DO YOU GII?

Stop by the Casio booth at NCTM #1441 for an exclusive look at our new graphing calculators, web site, fx-Manager Software, testimonial videos, new training videos and much more!

Look inside and stop by booth #1441 to see if you won $2,000 or a class set of Casio GII Graphing Calculators

©2010 CASIO AMERICA, INC.
The publications and programs of the National Council of Teachers of Mathematics present a variety of viewpoints. The content, affiliations, and views expressed or implied in this publication, unless otherwise noted, should not be interpreted as official positions of the Council. References to particular commercial products by a speaker should not be construed as an NCTM endorsement of said product(s). NCTM reserves the right to change speakers, change facilities, or modify program content.

NCTM does not sell or distribute member e-mail addresses in compliance with Federal privacy policies. However, some speakers on this program have elected to print their e-mail addresses as a means for individual correspondence with conference attendees. Unsolicited commercial e-mail or unsolicited bulk e-mail, whether or not that e-mail is commercial in nature, is expressly prohibited. Any use of e-mail addresses beyond personal correspondence is not authorized by NCTM.

National Council of Teachers of Mathematics, 1906 Association Drive, Reston, VA 20191-1502; Telephone (703) 620-9840; Fax (703) 476-2970; e-mail nctm@nctm.org; Web www.nctm.org.
Welcome to the largest, most exciting annual gathering of mathematics educators in the world. The 88th Annual Meeting and Exposition of the National Council of Teachers of Mathematics brings together outstanding classroom teachers, mathematics educators, and mathematicians to share what they know and to exchange ideas all in support of helping every student learn challenging mathematics. On behalf of the Board of Directors, Program and Local Arrangements committees, NCTM staff, and the many volunteers who have worked long hours over the past two years to put together an extraordinary set of opportunities for you, welcome to San Diego.

Our conference theme, Connections: Linking Concepts and Context, provides just a glimpse of what the conference will offer. Our Program Committee has put together an exceptional group of presentations for you to explore and consider so that you can help all students learn. You will find presentations that challenge you to examine your own teaching within the context of connecting concepts and context, as well as your connections to your students and their community, and your perspectives on mathematics.

There is much more to the conference than the more than 700 presentations planned for your professional enrichment. Over the next three days, take advantage of the extraordinary opportunities you’ll have to meet new colleagues and to form stimulating professional and personal relationships that can last a lifetime. With its idyllic climate, 70 miles of beaches, and a wide variety of attractions, San Diego has something for everyone. Popular attractions include the San Diego Zoo, Sea World, Balboa Park, and Coronado Island. Explore San Diego’s charming neighborhoods and experience its vibrant nightlife. Sightseeing tours are available to NCTM attendees and guests through NCTM’s shuttle company.

We hope that after your San Diego experiences you will return to your classroom and colleagues full of new ideas and fresh perspectives that will expand your thinking about the mathematics you teach and the students whose lives you influence every day.

Welcome to the Council’s 2010 Annual Meeting and Exposition. The NCTM staff and I are delighted that you decided to join us for this wonderful event in sunny Southern California!

The NCTM Annual Meeting is a truly awesome event not only because of its size—we have more than 12,000 students, teachers, and educators attending our conference—but also because of its scope of coverage. This year’s meeting is no exception: there are more than 700 presentations to choose from, covering a wide range of topics. There are presentations on such timely topics as the national common core standards, response to intervention strategy, and NCTM’s recent publication, Focus in High School Mathematics: Reasoning and Sense Making. Moreover, you will discover that mathematics is everywhere, even in such unexpected places as origami, the Federalist papers, the NBA draft lottery, opera, and poetry. I am confident that you will grow professionally and have fun in the process.
Inviting to the Touch.

You’re invited to experience the new TI-Nspire™ handheld with Touchpad.

Come by TI Booth #1223 to get your hands on one and feel the difference.

Visit education.ti.com/nspire.
THE 2010 NCTM Annual Meeting and Exposition officially begins with the Opening Session, starting at 5:30 p.m. on Wednesday, April 21, in Ballroom 20 at the San Diego Convention Center. All other presentations begin at 8:00 a.m. each day and are scheduled concurrently throughout the day on Thursday, Friday, and Saturday.

We have made every attempt to provide adequate seating for participants at the Annual Meeting and Exposition. The room capacity for each presentation is listed on all meeting room signs. For your safety and because of fire regulations, only those with seats will be allowed in meeting rooms. To comply with fire codes, it may be necessary to ask any person sitting on the floor or standing to leave the room.

Please remember:

• All meeting rooms will be cleared between presentations.
• All seats are available on a first-come, first-served basis.
• Reserving spaces in line or saving seats is not permitted.
• As a courtesy to the speakers and your colleagues, please turn off your cell phone during all presentations.

Learn↔Reflect sessions are open for anyone to attend throughout the day. Personalized certificates will be prepared for those attendees who attend the Kickoff session, at least one Learn↔Reflect session during the day, and the final Reflection session.

New Teacher Strand
The New Teacher strand offers sessions and gallery workshops designed to answer questions and concerns of new teachers. Presentations are grade-band-specific and include topics from management and motivation, to engaging struggling students, to a celebration of those entering and just beginning their teaching careers. Learn, network with other new teachers, and get your questions answered. Targeted to early career teachers and those working on certification. All are welcome.

Look for this symbol, , on Friday, April 23, 2010, for presentations that are part of this strand. Join the New Teacher Kickoff on Thursday at 3:00 p.m.

Visit www.nctm.org/newteacher for more information.

NCTM Committee Presentations
NCTM committee presentations are identified by the symbol. For a list of all NCTM committees, please visit www.nctm.org.

Equity Strand
The Equity strand features presentations given by the Benjamin Banneker Association, TODOS: Mathematics for ALL, and Women and Mathematics Education. Presentations are scheduled throughout the conference.

Mathematical Association Presidents’ Series
The Presidents’ Series is a feature of the NCTM Annual Meeting program that highlights connections among the mathematical community at different levels. Presentations are scheduled throughout the conference.

Come, Connect, Communicate
Join your colleagues in informational discussions about the latest trends in education. Held on Friday, these small-group discussions will be led by a facilitator and provide attendees with a place to focus on important issues in the education world.
Raytheon believes when students are engaged and inspired by math and science, anything is possible. That’s why we created the MathMovesU® national initiative. It takes math and science to fun, exciting and innovative places: like having kids engineer their own thrills through a new Raytheon experience at INNOVENTIONS at Epcot® at the Walt Disney World® Resort; compete with peers in the Raytheon MATHCOUNTS® National Competition; use math to talk football with the New England Patriots; or explore a range of interactive activities on www.mathmovesu.com. It’s all part of our mission to inspire today’s students to be tomorrow’s leaders.

Visit us at Booth 1053 to learn more and enter to win a $250 gift card.

www.MathMovesU.com
New Member and First Timers’ Orientation

New to NCTM or a first-time attendee? Hear about maximizing your NCTM member experience and get takeaways full of classroom-ready activities with the New Member and First Timers’ Orientation. Plus, the sessions will discuss the format of the conference and help attendees make the most of their experience. Our attendees are representative of the United States, Canada, and numerous international locations.

<table>
<thead>
<tr>
<th>Wednesday</th>
<th>Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session #1</td>
<td>Session #3</td>
</tr>
<tr>
<td>4:00 p.m.–4:30 p.m.</td>
<td>7:15 a.m.–7:45 a.m.</td>
</tr>
<tr>
<td>Room 6 A (Convention Center)</td>
<td>Room 6 A (Convention Center)</td>
</tr>
</tbody>
</table>

Types of Presentations

All presentations are open to all conference participants. Admission is on a first-come, first-served basis. Reserving spaces in line or saving seats in not permitted.

<table>
<thead>
<tr>
<th>Session (60 minutes)</th>
<th>Rooms are set theatre style and vary in size.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Session (60 minutes)</td>
<td>Rooms are set theatre style and vary in size. Research sessions emphasize the connection between research and practice.</td>
</tr>
<tr>
<td>Gallery Workshop (90 minutes)</td>
<td>Rooms are set with round tables for hands-on work and additional seating around the perimeter of the room. The gallery participants will receive the print material and observe the workshop in a fashion similar to a classroom observer.</td>
</tr>
<tr>
<td>Exhibitor Workshop (60 minutes)</td>
<td>Rooms are set theatre style for 100 people. Exhibitors showcase their products and services away from the exhibit hall. Look for the symbol indicating Exhibitor Workshops in the program book.</td>
</tr>
</tbody>
</table>

Grade Bands

To assist attendees in finding appropriate presentations to attend, each presentation lists the presentation’s target grade band audience. The grade bands are:

- **Pre-K–2**—preschool and prekindergarten through grade 2
- **Grades 3–5**—grades 3 through 5
- **Grades 6–8**—grades 6 through 8
- **Grades 9–12**—grades 9 through 12
- **Higher Education**—university and college level issues including both two-year and four-year institutions
- **Preservice and In-Service**—content and techniques for providers of preservice teacher education and professional development for practicing teachers, supervisors, specialists, coaches and mathematics educators.
- **General Interest**—applicable to all grades and audiences

On-Site Daily News

Start each morning with the NCTM *Daily News*, which will include late-breaking news about the 2010 NCTM Annual Meeting and Exposition. Program or speaker changes and cancellations will be listed as well. The *Daily News* will be distributed in the lobby of the San Diego Convention Center and available in the Manchester Grand Hyatt San Diego and the San Diego Marriott Hotel and Marina.

Tips for a Rewarding Annual Meeting and Exposition

- Become familiar with the layout of the San Diego Convention Center, Manchester Grand Hyatt San Diego, and San Diego Marriott Hotel and Marina by reviewing the floor plans on pages 168–71.
- Visit the NCTM Bookstore and save 25 percent on all NCTM resources.
- Stop by the Information Booth for information on the local San Diego, California, area.
- If attending the conference with colleagues, attend different presentations and share your learned knowledge after the conference.
- Wear comfortable shoes and clothes, and dress in layers.
- Turn off cell phones and pagers during presentations.
- Visit the Exhibit Hall, where more than 200 exhibitors will share the latest educational products.
- The more you participate in the presentations, the more you will get out of the conference.
- Help us continually improve the Annual Meeting and Exposition by filling out the post-conference survey, sent via email in late April.
- Be safe! Remove your name badge when you leave the conference facilities at the end of the day.
Everyone's favorite puzzle is now your students' favorite MATH LESSON

ACT NOW! CONFERENCE SPECIAL
ends June 1, 2010.

You CAN do the RUBIK'S CUBE

Enhance learning in grades 3-12 with the Rubik's Cube Math Education Kit. Makes learning Math more fun!

Lessons in GEOMETRY, ALGEBRA and GENERAL MATH
9 lessons aligned to National and State Math Standards

Each kit only $33.33* a $150 value!
*when purchasing 3 kits

Math Education Kit contains everything educators need to use the Rubik's Cube as a Math Manipulative
12 Rubik's Cubes
1 Instructional DVD
1 CD with 12 Diverse Math Lessons and Activities
1 Teaching Tips
12 Solution Guides
2 Sign Out Sheets
2 Posters
2 Certificates
4 Stickers

Student Benefits
Promotes 21st Century Skills including problem solving, critical thinking, perseverance and encourages logical thinking
Helps to visualize Math concepts

Learn more at www.YouCanDoTheCube.com
- Online community
- Teacher experiences with program
- Free downloads
- List of schools currently using the Math Education Kit

© 2010 Seven Towns Limited
Rubik's® is a registered trademark of Seven Towns, Ltd. London, England

Learn More at our workshop on Friday, April 23
4:00 p.m. – 5:00 p.m., Room 1A in the Convention Center
Booth #1847
These are just a few of the many resources available to you that are included with your membership. Check us out to see how we can help you; visit www.nctm.org/membership.

Need help with your membership or have questions? Contact us by phone (800) 235-7566 or by e-mail nctm@nctm.org.
Every day you shape futures.
You can count on us to help.

www.keypress.com • Visit us at booth #1041
WARNING: YOUR STUDENTS MAY DEVELOP A SUDDEN, INCURABLE INTEREST IN MATHEMATICS.
Registration Hours
8:00 a.m.–7:00 p.m.

Bookstore and Member Showcase Hours
10:00 a.m.–7:00 p.m.

Fire Codes
We have made every attempt to provide adequate seating for participants at the conference, but for your safety and because of fire regulations, only those with seats will be allowed in meeting rooms. To conform to fire codes, it will be necessary to ask persons sitting on the floor or standing to leave the room.

HIGHLIGHTS

- Opening Session (Presentation 2): Change Is Good When Your Attitude Is Great!
NCTM Regional Caucuses
Regional Caucuses for Delegates and Alternates

<table>
<thead>
<tr>
<th>Caucus</th>
<th>Location</th>
<th>Presiders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Caucus</td>
<td>17 B</td>
<td>Rita Janes, Educational Solutions, St. John’s, Newfoundland</td>
</tr>
<tr>
<td>2:00 p.m.—4:00 p.m.</td>
<td>(Convention Center)</td>
<td></td>
</tr>
<tr>
<td>Central Caucus</td>
<td>16 B</td>
<td>Bethany Noblitt, Northern Kentucky University,</td>
</tr>
<tr>
<td>2:00 p.m.—4:00 p.m.</td>
<td>(Convention Center)</td>
<td>Highland Heights, Kentucky</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tom Muchlinski, Retired, Plymouth, Minnesota</td>
</tr>
<tr>
<td>Eastern Caucus</td>
<td>16 A</td>
<td>Maria Diamantis, Southern Connecticut State University,</td>
</tr>
<tr>
<td>2:00 p.m.—4:00 p.m.</td>
<td>(Convention Center)</td>
<td>New Haven, Connecticut</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neil Cooperman, Millburn High School, Millburn, New Jersey</td>
</tr>
<tr>
<td>Southern Caucus</td>
<td>14 A/B</td>
<td>Desha L. Williams, Kennesaw State University, Kennesaw, Georgia</td>
</tr>
<tr>
<td>2:00 p.m.—4:00 p.m.</td>
<td>(Convention Center)</td>
<td>Vanessa Cleaver, Little Rock School District, Little Rock, Arkansas</td>
</tr>
<tr>
<td>Western Caucus</td>
<td>15 A/B</td>
<td>David Brancamp, Nevada Department of Education,</td>
</tr>
<tr>
<td>2:00 p.m.—4:00 p.m.</td>
<td>(Convention Center)</td>
<td>Carson City, Nevada</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sandy Christie, Puget Sound Educational Service District, Renton, Washington</td>
</tr>
<tr>
<td>Affiliates-at-Large Caucus</td>
<td>17 A</td>
<td>Vena Long, University of Tennessee, Knoxville, Tennessee</td>
</tr>
<tr>
<td>2:00 p.m.—4:00 p.m.</td>
<td>(Convention Center)</td>
<td></td>
</tr>
</tbody>
</table>

Focusing on a coherent approach for the 21st century, Math Innovations engages students in a rich understanding of mathematics.

Stop by our booth and see how Math Innovations focuses on your students’ success!

From the same publisher as: We Discover Math, Project M³, Math Trailblazers, and SIMMS Integrated Mathematics.

Go to: www.kendallhunt.com/mathinnovations to download your free digital sample.
New Member and First Timers’ Orientation
(General Interest) Session

New to NCTM? Join members of the NCTM Board to learn how to maximize your membership experience! From journals and online lessons, tools, and activities to networking and career-advancement opportunities, you’ll discover all that NCTM has to offer you. First-time attendees, learn how to make the most of your time at the conference.

National Council of Teachers of Mathematics Board of Directors
National Council of Teachers of Mathematics, Reston, Virginia

5:30 p.m.–7:00 p.m.

Change Is Good When Your Attitude Is Great!
Opening Session

Remarks by NCTM President Henry S. Kepner, Jr.

Change happens! Life happens! Change is essential to any growth process, yet nobody wants to change. Progress necessitates change, and change is the key to progress. Jolley will share his “VDAD” (Vision, Decision, Action, Desire) formula for embracing change. You will view change as an ally, believing that change is good!

Willie Jolley is truly a renaissance man—an award winning speaker, singer, author, and national columnist, all in one. In 1999 he was named “One of the Outstanding Five Speakers in the World” by Toastmasters International. He is the author of two international best selling books, *It Only Takes a Minute to Change Your Life!* and *A Setback Is a Setup for a Comeback*, and coauthor of several more. He is host of the radio show, *The Willie Jolley Weekend Show* on XM Radio.

Willie Jolley
Willie Jolley Productions, Inc., Washington, D.C.

Ballroom 20 (Convention Center)
get plugged in for FREE*

* Visit ORIGO Education at Booth 329-432 and quote code NCTM-432 for six months free subscription to Fundamentals Game Boards. Alternatively, go to www.origoeducation.com/nctm-offer.
Across the world lesson study gives teachers immediate classroom-based feedback that helps them evaluate and improve their instructional effectiveness. They develop a method for ongoing learning about mathematics and the craft of teaching.

In A Mathematics Leader’s Guide to Lesson Study in Practice, Jane Gorman, June Mark, and Johannah Nikula share the best practices they’ve learned in leading lesson study teams, training lesson study coaches, and launching lesson study programs in schools. Taking teams beyond understanding how to get started, the guide provides a resource for leaders and teams to use across many lesson study cycles to continually deepen lesson study practices.

Focusing on students is a powerful force for teacher learning. Teams set student-centered goals reflecting the learning needs of their own students. They study the mathematics through a student lens.

—Jane Gorman, June Mark, and Johannah Nikula

A Mathematics Leader’s Guide to Lesson Study in Practice, Gr 6–12

ALSO AVAILABLE
Lesson Study in Practice: A Mathematics Staff Development Course offers a structured introduction to lesson study in a learn-by-doing format. Includes 10 ready-to-go PD sessions and a DVD-ROM with classroom case-study videos and more.

Save 30% at Heinemann Booth #2032

Visit Heinemann.com for samples of video and sessions.
NEW BOOKS from NCTM

Shop online where you can view tables of contents and sample pages! For more information or to place an order, visit www.nctm.org/catalog or call (800) 235-7566.

Teaching and Learning Proof Across the Grades
Stock #: 13956
List Price: $125.00
Member Price: $100.00
Conference Price: $93.75

Focus in High School Mathematics: Statistics and Probability
Stock #: 13526
List Price: $28.95
Member Price: $23.16
Conference Price: $21.71

Focus in High School Mathematics: Reasoning and Sense Making
Stock #: 13494
List Price: $34.95
Member Price: $27.96
Conference Price: $26.21

Promoting Purposeful Discourse
Stock #: 13484
List Price: $35.95
Member Price: $28.76
Conference Price: $26.96

Good Questions: Great Ways to Differentiate Mathematics Instruction
Stock #: 13513
List Price: $29.95
Member Price: $23.96
Conference Price: $22.46

Understanding Geometry for a Changing World, 7th Yearbook
Stock #: 13466
List Price: $52.95
Member Price: $42.36
Conference Price: $39.71

Designing Professional Development for Teachers of Science and Mathematics, 5th Edition
Stock #: 13761
List Price: $39.95
Member Price: $31.96
Conference Price: $29.96

A Guide to Mathematics Leadership
Stock #: 13762
List Price: $28.95
Member Price: $23.16
Conference Price: $21.71

Focus in Grades Pre-K–2
Stock #: 13486
List Price: $34.95
Member Price: $27.96
Conference Price: $26.21

Contemporary Issues in Mathematics Curriculum
Stock #: 13591
List Price: $TK
Member Price: $TK
Conference Price: $TK

All conference attendees will receive a special conference discount of 25% off the NCTM list price on all purchases made in the Bookstore.* Visit the NCTM Bookstore in the Exhibit Hall!

Store hours: Wednesday 10 a.m.–7 p.m. • Thursday 7 a.m.–5:30 p.m.
Friday 7:30 a.m.–5:30 p.m. • Saturday 8:30 a.m.–12 p.m.

*Conference discount not valid on sale items.
## Registration Hours
7:00 a.m.–4:00 p.m.

## Exhibits and Cyber Café Hours
8:30 a.m.–5:00 p.m.

## Bookstore and Member Showcase Hours
7:00 a.m.–5:30 p.m.

### Fire Codes
We have made every attempt to provide adequate seating for participants at the conference, but for your safety and because of fire regulations, only those with seats will be allowed in meeting rooms. To conform to fire codes, it will be necessary to ask persons sitting on the floor or standing to leave the room.

### HIGHLIGHTS
- 61st Annual Delegate Assembly (Presentation 4)
- Learn↔Reflect Kickoff (Presentation 69)
- New Teacher Workshop and Kickoff (Presentation 302.1)
- Learn↔Reflect Reflection Session (Presentation 307)
- NCTM President’s Address (Presentation 340)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00</td>
<td></td>
</tr>
<tr>
<td>8:30</td>
<td></td>
</tr>
<tr>
<td>9:00</td>
<td></td>
</tr>
<tr>
<td>9:30</td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td></td>
</tr>
<tr>
<td>10:30</td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td></td>
</tr>
<tr>
<td>11:30</td>
<td></td>
</tr>
<tr>
<td>Noon</td>
<td></td>
</tr>
<tr>
<td>12:30</td>
<td></td>
</tr>
<tr>
<td>1:00</td>
<td></td>
</tr>
<tr>
<td>1:30</td>
<td></td>
</tr>
<tr>
<td>2:00</td>
<td></td>
</tr>
<tr>
<td>2:30</td>
<td></td>
</tr>
<tr>
<td>3:00</td>
<td></td>
</tr>
<tr>
<td>3:30</td>
<td></td>
</tr>
<tr>
<td>4:00</td>
<td></td>
</tr>
<tr>
<td>4:30</td>
<td></td>
</tr>
<tr>
<td>5:00</td>
<td></td>
</tr>
</tbody>
</table>

**Learn↔Reflect Strand**

**Exhibitor Workshop**

**New Teacher Strand**

**NCTM Committee Presentation**
### New Member and First Timers’ Orientation (General Interest) Session

New to NCTM? Join members of the NCTM Board to learn how to maximize your membership experience! From journals and online lessons, tools, and activities to networking and career-advancement opportunities, you’ll discover all that NCTM has to offer you. First-time attendees, learn how to make the most of your time at the conference.

**National Council of Teachers of Mathematics Board of Directors**
National Council of Teachers of Mathematics, Reston, Virginia

*6 A (Convention Center)*

### 61st Annual Delegate Assembly (General Interest) Session

This session is a forum for delegates and designated leaders of NCTM Affiliates to make recommendations to the NCTM Board of Directors concerning activities and policies of NCTM and mathematics education.

**Affiliate Services Committee**
National Council of Teachers of Mathematics, Reston, Virginia

*6 B (Convention Center)*

### The Teacher Development Continuum in China (General Interest) Session

Mathematics teachers in China progress through a sequence of levels with increasing mentoring and curriculum responsibilities. This session will describe how this system works in China, on the basis of findings of the August 2009 conference for Chinese and American mathematics educators sponsored by the U.S. National Commission on Math Instruction.

**Joseph G. Rosenstein**
Rutgers University, New Brunswick, New Jersey

**Ann Lawrence**
Consultant, Washington, D.C.

**Rick Scott**
New Mexico Department of Higher Education, Santa Fe

*7 B (Convention Center)*

### Connecting Algebra from Grade to Grade! (General Interest) Session

Explore classic problems as algebra develops, grades K–12, in topics such as patterns, functions, and rate of change. Solve problems, view students’ work demonstrating connections for concept development. Gain the insight that the structure of problems formed in early grades is the foundation for creating a connected vision of math.

**Nell W. McAnelly**
Louisiana State University, Baton Rouge

*Elizabeth Ballroom D/E (Hyatt)*

### Promote Number Sense with Effective Games and Practices (Pre-K–2) Session

Experience highly engaging activities and instructional strategies that promote students’ greater participation and sense making. A ready-to-use handout will help you enhance mathematical reasoning and build your students’ confidence. Discover repeatable, adaptable activities that work well at school and home.

**Laura Lee Choate**
Fallbrook Union Elementary School District, California

*16 B (Convention Center)*

### Differentiation: Supporting and Challenging All Students (Pre-K–2) Session

The diversity of learning needs in classrooms is growing. By adapting classroom practices that address this growing diversity, teachers can increase the likelihood that curricular outcomes will be met. Come explore how to transform tasks to allow access and success for all students.

