champaign, IL 61820
reese@illinois.edu

Board Chair

Jackie Murawska
Saint Xavier University
3700 West 103rd Street
Chicago, IL 60655
murawska@sxu.edu

Conference Director

Marshall Lassak
mblassak@eiu.edu

ICTM Bulletin Volume XXXVII
Issue 2

Directors: Anita Reid/Denise Brown

Reports: George Reese
Robert Mann
Jackie Murawska

Activities: Denise Brown
Martin Funk

Conference Info: Marshall Lassak

Produced by: Eastern Illinois University
School of Continuing Education

Why You Should Join

- Connect with other educators working to improve mathematics education.
- Contribute to mathematics education.
- Stay current about regional, state and national meetings.
- Attend conferences at reduced rates.
- Receive the **ILLINOIS MATHEMATICS TEACHER**, a journal with articles about teaching and learning mathematics at levels from kindergarten to college.
- Receive the **ICTM BULLETIN** with classroom activities, news and information about professional development opportunities.

CALL FOR ARTICLES

Can you help?

The Illinois Mathematics Teacher is always looking for new reviewers and articles. If you would like to volunteer as a reviewer or have an article to submit, please contact the editors at imt@ictm.org.

We look forward to hearing from you.

For ICTM Membership Services, please contact:

ICTM Membership

c/o School of Continuing Education
Eastern Illinois University
600 Lincoln Avenue
Charleston, IL 61920-3099

phone 800-446-8918 or 217-581-5116

e-mail ictm_membership@eiu.edu

Join or Renew Online at: <https://ictm.memberclicks.net/membership-application>

ICTM MEMBERSHIP APPLICATION FORM

Clip out this page and mail it with your payment to the address below.

- New Member
 Reinstatement
 Renewal
 Change of Address

Name _____ Member Number _____

Check preferred mailing address. Please complete BOTH columns.

- | | |
|--|--|
| <input type="checkbox"/> Home
Street Address: _____
City: _____
State: _____
Zip Code: _____
Phone: _____
Email: _____ | <input type="checkbox"/> Work
School Address: _____
City: _____
State: _____
Zip Code: _____
Phone: _____
Email: _____ |
|--|--|

Regional Office of Education

NCTM Member? Yes No

Profession: (check only one)

- EC-3 Teacher
- 4-6 Teacher
- Jr. High/Middle Teacher
- Sr. High Teacher
- Special Education Teacher
- Community College
- College/University
- Administration
- Retired
- Student
- Institutional Member
- Other
- Other

Interests: (check up to three)

- Remedial
- Gifted
- Teacher Education
- Assessment
- Certification
- Multicultural Education
- Teacher Evaluation
- Professional Development
- Scholarship
- Technology
- Research
- Math Contest

Please note, the ICTM membership year ends on November 5, and memberships are not prorated. However, memberships purchased between April 1 and November 4 will be active for the full membership cycle purchased, PLUS a grace period between the date of purchase and November 5, the beginning of the next full membership cycle.

Dues for ICTM Membership:

Regular member

- one year \$35
- three year \$100
- five years \$160

Student Member

(This rate is reserved for full-time, baccalaureate pre-service students only)

- one year \$20

Retired Member

- one year \$30

Institutional Member

- one year \$100

(The name of classroom teacher in the blank at the top of this page will be used as the contact teacher for the institutional membership. Please make sure to indicate a contact person.)

If recruited as a new member by a current member, please list the recruiter's name _____

Mail this application and a check or money order payable to: **EASTERN ILLINOIS UNIVERSITY**

ICTM Membership
 School of Continuing Education
 Eastern Illinois University
 600 Lincoln Avenue
 Charleston, IL 61920-3099

Total Enclosed: \$ _____

2MAR2010



ICTM Spring Regional Conferences

Southern Illinois University at Carbondale Thursday, February 18, 2016

Western Illinois University, Macomb Friday, April 8, 2016

NCSM Annual Conference

San Francisco, CA

April 11-13, 2016

NCTM 2015 Annual Meeting and Conference

San Francisco, CA

April 13-15, 2016

ICTM 2016 Math Contest

University of Illinois at Urbana-Champaign

May 7, 2016

FIRST CLASS MAIL
US POSTAGE PAID
CHARLESTON IL 61920
PERMIT NO 24

901090

c/o Eastern Illinois University
School of Continuing Education
600 Lincoln Ave.
Charleston, IL 61920-3099