**Amy Cliffe Mayfield**
Math Solutions, Sausalito, California

*5 B (Convention Center)*

---

**Visit the NCTM Bookstore and save 25% off the list price of all publications and specialty items!**
9
Supporting Teachers at Crucial Junctures
(Pre-K–2, 9–12, Higher Education, Preservice and In-Service) Session
This session will discuss the nature of three graduate-level mathematics education programs that are designed to support teachers at crucial junctures in the mathematics education continuum. Our focuses will be on programs for grades K–3 mathematics specialists, Algebra 1 teachers, and newly certified secondary school mathematics teachers.

Ira Papick
University of Nebraska—Lincoln
Jim Lewis
University of Nebraska—Lincoln

10
Grades Pre-K-2 Math: It’s Mostly about the Numbers
(Pre-K–2, Preservice and In-Service) Session
Current recommendations focus on helping students build an understanding of number and number relationships. This begins with helping students build an intuitive feel for number meaning through explorations and experiences. This session will provide teachers with concrete ideas to take back to their own classrooms.

Carol Inzerillo
Kendall Hunt Publishing Company, Dubuque, Iowa

11
Flips, Turns, and Slides: Sorry, This Is Not Dance Class
(Pre-K–5) Session
This presentation will give you classroom resources to help your students develop the spatial visualization skills needed to recognize and perform geometric transformation (flips, turns, and slides). Each participant will create their own “Flips, Turns, and Slides” book.

Belinda Phillips Robertson
Arkansas Center for Mathematics and Science Education, University of Central Arkansas, Conway

12
I’ve Assessed: Now What? New Insights into Data-Guided Instructional Planning
(Pre-K–5) Session
IES-funded research examining three years of longitudinal assessment data reveals patterns in students’ learning that apply to classroom instruction. Learn about these new patterns and their relevance to your students and instruction. Actual profiles and lesson plans will be shared, as well as guidance on effective classroom implementation.

Herbert P. Ginsburg
Teachers College, Columbia University, New York, New York
Doug Moore
Wireless Generation, Brooklyn, New York

13
Math Is a Life Skill: Presenting Mathematical Concepts in Contexts That Students Understand
(Pre-K–5) Session
Stories that present mathematical concepts within the context of a kid’s-world setting help students to understand that math isn’t just a school skill: it’s a life skill. Visual models help students to understand difficult concepts, make connections to other areas of learning, and build their mathematical comprehension.

Stuart J. Murphy
MathStart Series, Boston, Massachusetts

14
Keeping Up, Not Catching Up: Differentiating Instruction without Differentiating Children
(Pre-K–5) Session
For strugglers, timing matters. A little help before a lesson gives a child two chances to learn—the help session, and then the lesson for which the child is more ready. It saves time, doesn’t hold the class back, and helps strugglers get the real lesson, not watered down, so they can rejoin the mainstream rather than falling further behind.

Shannon Sauder
Cunniff Elementary School, Watertown, Massachusetts
E. Paul Goldenberg
Education Development Center, Newton, Massachusetts
The NCTM Membership Showcase has activities, lessons, sample journals, and more. Stop by!
22

Using Misconceptions and Students’ Thinking to Deepen Teachers’ Mathematics Knowledge

(3–8, Preservice and In-Service) Session

Explore activities intended to develop teachers’ knowledge of content and students. Grades 3–8 topics from fractions, algebra, and geometry will situate three types of activities—analyzing students’ work, discussing one’s own misconceptions, and engaging with research on students’ thinking.

Mary Lou Metz  
Indiana University of Pennsylvania

Amy F. Hillen  
Kennesaw State University, Georgia

Elizabeth Hughes  
University of Northern Iowa, Cedar Falls

Manchester Ballroom B (Hyatt)

23

Journey through the Core

(3–12) Session

One of the goals of the team writing the common core standards was to capture the coherence of mathematics. The team identified unifying principles that tie together the disparate topics in school mathematics. The speaker will describe these principles and illustrate with examples how they can provide coherence to the curriculum.

William McCallum  
University of Arizona, Tucson

6 E (Convention Center)

24

Making Sense of Multiplication with Fractions: The Role of Context

(6–8) Session

Field-tested, carefully crafted problems that use the context of designing urban playgrounds will be examined, in order to support students’ development of big ideas and strategies related to multiplication with fractions and equivalent forms of fractions—decimals and percents. Helpful suggestions for classroom use and materials will be provided.

Lynn D. Tarlow  
City University of New York—City College

Marina G (Marriott)

25

Wikis in the Math Classroom

(6–12) Session

Increase classroom communication and collaboration. Create a classroom resource. Discover how wikis can be used in the math classroom. Receive how-to information including lesson ideas, lesson plans, technology tips, and related Web site information.

Jennie L. Gibson  
Idaho Virtual Academy, Jerome

Edward A/B/C/D (Hyatt)

26

SMART™ Games That Engage

(6–12) Session

Experience exciting, new interactive algebra games using SMART technology that will reinforce your lessons in a fun way. These engaging games can be customized to any grade level. CDs will be given out with the templates already created, waiting for your personal editing. Be prepared to interact, learn, and have fun, just like your students.

Karen Lee Compere  
Trinity Christian Academy, Addison, Texas

Judy Lins  
Trinity Christian Academy, Addison, Texas

Elizabeth Ballroom A (Hyatt)

27

Myth Busters: Engaging Students in Data Representation

(6–12) Session

Imagine your students creating their own *Myth Busters* episodes! In this session you will experience the power of giving students choices, integrating technology, and applying data analysis to bring math and science full circle. See several student-made projects and receive lesson plans and rubrics.

Amber Muscarello  
Sartartia Middle School, Sugar Land, Texas

Anna Lauryn Davila  
Sartartia Middle School, Sugar Land, Texas

Salon 1/2 (Marriott)
Build Mathematics Instructional Capacity with Help from Pearson

Learn the Latest Methodology and Teaching Strategies

Provide Targeted Improvement in Algebra and Intervention Teaching Strategies

Mathematics Institutes are designed to help educators and administrators working in kindergarten to tenth grade. Over two-and-a half days, participants will learn proven strategies, techniques, and practices to effectively help every student understand and thrive in mathematics and algebra. Workshops include K-8 Intervention, Foundations of Algebra (K-8), and Rethinking Algebra (6-10).

Build Instructional Capacity in Your District

When your district is ready to take the next step to improve math instruction, advance student achievement, and build capacity, Pearson’s on-site math training programs are the solution. Our training supports any curriculum currently in use, including Pearson’s research-based programs, and is tailored to your district’s specific needs to help you get results that matter.

Join us in BOOTH #1023 to check out our newest offerings!
28
Lines of Best Fit: Fact and Fiction?
(6–12) Session
It’s easy to push the LinReg button, but how and why does a line of best fit really work? What does “regression” mean? How is that related to correlation? And what common misunderstanding appears frequently in textbooks and on tests?
David Bock
Ithaca High School, New York
11 B (Convention Center)

29
Patty Paper Geometry on the Go!
(6–12) Session
Start easy and go far folding your way to sophisticated geometric reasoning you and your students will find irresistible! Explore how patty paper activities can motivate students to talk about geometry, use and increase their mathematical vocabulary, discover and retain important geometric ideas, and persist in wrestling with challenging problems.
Jenny K. Tsankova
Roger Williams University, Bristol, Rhode Island
Polina Dina Sabinin
Boston University, Massachusetts
6 A (Convention Center)

30
Strengthening Connections among Representations of Algebraic Functions
(6–12) Session
Connecting the symbolic, verbal, tabular, and graphical representations of algebraic functions will help students improve their depth of understanding and fluency. Shared strategies will emphasize these connections and foster an environment that encourages students’ conjectures when studying linear, nonlinear, and piecewise functions.
Elizabeth Kim McClain
University of Kansas, Lawrence
Susan Gay
University of Kansas, Lawrence
Manchester Ballroom H (Hyatt)

31
Connecting Algebraic Ideas in Middle and High School Mathematics
(6–12) Session
What does it mean for a student to have a coherent experience of algebra in middle and high school? Participants in this hands-on session will trace core algebraic ideas from middle school through high school mathematics using two NSF curricula, Connected Mathematics Project 2 and the high school CME Project, both published by Pearson.
Sarah Sword
Education Development Center, Inc., Newton, Massachusetts
Bowen Kerins
Education Development Center, Inc., Newton, Massachusetts
Salon 3 (Marriott)

32
Teaching for Understanding and Its Impact on Learning in Algebra
(6–12, Higher Education) Session
The speakers will discuss a student-friendly framework designed to develop habits of mind (predicting, applying, representing, justifying, comparing) that help students learn algebra with understanding. They will share data from a project that evaluates the use of this framework. Participants will leave with tasks and rubrics used.
Jon Hasenbank
University of Wisconsin—La Crosse
Jennifer Kosiak
University of Wisconsin—La Crosse
6 C (Convention Center)

33
Making Mathematics “Real”
(6–12, Higher Education) Session
A critical-thinking approach encouraging the development of mathematical intuition and student interaction (while discouraging blind reliance on algorithms) is described. Concrete examples come from experiences in the ultimate test-bed of linking mathematical concepts and context: beginning calculus classes with 200-plus students.
Donald Saari is a mathematician interested in dynamic systems with emphases ranging from the evolution of the universe and chaotic price dynamics to voting theory and the evolution of social norms. He directs a research institute in California that emphasizes the math of the social and behavioral sciences. His interest in teaching challenged him to find a way to teach math so that students in a class of more than 200 could outperform those in smaller classes.
Donald Saari
Institute for Math Behavioral Sciences, University of California—Irvine
20 A/B/C (Convention Center)
34  Making Dynamic Connections between Algebra and Geometry 
(9–12) Session
Assist students in connecting applications, linear equations and coordinate geometry using geometry software. The presentation will make use of Geogebra, a free program. Applications of interest to high school students will be examined and lesson outlines will be provided so that you can use the materials or modify them to fit your needs.

Amy B. Bell  
A. C. Flora High School, Columbia, South Carolina  
17 B (Convention Center)

35  Why Does a Soccer Ball Have 12 Pentagons?  
(9–12) Session
We spend most of our geometry classes on 2-D figures, but we live in a 3-D world! Improve students’ ability to think in 3-D by studying Eüler’s formula and some extensions for regular and semiregular polyhedra using manipulatives, photos of real-life models, and software. See how a soccer ball is manufactured and why it has exactly 12 pentagons.

Laurie Bass  
Ethical Culture Fieldston School, Bronx, New York  
Douglas Pavilion B (Hyatt)

36  The Equivalence of Coffee Cups and Doughnuts  
(9–12) Session
This session will explore some elements of topology, mathematics often only for advanced undergraduates that is accessible to talented students before calculus. Investigate geometric properties from a first proof course such as sets, functions, or knot theory, and receive both a proof-based and a hands-on introduction to topology.

Joshu Fisher  
Johns Hopkins University–Center for Talented Youth, Baltimore, Maryland  
14 B (Convention Center)

37  Sliding through Calculus: Using Sliders and Animations to See Patterns and Change  
(9–12, Higher Education) Session
Computer animations help students visualize concepts, patterns, and change in calculus. The speaker will compare several software programs, show examples, and discuss possibilities for using animations effectively in the classroom with students.

Ruth Dover  
Illinois Mathematics and Science Academy, Aurora  
San Diego Ballroom B (Marriott)

38  Connecting Simple Physical Phenomena to Fundamental Concepts of Calculus  
(9–12, Higher Education, Preservice and In-Service) Session
This session will show how familiar phenomena can be used to explore concepts in calculus. Data streaming collects and displays data at high rates in real time. The data is used to develop a mathematical model. The model leads to mathematical discourse on concepts. A computer algebra system will lift the discourse further to pure mathematics.

G. T. Springer  
Hewlett-Packard Company, San Diego, California  
Manchester Ballroom C (Hyatt)

39  Math Phobic? Answers to Real Problems  
(Higher Education) Session
This presentation will give strategies to help identify math-phobic students and, more important, strategies that college professors can use to help reduce math anxiety. Come prepared to start reducing and eliminating math phobia!

Amelia Ann Allen  
Monmouth University, Long Branch, New Jersey  
Harvey Allen  
Monmouth University, Long Branch, New Jersey  
Elizabeth Ballroom C (Hyatt)
40
Brain-Based Strategies to Promote Learning Mathematics for All Students (Preservice and In-Service) Session
How is a child’s perception of a concept determined by the child’s experiences? How do students “experience” concepts of number or algebra? How is learning mathematics anchored through visual and concrete manipulatives? This session will address brain-based strategies to help all students actively participate in learning mathematics.

Candace Yamagata
EC Educational Consulting, Orem, Utah

Yvonne Randall
Touro University Nevada, Henderson

Helen McAnany
Fertitta Middle School, Las Vegas, Nevada

6 D (Convention Center)

41
Math Out of the Box®—a Numbers Game! (General Interest) Exhibitor Workshop
Discover patterns in the world around us through addition, subtraction, multiplication, division, fractions, decimals, and probability in Math Out of the Box, an inquiry-based curriculum developed at Clemson University.

Carolina Biological Supply Company
Carolina Biological Supply Company, Burlington, North Carolina

1 B (Convention Center)

41.1
Aim for Algebra: Not Business As Usual (General Interest) Exhibitor Workshop
Learn about an engaging algebra intervention program that helps students overcome common barriers to success in algebra. Aim for Algebra is a conceptually-based, standards-aligned supplementary program organized in a modular format allowing for easy implementation, flexible programing, and individualized student placement.

Mardi Gale
It’s About Time, Armonk, New York

Torrey (Marriott)

42
Response to Intervention - Mathematics (K–6) Exhibitor Workshop
From universal screening and progress monitoring to intensive intervention, learn about different solutions for providing intervention around mathematics in your classroom.

Pearson
Pearson, Upper Saddle River, New Jersey

1 A (Convention Center)

43
Composing and Decomposing Numbers: An Important Prerequisite Math Skill (Pre-K–2) Gallery Workshop
Research suggests that between the ages of 9 and 12, the brain matures enough to take things apart and put them together in new ways. Yet many states expect second graders to add and subtract “whether or not regrouping is necessary.” How can we provide early mathematical experiences to help support this expectation?

Dinah Lee Chancellor
D. R. Chancellor, Inc., Southlake, Texas

5 A (Convention Center)

44
Big Ideas for Little People: Important Things after Counting (Pre-K–2) Gallery Workshop
This presentation will address four foundational big ideas about numbers that will help children be successful in mathematics. The focus will be how to develop children’s understanding of these number relationships in whole-class lessons and small-group activities or centers.

Carollee Norris
Peace River North School District, Fort Saint John, British Columbia, Canada

Betsy A/B/C (Hyatt)

45
Focal Points + Manipulatives + Theme = Learning for Understanding! (Pre-K–2) Gallery Workshop
Using ideas from NCTM’s Focal Points, we will share grades pre-K–2 activities using games and manipulatives. Ideas will focus on the number and operation strand using common themes—farm, rain forest, ocean, and carnival.

Jeannie Gee
Des Moines Public Schools, Iowa

Salon 6 (Marriott)

46
Catch the Attribute Train! (Pre-K–5) Gallery Workshop
Participants will explore how the use of SMART Board technology, attribute and pattern blocks, games, and graphic organizers can enhance children’s understanding of patterns, relationships, and functions. Attendees will leave with ready-to-use activities and lessons for their classrooms.

Susan H. Davies
Fairfax County Public Schools, Springfield, Virginia

3 (Convention Center)
47
Contextual Problem Solving: It’s More than a Story Problem
(Pre-K–5) Gallery Workshop
This interactive presentation will examine the differences between story problems connected to school mathematics and contextual problems based on students’ experiences. Participants will view videos of students engaged in problem solving and discuss how contextual problems encourage meaningful approaches to a solution.

Laurel Marsh
Howard County Public Schools, Columbia, Maryland
Kay Sammons
Howard County Public Schools, Columbia, Maryland

14 A (Convention Center)

48
Rhythm and Hues: Teaching with the SMART Board™ and TI-10
(Pre-K–5, Preservice and In-Service) Gallery Workshop
Discover how the SMART Board, TI-10, music, literature, and manipulatives can build conceptual understanding and make learning mathematics fun! Hands-on activities will include unique features of the SMART Board and TI-10. Special needs will be addressed. Participants will leave with ready-to-use lessons.

Christine Ruda
Teachers Teaching with Technology (T³), Miami, Florida

Manchester Ballroom E/F (Hyatt)

49
Leading a Schoolwide Effort to Increase Number Sense for All!
(Pre-K–8) Gallery Workshop
“I could teach _____, if only they had ___,” or “They don’t know their math facts.” Math Leaders hear these comments all the time. This presentation will examine your own beliefs about number sense and how to help teachers help students become flexible with numbers. Leave with brain-compatible strategies to implement in your own schools.

Debbie Scruggs
Kokopelli Educational Consulting, Albuquerque, New Mexico

Marina F (Marriott)

50
Children’s Literature and Mathematics: Connecting and Extending
(3–5) Gallery Workshop
Many current children’s literature books provide opportunities for teachers to connect the mathematics with other areas. How do the activities fit with your lessons? How can NCTM’s Curriculum Focal Points and connections be implemented using children’s literature? A variety of materials will be provided.

Richard Callan
Bunker Hill Elementary School, Indianapolis, Indiana
Don S. Balka
Saint Mary’s College, Notre Dame, Indiana

Elizabeth Ballroom G (Hyatt)

51
Connecting the Student’s Toybox with the Teacher’s Mathematical Toolbox
(3–5) Gallery Workshop
Can playing with bubbles or balloons help my high-stakes assessment results? Experience ways to enrich mathematical knowledge and deepen understanding using everyday toys in order to address content standards. Simple items will be used to demonstrate fun, easy-to-implement tasks that reinforce the skills necessary for students’ achievement.

Jeremy J. Winters
Middle Tennessee State University, Murfreesboro
Leslie Marrie Lasater
Campus School, Middle Tennessee State University, Murfreesboro
Cindy Cliche
Campus School, Middle Tennessee State University, Murfreesboro

Manchester Ballroom I (Hyatt)

52
Measurement Mania
(3–5) Gallery Workshop
Are you looking for creative ways to help students master concepts in measurement? Try out these classroom ready, hands-on activities that engage and motivate students. Have you ever been in a metric lineup? Created your measurement mug? Built a weight wall? Find out how! Be part of the measurement mania!

Connie Horgan
Jerome School District, Idaho

Salon 5 (Marriott)
53
How to Love 3-D Geometry
(3–8) Gallery Workshop
Come to enrich your teaching of spatial geometry through play and games. You will build the most symmetrical solids and play with decomposition to nets to discover what solids can be build with given nets. You will find out how to represent and show with simple materials the abstract 3-D constructs such as height and diagonal.

Aniceta Skowron
Geometro, Ancaster, Ontario, Canada

11 A (Convention Center)

54
Using Origami in an Algebra Class, Meaningfully
(6–8) Gallery Workshop
Change is an essential concept in algebra. Using origami we will explore how length, area, and volume change as a function of the size of the paper that is folded. Models will be built and used with extensions beyond what we will do in this gallery workshop. Teaching algebra is not a prerequisite to benefit from this presentation.

Joseph R. Georgeson
University School of Milwaukee, Wisconsin

16 A (Convention Center)

55
Beyond M&M’s and Cheerios: Making Data Collection and Analysis Fun!
(6–8) Gallery Workshop
Let’s make statistics fun! Participants will actively collect and engage in a variety of hands-on data-collection activities to generate data suitable for scatterplots, trend, box-and-whiskers plots, bar graphs, histograms, and other descriptive statistics. Handouts with many other activities will be included.

Colleen Watson
James Madison University, Harrisonburg, Virginia

Douglas Pavilion C (Hyatt)
56

Body Parts, Livestock, and Bacteria: Algebra Contexts for Middle Grades
(6–8, Preservice and In-Service) Gallery Workshop

This gallery workshop will focus on explorations designed to help students develop their algebraic thinking with a variety of concepts and relationships. These explorations help students connect algebra to a variety of contexts and are useful in fostering rich discussions in the mathematics classroom.

Terry Goodman
University of Central Missouri, Warrensburg

Ann McCoy
University of Central Missouri, Warrensburg

8 (Convention Center)

57

Making Math Come Alive by Working on Problems of Living Mathematicians
(6–12) Gallery Workshop

Can your students name three professional living musicians and athletes? Of course. Can they name three living professional mathematicians or any of their problems? Can you? In this gallery workshop we will explore some rich, contemporary problems that are accessible to middle school students and learn about some of the mathematicians connected to these problems.

James R. Matthews
Siena College, Loudonville, New York

Manchester Ballroom G (Hyatt)

58

Math on the Move: Making Connections!
(6–12) Gallery Workshop

Come prepared to move! Using lessons that helped the speaker’s students make connections and be successful, participants will kinesthetically and visually explore the connections in the order of operations, integer operations, greatest common factor and lowest common multiple using prime factorization, properties of polygons, and other topics.

Julie Nurnberger-Haag
Michigan State University, East Lansing

San Diego Ballroom A (Marriott)

59

Creating an “Algebra for All” Toolkit
(6–12) Gallery Workshop

Do you teach algebra to English language learners, students with disabilities, or unmotivated students? If so, come “fill your toolkit” with hands-on activities, games, graphic organizers, puzzles, discovery lessons, and journaling ideas to make algebra truly accessible for all.

Sharon Bryant Hoffert
Chesterfield County Public Schools, Midlothian, Virginia

15 A (Convention Center)

60

Pyramids, Cubes, and Stellated Octahedrons: Hands-On, Geometric Origami
(6–12) Gallery Workshop

Learn to build various 3-D geometric figures, including the beautiful stellated octahedron, from colorful origami paper! While folding the basic building units and constructing the final “spiky-ball” structure, the speaker will address geometric concepts that arise during the process, including quadrilaterals, triangles, angles, and surface area.

Mansoor Kapasi
Los Angeles Unified School District, California

9 (Convention Center)

61

Geometry Investigations for 2010
(6–12) Gallery Workshop

Does every Pentomino tile the plane? What are all the Archimedean tilings? What is Pick’s formula? What is origamics? Can you solve the challenging geometry constructions needed to design the stained-glass windows and tracery of gothic cathedrals? If these are new to you, come explore some unusual and very cool geometry investigations.

Michael Serra
Key Curriculum Press, Emeryville, California

Douglas Pavilion A (Hyatt)

62

Connecting the Concrete to the Abstract through 3-D Puzzles
(6–12) Gallery Workshop

Three-dimensional puzzles are a powerful, engaging tool to help students conceptualize important geometric concepts. Through the use of analysis, paper folding, compasses, and computer drawing tools, participants will create nets and construct puzzles while reflecting on the powerful underlying geometric concepts.

Joyce Evelyn Frost
Finn Hill Junior High School, Kirkland, Washington

Manchester Ballroom A (Hyatt)
8:30 a.m.–10:00 a.m.

**63**

**Increasing Accessibility to Algebra and Geometry for All Students**

*(6–12) Gallery Workshop*

Make math accessible to all students by using graphic organizers (rule-of-four links sheets, webs, splashes, sorts, matches). The presenter will model helping students build on prior knowledge and communicate what they can do using multiple representations. Participants will have access to our Web site with more than 200 organizers for grades 6–12.

**Carol Hynes**
Retired, Leominster Public Schools, Massachusetts

*San Diego Ballroom C (Marriott)*

**64**

**Making Secondary School Mathematics More Visual: Using Algebra Tiles from Integers to Factoring**

*(6–12) Gallery Workshop*

Manipulatives in a secondary school math classroom? See how it works. Participants will use algebra tiles in a variety of situations. Operations on polynomials will be explored from factoring through completing the square. The important part is transitioning from the concrete (manipulative) to the abstract (paper and pencil).

**Virginia Head**
College Preparatory Mathematics, Grand Prairie, Texas

*San Diego Ballroom C (Marriott)*

**65**

**It’s All about the Rectangle!**

*(6–12, Preservice and In-Service) Gallery Workshop*

Did you know that the formulas for the areas of many plane figures are based on the rectangle? Make hands-on models of figures, such as trapezoids, circles, and regular polygons. Use models to develop formulas. Discuss how these activities can be used to differentiate instruction in diverse classrooms. Classroom-ready materials will be provided.

**Teri Willard**
Central Washington University, Ellensburg

**Mandy McDaniel**
Boise State University, Idaho

*Marina D (Marriott)*

**66**

**What’s New in Visualization? I Can See the Math!**

*(6–12, Preservice and In-Service) Gallery Workshop*

*Presidents’ Series presentation*

Using some of the latest software and technology tools available, explore ways in which students can make discoveries that can sometimes be difficult to grasp. The speaker will focus on latest developments with Sketchpad V5. Optional: Bring a fully charged laptop for a hands-on experience.

**David Kapolka**
Council of Presidential Awardees in Mathematics, Alto, Michigan

*Elizabeth Ballroom F (Hyatt)*

**67**

**Making Connections: There Really Is a Use for Why We Do That!**

*(9–12) Gallery Workshop*

Square root functions, reciprocal functions, trig functions and rational functions: “Why do we need to know this?” In this gallery workshop we will explore problems that connect the mathematics that is taught to the real world. The examples will span Algebra 1 to precalculus. Be prepared to use your graphing calculator to help make the connections.

**Fred Decovsky**
Teachers Teaching with Technology, Millburn, New Jersey

*17 A (Convention Center)*

**68**

**Classroom Investigations to Improve Students’ Understanding of Limits and Derivatives**

*(9–12, Higher Education) Gallery Workshop*

This presentation will share several investigations used in the classroom to help strengthen students’ understanding of limits and derivatives. The speaker will discuss some ideas for developing these investigations and offer reproducible copies to use in your classes. All levels of teaching experience are welcome.

**Ken M. Collins**
Charlotte Latin School, North Carolina

*Elizabeth Ballroom B (Hyatt)*
New Company. Same Mission.

We are excited to announce that Cambium Learning, Inc. and Voyager Learning Company have joined together to form the leading provider of intervention curricula, educational technologies, and services for the PreK–12th grade market in the United States.

As one company, we remain steadfast to our mission to help all students achieve their full academic potential. The three core divisions—Voyager, a comprehensive intervention business; Sopris, a supplemental solutions business; and Cambium Learning Technologies—will be primarily focused on serving the needs of the nation’s most challenged learners and those realizing their full potential.

We look forward to continuing to provide our customers with our proven solutions and exceptional service.
Making Math Much More Accessible to Our Students

Learn↔Reflect Kickoff Session
(General Interest) Session

This fast-paced, up-beat presentation will identify and model a set of practical, easy-to-adopt instructional strategies that significantly enhance mathematical learning and retention at all grades. Look at how adopting a few daily routines and shifting a few crucial mindsets can pay rich dividends in long-term mastery and test scores.

Steven Leinwand
American Institutes for Research, Washington, D.C.

April 21–24, 2010 • San Diego, California

Developing Early Numeracy for Prekindergarten: The Power of Small Numbers

(Pre-K–2, Preservice and In-Service) Session

The presenter will share ideas to encourage early numeracy for young children, such as the use of multiple visual models and partner games. Participants will experience activities and literature to help young children make connections.

Patsy Kanter
PK Consultants, New Orleans, Louisiana

Algebraic Strategies for Enhancing Visual Discrimination and Numeracy in Children

(Pre-K–5) Session

Explore a variety of easy-to-learn strategies for introducing algebraic symbols as a learning tool for children in the early grades. The presentation will focus specifically on how algebraic symbol manipulation will enhance visual discrimination and numeracy skills. Participants will also learn ways to document the effects of these strategies.

Suzy Koontz
Math Made Fun, Ithaca, New York

Response to Intervention (RTI) and Math: Completing Your Assessment Plan!

(Pre-K–5) Session

Please join us to learn how a regional educational service agency in Ottawa developed and implemented a large scale RTI model for math. This model includes screening for number sense, data analysis, targeted interventions, and progress-monitoring tools for grades 1–6. Sample screeners and intervention tools will be shared.

Michael Klavon
Ottawa Area Independent School District, Holland, Michigan
Robyn Lucas
Ottawa Area Independent School District, Holland, Michigan

Edward A/B/C/D (Hyatt)
9:30 a.m.–10:30 a.m.

75 Making Equity Real in a Multicultural District through Professional Development (Pre-K–8) Session
Meeting the needs of all in a large, multicultural school district can be a challenging process, but well worth it when students’ achievement scores continue to improve year after year. Learn how our all-inclusive, synchronized effort between an outside mathematics consultant and a district coordinator has resulted in data we are proud to share.

Claran Einfeldt
C Math 2, Inc., Bradley, Illinois

Janice Taylor
Joliet Public Schools, District 86, Illinois

76 The Art of Smart
(Pre-K–8, Preservice and In-Service) Session
What’s the goal, to make kids great in computations or great in problem solving? Neither: the goal is to make them smart! Join us as we explore a new teaching paradigm that develops algebraic thinking in even the youngest students. See how a few crucial changes to your teaching practice can produce better math students and smarter kids.

Greg Tang
Houghton Mifflin Harcourt, Cambridge, Massachusetts

77 Spatial Relations: Building Problem-Solving Skills through a “Stacking” Approach (3–5) Session
Children view the world more through perceptions than knowledge. Appropriate hands-on math and science activities will be demonstrated with videos from lessons taught by student teachers. From shadows to cross sections, models to mirrors, see children develop mathematical and scientific concepts using topology, perspectives, and projections.

Jean Morrow
Emporia State University, Kansas

Nancy Tanner Edwards
Missouri Western State University, Saint Joseph

78 Fractions without Distraction (3–5) Session
Learn to eliminate “fraction phobia” using mnemonic devices, number lines, tortillas, and more. See fun, effective, research-based activities and unique teaching tools for differentiated instruction. Learn to “smart teach” fractions. There will be door prizes and handouts!

Sandra White
Lone Star Learning, Lubbock, Texas

17 B (Convention Center)

79 Wrapping Around: Understanding Fractions and “Super” Units (3–5) Session
The speakers’ team of teachers and researchers developed a lesson to help students build knowledge of units and quarter units of length as they measure. They will describe the transition from tutoring students to a whole-class lesson involving wrapping that was developed to address the struggles relating quarter units and units along a ruler.

Chepina Witkowski
Illinois State University, Normal

Ronda Wilder
Thomas Metcalf Elementary School, Normal, Illinois

Roberta Maubach
Thomas Metcalf Elementary School, Normal, Illinois

Karen Irvin
Thomas Metcalf Elementary School, Normal, Illinois

Michelle Mueller
Thomas Metcalf Elementary School, Normal, Illinois

Craig Cullen
Illinois State University, Normal

5 B (Convention Center)

80 Who Has Time for Development over Time? Helping Students Acquire Both Conceptual and Procedural Knowledge (3–5) Session
If you think you don’t have enough time to develop your students’ conceptual and procedural knowledge thoroughly, then this session is for you. Through a series of tasks, participants will explore how students’ learning progresses from conceptual to procedural knowledge. Emphasis will be given to what “development over time” looks like.

Shannon E. Harmon
Mississippi Council of Teacher of Mathematics, University

Douglas Pavilion B (Hyatt)
Teaching Investigations Math with SMART™ Board Technologies

(3–5) Session

The presenters will demonstrate how to incorporate SMART Board technologies into teaching the Investigations math program. Participants will be shown dozens of Investigations activities and games (made in notebook 10) on the SMART Board, as well as how to use the SMART document camera as part of an effective math lesson.

Kelle Singleton
Oakridge Elementary School, Arlington, Virginia

Greg Chapuis
Oakridge Elementary School, Arlington, Virginia

Karen Heathcock
Oakridge Elementary School, Arlington, Virginia

Creating Comics: Connecting Mathematics, Art, and Writing to Explain Concepts

(3–8) Session

Writing graphic stories (i.e., comics) are a fun, efficient way for students to make connections among concepts, represent and communicate their understandings to others, explain their reasoning, and develop their problem-solving skills. Come learn how to use math comic writing with students, see sample comics, and build a demonstration comic.

Leslee Francis-Pelton
University of Victoria, British Columbia, Canada

Tim Pelton
University of Victoria, British Columbia, Canada

Karen Moore
Eastern School District, St. John’s, Newfoundland and Labrador, Canada

Making Connections among Concepts, Procedures, Representations, and Contexts

(3–8) Session

Mathematics teaching in Japan centers on problem solving, and textbooks include carefully selected and coherently sequenced problems. This session will examine how a Japanese elementary school math textbook series uses problems to help students develop a web of connections among concepts, procedures, and representations using problem contexts.

Tad Watanabe
Kennesaw State University, Georgia

Adapting Instruction to Promote Equity for Special-Needs Students, Grades 3–8

(3–8, Preservice and In-Service) Session

This session will discuss research-based strategies that adapt mathematics instruction to make it equitable for special-needs students. The speakers will demonstrate how to adapt a problem that integrates several areas of geometry (surface area, volume, and measurement), using these strategies for grades 3–8 and a variety of special needs.

Julie Sliva Spitzer
San Jose State University, California

Cheryl D. Roddick
San Jose State University, California

Preservice Teachers Learn to Use Literature to Connect Children’s World to Mathematical Ideas

(3–8, Preservice and In-Service) Session

This session describes how the book *Spaghetti and Meatballs for All* was used as a catalyst to help prospective elementary school teachers develop skills in connecting students’ world to area, perimeter, and algebraic thinking.

Blidi S. Stemn
Hofstra University, Hempstead, New York

You’re Not in Math Class Any More! Integrating Math across the Curriculum

(6–8) Session

It is the responsibility of every mathematics teacher to help students recognize and apply mathematics outside the contexts of mathematics. Connecting mathematics to other subject areas is an exciting way to capture students’ interests. This presentation will look at examples of how mathematics can be connected to other subject areas.

Mark Evans
Saint Callistus School, Garden Grove, California

Blidi S. Stemn
Hofstra University, Hempstead, New York
87

The MATHCOUNTS Club Program: Free, Easy, Fun, and Effective!

(6–8) Session

The MATHCOUNTS Club Program is a free program every middle school math teacher can use in and out of the classroom. We provide all the standards-based activities and students’ incentives you need! Join us as we go through the Club-in-a-Box, the online resources, and the prizes that make this club a must-have in every middle school.

Kristen Chandler
MATHCOUNTS, Alexandria, Virginia

Manchester Ballroom B (Hyatt)

88

Interactive Classroom Activities That Enhance Mathematical Reasoning and Problem Solving

(6–8) Session

This session will showcase a collection of hands-on, action-oriented classroom activities, designed to develop and enhance numerical, geometric, and algebraic reasoning and skills when presented interactively. These dynamic activities support the belief that mathematics must tickle the senses as well as stretch the mind.

Evan M. Maletsky
Montclair State University, New Jersey

Manchester Ballroom D (Hyatt)

89

Linking Arithmetic and Algebraic Thinking

(6–8) Session

This session will engage participants in activities and discussions that link algebraic thinking instruction to arithmetic instruction. Specific content focuses will be on equivalence and properties.

Genni Steele
Math Solutions, Saint Paul, Minnesota

Manchester Ballroom H (Hyatt)

90

Addressing Misconceptions Using Open-Source, Interactive Technologies

(6–8) Session

This interactive session will introduce the combined use of formative assessment prompts and interactive technologies to elicit and address students’ known misconceptions as revealed by research. Focus topics will include identifying, locating, comparing, and operating with rational numbers. Additional content areas will be discussed.

Cheryl Rose Tobey
Educational Development Center, Gardiner, Maine

Salon 4 (Marriott)

91

Teaching Fractions: Is It Poetry or Mathematics?

(6–8, Higher Education) Session

Why are students not learning fractions? The speaker will describe a likely general reason: if we continue to teach fractions—or, in fact all school mathematics—solely by the use of analogies, metaphors, and allusions rather than precise mathematical language, students will continue not to learn.

Hung-Hsi Wu
University of California Berkeley

16 B (Convention Center)
92
Reading and Rhyming in the ‘Rithmetic Classroom
(6–12) Session
Explore the mathematical structure of poetry as we examine a variety of styles in this genre. Learn techniques designed to enable you to spark your students’ creativity as they discover ways to express mathematical concepts in verse. You may encounter your own “inner poet!”
Martha Hildebrandt
Chatham University, Pittsburgh, Pennsylvania
Barbara Biglan
Chatham University, Pittsburgh, Pennsylvania

93
A SMARTer Way to Teach Math: Use SMART Notebook™ Math
(6–12) Session
Get an interactive look at the new SMART Notebook mathematics software. Participants will have the opportunity not only to observe, but also to take part in using the many new features relating to algebra, geometry, and other concepts. Get ideas about lesson creation, classroom instruction, and students’ engagement from middle school classroom teachers.
Jill Lyttle
Kenmore Middle School, Arlington, Virginia
Michelle Meehan
Kenmore Middle School, Arlington, Virginia

94
Can Three Wrongs Make a Right? Drive Students’ Thinking with Test Items
(6–12) Session
We use items from large-scale math tests with our students, but can we use them for more than drill, to help drive their thinking to higher levels? Absolutely! Using case studies, the speaker will build insights into item and test construction and explore methods and strategies to make test items into tools that really get students thinking.
Sendhil Revuluri
Chicago Public Schools, Illinois

95
Fractions from the Ground Up
(6–12, Higher Education) Session
Many students begin eighth-grade algebra with a very rudimentary understanding of algorithms for fraction operations, which increases the likelihood that they will need to take algebra a second time. Explore some language issues and visual models that better connect fraction and operation concepts to students’ experience.
Lewis Philip Douglas
Lawrence Hall of Science, Berkeley, California

96
We Are Leaving Our English Language Learners (ELLs) Behind: How Teachers Can Help Prevent It
(6–12, Higher Education, Preservice and In-Service) Session
ELLs typically score low on state assessment tests. They need to learn mathematics language in the context of mathematics lessons. This session will offer tested classroom activities that help students practice geometric vocabulary, with an emphasis on implementing the Texas English Language Proficiency Standards.
Bill Jasper
Sam Houston State University, Huntsville, Texas

97
Searching for Solutions to Solution Sets
(9–12) Session
What does it mean to solve an equation or a system of equations? Explore this question to gain insight into teaching and assessing these important concepts. Experiences and discussions with NSF Mathematics Leadership Institute lead teachers will be shared focusing on the common misconceptions about the nature of solution sets.
Richard Parr
Rice University School Mathematics Project, Houston, Texas
Anne Papakonstantinou
Rice University School Mathematics Project, Houston, Texas
### 98
**Algebra Explained through Magic!**

(9–12) Session  
Magic tricks that are explained by using algebra will be presented. First the trick will be presented with cards, number cubes, calendars, or mental patterns. Then the trick will be explained showing the algebra that the teacher can share with their students.

**John Gregory**  
University of Florida, Gainesville

20 D (Convention Center)

---

### 99
**Transform Geometry with Transformations**

(9–12) Session  
Students come to geometry with a basic understanding of transformations. So, why not begin with what they know? This session will provide a series of hands-on activities that develop conceptual understanding of the properties of triangles and quadrilaterals in connection to students’ knowledge of transformations.

**Colleen McLean Eddy**  
University of North Texas, Denton

**Kevin Hughes**  
Arlington Independent School District, Texas

**Vincent Kieftenbeld**  
University of North Texas, Denton

**Carole Hayata**  
University of North Texas, Denton

6 B (Convention Center)

---

### 100
**Focus in High School Mathematics: Reasoning and Sense Making**

(9–12) Session  
NCTM has recognized the need to promote new discussion around high school mathematics. This session will provide participants an opportunity to discuss NCTM’s *Focus in High School Mathematics: Reasoning and Sense Making*. Other NCTM activities related to high school mathematics will also be discussed.

**W. Gary Martin**  
Auburn University, Alabama

**Judith Quander**  
National Council of Teachers of Mathematics, Reston, Virginia

**Vincent Snipes**  
Winston-Salem State University, North Carolina

6 D (Convention Center)

---

### 101
**Why Are Word Problems So Much Easier than the Others?**

(9–12) Session  
This is an actual question from a student. Without context, students are working with abstractions and have nothing to suggest the approach to solving the problem. The speaker will provide examples of problems and contexts beginning in elementary algebra that will help students solve problems and develop concepts.

**Guy Robert Mauldin**  
Science Hill High School, Johnson City, Tennessee

Marina G (Marriott)

---

### 102
**To the Vector Belong the Spoils**

(9–12, Higher Education) Session  
Learn three unique ways to introduce vectors. Discover how MacDonalds can make understanding dot product easier. Glean unusual ways to use vectors in $d = rt$ problems, geometric proofs, and a dynamic projectile motion game on the TI-84. Plus, be surprised by simple AB and BC calculus applications that are not difficult to comprehend.

**William E. Rogge**  
University of Nebraska—Lincoln

Molly A/B (Hyatt)

---

### 103
**Oral Assessments: Retaining Students in Science, Technology, Engineering, and Mathematics (STEM) Majors**

(9–12, Higher Education) Session  
In voluntary, ungraded oral assessments, students defend their reasoning and negotiate meaning with peers. Students learn to assess themselves, use multiple representations, and make important mathematical connections. Statistical analyses show that orals help underprepared students improve conceptual understanding and their retention in STEM majors.

**Mary Ann Nelson**  
University of Colorado, Boulder

Gregory A/B (Hyatt)
Lakeshore helps children make connections...

...by aligning our products to the 5 NCTM content strands:

- Geometry
- Number & Operations
- Measurement
- Algebra
- Data & Graphing

Stop by Booth 1623 for:

- Engaging Workshops
- Free Samples
- Booth Raffle

Call us!
(800) 421-5354.

Lakeshore
LakeshoreLearning.com

View our new MATH catalogs online:
DI Math
RTI Math

Download a PDF or request free copies.
104
Mathematics Teacher Education: Current Issues and Perspectives
(Higher Education) Session
Presidents’ Series presentation
The session will highlight issues in the preparation of mathematics teachers, including a shortage of qualified secondary school mathematics teachers, strengthening mathematics preparation of elementary school teachers, and responding to public criticism of traditional teacher education programs. Ideas for addressing the issues will be shared.
Barbara Reys
University of Missouri—Columbia

105
Algebra, the Connector Par Excellence!
Connections within, between, and Among (Higher Education, Preservice and In-Service) Session
Algebra is a now a way of thinking that cuts across content areas and unifies the curriculum. Demands on elementary school teachers to expose students to algebra early, and on middle and high school teachers to build on students’ prior experiences, can be daunting. The speaker will use her research and writing to render them concrete.
Monica Neagoy
MN Mathematics Consulting Services, Arlington, Virginia

106
Interactive Digital Texts Engage Students in Algebra
(General Interest) Exhibitor Workshop
Use multiple forms of input to engage your students in algebra. Animations, audio, multiple self-assessment tools and more are built into a comprehensive digital text that has successfully completed the California state adoption.
Kinetic Books
Kinetic Books, Seattle, Washington

106.1
Math Connections: A Standards-Based Mathematics Curriculum
(General Interest) Exhibitor Workshop
This presentation will look at three activities that demonstrate how the standards-based program Math Connections helps students at all levels of ability achieve success in mathematics. We will show data on how schools have increased student results on state assessments—the greatest gains being for the lower-level students.
Jim Kearns
It’s About Time, Armonk, New York

107
Scott Foresman-Addison Wesley enVisionMATH: The Next Generation of Problem Solving
(K–6) Exhibitor Workshop
Are you ready to meet the needs of the next generation of learners in the mathematics classroom? Through activities in this exhibitor workshop, participants will learn strategies to engage a range of learners through problem-based interactive learning and pictorial representations for solving problems.
Pearson
Pearson, Upper Saddle River, New Jersey
108  “Cracking the Code of Algebra” or “Cracking One’s Head on Algebra”  
(4–9) Exhibitor Workshop  
How does Hands-On Equations® enable 80 percent of inner city fourth graders to have success with such basic equations as $4x + 3 = 3x + 10$? If algebra is a foreign language to your students, this presentation is for you!  
Borenson and Associates, Inc.  
Borenson and Associates, Inc., Allentown, Pennsylvania  
Columbia (Marriott)

109  Formative Assessment: A Pathway to Enhanced Learning  
(Pre-K–2) Gallery Workshop  
In education, it seems that each day brings a new classroom practice that teachers need to embrace and implement with their students. A closer look at formative assessment may help you recognize how you are already enhancing learning through this important practice, as well as how you can more fully engage in and learn from it.  
Renee Everling  
Math Solutions, Sausalito, California  
16 A (Convention Center)

110  A Glimpse of Singapore Math in the Primary Grades  
(Pre-K–2) Gallery Workshop  
Come learn strategies from the Singapore Primary Mathematics Curriculum that will help build a strong foundation in mathematics. Participants will use various manipulatives to engage in activities that will help students develop logical-thinking and problem-solving skills. Activities will be provided.  
Johnette Roberts  
City of Baker School System, Baton Rouge, Louisiana  
Elizabeth Ballroom B (Hyatt)

111  Math Takes Center Stage  
(Pre-K–2) Gallery Workshop  
Connect literature, standards, and drama to create a command math performance. Experience teacher created math theater activities that enhance students’ learning. See how easily literature and drama can be infused into your teaching and leave with scripts, Web tools, and Web sites to produce your own class math videos.  
Charyl Kerns Hills  
Council Rock School District, Newtown, Pennsylvania  
Manchester Ballroom I (Hyatt)

112  Designing a Shape Gallery: Making Geometry Connections for Primary School Students  
(Pre-K–2) Gallery Workshop  
Explore activities from an NSF grant to create units based on Curriculum Focal Points, enrichment teaching, and learning strategies. Young students make connections between two- and three-dimensional shapes and explore symmetry and perspective as they create a shape gallery. Participants will leave with engaging, research-based activities.  
M. Katherine Gavin  
University of Connecticut, Storrs  
Tutita Casa  
University of Connecticut, Storrs  
Janine M. Firmender  
University of Connecticut, Storrs  
Marina F (Marriott)

113  Using Visual Aids and Games to Develop Basic Fact Strategies  
(3–5) Gallery Workshop  
Students must be confident with a variety of computation methods. This presentation will show how mental computation can be developed using a sequence of strategies that begins with number facts and broadens as it extends to larger numbers. Participants will leave with many practical activities and games to use immediately in their classrooms.  
James L. Burnett  
ORIGO Education, Saint Charles, Missouri  
8 (Convention Center)

114  SMART Board™ + Manipulatives = A Winning Combination  
(3–5) Gallery Workshop  
Success in math begins with the conceptual understanding of number sense. Manipulatives and the SMART Board are powerful tools that help lay the foundation for number sense. Participants will actively engage in hands-on activities that move students through the three levels of learning—concrete, transitional, and abstract.  
Carolyn Belson  
Retired, Chesapeake Public Schools, Virginia  
Sharon Huber  
Chesapeake Public Schools, Virginia  
Manchester Ballroom E/F (Hyatt)
The Zeroing in on Number and Operations series features easy-to-use tools for teaching key concepts in number and operations and for addressing common misconceptions. Each book in the series, which is organized by grade level, provides thirty research-based, classroom-tested modules that zero in on the key mathematical strategies and concepts essential for that grade level while highlighting the importance of teacher language in the development of those skills. The spiral-bound, flipchart format makes it easy to access the important sections in each module, including:

- summaries that identify the mathematical focus and associated challenges and misconceptions
- instructional strategies and activities that develop conceptual understanding and computation skills
- ideas and activities for adjusting activities to meet individual needs
- reproducibles for instructional use
- resources for further reading

Now, we’ve expanded our focus to include math. Like all of our titles, our math books feature proven strategies from the country’s top teachers and teacher educators.
Teach Problem Solving Using ThinkFun’s Hands-On Program
(3–8) Gallery Workshop
This program will not only teach your students problem solving but also be the best part of their day! Use hands-on brain games and puzzles to teach problem-solving steps, strategies, and state of mind, the tools to empower students to tackle problems. Teacher-tested and approved, empowering students everywhere. Come play, learn, and be inspired!
Tanya Lee Thompson
ThinkFun, Inc., Alexandria, Virginia

Slow Down to Think Mathematically: Connecting Concepts and Context
(3–8) Gallery Workshop
This presentation will help teachers focus students on thinking mathematically rather than just getting to the right answer quickly. Participants will work on and discuss sample grades 4–8 problems from Gillan’s *Problems without Figures* and receive a copy of the book to use with their students.
Patsy Wang-Iverson
Gabriella and Paul Rosenbaum Foundation, Stockton, New Jersey
Richard Askey
Retired, University of Wisconsin—Madison
Marian Palumbo
Bernards Township Public Schools, Basking Ridge, New Jersey

How Does Your Body Measure Up?
(3–8) Gallery Workshop
Not every classroom can have an X-ray machine or a CAT scan to look inside the body, and books can only provide a static representation. Using measurements like length, weight, and volume, students will begin to understand the true workings of the human body.
Jeanine L. Haistings
William Jewell College, Kansas City, Missouri

Visualizing and Mentally Calculating Percents
(3–8) Gallery Workshop
Attendees will create visual models of percents and then be able to calculate percents mentally. Next, attendees will solve word problems involving percents using number sense and not confusing algorithms. Finally, they will understand the relationships among percents, fractions, and decimals.
Sandy Hindy
Ventura County Mathematics Council, California

Maximize Technology: Meet the Challenge to Reach All Math Students
(3–8) Gallery Workshop
To meet learning needs effectively, see how teachers can use a broad range of strategies involving technology, manipulatives, and paper that integrate a variety of resources to promote deeper understandings of fractions, area, and algebraic thinking. Participants will receive a CD and a lesson to use in Monday’s class.
Rudy Neufeld
Neufeld Learning Systems, London, Ontario, Canada

Jump toward Better Understanding of Linear Functions through Multiple Representations
(3–8) Gallery Workshop
Participants will experience the problem Jump Frog Jump and discover the power multiple representations have in developing algebraic thinkers. Jump Frog Jump addresses concepts of linear functions and rate of change from earliest grades through high school algebra. Hands-on activities and TI-73 calculators will be incorporated into the presentation.
Gloria Beswick
Partnership Institute for Mathematics and Science Education Reform, Louisville, Kentucky
Rhonda Niemi
Jefferson County Public Schools, Louisville, Kentucky
<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Speaker(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>121</td>
<td>Nonstandard Units Are Custom Units: Linking Measurement to Proportional Reasoning</td>
<td>Susan Addington, Madeleine Jetter</td>
<td>Nonstandard units arise in impromptu measurement and in traditional cultures where objects are custom-made for the user. They also introduce proportional thinking. Activities will involve body proportions, connecting body measurements to standard units, and reinterpreting mathematical topics through custom units. Bring scissors if possible.</td>
</tr>
<tr>
<td>122</td>
<td>The Study of Change as a Preparation for Algebra</td>
<td>Susan Nickerson, Judith Sowder</td>
<td>This opportunity to better understand and interpret graphs can help you provide students with knowledge they need to succeed in algebra and beyond. The antics of Wile E. Coyote, a race between a turtle and a rabbit, and graphing one’s own motions will provide a venue for making sense of graphs representing change.</td>
</tr>
<tr>
<td>123</td>
<td>Thinking Proportionally with Origami Cubes</td>
<td>Diane Devine</td>
<td>Participants will construct origami cubes and explore what happens to the surface area and volume of the cube when the dimensions of the initial square change. They will also engage in proportional-reasoning activities and discuss the rubrics based on these models.</td>
</tr>
<tr>
<td>124</td>
<td>Aha! Multiple Instructional Strategies That Build Concepts for All Students</td>
<td>Brenda Morgan, Lisa Friedberg</td>
<td>Just when you think you’ve seen and heard it all: come join us and learn multiple instructional strategies that build solid math concepts for fractions, decimals, percents, and number operations for all students. Get ready to be involved with lots of differentiated activities. Walk away with a CD and lessons that you can use on Monday!</td>
</tr>
<tr>
<td>125</td>
<td>Promote Positive Mathematical Dispositions with Games and Puzzles</td>
<td>Vicki Ann Vierra</td>
<td>Build productive dispositions—beliefs about abilities and the nature of mathematics. Promote proficiency, positive attitudes, and diligence through games, puzzles, and group problem solving.</td>
</tr>
<tr>
<td>126</td>
<td>Unwrapping Surface Area</td>
<td>Laurie Boswell</td>
<td>How are prisms and cylinders alike? How are pyramids and cones alike? Unwrap students’ confusion by exploring 2-D nets! Use geofix manipulatives and common containers to develop an understanding of surface area and how to generalize the many formulas. Students’ engagement, discourse, and a castle blueprint activity will be discussed.</td>
</tr>
</tbody>
</table>
10:30 a.m.–12:00 noon

127

Helping At-Risk Students Visualize Mathematics through Technology
(6–12) Gallery Workshop

At-risk students struggle with visualizing math concepts. Using graphing software and interactive whiteboard technologies, the presenter will show how these technologies enhance students’ understanding of algebra and geometry. The activities, professional development, and technology helped the presenter’s district earn state and national awards.

James William Kearns
Salem State Collaborative, Massachusetts

128

Building Conics with Patty Paper and on the TI-Nspire™
(9–12) Gallery Workshop

Participants will use patty paper to fold the three conic sections—the parabola, ellipse, and hyperbola. Using the definition for each, and the techniques that were just used in the paper folding, the participants will create the envelope in which each conic sits and then find the actual conic (the set of points that fits the definition).

Art Mabbott
Seattle Schools, Washington

129

Nspired™ Connections: Rich Tasks That Connect Concepts and Contexts
(9–12) Gallery Workshop

Explore rich tasks, designed for the TI-Nspire, that investigate applications of mathematics to real-life contexts. The speaker will analyze these interactive tasks through multiple representations and the connections between them. See how inquiry and engagement can lead to deep mathematical thinking.

Marc Garneau
Curriculum and Instructional Services, School District 36, Surrey, British Columbia, Canada

130

Real-World Investigations Connecting Data Analysis, Probability, and Statistics
(9–12, Higher Education) Gallery Workshop

Does sleep deprivation impair students’ performance two days later? Using experimental data, cards, and technology, investigate whether the results can be explained by chance. Did a company carry out a fair lottery to choose employees for promotion? Perform simulations to help decide.

Daren Starnes holds the endowed Master Teacher chair in Mathematics at the Lawrenceville School, where he team-teaches a course with a different colleague each term. He has led numerous AP Statistics institutes for new and experienced AP teachers and has been a reader, table leader, and question leader for the AP Statistics exam. From 2004 to 2009, he served on the ASA/NCTM Joint Committee on Statistics and Probability, chairing the committee in 2009.

Daren Starnes
The Lawrenceville School, New Jersey

131

The Fundamental Theorem of Calculus, Integration, and Differentiation: Putting It All Together
(9–12, Higher Education) Gallery Workshop

Working through a series of paper-and-pencil and technology-based classroom activities, participants will try hands-on investigations designed to help students improve their conceptual understanding of the fundamental theorem of calculus. Activities will focus on connections between integrally defined functions and their derivatives.

Mike Koehler
Blue Valley North High School, Overland Park, Kansas

132

Unfolding Mathematics from Geometry to Precalculus and Beyond
(9–12, Higher Education) Gallery Workshop

This is not your parents’ origami! Fold paper to explore and illustrate ideas from geometry, precalculus, and beyond. Investigations will include parabolas, ellipses, convergence, and regularity.

Paul J. Karafiol
Walter Payton College Prep High School, Chicago, Illinois
Scott Galson
Walter Payton College Prep High School, Chicago, Illinois
133 Nesting Boxes and Students’ Work Samples: Building Teachers’ Subject-Matter Knowledge of Geometry (Preservice and In-Service) Gallery Workshop
The presenter’s research study suggests that teachers’ geometric reasoning and spatial sense can be enhanced when they analyze, categorize, and assess students’ work samples. Attendees will become familiar with this research study, and they will engage in activities aimed at furthering teachers’ mathematical subject-matter knowledge.
Sherri Cianca
Niagara University, Lewiston, New York
9 (Convention Center)

134 Challenging Geometric Constructions with The Geometer’s Sketchpad® (Preservice and In-Service) Gallery Workshop
Strategies for discovering constructions that have proven unusually interesting to preservice and in-service high school teachers will be investigated. Constructions will include maxima and minima problems using transformations.
Shlomo Libeskind
University of Oregon, Eugene
Douglas Pavilion A (Hyatt)

135 Research-Based Practices and Practical Suggestions for Implementing Them in Your Classroom (General Interest) Session
Many instructional practices are called “research-based,” but are they really? Learn about important research-guided practices identified in the NCSM PRIME Leadership and Teaching Framework that can significantly increase students’ achievement, the conditions under which they do so, and practical ideas for incorporating them into your instruction.
Diane J. Briars
National Council of Supervisors of Mathematics, Pittsburgh, Pennsylvania
6 A (Convention Center)

136 Building Math and Science Connections in Preschool and Kindergarten (Pre-K–2) Session
Teachers will discuss how to integrate concepts in science and mathematics through an analysis of the content and process standards. They will investigate developmentally appropriate activities to determine connections and discuss how to foster cognitive process in preschool and kindergarten age children.
Glenda Pepin
Clemson University, South Carolina
Sandra Mammano Linder
Clemson University, South Carolina
11 B (Convention Center)

137 The National Research Council (NRC) Report on Early Mathematics (Pre-K–2, Higher Education) Session
The NRC recently completed a study of early childhood math, synthesizing and analyzing the past twenty years of research from a number of disciplinary fields. The authors of the report will draw implications for practice and policy that will help all children, especially vulnerable children, get a strong start in learning math.
Douglas H. Clements
University at Buffalo, State University of New York
Sybilla Beckmann
University of Georgia, Athens
Karen C. Fuson
Northwestern University (Emerita), Evanston, Illinois
Herbert P. Ginsburg
Teachers College Columbia University, New York, New York
Julie Sarama
University at Buffalo, State University of New York
6 A (Convention Center)

138 Assessing Mathematical Understanding: Using One-on-One Mathematics Interviews with Grades K–2 Students (Pre-K–2, Higher Education, Preservice and In-Service) Session
High-quality mathematics experiences in the primary grades build a strong foundation for future learning. This session will share useful assessment tasks along with video clips of grades K–2 students that help teachers understand what to ask and what to look for when assessing their students.
Linda Griffin
Northwest Regional Educational Laboratory, Portland, Oregon
Lisa Lavelle
Education Northwest, Portland, Oregon
17 B (Convention Center)
Increase mathematics achievement through DEEP PRACTICE

First In Math®
ONLINE PROGRAM
www.firstinmath.com

- PROVIDES "DEEP PRACTICE" NECESSARY FOR SKILL RETENTION. Geared to student practice and fact mastery—not just with whole numbers, but with FRACTIONS, DECIMALS & INTEGERS.
- NO ADDED LOAD ON TEACHERS. Launch the program in minutes.
- IMPROVES TEST SCORES. The First In Math® Online Program’s track record—in scientific studies and in the classroom—shows that students CAN succeed when presented with engaging content that focuses on important components of math learning.*
- GREAT FOR INTERVENTION AND GIFTED. Provides differentiated instruction with extensive content, ranging from one-step addition to multi-step algebra.
- INCLUDES TEST-PREP EXERCISES GEARED TO GRADE LEVEL. “Know & Show” modules are a unique way for students to familiarize themselves with standardized test questions.
- ENGAGES STUDENTS. This is a program that students WANT to do. They can elect to participate in a national, individual and/or team competition.
- COMPLEMENTS ANY CURRICULUM. Ties closely to state, national and NCTM standards. Grades 1 through 9.

*As demonstrated by elevated test scores, WestEd study, 2004.

To purchase the comprehensive mathematics supplement that is results-oriented and cost-effective, contact our dedicated Customer Service Team now!

800-242-4542 • sales@firstinmath.com

DEMO FIRST IN MATH®!
Booth #1341

FIRST IN MATH® is for educational purposes only—no links to advertising. © 2010 Suntex Int. Inc. All rights reserved. 24® and First In Math® are registered trademarks.
139
Math Fact Fluency: How and Why We Teach for Flexible Thinking
(Pre-K–5) Session
This session will provide participants with multiple instructional strategies, activities, and games that can be used to help students develop fluency with addition, subtraction, and multiplication facts. All suggested strategies are based on significant research and have been successfully applied in public schools serving diverse populations.

Sam Strother
Boise State University, Idaho

140
Communicating Mathematical Thinking:
Young Problem Solvers Show What They Know
(Pre-K–5) Session
How do young students use math materials, pictures, numbers, and words to show what they know? Examples of how students solved a variety of open-ended, literature-based mathematical problems will be shared. A focus of the problem-solving experiences was having students communicate their mathematical thinking and showing how they solved the problem.

Janice Novakowski
Richmond School District, Vancouver, British Columbia, Canada

Manchester Ballroom B (Hyatt)
141
Math for All! Equal Opportunity Education in the Math Classroom
(Pre-K–5, Preservice and In-Service) Session
Have a better understanding of how to differentiate math instruction easily to meet the needs of a variety of learning styles. Learn how to implement these strategies into classrooms through a variety of engaging activities that are motivating for learners using few or inexpensive, easy-to-make materials.

Marilyn R. Lance
Houghton Mifflin Harcourt, Austin, Texas

Nicole Hamilton
Houghton Mifflin Harcourt, Boston, Massachusetts

142
Supporting English Language Learners (ELLs) in Math Class
(Pre-K–5, Preservice and In-Service) Session
Discussing ideas in math class facilitates understanding, but ELLs may be at a disadvantage. This session will show teachers how to structure experiences so ELLs can accomplish two goals—developing their mathematical thinking and, at the same time, developing proficiency in English.

Bernard George Bresser
University of California at San Diego

Kathy Melanese
University of California at San Diego

143
Algebra in Elementary School?
(Pre-K–5, Preservice and In-Service) Session
Many in-service teachers have difficulty recognizing that many of the topics and concepts they currently teach are actually preparing their students for success in formal algebra. What does algebra look like in grades K–3? How can we prepare teachers to take advantage of opportunities to nurture algebra skills in students at lower grades?

Amy Rushall
Northern Arizona University, Flagstaff

144
Building a Community of Mathematical Thinkers through the Use of Math Olympiad Problems
(3–5) Session
The speaker will explore rich problems provided by the Math Olympiad for Elementary and Middle School students and discuss how these problems are used to create an environment of mathematical thinkers. She will also share her experience as the coach of a team of grades 4–6 students and provide a packet of sample problems and solutions.

M. Lynn Breyfogle
Bucknell University, Lewisburg, Pennsylvania

145
Speaking the Language of Mathematics
(3–5, Preservice and In-Service) Session
Talking about math ideas helps students expand their understanding, but talking about math is not easy. Math has a complicated language with challenging vocabulary that tests even the most capable students. This session highlights classroom-tested, research-based, vocabulary strategies that are interactive and fit in any math program.

Susan O’Connell
Quality Teacher Development, Ellicott City, Maryland

146
Quilts, Topology, Origami, Tessellations, and More: Connecting Mathematics with Art
(3–8) Session
Art is full of amazing connections with mathematics! The speaker will share ideas of how to connect mathematics to art in elementary school classrooms using a variety of activities. These activities will include quilts, topology, origami, tessellations, pop-up cards, geometric sculpture, and more. He will also share examples of students’ work.

Elaine Tuft
Utah Valley University, Orem
11:00 a.m.–12:00 noon

147
You Are What You Eat: Integrating Science and Mathematics
(3–8) Session
This session will explore research based activities integrating science and mathematics in the context of smart energy choices. Students will transform into researchers who ask the important questions related to nutritional choices, purposefully collect and analyze data, and then professionally report their findings.

Sarah Selmer
West Virginia University, Morgantown
Johnna Bolyard
West Virginia University, Morgantown
Jim Rye
West Virginia University, Morgantown

15 B (Convention Center)

148
Building a Foundation for Understanding Fraction Operations: Using Concrete Contexts
(3–8) Session
Misconceptions are common with fraction operations. The use of context can assist in dispelling common misconceptions. This session will examine the use of context in teaching fraction operations, particularly multiplying and dividing fractions. Solving and creating context problems will be examined.

Janet Andreasen
University of Central Florida, Orlando
Jennifer M. Tobias
Illinois State University, Normal

Elizabeth Ballroom A (Hyatt)

149
Differentiated Instruction for Conceptual Understandings
(3–8) Session
This session presents a variety of instructional processes for differentiation, including C-R-A and scaffolded questioning, aligned differentiated assessments for progress monitoring, and multiple product representations. Specific examples and tools to implement differentiated instruction systematically for conceptual understandings will be shared.

Jodi O’Meara
Jodi O’Meara, Inc., Parrish, Florida

Elizabeth Ballroom H (Hyatt)

150
Speaking, Writing, and Problem Solving
(3–8, Preservice and In-Service) Session
Try “speak, write, reflect, revise”—a cooperative learning process that effectively connects problem solving with rich classroom discourse and writing. See how every student contributes to a classroom of successful problem solvers and how students’ written words guide math instruction. Do this tomorrow in your classroom!

Robyn Silbey
Montgomery County Public Schools, Gaithersburg, Maryland

10 (Convention Center)

151
Algebra Connections: Developing Students’ MP³ (Mathematical Passion, Perseverance, and Promise)
(6–8) Session
Participants will explore problems and investigate related extensions designed to develop the passion, perseverance, proficiency, power, and promise of a wide range of students, using algebraic reasoning and multiple representations to analyze patterns, make predictions and generalizations, and develop recursive and explicit rules and formulae.

Linda Jensen Sheffield
Northern Kentucky University (Emerita), Highland Heights

5 B (Convention Center)

152
I Notice, I Wonder, I Can Think!
(6–8) Session
Develop students’ ability to think through technology and challenging, complex problems. Empower your students with the power of thinking. Focus on questions and observations as a method leading to problem-solving skills. Redirect students from solution-orientated thinking to reasoning and inquiry as a method to developing problem-solving skills.

Barbara Delaney
Bellingham Memorial Middle School, Massachusetts
Ashley C. Miller
China Grove Middle School, North Carolina
Marie Hogan
Traweek Middle School, West Covina, California

Salon 3 (Marriott)
Aim for Algebra: Algebra Intervention—Not Business as Usual  
(6–12) Session
Aim at intervention: learn about essential elements for algebraic intervention by examining a successful, conceptually based, standards-aligned program that supports struggling students through modules targeting common barriers to algebraic success, provides teacher support for each lesson, and implements flexibly for grade levels and schedules.

Mardi A. Gale  
WestEd, Redwood City, California

Bringing Connections to the Pythagorean Theorem “Full Circle”  
(6–12) Session
Examining connections between, and representations of, mathematical ideas is vital if students are to visualize concepts rather than memorize formulas. See how visualizing connections among the Pythagorean theorem, the distance formula, and the equation of a circle helps connect ideas, enhancing the transfer of knowledge to new situations.

Cheryl Malm  
Northwest Missouri State University, Maryville  
Christine C. Benson  
Northwest Missouri State University, Maryville

Using Mathematics in Tennis  
(6–12) Session
Much mathematics is included in tennis—measurement, geometry, data, and algebra. This session will offer many ideas that show how mathematics can be used when playing tennis.

Robert Reys  
University of Missouri—Columbia  
Rustin Reys  
Park Hill High School, Kansas City, Missouri

Math Is All around You  
(6–12) Session
Mathematics learning is enhanced when your students make the connections across mathematics topics and across different subject areas. See lessons that connect algebra, probability, science, social studies, language arts, and more!

Fred Dillon  
Board of Directors, National Council of Teachers of Mathematics; Strongsville City Schools, Ohio

Connect with Mathematical Curves in the Real World  
(6–12) Session
Conic sections, spirals, catenaries, fractals, and other curves will be presented in many different ways, (some humorous, some real), with hands-on activities, digital photos, and calculator/computer applications. Connections within mathematics and other sciences will be a main focus.

Scott Oliver  
Adlai E. Stevenson High School, Lincolnshire, Illinois
158
Why Should We Assign Homework in Math?
(6–12) Session
The speaker will share the numerous types of assignments he has used in classes ranging from Algebra 1 through AP Calculus BC. He will discuss what some of the research says, and what it does not, about homework, and there will be an opportunity to share what practices have worked for other participants.

James Wysocki
Chadwick School, Palos Verdes Peninsula, California
Salon 4 (Marriott)

159
Coaching in an Urban District: Math + Science + Coaching = Success
(6–12) Session
How can you create an effective professional learning community in a large, urban district? The speaker will share the program design and interim results of an ongoing math and science professional development and coaching academy. Teams of teachers increase their content and pedagogy knowledge and cultivate leadership skills.

Wanetta Jones-Allen
Houston Independent School District, Texas
6 E (Convention Center)

160
Connecting Vocabulary and Conceptual Understanding: Strategies, Assessments, and Research Findings
(6–12, Higher Education) Session
Vocabulary strategies promoting conceptual understanding and examples of students’ work done in middle school through college algebra will be shared. The speakers will discuss assessments that provide diagnostic information and share research findings on students’ understanding of primary concepts such as equation, exponent, domain, and function.

Susan Gay
University of Kansas, Lawrence
Ingrid Peterson
University of Kansas, Lawrence
7 B (Convention Center)

161
Let’s Talk Mathematics: Supporting Mathematical Discourse in Your Classroom
(6–12, Preservice and In-Service) Session
This presentation focuses on specific discourse moves that teachers can use in order to support students’ learning during mathematical discussions. During this session, teachers will analyze an episode of teaching that illuminates these discourse moves and then discuss how to implement these moves in their classroom.

Amy F. Hillen
Kennesaw State University, Georgia
Elizabeth Hughes
University of Northern Iowa, Cedar Falls
Douglas Pavilion D (Hyatt)

162
Now That Calculators Can Do Algebra, What Is Left to Learn in Algebra Class?
(9–12) Session
Affordable calculators can now do most of the operations that once formed the core of the algebra curriculum; however, there is plenty left to learn, and many tasks that only people can do. Take a look at how to harness the new power and to clarify what we still need to learn and do ourselves.

Loring Coes
Rocky Hill School, East Greenwich, Rhode Island
Douglas Pavilion B (Hyatt)

163
So You’ve Got a SMART™ Board: Now What?
(9–12) Session
This session will demonstrate and discuss various ways to use your SMART Board for teaching and learning mathematics, from algebra to calculus, including use of SMART Notebook Math, the new notebook software for mathematics classrooms. Bring your successful SMART Board strategies to share with others, too!

Roger Day
Chad Shepherd
Pontiac Township High School, Illinois
Brian Schmalzer
Glenbrook South High School, Illinois
Tami S. Martin
Illinois State University, Normal
Manchester Ballroom C (Hyatt)
164
Mathematics in the NBA Draft, Electoral College, and Olympic City Voting (9–12) Session
The NBA draft lottery uses combinatorics and probability to order the teams. The electoral process uses apportionment to determine presidential elections. The voting for a host city uses an application of elimination-method voting. These three examples provide a context for students to see mathematics outside the classroom.
Anthony W. Griffith
Westminster School, Simsbury, Connecticut

165
Making Sense of Data Analysis (9–12, Higher Education) Session
This presentation will focus on how some specific data sets have been used in an elementary statistics class to help students make sense of and understand the statistical processes used to obtain and interpret the results. Strategies on how to teach for understanding and make sense of the processes using these data sets will also be discussed.
Martha Tapia
Berry College, Rome, Georgia

166
High School High-Stakes Testing and Remedial Math in College (9–12, Higher Education) Session
Is there a mismatch between success on high-stakes high school tests and college expectations? Come learn about the results of survey research on secondary school and teachers’ practices that may explain the paradox of higher test scores and increasing numbers of students requiring remediation in college.
Laura Bridge
Greater Richmond Council of Teachers of Mathematics, Richmond, Virginia

167
The Impact of High School Curricula on College Mathematics Achievement and Course-Taking Patterns (9–12, Higher Education) Session
Results will be discussed of an ongoing, four-year, multiuniversity, NSF-funded research project examining college-level mathematics achievement, persistence, and course-taking patterns as a function of students’ high school curricula. Thirty-five higher education institutions and 27,000 students are represented in the data.
Tom Post
University of Minnesota—Twin Cities, Minneapolis
Michael Harwell
University of Minnesota—Twin Cities, Minneapolis

168
Exploring Grades 10–12 Teachers’ Beliefs about Mathematics, Teaching, and Learning (9–12, Higher Education, Preservice and In-Service) Session
What are grades 10–12 teachers’ ideas and beliefs about mathematics education and the reform movement? This session will give an opportunity to explore our beliefs about mathematics, teaching, and learning, and to learn more about the many paradigms of mathematics education. Explore beliefs using clicker technology.
Lorraine M. Baron
Central Okanagan School District, Kelowna, British Columbia, Canada

169
A Secondary School Preservice Teacher Content Course Focused on Problem Solving (Higher Education) Session
To strengthen licensure and students’ knowledge of high school curriculum and ground investigation in good practice, the speakers created a course based in problem solving, reasoning, and critical thinking. Participants will experience rich problems, see students’ reflections from the course, and discuss the impact on teacher education programs.
Janet Mays
Elon University, North Carolina
Alan Russell
Elon University, North Carolina
Amanda Ketner
Elon University, North Carolina
**11:00 a.m.–12:00 noon**

**170**

Using Beyond Crossroads to Teach the Millennial Generation  
(Higher Education) Session  
Presidents’ Series presentation

This session will demonstrate using Beyond Crossroads to address teaching strategies for the millennial generation. These students are now entering college classrooms with a different set of expectations and values than previous generations. The speaker will present specific ways to engage these students while maintaining academic integrity.

Robert Farinelli  
Community College of Allegheny County, Pittsburgh, Pennsylvania  
_Elizabeth Ballroom C (Hyatt)_

**171**

Mathematics Anxiety and College Algebra  
(Higher Education) Research Session

The presenter will provide information about mathematics anxiety pertinent to the classroom teacher. The session will include the results of a three-semester study examining math anxiety of students enrolled in a college algebra course using tutorial software as an integral part of course delivery. Audience discussion will follow the presentation.

DesLey V. Plaisance  
Nicholls State University, Thibodaux, Louisiana  
_Molly A/B (Hyatt)_

**11:30 a.m.–12:30 p.m.**

**171.1**

Autograph®: Empowering All Students to Graph, Visualize, and Understand Mathematics  
(General Interest) Exhibitor Workshop

Show four-color representations of graphs of functions, geometric transformations, systems of equations in two or three variables of revolution. Autograph is the leading program for helping students visualize complex topics in algebra through calculus. See how teachers use Autograph in classrooms and how it works seamlessly with the SmartBoard, Excel, and Word.

It’s About Time  
It’s About Time, Armonk, New York  
_Torrey (Marriott)_

**172**

Interactive Whiteboard in an Inquiry-Based Classroom  
(K–5) Exhibitor Workshop

Are you looking to utilize an interactive whiteboard in an inquiry-based classroom? Learn how to use activities on your interactive whiteboard to bring new depth to your class.

Pearson  
Pearson, Upper Saddle River, New Jersey  
_1 A (Convention Center)_

**172.1**

The Cutting Edge of Singapore Math: Problem Solving, Creative Thinking, and Enquiry Thinking  
(1-6) Exhibitor Workshop

This exhibitor workshop describes important Singapore approaches that have shown results in inculcating mathematical problem solving skills, creative thinking, and enquiry thinking. Participants will have the opportunities to learn various methods that help students excel in mathematics grades 1–6.

Fong Ho Kheong  
Houghton Mifflin Harcourt, Boston Massachusetts  
_Columbia (Marriott)_

**173**

Math Upgrade Interactive Prealgebra Lessons Using Songs, Video, and Games  
(3–8) Exhibitor Workshop

Math Upgrade features music and animation to make prealgebra concepts understandable. Find out how teachers transform their classes using interactive, whole-class lessons and individual online courses. Join us for math, music, and fun!

Learning Upgrade LLC  
Learning Upgrade LLC, Escondido, California  
_1 B (Convention Center)_

**12:30 p.m.–1:30 p.m.**

**174**

The Common Core Standards Initiative  
(General Interest) Session

Building on crucial work of NCTM and others, the National Governors Association, the Council of Chief State School Officers, and 48 states have begun developing common standards in mathematics. Participants will learn about the effort and discuss how NCTM members can play an active role in implementation of these standards across the states.

Dane Linn  
National Governors Association, Washington, D.C.  
Gene Wilhoit  
Council of Chief State School Officers, Washington, D.C.  
_20 A/B/C (Convention Center)
Join Us For Music, Math, and Fun!

Algebra Upgrade Interactive Lessons
Using Songs, Video, and Games

Session Thursday 1:00 - 2:00 pm
Room 1B Convention Center
Free Course For Each Attendee!

Algebra Upgrade features music and animation to make challenging concepts understandable. Find out how teachers transform their classes using interactive whole class lessons and individual online courses. Join us for algebra, music, and fun!

Math Upgrade Interactive
Pre-Algebra Lessons
Using Songs, Video, and Games

Session Thursday 11:30 am - 12:30 pm
Room 1B Convention Center
Free Course For Each Attendee!

Math Upgrade features music and animation to make pre-algebra concepts understandable. Find out how teachers transform their classes using interactive whole class lessons and individual online courses. Join us for math, music, and fun!

LEARNING UPGRADE®
(800) 998-8864
info@learningupgrade.com
Play A Live Course Demo:
www.learningupgrade.com

Algebra Upgrade, Math Upgrade and Learning Upgrade are registered trademarks of Learning Upgrade LLC
© 2010 Learning Upgrade LLC
12:30 p.m.–1:30 p.m.

175  
Math and Philosophy: What did Plato, Kant, and Russell Think about Mathematics?  
(General Interest) Session  
The speaker will discuss what the great philosophers thought about mathematics and see if their thinking is still relevant in today’s world.  
Kichoon Yang  
Executive Director, National Council of Teachers of Mathematics, Reston, Virginia  
6 D (Convention Center)

176  
Fixing 27 Common Myth-Takes of 23 Myth-Conceptions in 42 Myth-Tical Minutes  
(General Interest) Session  
Presidents’ Series presentation  
Beginning with the misunderstanding of the number line through the operations, algebra, and on to calculus, here are the causes (and the cures) for the most common errors in mathematics by students.  
Alan Zollman  
School Science and Mathematics Association, DeKalb, Illinois  
Manchester Ballroom B (Hyatt)

177  
Can Grades Pre-K–2 Students Use Algebraic Reasoning?  
(Pre-K–2) Session  
Participants will explore the main concepts of algebraic reasoning with connections to literature and problem solving. Activities will include students’ work from the NCTM Navigating through Algebra series.  
Donna E. Weaver  
Norfolk Public Schools, Virginia  
Diana J. Batliner  
Norfolk Public Schools, Virginia  
10 (Convention Center)

178  
Project M²’s Approach: Connecting Math and Language Arts through Communication  
(Pre-K–2) Session  
Learn how to implement the cornerstones of a balanced language arts program to encourage high-level math thinking. Participate in discussion-based activities and review writing from students in urban and suburban classes that developed their knowledge of advanced math ideas along with their reading, writing, listening, and speaking skills.  
Tutita Casa  
University of Connecticut, Storrs  
M. Katherine Gavin  
University of Connecticut, Storrs  
Janine M. Firmender  
University of Connecticut, Storrs  
16 B (Convention Center)

179  
Measuring Number Sense in Preschoolers through a Curriculum-Based Measure  
(Pre-K–2) Session  
This research evaluated a curriculum-based assessment of number sense (quantification, counting, set comparison, numerals, addition, patterning) in preschool children. The measurement tool is an interactive game played between assessor and child. Factor analysis indicated the tool is valid and reliable for teachers to use to guide instruction.  
Sally Moomaw  
University of Cincinnati, Ohio  
6 F (Convention Center)

180  
Effects of a Professional Development Intervention on Low-Income Children’s Knowledge of Mathematics and Teachers’ Practice  
(Pre-K–2) Research Session  
This presentation will describe a prekindergarten math-science curriculum, the professional development of Head Start teachers, prekindergarten children’s outcomes, and findings from the first three years of data collection. Suggestions for helping teachers become successful facilitators of math-science activities will be shared.  
David Brown  
Texas A & M University—Commerce  
Gregory A/B (Hyatt)
Generating Mathematical Discourse: Establishing an Environment That Supports Mathematical Proficiency
(Pre-K–5) Session
Teachers who have successfully established discourse-based learning environments will share selections from classroom videos of mathematics lessons. They will discuss strategies they use for teaching children to discuss, listen, and learn from each other.

Lisa Ann de Garcia
Brigham Young University, Provo, Utah
Amy Smith
San Diego Unified School District, California
Adriane Stewart
San Diego Unified School District, California
Jeralyn Treas
San Diego Unified School District, California
Stephanie Hasselbrink
San Diego Unified School District, California

182
Concept Mapping for Mathematics Connections: Linking Concepts and Context
(Pre-K–5, Preservice and In-Service) Session
Attendees will be provided with an opportunity to engage actively in hands-on/minds-on “concept mapping” assessment techniques in mathematics that will reach students at the concrete, pictorial/representational, and symbolic levels. Critical thinking, problem solving, and decision making will be emphasized while connecting math concepts.

Nancy L. Gallenstein
Coastal Carolina University, Conway, South Carolina
Marilyn Larmon
University of Southern Mississippi, Hattiesburg

5 B (Convention Center)
12:30 p.m.–1:30 p.m.

183
From Concrete Manipulatives to Abstract Numeric Symbols: Bridging the Gap
(Pre-K–5, Preservice and In-Service) Session
Many students have difficulty moving from manipulatives to numeric representations. This discussion will attempt to convert the giant leap from concrete to abstract into a series of small, manageable steps. This technique uses schematic representations in which each representation is just slightly more abstract than the one before it.

Arlene Goldblatt
Southern Connecticut State University, New Haven

184
Home and School Connections: Presidential Award Teachers Share Ideas!
(Pre-K–8) Session
Learn how experienced math teachers involve parents and community. Find ways to help parents understand where their children are headed, what students should know, and what they be able to do. Hear how parents’ involvement affects learning. Discover resources for teachers and parents from NCTM and the U.S. Department of Education. Some are free!

Sara Normington
Catlin Gabel School, Portland, Oregon
Lisa K. Cartwright
Pullman School District, Washington
Lisa M. Hall
Jacob L. Adams Elementary School, Richmond, Virginia
Stacie Kaichi-Imamura
Hawaii Department of Education, Honolulu
Leslie Marrie Lasater
Campus School, Middle Tennessee State University, Murfreesboro
Sandy Schoff
Anchorage School District, Alaska
Martha C. Short
Consultant, Jackson, Missouri
Joy Wolfe
Rogers Public Schools, Arkansas

185
Mathematical Stretches: Math Warm-Ups to Begin the Day
(Pre-K–8, Preservice and In-Service) Session
Athletes know the wisdom of beginning their workouts with stretching so they can maximize their performances. The same is true for students. This session will offer specific ideas for easily implemented “math stretches,” in which students draw on their background knowledge and make math connections as they warm up for math with brief tasks.

Laney Sammons
Hubbard Elementary School, Forsyth, Georgia

186
Being SMART™ in Your Math Lessons
(3–5) Session
Participants will see how to use the SMART Board as a mathematical tool, from manipulatives to timers and other interesting features. Come learn how to enhance your classroom.

Adam Meador
Bingham Elementary School, Springfield, Missouri
Manchester Ballroom C (Hyatt)

187
Exploring Logic Problems with Elementary School Students
(3–5, Higher Education, Preservice and In-Service) Session
Many students have difficulty solving word problems involving logic. This presentation will describe a lesson that gives students in the primary grades the opportunity to explore a variety of solution strategies to a logic word problem.

Zhixia You
University of Nevada, Reno
Robert J. Quinn
University of Nevada, Reno

188
Fractions and Geometry with Manipulatives
(3–5, Preservice and In-Service) Session
Help your students develop visual, proportional, logical, and algebraic thinking skills to deepen their understanding of fraction and geometry concepts using manipulatives such as tangrams, pattern blocks, and a few new surprises.

Barbara Irvin
Consultant, Plano, Texas

189
Differentiating Instruction in the Middle School Mathematics Classroom
(3–8) Session
Participants will gain insight into ways differentiated instruction can be effectively implemented into their classrooms. Differentiating instruction can be an overwhelming task to both new and veteran teachers. This presentation will give teachers ideas on how to meet their students at challenging and motivating levels.

John T. Neral
Oakland Public Schools, New Jersey

Elizabeth Ballroom H (Hyatt)

Manchester Ballroom C (Hyatt)

6 E (Convention Center)

15 B (Convention Center)

Salon 4 (Marriott)
190
Around the World in 60 Minutes: A Cultural Excursion through Probability
(3–8, Preservice and In-Service) Session
Play probability games from diverse cultures around the world. Analyze situations using applets and simulations; record data using graphs, trees, and lists to relate theoretical and experimental probability. Take a quick glimpse at pop culture through the Monty Hall problem and more! Souvenirs will provided at the end of the tour.

Nirmala Naresh
Miami University, Oxford, Ohio

Iris DeLoach Johnson
Miami University, Oxford, Ohio

191
What’s Your Mindset? Transforming Mathematics Learning through Emerging Technologies
(3–12) Session
Emerging technologies are often not yet widely adapted or fully actualized, but hold the potential to engage learners, deepen their understanding, and extend mathematical and real-world connections. Learn more about some tools and devices that show remarkable promise for transforming the mathematics classroom.

Jon Wray
Howard County Public Schools, Ellicott City, Maryland

192
Strategy Games for the Last Five Minutes of Class
(3–12) Session
Sometimes you finish a lesson early and don’t want to start something new. Learn some mathematics games that are a good use of time. The winning strategies will be explored during the session.

Diane Resek
San Francisco State University, California

193
Using Geometry as a Lens for Exploring Other Content Strands
(3–12, Preservice and In-Service) Session
Learn to integrate concepts that are too often viewed in isolation by using geometry as the organizing agent. Geometry is a driving focal point for fundamental concepts of number, algebra, measurement, data analysis, and probability. See how a myriad of concepts take on a new life and richer meaning when viewed through a common lens.

William Renwick Speer
University of Nevada, Las Vegas

194
Problem Solving and Technology Implementation in an Inclusion Classroom
(6–8) Session
Learn how the speakers are creating a problem-solving environment in classrooms that include English language learners and special-education students. They will share problems and accompanying activities—some of which use Sketchpad, applets, and other technology—that can help turn students into problem solvers.

Annie Fetter
The Math Forum @ Drexel, Philadelphia, Pennsylvania

Michelle O’Donnell
Woodlynne School, New Jersey

195
Bringing Math to Life with History
(6–8) Session
Have you ever wondered where mathematics comes from? Providing a historical context to the math you teach can help students to make connections among people, places, and ideas. Integrating history and biography into your middle school math classroom can help you engage students in learning standards-based content and concepts.

Christine Latulippe
California State University Polytechnic, Pomona
**Teaching for Understanding with Mathematics Teaching in the Middle School (MTMS)**

(6–8) Session

The *MTMS* journal provides opportunities for educators to reach students of all abilities while teaching for understanding. Presenters will share classroom-tested ways they have used the journal to challenge students while building conceptual knowledge.

Mathematics Teaching in the Middle School Editorial Panel
National Council of Teachers of Mathematics, Reston, Virginia

12:30 p.m.–1:30 p.m.

“Using Context to Support Algebraic Reasoning”

(6–8) Session

During this interactive session, participants will explore middle school students’ understandings and strategies used to solve context-based problems involving algebra. Participants will discuss how to integrate context problems into the classroom.

George J. Roy
University of South Florida—Saint Petersburg

Farshid Safi
College of New Jersey, Ewing

197

“Binary System, Braille Alphabet, Wordplay, Jon Arno Lawson’s Poetry, and Mathemagic”

(6–8) Session

The speaker will explore diverse and unexpected places where the binary system appears, such as the Braille alphabet; recreational wordplay; the underlying structure of *The Voveller’s Bestiary*, a children’s poetry book by poet Jon Arno Lawson, numerical patterns; mathematical magic tricks; and shuffling a deck of cards.

Ron Lancaster
University of Toronto, Ontario, Canada

198

“Connecting Logarithms to Logistics: Mathematics Activities for Global Competitiveness”

(6–12) Session

How can you introduce your students to the high-paying careers of the future and make them globally competitive while teaching to national standards? This hands-on session introduces activities from a context-based, grade 6–12 mathematics curriculum that integrates supply chain and logistics concepts to increase relevancy and students’ engagement.

Allison Medley
North Canton City Schools, Ohio

Leslie Gardner
University of Indianapolis, Indiana

199

“Quantitative Reasoning in Science, Technology, Engineering, and Mathematics (QR in STEM): Integrated Science and Mathematics”

(6–12, Higher Education) Session

QR in STEM is a mathematics and science partnership project that integrates biology, chemistry, earth sciences, physics, and mathematics in the context of energy and environment. The speakers will share performance tasks developed through a collaboration of scientists and teachers and provide the evidence of impact on students’ learning.

Robert Lee Mayes
Science and Mathematics Teaching Center, University of Wyoming, Laramie

Jim Verley
University of Wyoming, Laramie

200

“Using Mathematics to Help Cure Hunger, Disease, and Global Warming”

(9–12) Session

Solar cookers can help with global warming while reducing disease and hunger. The focal property of a parabola makes it a good shape for a solar cooker that can be repositioned to point directly at the sun. Examine alternatives to the parabola for the shape of a solar cooker made of clay and aluminum foil that cannot be moved.

Philip Todd
Saltire Software, Tigard, Oregon

Irina Lyublinskaya
City University of New York—College of Staten Island

201
202
Geometric Means, and What They Mean
(9–12) Session
The geometric mean is a versatile concept, with applications in dynamic processes, exponential growth, and higher-dimensional geometry. Participants will learn surprising properties of geometric means, generalizations you have probably never seen, and strategies for incorporating them across the curriculum from algebra to calculus.

Michael Weiss
Oakland University, Rochester, Michigan

6 A (Convention Center)

204
Proof! Finally, a Logical Approach!
(9–12) Session
The development of proof begins with deductive reasoning by way of games. The goal is to use communication, reasoning and logic skills needed in proof. Participants will justify and argue strategies as they come to conclusions. Three types of proof will be modeled: flowchart, paragraph, and two-column.

Mark Noel Cote
Beaver Lake Middle School, Issaquah, Washington

Elizabeth Ballroom A (Hyatt)

205
Solving a Mystery: Who Wrote the Disputed Federalist Papers?
(9–12) Session
Disputes about authorship arise in the press, the legal system, and even among historians. One such dispute was a “mystery” concerning some famous documents in United States history, the Federalist papers. Find out how frequency distributions were used to investigate this mystery and connect mathematics to social science.

Natalie Jakucyn
Glenbrook South High School, Glenview, Illinois

Manchester Ballroom D (Hyatt)

206
Assessing More than Procedures without Losing Your Weekend
(9–12) Session
If conceptual understanding is not assessed, then students will not value it. The speaker will explore assessing conceptual understanding without overburdening teachers. Examples of items assessing conceptual understanding and students’ related work will be shared. Participants will write items that assess conceptual understanding.

Rebecca K. Walker
Grand Valley State University, Allendale, Michigan

San Diego Ballroom B (Marriott)

207
Computer Algebra Systems (CAS): From Where Did They Come, and Where Might They Go?
(9–12, Higher Education) Session
Beginning on mainframes, CAS evolved to desktop versions and into handheld computers. What is CAS, and what has been its impact on teaching and learning? What might mathematics educators expect from CAS in the future? Ideas from those involved in the development of CAS will be shared, and audience speculation about the future will be encouraged.

Ed Dickey
University of South Carolina, Columbia

208
Striving to Teach Mathematics for Social Justice: A Learning Experience
(9–12, Higher Education) Session
Teaching math for social justice, or using math as a way to understand and critique the world, is an exciting idea. Educators, however, may be intimidated at the prospect of creating lessons that use local contexts to engage all students in learning math. This session will show an attempt at adapting a Standards-based curriculum to create such a lesson.

Joel Amidon
University of Wisconsin—Madison

Salon 1/2 (Marriott)
209
Preparing for Your Institution’s NCATE Program Review
(Higher Education) Session
Learn to navigate the NCATE program review process and prepare the required documents. This session provides information about the overall program review system, as well as specifically what is needed to prepare mathematics education program reports. Report templates, samples of assessments, and mistakes to avoid will be explored in this session.

Monique Lynch
National Council of Teachers of Mathematics, Reston, Virginia

Manchester Ballroom H (Hyatt)

210
Changing Mathematics Preparation for Elementary Education: Using Discourse with Undergraduates
(Preservice and In-Service) Session
Using discourse in the classroom can help elementary education students achieve conceptual understanding of mathematics. This session will teach effective discourse strategies to use with preservice elementary school teachers to prepare them to teach mathematics effectively with a focus on fostering conceptual understanding.

Mary Elizabeth Matthews
Boston University, Massachusetts
Ziv Feldman
Boston University, Massachusetts

Molly A/B (Hyatt)

211
CMP2: An Award Winning Middle School Math Program
(5–8) Exhibitor Workshop
See the latest technology to support teachers and students using Connected Mathematics. Also, review recent research results that show the effectiveness of this award-winning mathematics curriculum.

Pearson
Pearson, Upper Saddle River, New Jersey

1 A (Convention Center)

212
Algebra Upgrade Interactive Lessons: Using Songs, Video, and Games
(9–12) Exhibitor Workshop
Algebra Upgrade features music and animation to make challenging concepts understandable. Find out how teachers transform their classes using interactive whole class lessons and individual online courses. Join us for algebra, music, and fun.

Learning Upgrade LLC
Learning Upgrade LLC, Escondido, California

1 B (Convention Center)

213
Numerical Reasoning in First Grade
(Pre-K–2, Higher Education, Preservice and In-Service) Gallery Workshop
The presenter will share an instructional sequence using the arithmetic rack, which helps children develop numerical relationships. Video clips of the instruction will show how children moved away from unitary counting to using mental reasoning strategies of five-referenced and ten-referenced numbers and doubles for addition and subtraction.

Patty King
U.S. Math Recovery Council, Nashville, Tennessee

9 (Convention Center)

214
Shuffling into Math: Primary School Math Games Using Cards and Dice
(Pre-K–5) Gallery Workshop
Come prepared to play card and dice games that help your primary school students achieve success in basic numeration, operations, place value, and graphing. Excellent ideas for implementing a math games component into your regular and after school programs will be shared. Reproducible game boards and students’ samples will be provided.

Jane Felling
Box Cars & One-Eyed Jacks, Edmonton, Alberta, Canada

Elizabeth Ballroom F (Hyatt)

Make time to explore the Exhibit Hall for the latest in educational resources.
ONE EXTRAORDINARY AP* STATISTICS BESTSELLER —
TWO INCREDIBLE OPTIONS FOR YOUR CLASSROOM

Available now...
Yates | Starnes | Moore
THE PRACTICE
OF STATISTICS
• THIRD EDITION •

order now to receive...
Six-year eBook access card
packaged free
with every new
copy of the text

Available Fall 2010...
Starnes | Yates | Moore
THE PRACTICE
OF STATISTICS
• FOURTH EDITION •

pre-order now and get...
the TPS 4e
preliminary edition
(chapters 1–6)—
for Fall ’10 classes.

Then automatically receive
the complete Fourth Edition
upon publication in
December ’10.

*AP and the Advanced Placement Program are registered trademarks of the College Board which was not involved in, and does not endorse, this product.

Just Published for Non-AP Statistics
Starnes | Yates | Moore
STATISTICS THROUGH APPLICATIONS,
SECOND EDITION

Learn more about these and other outstanding titles
at BFW’s NCTM exhibit, booths 1823, 1825, & 1827.
Stop by and receive a FREE gift!
1:00 p.m.–2:30 p.m.

215
Shazam! Students Creating Math Story Problems Using Graphic Literature
(Pre-K–5) Gallery Workshop
Attendees will experience integrating the use of several graphic novels and other graphic texts into the math curriculum. The presenters will show how students can develop their own math problem-solving stories. Come prepared to laugh, enjoy, and explore math concepts using the latest literacy phenomenon in children’s texts.
Robyn B. Rhodes
Bushland Independent School District, Texas
Gina D. McCown
Bushland Independent School District, Texas
Beverly Sutterfield
Bushland Independent School District, Texas
San Diego Ballroom A (Marriott)

216
Response to Intervention: Supporting Struggling Learners with Differentiated Instruction and Intensive Interventions
(Pre-K–8) Gallery Workshop
Are you looking for ways to support students who struggle with mathematics? Join the speaker as she discusses evidence-based strategies for providing intensive interventions. Engage in hands-on activities, hear ideas for organizing the classroom to provide differentiated support, and receive handouts containing references and resources.
Linda Forbringer
Southern Illinois University Edwardsville
Douglas Pavilion C (Hyatt)

217
Understanding Multiplication and Division Problems: Not a Problem!
(3–5) Gallery Workshop
Solving word problems can be challenging for students. Using a hands-on approach, the speaker will explore and examine the categories of multiplication and division problems. Leave with an in-depth understanding of these structures as you write some problems of your own. Help your students be strong problem solvers!
Sally Kingsley Goss
Howard County Public Schools, Ellicott City, Maryland
11 A (Convention Center)

218
Fraction Sense
(3–5) Gallery Workshop
Proficiency with fractions is crucial for success in algebra. As teachers, we strive to develop number sense. But how do we develop “fraction sense?” This presentation will focus on instructional strategies that will develop students’ fraction sense when implemented daily and intentionally. Classroom structures and activities will be shared.
John SanGiovanni
Howard County Public Schools, Ellicott City, Maryland
Marina F (Marriott)

219
What’s Your Problem?
(3–5, Preservice and In-Service) Gallery Workshop
You can help your students become problem solvers through the use of problem-solving strategies. Experience using, and teaching with, these strategies as well as ideas for instruction and assessing students’ work. Receive rich tasks to use with your students. Come prepared to solve some problems!
Linda M. Gojak
John Carroll University, University Heights, Ohio
San Diego Ballroom C (Marriott)

220
Exploring Geometric Shapes as a Visualization of Basic Algebraic Ideas
(3–8) Gallery Workshop
From early grades, geometry can and should be used to help students visualize and better understand connections between quantities. The activities presented in this gallery workshop may help students practice notions of area and length while preparing them for understanding important algebraic ideas.
Natalya Vinogradova
Plymouth State University, New Hampshire
Manchester Ballroom A (Hyatt)

221
Visions of Fraction Divisions
(3–8, Higher Education) Gallery Workshop
Want to see the real picture of fraction division? Algorithms for partitive and measurement fraction division should be “seen” from pictures that promote understanding rather than easily forgotten rote procedures. Hands-on activities will reveal why some fraction problems have exact answers whereas others have whole-number answers with remainders.
George Douglas Poole
East Tennessee State University, Johnson City
17 A (Convention Center)
222
3D Paper Mechanisms: Learning Algebra and Geometry through Paper Engineering (3–8, Preservice and In-Service) Gallery Workshop

Become a paper engineer! Learn to make your own three-dimensional, animated paper mechanisms using cardstock and tape. To understand and design their mechanisms, students measure distances and angles, search for patterns in data, develop their own linear equations, and solve them algebraically, geometrically, or both ways.

Gary Scott
University of Southern California, Los Angeles

Gary Benenson
City College of New York, New York

Douglas Pavilion A (Hyatt)

223
Computational Thinking and Data Analysis in the Middle School Classroom (6–8) Gallery Workshop

Data in the form of numbers, words and images through cell phones, text messages, Internet surfing, and computer gaming fill students' daily lives. Promote understanding of data in a student-relevant context while building thinking skills. Explore activities and strategies to help students analyze data, identify trends and gain meaning from data.

Lisa Howells
iPlant Collaborative—Tucson, Arizona

14 A (Convention Center)

224
When Your Textbook Isn’t Enough: Teaching Algebra Right the First Time (6–8) Gallery Workshop

Research indicates teaching procedural skills in algebra before conceptual understanding leaves students with superficial perceptions. Engage students with labs and learning activities that deepen algebraic thinking leading to procedural skills. The “big ideas” developed in this presentation are relational thinking about equality and inverse operations.

Paul Agranoff
AIMS Education Foundation, Saint Francis, Minnesota

16 A (Convention Center)

225
Use Multiple Entry-Level Problems to Reach All Students (6–8) Gallery Workshop

One way of achieving equity in the mathematics classroom is through the use of multiple entry-level problems. Participants will solve problems, examine students’ responses, and receive related resources. They will also discuss the importance of involving all students in the problem-solving process.

Marilyn Elaine Strutchens
Auburn University, Alabama

S A (Convention Center)

226
Effective Strategies for Connecting Mathematics and Language for English Learners (6–8) Gallery Workshop

Teachers who know the mathematics they teach are better at teaching it to their students. Teachers need to understand how English mathematics language challenges English language learners. This presentation will give teachers insight into the interplay of language, culture, and mathematics understanding.

Harold Asturias
Lawrence Hall of Science, University of California at Berkeley

Betsy A/B/C (Hyatt)

227
Question and Shout: Making Concept Connections through Questioning Strategies (6–8) Gallery Workshop

Experience a process for strengthening students’ mathematics performance on assessments using questioning strategies and language concepts. Participants will expand their questioning process, improve skills in question construction, and learn to self-assess questions so that every student is more successful on various mathematics assessments.

Jennie Marie Bennett
NUMBERS Mathematics Professional Development, Houston, Texas

Manchester Ballroom I (Hyatt)
228
Engage All Students with Interactive and Visual Environments
(6–8) Gallery Workshop
Students are surrounded by highly visual and interactive environments. Yet math instruction centers on auditory and sequential procedures. Students must be engaged using a more active approach. See how hands-on investigations, informative comics, and videos can be used to engage students and develop essential conceptual math understanding.
Sheldon J. Erickson
Fresno Unified School District, California

229
Building the Diagonal Cube
(6–8) Gallery Workshop
Using a protractor, the speaker will draw seven adjacent isosceles triangles on strips of colored paper, weave the strips to create the 3-D cube, and observe clockwise observation of each face to discover 24 color combinations, modeling the maximum number of ways to arrange four elements of a set. Instructions and supplies will be provided.
Jane A. Whitmire
Central Washington University, Ellensburg

230
Solving Rate Problems with Pattern Blocks
(6–12) Gallery Workshop
Question: “Mary fills 3 balloons per minute. Joe fills 5 balloons every two minutes. How long will it take them to decorate for the prom if they need 440 balloons?” Pattern blocks provide visual models for problems of this type. Experience an intuitive, unique solution path in a hands-on gallery workshop. Classroom-ready resources will be available.
Robb Sinn
North Georgia College and State University, Dahlonega
Dianna Spence
North Georgia College and State University, Dahlonega

231
Connections: Linking Research-Based Instructional Strategies with Standards-Based Mathematics
(6–12) Gallery Workshop
Do you know how to integrate reading, writing, vocabulary, cooperative learning, and diverse learning styles without losing crucial content? Engage in a lesson that uses strategies to support a deep understanding of mathematics. Teachers from a large, urban district are seeing increased engagement and achievement from using these strategies.
Rosann Hollinger
Milwaukee Public Schools, Wisconsin
Laura Maly
Milwaukee Public Schools, Wisconsin

232
Technology, Assessment, Inquiry: TI-Nspire™ Navigator and SMART™ Technology
(6–12) Gallery Workshop
Experience hands-on activities with the latest handheld learning tool. Hear about inquiry learning resources focused on improving instruction of tough-to-teach, tough-to-learn algebra and geometry topics. See how the TI-Nspire Navigator can be used with interactive whiteboards for formative assessment or review and preparation for high-stakes tests.
Sean Bird
Covenant Christian High School, Indianapolis, Indiana
233
Looking for Patterns and Developing Algebraic Representations
(6–12) Gallery Workshop
Explore hands-on activities designed to help students move from concrete models of problem situations to algebraic representations. Data will be graphed and analyzed using the TI-Nspire.
Elizabeth Gasque
Retired, Charleston, South Carolina
Judy Hicks
Retired, Arvada, Colorado

234
Building Quadratics and Other Polynomials from Linear Functions
(9–12) Gallery Workshop
Students do not always see quadratic functions’ link with linear functions. The speakers will share activities to develop an understanding of quadratic functions and higher-order polynomials from graphs and tables of linear functions, extending linear contexts to explore relationships among linear, quadratic, and higher-order polynomials.
Charlene E. Beckmann
Grand Valley State University, Allendale, Michigan
Denisse R. Thompson
University of South Florida, Tampa
Rheta N. Rubenstein
University of Michigan—Dearborn

235
Transitioning You and Your Statistics Students to TI-Nspire™ Handhelds
(9–12) Gallery Workshop
Explore data analysis and related inference topics in this overview of the extraordinary capabilities of the Nspire. This hands-on gallery workshop will focus on differences between the TI-84 Plus and the TI-Nspire while emphasizing opportunities for maximizing scores on the AP Statistics exam. Activity worksheets will be provided.
Lee E. Kucera
Capistrano Valley High School, Mission Viejo, California

236
One-Variable and Two-Variable Functions through the Lens of 3-D Geometry in a Dynamic Environment
(9–12) Gallery Workshop
Develop a twofold meaning for the concept of a graph of a function involving both algebraic and geometric understandings. Through the dynamic environment of Cabri 3D, visually and graphically give linked meaning to the worlds of algebra, geometry, and calculus.
Colette Laborde
University of Grenoble, Isère, France
Barbara Pence
San Jose State University, California

237
Connecting Calculus with the Roller Coaster
(9–12, Higher Education) Gallery Workshop
A roller coaster is the perfect context for bringing to life and understanding the concepts of calculus. Multiple representations, including the use of GeoGebra, Amusement Park Physics, and Data Studio software, as well as hands-on activities, will provide connections between calculus and roller coasters. It’s a ride you can’t miss.
Mike Long
Shippensburg University, Pennsylvania

238
Exploring Exponential Functions Using the TI-Navigator™ System
(9–12, Preservice and In-Service) Gallery Workshop
We’ll use calculator features and some simple experiments to model exponential growth and decay and then use the features of TI-Navigator to assess understanding.
Roberta Koss
Teachers Teaching with Technology (T³), Dallas, Texas
New to Teaching?
Get answers to pivotal questions and concerns of new and soon-to-be teachers at the New Teacher Strand on Friday.
244
Geometric Thinking in Young Children: An International Research Perspective
(Pre-K–2, Higher Education, Preservice and In-Service) Session
The presenters will share findings from a study addressing geometric thinking in five- and six-year-olds conducted in Queensland, Australia. Classroom-tested lessons will be shared that connect effective teaching practices to students’ learning of important geometric concepts. Implications for teaching and learning will be discussed.

Trena Wilkerson
Baylor University, Waco, Texas
Betty Ruth Baker
Baylor University, Waco, Texas
Jordan Sandefur
Baylor University, Waco, Texas
Julie Leary
Baylor University, Waco, Texas
Kimber Fowler
Baylor University, Waco, Texas
Alison Macari
Baylor University, Waco, Texas

245
Promoting Deductive Thinking through Problem Solving with Storybook Characters
(Pre-K–2, Preservice and In-Service) Session
Do you read storybooks and have the characters pose problems that require students to use deductive thinking and problem-solving strategies to solve? This session will share examples of how primary grade teachers used storybooks to promote mathematical reasoning and will provide participants with strategies to use in their own classrooms.

Jane M. Wilburne
Penn State Harrisburg, Middletown, Pennsylvania
Jane Keat
Penn State Harrisburg, Middletown, Pennsylvania

246
Poetometry: Empower All Students by Connecting Geometry and Poetry
(Pre-K–5) Session
Poetometry is an integrated mathematics and poetry project. This session will describe the powerful connections between geometry and poetry. Children learn geometric concepts in the context of poetry. They compose poems, construct figures, and investigate geometric properties. Elementary school students’ poetometry will be showcased.

Donna Gee
Angelo State University, San Angelo, Texas
Marilyn Eisenwine
Angelo State University, San Angelo, Texas
Judith A. Hakes
Angelo State University, San Angelo, Texas

247
The Mathematics and Literature Connection: Moving beyond The Doorbell Rang
(Pre-K–5) Session
This session will showcase research and practical applications related to the integration of mathematics and children’s literature. A framework will be provided that will guide attendees to support students in making authentic and meaningful mathematical connections stemming from children’s literature.

Jeffrey Shih
University of Nevada, Las Vegas
Cyndi Giorgis
University of Nevada, Las Vegas

248
Drill and Thrill: Mindful Practice That Connects Skill with Understanding
(Pre-K–5) Session
Whether one is learning soccer, piano, or mathematics, practice is necessary, but mindless practice is deadening. This session will give several concrete examples—with handouts and video—of highly focused, effective practice that children love and that build competence very quickly. How? Connect skill with thinking through mindful practice!

Liz Uccello
Cunniff Elementary School, Watertown, Massachusetts
Shannon Sauder
Cunniff Elementary School, Watertown, Massachusetts
E. Paul Goldenberg
Education Development Center, Newton, Massachusetts
249
A Balanced Approach to Elementary Math Methods: Seeing is Believing (Pre-K–5, Preservice and In-Service) Session
This presentation focuses on balanced mathematics—an integration of constructivist approaches with a math version of Response to Intervention—in an elementary methods course designed by a teacher, professor, and mathematician. A description of course components will be provided, and attendees will participate in a simulated classroom activity.

Stephanie Baker Peacock
University of Texas at Austin

Taylor Martin
University of Texas at Austin

Rose Tran
University of Texas at Austin Elementary School

Marilyn Burns
Math Solutions, Sausalito, California

250
Individual Assessments: The Key to Student’s Skills and Understanding (Pre-K–8) Session
Number and operations is the cornerstone of elementary school math instruction. Teaching students effectively depends on having detailed and specific information about their understanding and skills. While paper and pencil work provides some information about students, individual assessments provide essential in-depth and unique information.

Marilyn Burns
Math Solutions, Sausalito, California

20 A/B/C (Convention Center)
2:00 p.m.–3:00 p.m.

251
How to Create Scoring Rubrics: Linking Appropriate Assessment to Math (Pre-K–8) Session
Successful teachers set clear expectations for students’ work. This session focuses on methods to develop rubrics that facilitate assessment. Attendees will create rubrics, use rubrics to assess sample work, review student-created rubrics, and share experiences. Sample rubrics and resources will be provided.

Audrey M. Quinlan
Seton Hill University, Greensburg, Pennsylvania
Manchester Ballroom B (Hyatt)

252
Connecting NCTM Articles to the Context of Teaching: Ideas for Growing Professionally (Pre-K–8, Preservice and In-Service) Session
The speakers will share favorite articles from Teaching Children Mathematics and Mathematics Teaching in the Middle School and explain how to engage teachers in ways to maximize the connection of the article to our work in classrooms.

Jennifer Bay-Williams
University of Louisville, Kentucky
Karen Karp
Board of Directors, National Council of Teachers of Mathematics; University of Louisville, Kentucky
Edward A/B/C/D (Hyatt)

253
Maximizing the Potential of Children’s Literature in Teaching Mathematics: What We Can Learn from Teachers (3–5) Session
Using children’s literature to teach mathematics has long been a recommended practice, but its use often falls short of its potential. Listen to the stories of three teachers who have learned to maximize the potential of this practice. Guidelines and benefits emerge that should help others use children’s literature in mathematics more effectively.

Eula Monroe
Brigham Young University, Provo, Utah
Damon L. Bahr
Brigham Young University, Provo, Utah
Salon 1/2 (Marriott)

254
Integrating Mathematics and Literature: Enhancing the Potential for Every Child (3–5, Preservice and In-Service) Session
The use of creative ideas to integrate teaching across the curriculum is an important tool. Introducing mathematics units with quality literature creates a positive atmosphere that enables students to be successful and actively involved in mathematical learning.

Sally C. Mayberry
Florida Gulf Coast University, Fort Myers

255
Building Strong Algebraic Foundations (3–5, Preservice and In-Service) Session
This session will address how to build algebraic thinking daily in grades 3–5. The speaker will model differentiated instruction with a multitude of instructional strategies to create algebraic constants. Come prepared to sing, dance, and think algebra with five powerful activities to use three times a week with students.

Kimberly Sutton
Creative Mathematics, Arcata, California

256
Two Sizes Too Small? Geometry Meets the Grinch (3–8) Session
This interactive session will explore size change transformations as we solve the Grinch Heart Task using a combination of by-hand and computer-based methods. This surprisingly rich problem, classroom-ready and student-tested, will reveal misconceptions your students have about proportionality and help you individualize your instruction.

Dana C. Cox
Miami University, Oxford, Ohio
Michael Todd Edwards
Miami University, Oxford, Ohio

April 21–24, 2010 • San Diego, California 65
257
Putting a Face on X: Connecting Number Sense to Algebraic Reasoning
(3–8) Session
Explore and connect the big ideas of fraction concepts and quantitative reasoning as well as students’ common misconceptions about these topics. Using a number-line model and strategies developed to help build quantitative reasoning, participants will examine basic algebra concepts of variable and connect them to reasoning about x.

Nadine Bezuk
San Diego State University, California
Steve Klass
Encinitas Union School District, Encinitas, California

6 B (Convention Center)

258
Focus on Fractions, Building Fraction Sense: Why Not?
(3–8) Session
Number sense is important for all elementary and middle grade mathematics students. For far too many, number sense has become only a whole-number opportunity. It’s way past time to extend number sense to fractions, decimals, ratio, and percent. Check out activities that work and that provide the foundation for developing rational number sense!

Francis (Skip) Fennell
Past President, National Council of Teachers of Mathematics; McDaniel College, Westminster, Maryland

6 F (Convention Center)

259
Fractions Are a Pane in the Window
(3–8) Session
What topic strikes mortal fear into the hearts of students and parents? Fractions! Come see how to develop meaningful concepts of, and operations with, fractions using a model from students’ everyday environment. After this session, windows will take on a new meaning for you. The same will be true for students after they see fractions in windows.

Dan Dolan
Project to Increase Mastery of Mathematics and Science, Middletown, Connecticut

20 D (Convention Center)

260
Children’s Book Project: Connecting Children’s Literature and Mathematics Using Technology
(3–8, Higher Education) Session
Children’s literature is a powerful tool for connecting a child’s attention to mathematics. This presentation will introduce a book project appropriate for preservice teachers or for use in a grades K–8 environment. Electronic book versions will be presented, analyzed, and discussed.

John Francis McAdam
Marist College, Poughkeepsie, New York
Erika Moore
Marist College, Poughkeepsie, New York

Marina G (Marriott)

261
Math Assessment: Engage Students through Projects, Problem Solving, and Writing
(6–8) Session
Use creative practical math application projects and extended-response problems to engage students in meaningful mathematics. Vocabulary strategies, journaling, and portfolios will be shared. Assessment rubrics and samples of students’ work will be included.

Edna F. Bazik
National-Louis University, Chicago, Illinois

2 (Convention Center)

262
Engaging Students in Understanding Functions with the Use of a Communicator®
(6–8) Session
Participants will experience how using the Communicator Clearboard can engage students in understanding the concept of a function and in connecting functions numerically, graphically, verbally, and analytically.

James R. Rahn
LL Teach, Inc., Bridgewater, New Jersey

San Diego Ballroom B (Marriott)
2:00 p.m.–3:00 p.m.

263

Math + (Science, Social Studies, or Language Arts) = Fun

(6–8, Preservice and In-Service) Session

Math has many connections with science, social studies, and language arts. This session will combine a variety of activities, literature, and games to use an interdisciplinary approach to help motivate middle school students. It is designed to help students see that math exists outside the classroom and the textbook.

Jeanne Ramirez Corpus Mather
University of Science and Arts of Oklahoma, Chickasha

17 B (Convention Center)

264

Conquering Measurement and Scale

(6–8, Preservice and In-Service) Session

Experience activities that make measurement and scale fun to teach and accessible to students. Problems designed to make conversions meaningful, a strategy to teach dimensional analysis, a tool that helps students transition from additive to multiplicative thinking when making scale drawings, and ready-to-use lessons will be included.

Shelley Kriegler
University of California at Los Angeles Math Content Program for Teachers and Students

Joanna Packham
University of California at Los Angeles Math Content Program for Teachers and Students

Manchester 1/2 (Marriott)

265

Connecting to the Real World with Alternative Assessment: It’s Not Just Assigning Projects!

(9–12) Session

Alternative assessment is not just assigning projects. Performance assessments, solving real-world problems, or communicating one’s understanding is part of the process, but alternative assessment is measuring students’ progress with validity and reliability in lieu of paper-and-pencil tests. Learn how without making yourself crazy in the process.

Neil D. Cooperman
Millburn High School, New Jersey

16 B (Convention Center)

266

How to Incorporate Financial Planning Successfully into the Math Classroom

(9–12) Session

Financial crisis: in the midst is the mathematics making it possible and solvable. High school students need the math skills to become financially independent. Stop waiting for someone else to teach the financial skills. Participants see portions of lessons and obtain resources to teach lessons on budgeting, investing, and using credit wisely.

Kimberly Hanson Nagorski
Big Lake High School, Minnesota

4 (Convention Center)

267

Financial Algebra: Real-Life Applications All Students Should Know

(9–12) Session

Financial Algebra is an algebra-based, technology-rich program incorporating topics from Algebra 1 and 2, and even precalculus, into the study of taxes, insurance, banking, budgeting, investing, home ownership, auto ownership, credit, and more. The program allows all students to extend and practice their algebra skills.

Robert Kenneth Gerver
North Shore High School, Glen Head, New York

6 E (Convention Center)

268

Teaching Limits So Students Will Understand Limits

(9–12) Session

Ways to help your students understand limits and the uses of limits in precalculus and calculus—continuity, asymptotes, area, and the tangent line—will be discussed. Numerical and graphical concepts help the students understand the analytic (delta-epsilon) definition. The use of technology and computer algebra systems will be included.

Lin McMullin
National Math and Science Initiative, Dallas, Texas

Douglas Pavilion D (Hyatt)
269

Using SMART™ Board to Improve Teaching and Students’ Understanding in Mathematics
(9–12) Session
Learn how to make your math lessons come alive with a SMART Board! The speaker will show how abstract concepts can become accessible to students with SMART’s Notebook software. Participants will also learn how to use other math software such as Autograph, The Geometer’s Sketchpad and the TI SmartView Calculator with a SMART Board.

Sarah Jane Heller
Lynnfield High School, Massachusetts

Manchester Ballroom C (Hyatt)

270

Innovative Applications of Computer Algebra Systems (CAS)
(9–12) Session
A CAS environment can make sophisticated mathematics tractable. Computational models of mathematical objects allow students to experiment with mathematical phenomena (functions, graphs, polynomials) in ways that would be difficult to do by hand. Investigate with examples from the CME Project, an NSF-funded high school curriculum.

Al Cuoco
Education Development Center, Inc., Newton, Massachusetts

Salon 4 (Marriott)

271

High School to Higher Education: Challenges of Transition
(9–12, Higher Education) Session
It is increasingly important for students to continue with education beyond high school—for their future and for the future of our country. We can’t wait until students are seniors to inspire them to apply to college and provide support for them to succeed. How can we pave the way for our students to make this crucial transition?

Susan Hudson Hull
Charles A. Dana Center, University of Texas at Austin

Salon 3 (Marriott)

272

Beyond the Two-Sample T-Test: ANOVA
(9–12, Higher Education) Session
This presentation will introduce one-way analysis of variance, including a discussion of hypotheses, conditions, the ANOVA table, the TSST statistic, F-distribution, decision, and concursion. Bring a TI-8X calculator if possible.

John M. Arko
Glenbrook South High School, Glenview, Illinois

Elizabeth Ballroom A (Hyatt)

273

Engage Students with Real-World Data Analysis
(9–12, Higher Education) Session
Arrive with ideas to share for spontaneous data collection, participate in several data-collection activities that wake up even sleepy college students, and leave with data sets and projects that are not only useful in and out of class but also motivate students to practice as they build a historical perspective on data analysis.

Janet Marie Winter
Pennsylvania State University, Reading

Elizabeth Ballroom C (Hyatt)

274

Mathematics as Sense Making: Technology as a Vehicle
(9–12, Preservice and In-Service) Session
Dynamic geometry, statistics, and algebraic technologies are tools for engaging students in mathematical thinking and sense-making. This session gives examples of activities that use technological tools for mathematical sense making and makes research-based suggestions for using technologies to deepen students’ mathematical understandings.

M. Kathleen Heid
Pennsylvania State University, University Park
Rose Mary Zbiek
Pennsylvania State University, University Park

Manchester Ballroom H (Hyatt)

275

Develop Practitioner Inquiry and Professional Learning Communities Using Web 2.0
(Higher Education, Preservice and In-Service) Session
Increase and enhance your understanding of readily available Web 2.0 technologies while exploring the applications in preservice and in-service teacher education. Learn powerful strategies for deepening teachers’ knowledge of mathematics while enhancing their understanding of the learning processes of the students they teach.

Hope M. Yursa
Drexel University, Philadelphia, Pennsylvania

Douglas Pavilion B (Hyatt)
2:30 p.m.–3:30 p.m.

276

Practice SMART! Assess SMART! Differentiate SMART! Britannica SmartMath!
(Pre-K–5) Exhibitor Workshop
Participants will engage in lively and interactive, Web-based practice and assessment for elementary students. Move students toward computational fluency while using tools that allow teachers to differentiate, assess, track, and evaluate in real time. Students enjoy doing math at home or in the classroom.

Britannica Digital Learning
Britannica Digital Learning, Chicago, Illinois

1 B (Convention Center)

277

Change the Way Students See Math
(8–12) Exhibitor Workshop
Prentice Hall Algebra 1, Geometry, Algebra 2 © 2001 is changing the way students see math! Make math more meaningful for students by focusing on student engagement, problem solving, visual instruction, and conceptual understanding. Deliver instruction through a blended medium of digital and print components and reach today’s digital natives.

Pearson
Pearson, Upper Saddle River, New Jersey

1 A (Convention Center)

3:00 p.m.–4:30 p.m.

279

Can You Explain Your Thinking?
(Pre-K–2) Gallery Workshop
Participants will learn about cognitively guided instruction (CGI) and implementing it in the classroom. This presentation will explore children’s thinking using math word problems and math games. You will learn about the different levels of math word problems using CGI and a variety of fun math games.

Cynthia Jane Graham
Plano Independent School District, Texas
Jessica Defrang
Plano Independent School District, Texas
Jane Curry
Baylor University, Waco, Texas

Betsy A/B/C (Hyatt)

280

A Unit Story: Introducing Unit and the Number Line to Young Children
(Pre-K–2) Gallery Workshop
See how unit and number are introduced after children are familiar with the meaning of addition and subtraction and comparing quantities. Storytelling and pictures accompanied by activities introduce students to the concept of unit. Participants will use continuous quantities and learn one way in which unit is taught to young children.

Fay Zenigami
Curriculum Research and Development Group, University of Hawaii, Honolulu
Claire Okazaki
Curriculum Research and Development Group, University of Hawaii, Honolulu

Elizabeth Ballroom G (Hyatt)

281

Using Music and Movement to Reach Your Grades K–1 English Language Learners in Math
(Pre-K–2) Gallery Workshop
Come learn some fun songs with movements that will help your students learn to identify numbers and shapes, count to 100, make patterns, compare sets, and more! These multisensory techniques are particularly effective for children who are still learning English, and they will compliment any existing math program.

Heidi Butkus
Bonita Unified School District, La Verne, California

Salon 5 (Marriott)

282

Camping In, Math Style!
(Pre-K–5) Gallery Workshop
Are you hiking through the world of mathematics looking for great ideas? Hike to math “trail posts,” record ideas in your camp journal, and fill your backpack with great ideas! Learn how to replicate a Math Camping In experience for your classroom or building. Handouts (and s’mores) provided.

Kelli Shrewsberry
Teaching and Learning Collaborative, Columbus, Ohio
Jessica Cahill
South Western City Schools, Grove City, Ohio
Mary Polen
South Western City Schools, Grove City, Ohio
Phyllis Bates
South Western City Schools, Grove City, Ohio
Jan Wilson
South Western City Schools, Grove City, Ohio

Manchester Ballroom I (Hyatt)
283
Bridging the Gap between the Standards and Teaching Data Analysis
(Pre-K–5, Preservice and In-Service) Gallery Workshop
This presentation will engage participants in activities developed by a joint American Statistics Association–NCTM project to enhance statistics teaching in elementary school. One of the activities will compare the use of different data displays (tally charts, frequency tables, bar graphs, and line plots) to examine various aspects of a data set.

Tim Jacobbe
University of Florida, Gainesville

Marina D (Marriott)

284
Communicating Mathematical Thinking through Writing, Talk, and Problem Solving
(Pre-K–8) Gallery Workshop
This gallery workshop will address practical ways of integrating writing and other types of communication strategies into your mathematics program. Teachers will participate in a variety of fun, easy-to-implement problem-solving activities that encourage students to learn mathematical concepts as well as communicate their own mathematical thinking.

Cathy Marks Krpan
University of Toronto, Ontario, Canada

San Diego Ballroom A (Marriott)

285
What’s Rational about Fractions?
(3–5) Gallery Workshop
Explore some activities to help your students connect with fractions and their contexts. Children’s literature, manipulatives, and games will be used to supplement students’ understanding of fractions. The speaker will also investigate how these activities can be differentiated to accommodate the different learning styles in your classroom.

Theresa Suetterlein
Fairfax County Public Schools, Springfield, Virginia

Elizabeth Ballroom B (Hyatt)

286
Engaging Activities + Effective Instructional Strategies = Students’ Success
(3–5) Gallery Workshop
“Work smarter, not harder” to improve numeric competence. These strategies promote greater participation and sense making, ideal for intervention success and “family math” efforts. A ready-for-immediate handout will include engaging activities to improve students’ performance and enhance mathematical reasoning.

Leigh Childs
California Mathematics Council, San Diego

Elizabeth Ballroom F (Hyatt)
287
Math Out of (Con)text: Bringing Concepts to Life
(3–5) Gallery Workshop
Go beyond the textbook and teach all students for mathematical understanding. Turn traditional textbook problems into real-life, problem-based tasks that are accessible to all students without increasing your work load or budget. Create lessons for immediate use in the classroom that develop students’ math competence, engagement, and understanding!
Anna M. LaForgia
Council Rock School District, Newtown, Pennsylvania
Julie Eastburn
Council Rock School District, Newtown, Pennsylvania
Manchester Ballroom G (Hyatt)

288
Number and Spatial Sense Supported by Technology
(3–8) Gallery Workshop
Number sense and spatial sense are the two main components for elementary school education. They can be supported by direct manipulation and dynamic activities. Come discuss how the new Cabri for Elementary Education supports this and can engage students in activities to help them construct more robust and in-depth mathematical concepts.
Jean-Marie Laborde
Cabrilog, Grenoble, Isère, France
14 A (Convention Center)

289
Using the Sieve of Eratosthenes in Beginning Number Theory Activities
(3–8) Gallery Workshop
The sieve reveals an “x-ray” of the decimal system and number patterns. A sieve of the numbers 1–102 will identify prime numbers by “sifting” out composite numbers whose prime factors are labeled. Activities include patterns in the sieve, factors, multiples, twin primes, fraction families, and patterns in repeating and terminating decimals.
Diana Venters
Key Curriculum Press, Berkeley, California
3 (Convention Center)

290
Putting the Hands in Hands-On Teaching
(3–8, Higher Education, Preservice and In-Service) Gallery Workshop
The focus of this presentation is to demonstrate how classroom teachers, at all levels, can enhance their teaching by using a hands-on approach to teaching in order to keep students actively engaged in the lesson. Manipulatives or other materials that allow students to gain a deeper understanding of a given concept will be incorporated.
Eric J. Heinrich
Louisiana Tech University, Ruston
Julie A. Holmes
Louisiana Tech University, Ruston
15 A (Convention Center)

291
Will It Float? Will It Fit? Is It Faultless?
(3–8, Preservice and In-Service) Gallery Workshop
Attendees will use Unifix cubes to estimate and build rectangular prism; measure, collect data, and use calculators to determine relationships between different circumferences; use water displacement to determine the volume of three dimensional objects; and develop an understanding of density as they determine what will sink or float.
Kim Hartweg
Keokuk Community School District, Iowa
Salon 6 (Marriott)

292
A Project Approach with Kaleidoscopes: Connecting Mathematics, Science, and Art
(3–8, Preservice and In-Service) Gallery Workshop
Use the Project Approach to plan and implement a hands-on unit. Build simple mirror systems, a teleidoscope, and a kaleidoscope to take home. Investigate math-science-art integration, kaleidoscope sources, construction materials, resource books, and literature connections. Come if you believe math consists of doing as well as knowing.
Nick Stupiansky
Edinboro University of Pennsylvania
Sandra Waite-Stupiansky
Edinboro University of Pennsylvania
Douglas Pavilion C (Hyatt)
Making Sense of the Census
(6–8) Gallery Workshop
The census is about much more than simply counting the number of people in the United States! This year’s census will provide math teachers with a plethora of data to use in classrooms. Participants will receive samples of census data and will construct box-and-whisker plots and scatter plots, both by hand and on the TI graphing calculator.

Jennifer M. Seay
Wicomico County Public Schools, Salisbury, Maryland

Using Math Games to Encourage and Enhance Students’ Learning
(6–8) Gallery Workshop
Participants will gain hands-on experience exploring sample games and extensions. They will discuss strategies while reflecting on the mathematical significance of each game. The focus of the gallery workshop will be on number and operations problem solving as defined in NCTM’s Principles and Standards for School Mathematics.

Sarah Klimek
National Council of Teachers of Mathematics, Reston, Virginia
Sarah DeLeeuw
National Council of Teachers of Mathematics, Reston, Virginia

The Physical to the Cognitive: Building Mathematical Connections
(6–8) Gallery Workshop
For algebra and geometry, learn how to build broader and deeper mathematical understanding for your students through the use of manipulatives. You will see how your students will gain crucial insights into the concepts and relationships that make math meaningful and engaging. This gallery workshop will greatly enrich your existing math curriculum.

Guy Stuart Foresman
Institute for Conceptual Instruction and California Association for the Gifted, Anaheim, California
Brad Fulton
Mistletoe Elementary School, Redding, California

Turning Work Problems into Hands-On Puzzles
(6–12) Gallery Workshop
Do you want to make work problems hands-on? Are you tired of teaching the trick to solve work problems? These problems are rooted in our everyday lives, but everyday people rarely use the trick to solve them. Join us to learn how to turn work problems into hands-on puzzles to help students create a deep understanding of these interesting problems.

Barbara Boschmans
Plymouth State University, New Hampshire
Brian P. Beaudrie
Plymouth State University, New Hampshire
3:00 p.m.–4:30 p.m.

299
Fibonacci in Action! Bring the Golden Ratio to Life
(6–12) Gallery Workshop
Learn how to integrate algebra, geometry, art, anatomy, history, and the natural sciences into a meaningful, action-packed lesson. Through inquiry activities you can introduce one of the most famous sequences that will have your students moving, exploring, and most important, learning.

Ricci Slobodnik
Northwest Career and Technical Academy, Las Vegas, Nevada

16 A (Convention Center)

300
Exploring the Connection between Recursive Sequences and the Composition of Functions
(9–12) Gallery Workshop
Multiple representations of recursive sequences will be examined through iterative techniques. Various learning styles will be addressed through modeling of real-world situations. See how handheld technology promotes algebraic thinking and a deeper understanding of sequences, functions, and limits to help students move from algebra to calculus.

Thomas Beatini
Glen Rock High School, New Jersey

5 A (Convention Center)

301
Connecting Mathematics and Science through Data Analysis
(9–12) Gallery Workshop
Participants will explore the use of graphing calculators and data collectors to simulate real-life problems connecting geometry and algebra to science. Explore using a motion sensor to map the ocean floor and using color to reflect light using a light sensor. All equipment will be provided for the activities. Sample lesson plans will be available.

Judy Johnson
Portsmouth City Schools, Virginia

Douglas Pavilion A (Hyatt)
Some Sequentially Organized Thoughts on the Nature of Randomness
(9–12, Higher Education, Preservice and In-Service)
Gallery Workshop
Much of mathematics is counterintuitive. Randomness definitely is. Participants will conduct two simulations of random events. Each simulation will be followed by an actual experiment of the simulated event. The simulated results will be compared to those of the actual event, and a discussion will follow.

Richard A. Little
Baldwin-Wallace College, Berea, Ohio

Weaving Mathematics and Culture through the Internet
(General Interest) Session
Many Internet sites provide an avenue to weave together culture and mathematics. Explore investigations developed using Internet sites about masks, flags, and games from around the world. The speakers will share how to modify these investigations to meet a range of grade and ability levels.

Michaele F. Chappell
Middle Tennessee State University, Murfreesboro
Denisse R. Thompson
University of South Florida, Tampa

Do You Expect Me to Find All the Pebbles in the World? (Hermione Granger)
(General Interest) Session
How do you know you have found all of the answers? How do you know for sure something does not exist? Questions such as these naturally lead students to create general arguments. In this presentation we will have fun exploring tasks that lead to such questions and in turn general arguments.

Joanna Rachel Bartlo
Portland State University, Oregon
Sean Larsen
Portland State University, Oregon

Predictors of Success in Algebra 1 and Higher Mathematics
(General Interest) Session
What does it take to be successful at Algebra 1, and what is preventing more students from success? Algebra can be for everyone. The results of a year-long, quantitative research study of 1500 high school students in a low-income community will be discussed along with its implications for both curricular and instructional changes.

Linda Faulk
Colton High School, California
3:30 p.m.–4:30 p.m.

307

Learn↔Reflect Reflection Session (General Interest) Session
This is a culminating session for those who attended the Learn↔Reflect strand sessions. The session will be a facilitated discussion of four reflection questions.

Professional Development Services Committee
National Council of Teachers of Mathematics, Reston, Virginia

6 D (Convention Center)

308

Yes, Virginia, Good Multiple-Choice Questions Do Exist! (General Interest) Session
Results from well-written, multiple-choice questions can provide diagnostic information and reveal a student’s possible error patterns and misconceptions. The key is to develop meaningful multiple choice questions. This session will give your specific steps and principles on writing good multiple-choice questions and interpreting the results.

Samantha Burg
MetaMetrics, Inc., Durham, North Carolina

6 D (Convention Center)

309

Building Strong Mathematical Foundations in Prekindergarten (Pre-K–2) Session
A learning environment that offers choices, fosters natural language development, and uses appropriate questioning to stimulate and support a child’s thinking lays a strong mathematical foundation. This session will focus on building prekindergarten math understanding through natural play situations and providing intentionally organized tasks.

Kim Bowen
Math Perspectives, Bellingham, Washington

14 B (Convention Center)

310

Integrating Algebraic Thinking with Number and Operations (Pre-K–2) Session
This session will explore how many early elementary school number-and-operation activities can be easily modified to incorporate algebraic thinking and to provide differentiation for students at different levels. Examples will be drawn from a variety of elementary school math curricula, and samples of students’ work will be shown.

Pamela J. Wells
Grand Valley State University, Allendale, Michigan

Elizabeth Ballroom C (Hyatt)

311

Using Literature to Build Operation Concepts and Teach Number Facts (Pre-K–2) Session
An understanding of operation concepts occurs best when young children are connected to their learning. Stories help children to build mental pictures of the ideas. These mental pictures then help teach strategies that lead to mastery of number facts. This session will show how stories can teach all four operations beginning in kindergarten.

Calvin Irons
Queensland University of Technology, Brisbane, Australia

Manchester Ballroom B (Hyatt)

312

Generalizations, Connections, and Ideas: Exploring the Role of Algebra in Elementary School (PreK–5) Session
This session will focus on how algebra ideas are investigated in the elementary school classroom. Algebra concepts in kindergarten through fifth grade will be explored and analyzed through activities and explorations. Emphasis will be placed on generalizations about the operations, growing patterns, fractions, equality, and relational thinking.

Zachary Champagne
Mandarin Oaks Elementary School, Jacksonville, Florida

Douglas Pavilion D (Hyatt)

313

Connecting It All: Four Frames Instructional Model (Pre-K–5) Session
Planned daily instruction includes spiral review, problem solving, direct instruction, and perfect practice. The direct instruction frame will include opportunities to explore number and place value as students develop an understanding of whole-number operations. Games will be shared in the perfect practice frame.

Deborah S. Donovan
Educational Resources Group, Inc., Charleston, South Carolina

Elizabeth Ballroom H (Hyatt)
3:30 p.m.–4:30 p.m.

**314**
**Developing Primary School Problem Solving**
*(Pre-K–5) Session*
Participants will explore developing an understanding of number sense through a conceptual approach to problem solving. Teaching big ideas from the textbook will be discussed, as well as implementing games, the workshop model, authentic problems, and use of the open number line.

**Ginalouise Pflanz**
Council Rock School District, Richboro, Pennsylvania

*Manchester Ballroom C (Hyatt)*

**315**
**Assessing for Understanding**
*(3–5) Session*
Connect powerful assessment and instructional practices to provide meaningful information for the classroom teacher. This session will share the development of an instructional plan with yearlong assessments that influence classroom practices to enhance and monitor students mathematical understanding in cognitively guided instruction.

**Mary Bridget Sweeney**
Des Moines Schools, Iowa

**Josie Burg**
Downtown School, Des Moines, Iowa

**Tracey Donovan**
Downtown School, Des Moines, Iowa

**Jessica Capper**
Downtown School, Des Moines, Iowa

*5 B (Convention Center)*

**316**
**Strengthen Mathematics Vocabulary Using Popular Games and National Comedy Theater**
*(3–5) Session*
Enhance students’ mathematics success by incorporating recommendations from the National Reading Panel. Learn to use activities adapted from TV game shows (new and old), *Whose Line is it Anyway?*, and the National Comedy Theater. Actors from National Comedy Theater will demonstrate with participants.

**Mary C. Cavanagh**
Arizona State University, Tempe

*6 E (Convention Center)*

**317**
**Braiding Together Language, Thinking, and Mathematics for Students’ Conceptual Understanding**
*(3–8) Session*
Transform your teaching through cognitively-based planning. Students can do problem solving by creating mathematical models, make connections among the mathematical concepts, create their own meaningful representations, and solve problems involving the same concept in different contexts to build a generalized understanding.

**Arthur Hyde**
National Louis University, Lisle, Illinois

**Susan Friedlander**
Northbrook School District 28, Illinois

*Marina G (Marriott)*

**318**
**Digging into Operation Sense: Helping Students Reason with Quantitative Analysis**
*(3–8) Session*
Do students begin attacking problems through computation without considering what operation they need to be using? Quantitative analysis is a process of analyzing the structure of a problem to verify which operations apply before plugging in values to solve. Come explore a strategy that truly helps think about a math problem before solving it.

**Beth Ann Schefelker**
Milwaukee Public Schools, Wisconsin

**Connie Laughlin**
Milwaukee Public Schools, Wisconsin

*Salon 3 (Marriott)*

**319**
**Making Math Cool! with “The Rappin’ Mathematician”**
*(3–8) Session*
This session will offer classroom teachers the tools, courage, and expertise to combat negative stereotypes of mathematicians as “nerdy” or “boring.” Making Math Cool! will deliver hands-on activities and ideas to turn even the most hardened, tough-to-teach student into one that says, “Hey, that’s pretty cool!”

**Alex Kajitani**
Escondido Union School District, California

*20 D (Convention Center)*

---

Check your e-mail at the Cyber Café located in the Exhibit Hall.
320
Reasoning Proportionally and Talking Math Lead to Success with Algebra
(3–8) Session
Fundamental to success with algebra is reasoning proportionally and describing relationships. Keyboarding, skateboarding, snowboarding, and a variety of projects, problems, and games from the sciences, arts, history, literature, and sports will serve as the settings for developing skill with proportional reasoning and communicating.
Carole Ellen Greenes
Arizona State University, Tempe
6 A (Convention Center)

321
Another Algebraic “Whack on the Side of the Head!”
(3–12) Session
The speaker was once asked how we could connect the concepts of algebraic thinking to the context of the algebra classroom. He will take a humorous, thought-provoking look at some common “mental locks,” and we explore how we can turn dry algebraic procedures into powerful algebraic thinking tools.
Larry Campbell
Missouri State University, Springfield
Douglas Pavilion B (Hyatt)

322
Empowering Yourself as a Mathematics Mentor
(3–12, Preservice and In-Service) Session
This session will discuss effective strategies for developing mentoring skills both individually and collaboratively, including a mixture of presentation and interactive experiences to demonstrate skills you can develop to mentor others and improve your own teaching. Examples from different levels of mathematics teaching will be provided.
Linda Sue Hutchison
University of Wyoming, Laramie
Judith Ellsworth
University of Wyoming, Laramie
Manchester Ballroom H (Hyatt)

323
Learning to Adapt Curricula through Lesson Study
(6–8) Session
Teachers face important decisions about how to implement curricula in the classroom. Lessons containing unfamiliar content, tools, or methodologies are especially challenging. In Japan, teachers work together through lesson study to implement new ideas. This presentation will examine the decisions teachers must make and how lesson study can help.
Thomas Fencer McDougal
Asia-Pacific Mathematics and Science Education Collaborative, Chicago, Illinois
Salon 4 (Marriott)

324
Activities and Applications to Facilitate Middle Grades Mathematics
(6–8) Session
This session will present activities and applications that can be used in middle school classrooms. Activities have been class-tested.
Rick Billstein
University of Montana, Missoula

325
Creating a Professional Learning Community through Coaching
(6–8, Preservice and In-Service) Session
Instructional coaching can be a powerful catalyst for developing a professional learning community in mathematics. This session will show how coaching extended beyond individual teachers’ classrooms to influence their awareness of inquiry, the selection and alignment of curriculum, and the formation of a vibrant grades 5–8 lesson study team.
Karma Nelson
Bozeman School District, Montana
Jennifer Luebeck
Montana State University, Bozeman
David Yopp
Montana State University, Bozeman
Elizabeth Burroughs
Montana State University, Bozeman
Manchester Ballroom D (Hyatt)
326
Mathematics’s Role in Developing a College-Going Culture
(6–12) Session
What role does mathematics education play in developing a college-going culture for at-risk kids? Researchers will share midpoint results of a seven-year, longitudinal study focused on building a college culture. The speakers will discuss merits and challenges of mentoring and tutoring as students make difficult transitions in grades 8 and 9.

Rich Radcliffe
Texas State University, San Marcos
Beth Bos
Texas State University, San Marcos

Salon 1/2 (Marriott)

327
Ping-Pong Balls and Lipstick: Teaching Problem Solving Using Complex Estimation
(6–12) Session
How many ping-pong balls fit in a plane? How fast does hair grow? Multistep estimation problems such as these will be explored as a way to teach problem solving. This session will look at a unit that supports all the skills needed to solve complex estimation problems. A packet of problems and lessons will be provided.

Eyal Wallenberg
Urban Assembly School for Law and Justice, Brooklyn, New York
Christopher Luzniak
Urban Assembly School for Law and Justice, Brooklyn, New York

10 (Convention Center)

328
A Checklist for Making Algebra Meaningful and Engaging
(6–12) Session
It’s a given that many students dislike, and have considerable difficulty in making sense of, algebra. Suggestions and rationale for some changes that build on prior learning experiences and forge connections with all content standards will be offered. Examples, activities, and projects that illustrate and illuminate will be provided.

Margaret J. Kenney
Boston College Mathematics Institute, Chestnut Hill, Massachusetts

San Diego Ballroom B (Marriott)

329
Bridging the Gap between Concrete Activities and Abstract Homework
(6–12, Preservice and In-Service) Session
Technology is only as good as the reasoning it inspires. Students often make no connection between an activity and their homework. This session will demonstrate appropriate, inappropriate, and innocuous uses of technologies, and ways to bridge between the concrete items students manipulate and the abstract ideas students represent on paper.

Christine C. Benson
Northwest Missouri State University, Maryville
Jennifer Wall
Northwest Missouri State University, Maryville

6 B (Convention Center)

330
Reasoning and Sense Making in Geometry across Grades 9–12
(9–12) Session
Participants will engage in tasks and discussion that promote students’ development of reasoning and sense making in high school geometry. Learn about students’ reasoning habits and how to increase reasoning opportunities, as presented in the geometry topic book that supports NCTM’s Focus in High School Mathematics document.

Sharon McCrone
University of New Hampshire, Durham
Yuria Orihuela
University of Miami, Florida
James King
University of Washington, Seattle

15 B (Convention Center)

332
SMART™ Students in a Flash
(9–12) Session
The presenters will share proven successful activities in Algebra 1 and 2 to enhance students’ self-testing and review of mathematical objectives through the use of SMART Board technology combined with TI study cards. CD demos will be shared with participants.

Antoinette Kidwell
Bryant Adult Alternative High School, Alexandria, Virginia
Lynn Wills
Bryant Adult Alternative High School, Alexandria, Virginia

Elizabeth Ballroom A (Hyatt)
**333**
**Integrating Advanced Algebra Applications into the Geometry Classroom**
*(9–12) Session*
This session will investigate advanced algebra concepts in a geometry environment. Participants will actively explore and extend geometry topics, using a review of the old (advanced algebra) and a preview of the new (precalculus). Included problems will involve probability, maximum and minimum (using a graphing calculator), and series.

Ilene Hamilton
Retired, Adlai Stevenson High School, Lincolnshire, Illinois

Elizabeth Ballroom D/E (Hyatt)

**334**
**Connecting with the Past: Lessons Learned from 19th-Century Textbooks**
*(9–12, Higher Education) Session*
Authors of early U.S. algebra textbooks described teaching philosophies that are surprisingly relevant today. Examining those philosophies gives us a chance to reflect on our own teaching practices. These antiquarian books can be used in the classroom as a teaching strategy. Participants will be able to examine a number of selected textbooks.

Marcus Jorgensen
Utah Valley University, Orem

11 B (Convention Center)

**335**
**Connecting Mathematical Concepts to Students’ Interpretations of Mathematical Representations**
*(9–12, Higher Education, Preservice and In-Service) Research Session*
Teachers’ and students’ interpretations of mathematical representations can differ significantly. Students do not always see what mathematicians see in representations. The speakers will investigate students’ interpretations of representations and discuss implications for such in respect to learning, instruction, and assessment.

Kwaku Adu-Gyamfi
East Carolina University, Greenville, North Carolina

Michael J. Bosse
East Carolina University, Greenville, North Carolina

Ron Preston
East Carolina University, Greenville, North Carolina

16 B (Convention Center)

**336**
**Some Difficulties to Be Aware of When Using Interactive Geometry in the Classroom**
*(9–12, Preservice and In-Service) Session*
Interactive geometry can be used quite effectively by the teacher to foster mathematical exploration; however, cognitive difficulties may arise in the visual and conceptual analysis of the dynamic figures with which the students can interact. We have analyzed a few of such difficulties and believe it is fundamental to develop awareness of them.

Anna E. Baccaglini-Frank
University of New Hampshire, Durham

Manchester 1/2 (Marriott)

**337**
**Connection-Making in a Secondary Mathematics Methods Course**
*(9–12, Preservice and In-Service) Session*
Why does the test for divisibility by nine work? Why is the volume of a cone one-third the volume of a cylinder? These questions are typically answered using algebra and calculus. The presenters will share alternative explanations using geometry and other representations that led to connection-making in a secondary mathematics methods course.

Bethany Noblitt
Northern Kentucky University, Highland Heights

Laura Bristol
Kentucky Center for Mathematics, Highland Heights

Molly A/B (Hyatt)

**338**
**Portfolios in Mathematics Teacher Education Programs: Tools for Documenting Transformation**
*(Higher Education, Preservice and In-Service) Session*
Portfolios present opportunities for preservice and in-service mathematics teachers to document struggles and transformations in knowledge, pedagogical skills, and dispositions. This session will focus on electronic portfolios rooted in the NCTM Principles and Standards as well as state standards and institutional conceptual frameworks.

William Lacefield
Mercer University, Atlanta, Georgia

7 B (Convention Center)
339
A Study on How Mathematics Teachers Use Technology in Their Teaching: Three Cases
(Higher Education, Preservice and In-Service) Session
To enrich teacher education programs in which teachers prepare teaching for students who live in a technologically advanced society, we need to know the relationship between what teachers learned in their teacher education programs and how they actually teach using technology. Research findings about the relationship will be presented.

Hyeonmi Lee
University of Georgia, Athens

Edward A/B/C/D (Hyatt)

340
Mathematics Standards and Assessments Require Reasoning, Sense Making, and Connections (General Interest) Session
Lifetime Achievement Awards Presentation
As we continue to build and implement the NCTM Standards and assessment work, students must expect to make sense of the mathematics they are learning. They should reason about mathematics and connect it across content strands and to contexts throughout their experiences. Let’s look at examples of tasks and student engagement in doing mathematics.

Henry S. Kepner
President, National Council of Teachers of Mathematics; University of Wisconsin—Milwaukee

20 A/B/C (Convention Center)

341
Simplify Math RtI: One Complete, Integrated Web-Based Solution (General Interest) Exhibitor Workshop
Learn about the first completely Web-based solution that connects the important components of Response to Intervention (RtI). The RtI Package for the Academy of Math delivers universal screening, scientifically based intervention, progress monitoring, case management and reporting.

AutoSkill International
AutoSkill International, Ottawa, Ontario, Canada

1 B (Convention Center)

342
Pearson’s New Middle Grades Math Program for Interactive Whiteboards (6–8) Exhibitor Workshop
Get a sneak peek at Pearson’s all-new middle grades math program built for today’s digital student. It has interactive Whiteboard lessons, online homework and assessments, and automatic grading and reporting.

Pearson
Pearson, Upper Saddle River, New Jersey

1 A (Convention Center)
In the first three volumes of this popular series Catherine Twomey Fosnot and Maarten Dolk help teachers support children’s development in number sense and operation.

The hallmarks of the series include:

- supporting children as they construct mathematical strategies and big ideas
- creating realistic contexts and representational models that develop children’s capacity to mathematize their world
- building a collaborative community of mathematical thinkers engaged in inquiry.

Now Catherine teams up with Bill Jacob to offer a comfortably familiar and characteristically rich extension to the earlier work. Catherine and Bill provide a landscape of learning that helps teachers recognize, support, and celebrate their students’ capacity to structure their worlds algebraically. They identify for teachers the models, contexts, and landmarks that facilitate algebraic thinking in young students.

When children are given the chance to structure number and operation in their own way, they can make sense of algebra not as a funny set of rules that mixes up letters and numbers but as a language for describing the structure and relationships they uncover.

—Catherine Fosnot and Bill Jacobs

Visit Heinemann.com for samples of video and sessions.

Save 30% at Heinemann Booth #2032
Resources for the Mathematics Educator… in the NCTM Bookstore

With nearly 200 publications written by mathematics educators for mathematics educators, NCTM’s wealth of books, electronic content, and specialty products is unmatched.

New Resources
NCTM’s publications are topical, practical, and dedicated to the same cause you are—improving the teaching and learning of mathematics for all students.

Popular Series
Realizing the vision of high-quality mathematics education for all students, as described in NCTM’s Principles and Standards for School Mathematics, requires the active participation of everyone in the education community. NCTM offers a wealth of materials designed to help you spread the message of the importance of improved mathematics education.

Strategies to Implement
Classroom friendly, grade-band specific volumes are filled with practical, teacher-tested activities and strategies to help students meet and exceed state or local standards.

Specialty Products
NCTM provides a variety of shirts, erasers, pencils, and other gifts and incentives to spread the importance of mathematics.

All conference attendees will receive a special conference discount of 25% off the NCTM list price on all purchases made in the Bookstore.*

Visit the NCTM Bookstore in the Exhibit Hall. Store hours:
   Wednesday 10:00 a.m. – 7:00 p.m.
   Thursday 7:00 a.m. – 5:30 p.m.
   Friday 7:30 a.m. – 5:30 p.m.
   Saturday 8:30 a.m. – 12:00 p.m.

* Conference discount not valid on sale items.
<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00</td>
<td></td>
</tr>
<tr>
<td>8:30</td>
<td></td>
</tr>
<tr>
<td>9:00</td>
<td></td>
</tr>
<tr>
<td>9:30</td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td></td>
</tr>
<tr>
<td>10:30</td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td></td>
</tr>
<tr>
<td>11:30</td>
<td></td>
</tr>
<tr>
<td>Noon</td>
<td></td>
</tr>
<tr>
<td>12:30</td>
<td></td>
</tr>
<tr>
<td>1:00</td>
<td></td>
</tr>
<tr>
<td>1:30</td>
<td></td>
</tr>
<tr>
<td>2:00</td>
<td></td>
</tr>
<tr>
<td>2:30</td>
<td></td>
</tr>
<tr>
<td>3:00</td>
<td></td>
</tr>
<tr>
<td>3:30</td>
<td></td>
</tr>
<tr>
<td>4:00</td>
<td></td>
</tr>
<tr>
<td>4:30</td>
<td></td>
</tr>
<tr>
<td>5:00</td>
<td></td>
</tr>
</tbody>
</table>

**HIGHLIGHTS**

- Iris M. Carl Equity Address (Presentation 478)
- NCTM Business Meeting (Presentation 582)
- NCTM President-Elect's Address (Presentation 648)
- New Teacher Celebration! (Presentation 686)

**Registration Hours**
7:00 a.m.–4:00 p.m.

**Exhibits and Cyber Café Hours**
8:30 a.m.–5:00 p.m.

**Bookstore and Member Showcase Hours**
7:30 a.m.–5:30 p.m.

**Fire Codes**
We have made every attempt to provide adequate seating for participants at the conference, but for your safety and because of fire regulations, only those with seats will be allowed in meeting rooms. To conform to fire codes, it will be necessary to ask persons sitting on the floor or standing to leave the room.
343
There Is No “Achievement” Gap in Mathematics
(General Interest) Session
We actually know what schools are doing that are successfully closing the achievement gap: they are focusing on closing instructional gaps by addressing the policies and practices that ultimately produce what we typically label the achievement gap. This session will address these instructional gaps and examine strategies for overcoming them.
Matt Larson
Lincoln Public Schools, Nebraska

344
Improving Achievement and Closing Gaps in Math and Science: Lessons from Schools on the Performance Frontier
(General Interest) Session
Kati Haycock will tell us about highly effective schools that get unusually strong results in math and science from all students, regardless of race or income. She will discuss the trends and the schools that beat them, as well as national math and science achievement trends, with a special focus on low-income and minority students.
Haycock serves as president of the Education Trust. Established in 1990, the Trust speaks up for what’s right for young people, especially those who are poor or members of minority groups. Before coming to the Education Trust, she served as executive vice president of the Children’s Defense Fund. A native Californian, she founded the Achievement Council and served as director of the outreach and student affirmative action programs for the University of California system.
Kati Haycock
The Education Trust, Washington, D.C.

345
The Mathematical Mysteries of a U.S. $1 Bill
(General Interest) Session
Money intrigues and motivates everyone, young and old. Who could have predicted that our common $1 bill could have a multitude of arithmetic, geometric, and origami connections for students of all ages? Hear the amazing story behind this rectangle, what it has to do with radar and bowties, and when $1 can be worth much more than a dollar!
David K. Masunaga
Board of Directors, National Council of Teachers of Mathematics; Iolani School, Honolulu, Hawaii

346
Renew Yourself by Teaching Math in Another Country
(General Interest) Session
Whether you are a new teacher, a seasoned veteran, or retired, you have much to offer and learn by teaching in another country. A panel shares their experiences and responds to your ideas and questions about teaching internationally. This session was conceived and cosponsored by the U.S. National Commission on Mathematics Instruction.
Stuart Moskowitz
Humboldt State University, Arcata, California
Cathy Seeley
Past President, National Council of Teachers of Mathematics; Charles A. Dana Center, University of Texas at Austin
Barbara Garri
State University of New York—College of Oswego
Ana Ferreras

347
Math and Opera in the Prekindergarten Classroom
(Pre-K–2) Session
This presentation will explore a collaborative curriculum program that connects mathematical concepts with opera figures from the Commedia dell’Arte and brings them to life in the preschool or prekindergarten setting. Included will be videos of this project, participation in some of the activities, and songs from the curriculum.
Julie Herron
University of Alabama, Tuscaloosa
Cecile Komara
University of Alabama, Tuscaloosa

348
Uno Means One: Grades Pre-K–2 Activities in Number, Measurement, and Spatial Relationships
(Pre-K–2) Session
TODOS: Mathematics for ALL presentation
During math lessons children learn to respect differences and value variety. Based partly on the speaker’s recent experiences in Mexico, the activities reinforce children’s understanding of number, measurement, and spatial relationships. Communication and connections help students see that mathematics permeates all cultures and societies.
Kay Gilliland
Mills College, Oakland, California
Now Students Can Envision Geometry...

And SUCCESS.
New Proof Tools,
Only in Carnegie Learning®
Geometry.

Visit us at booth #840 to see a demonstration!

Carnegie Learning
www.carnegielearning.com

8:00 a.m.–9:00 a.m.

349
Games, Grids, Ten Frames: Number Sense for Primary Grades
(Pre-K–2) Session
The speaker will explore card games, dice games, and arrays (ten frame and hundreds chart) to build number sense with grades K–2 students. She will use an arithmetic rack (rekenrek) to connect fives and tens to computation.

Ann Carlyle
Gervirtz School, University of California at Santa Barbara
Elizabeth Ballroom D/E (Hyatt)

350
Math Buddies: A Three-Way Collaboration among Preservice Teachers, Preschoolers, and Their Parents
(Pre-K–2, Preservice and In-Service) Session
The presentation will walk participants through the process of setting up a three-way collaboration. Participants will engage in four model learning activities and review journal comments and interviews with preschoolers, preservice teachers, and parents. The session will conclude with lessons learned and tips for avoiding pitfalls.

Eileen Cyr
Springfield College, Massachusetts
14 B (Convention Center)

351
This Isn’t Language Arts: Vocabulary Instruction in Math Classrooms
(Pre-K–5) Session
Want to know how to enhance vocabulary instruction in your math classroom? This session will discuss the importance of building mathematical vocabulary in elementary school classrooms as well as how teaching the language of math can be confusing. Various hands-on activities, games, literature, graphic organizers, and writing prompts will be shared.

Carol A. Corcoran
Stetson University, DeLand, Florida
20 D (Convention Center)

352
Math Fact Fluency: How Can Students’ Data Guide Its Development?
(Pre-K–5) Session
How does a student’s math fact fluency develop over time? Which methods can be used to promote fluency across a broad range of students? See what the latest research reveals about math fact fluency through longitudinal performance data from a large-sample, online research platform developed under grants from the National Science Foundation.

Paul Cholmsky
ExploreLearning, Charlottesville, Virginia
Salon 4 (Marriott)
353
A Comprehensive Approach to Number Sense: Technology That Supports Professional Development
(Pre-K–5) Session
Explore how Dr. Bob Wright’s Learning Framework in Number, from Math Recovery and Add+Vantage Math Recovery, is used to improve achievement by providing a foundational and comprehensive understanding of number sense development and how technology can be used to help classroom teachers expand instructional approaches with this concept.

Tina Silvestri
Solon City Schools, Ohio
William LaRiccia
Solon City Schools, Ohio

6 C (Convention Center)

354
Learning about Mathematics in Conversation with Children
(Pre-K–5, Preservice and In-Service) Session
What do teachers learn when children in first, second, and fourth grade are invited into a conversation about their mathematical thinking? Explore how conversations in mathematics assessment provide opportunities for children to illustrate their deep mathematical thinking and for teachers to develop different perspectives of mathematical ideas.

Florence Glanfield
University of Alberta, Edmonton, Canada
M. Shaun Murphy
University of Saskatchewan, Saskatoon, Canada
Gladys Sterenberg
University of Alberta, Edmonton, Canada

Douglas Pavilion B (Hyatt)

355
Intervention, the Ultimate Connector: Integrating Concepts, Content, Contexts and Cultures
(Pre-K–8) Session
At some time, everyone needs intervention. This session will engage participants in fun activities, a variety of representations (concrete/visual/virtual), and active discussions to link concepts, content, context, and culture, thereby ensuring fairness and accessibility for all students, including the disenfranchised.

Carolyn M. Moore
McGraw-Hill, Columbus, Ohio

Manchester 1/2 (Marriott)

356
Improving Blackboard Organization to Enhance Students’ Mathematical Thinking and Understanding
(Pre-K–8) Session
Japanese teachers believe that effective use and organization of the blackboard, or bansho, helps improve students’ mathematical thinking and understanding. For this reason, bansho is often examined during lesson study in Japan. Participants will learn ideas for enriching students’ learning through effective use of the blackboard.

Makoto Yoshida
William Paterson University, Wayne, New Jersey
William Jackson
Scarsdale Public Schools, New York

Manchester Ballroom H (Hyatt)

357
Scratch™ Brings Geometry to Life!
(3–5) Session
Animation brings geometry, integers, and Cartesian planes to life. Scratch, a new programming language, was integrated into our curriculum. Projects and resources will be shared. Scratch supplements the Focal Points by extending the understanding of 2D shapes, transformations, and rotational symmetry. Scratch was developed at Massachusetts Institute of Technology and is free.

Mary Queitzsch Zocchi
Watkins Elementary School, Washington, D.C.
Ann Potter
Langley School, McLean, Virginia

2 (Convention Center)

358
Multiplication Matters
(3–5) Session
Teaching and learning multiplication facts can be a trying process. On the basis of her dissertation research, the speaker has come up with a radically different approach to teaching multiplication facts that helps teachers and makes the process engaging for children. She will share her plan.

Lynn Salvo
Consultant, McLean, Virginia

Elizabeth Ballroom H (Hyatt)
359
How What Why Creating Interdisciplinary Units of Study
(3–8) Session
This session will discuss what research says in creating interdisciplinary projects and how it can guide design decisions. The speakers will share a math-and-science unit aligned to the Standards to discover what content-specific topics are being addressed. Various resources will also be given to support teachers in creating similar projects.
Jean Sangmin Lee
Indiana University Bloomington
Vanashri S. Nargund
Indiana University Bloomington
6 D (Convention Center)

360
When Mathematicians Write: Making Meaning of Mathematics
(3–8) Session
When students engage in the authentic work of mathematicians, they solve problems, communicate their solutions, collaborate, and deepen their understanding of concepts through writing. Come explore how writing in math helps students make meaning of mathematical language and differentiates a single math task for a spectrum of learners.
Kateri Thunder
University of Virginia, Charlottesville
Jane Hansen
University of Virginia, Charlottesville
Linde Rickert
Charlottesville City Schools, Virginia
6 F (Convention Center)

361
Dust Off Those Cuisenaire Rods: They’re Still Real Cool!
(3–8, Preservice and In-Service) Session
In this activity-based presentation, participants will discover and explore the rods as a means to understanding fundamental algebraic concepts. Ideas to be explored include rational numbers, patterns and functions, area, factoring, prime and composite numbers, and more. Join the fun, and use rods with us to go back to the future!
John F. Thomson
Consultant, Rochester, New York
Salon 1/2 (Marriott)

362
How Can We Improve Students’ Success with Algebra?
(3–12) Session
Why do many “successful” elementary school math students have so much difficulty with formal algebra? How do we diagnose common misconceptions and partial concepts that children may have developed regarding number and operations? Reveal “cracks” in our students’ foundations that may be keeping them from engaging deeply in their algebraic studies.
Debi De Paul
Educational Service District 123, Pasco, Washington
5 B (Convention Center)

363
Helping Struggling Learners Increase Self-Monitoring through Writing to Solve Problems
(3–12) Session
Many students with disabilities are poor self-regulators when solving word problems. This often hinders their progress and development in solving problems and understanding the content. Teachers will be provided with an instructional approach that uses writing to promote self-monitoring and strategic awareness for solving problems.
Delinda van Garderen
University of Missouri—Columbia
Douglas Pavilion D (Hyatt)

364
Inquiry into Equity: Using a Mathematics Cultural Proficiency Continuum
(3–12) Session
Develop your school or district capacity for closing mathematics education opportunity and achievement gaps, using a new inquiry-based tool to identify and examine your instructional program’s cultural proficiency. Learn how a leadership team of teachers are using this tool to close gaps for African American and English language learner students.
Lisa Usher-Staats
Los Angeles County Office of Education, Downey, California
Stephanie Graham
Los Angeles County Office of Education, Downey, California
7 B (Convention Center)
Pick-up a copy of the onsite Daily News for up-to-date conference information.

365
Learning Geometry from a Sheet of Paper
(6–8) Session
Middle school geometry will be taught by using an inexpensive manipulative—paper! Through paper-folding activities, using both regular paper and patty paper, many of the middle school geometry topics, and much of the vocabulary, will be shown. Come learn some new ways to teach geometry to your students.

Catherine Banks
Texas Woman’s University, Denton
Edith Hays
Texas Woman’s University, Denton

366
Teaching Math to Artists: Creative Math Projects in High School
(6–12) Session
Math teachers at the Boston Arts Academy have developed a unique math program that infuses arts and project-based learning into a traditional math sequence. Come hear about some of our successes. Leave with project samples that will engage students, connect to their interest in the arts and allow students to explore rich math content.

Mark Lonergan
Boston Arts Academy, Massachusetts

367
Linking Mental Math, Concepts, and Context in Grades 7–12 Mathematics
(6–12) Session
With the use (and sometimes overuse) of calculators, we need to put a focus on mental math. This session will discuss ways to teach mental-math strategies, help students see the power of mental math, and show ways we can have students simultaneously practice mental-math strategies and the concepts and skills we are teaching.

James Olsen
Western Illinois University, Macomb

368
Reasoning and Sense Making in Geometry: Even Italian Painters Sometimes Get It Wrong
(6–12) Session
Geometry can be a difficult subject: it is often the first time a student is asked to think visually or logically. The speaker will explore geometry areas that give students trouble and look at classroom-tested ideas that help facilitate students’ learning. Students’ work will be used to highlight reasoning and sense making.

Paul Kelley is a mathematics teacher at Anoka High School, Minnesota, where he has taught since 1987, focusing on teaching geometry and teaching using technology. He has written curriculum for his district for geometry, statistics, and trigonometry and served on several adoption committees. He cowrote Navigating through Geometry in Grades 9–12 and has presented at many mathematics conferences.

Paul Kelley
Anoka High School, Minnesota

369
Interactive Statistics: Exploring Statistical Concepts through Real-World Context
(6–12) Session
Participants will explore real-world statistical concepts in context of the GAISE Pre-K–12 Report (www.amstat.org/education/gaise) by formulating questions, collecting, analyzing, and drawing conclusions from data. This session will enhance educators’ understanding of statistics, clear up common misconceptions, and provide interactive activities.

Martha Aliaga
American Statistical Association, Alexandria, Virginia
Rebecca Nichols
American Statistical Association, Alexandria, Virginia

370
What Do Mathematicians Do, Anyway? Explorations in Problem Solving
(6–12, Higher Education) Session
Many students equate excellence in math with speed in problem solving and are unaware that mathematicians may spend years on a single problem. Learn about a method to encourage students to investigate a single problem at length and to communicate mathematical thinking. Receive detailed directions, a scoring rubric, and sources of problems.

Mary Pat Sjostrom
Chaminade University of Honolulu, Hawaii
371
Create More Instructional Time: Effectively Integrating SMART™ Boards, TI-Nspire™, and TI-Navigator™
(6–12, Higher Education) Session
Buy time for your classroom by incorporating these fascinating technologies! Place your actual daily class notes online in color as PDFs and videos. Use Nspire documents as investigations, reviews, tutorials, study cards, and more. Learn to use the wireless Navigator system effectively. Obtain a CD with hundreds of ready-to-use activities.

Tom Reardon
Fitch High School, Youngstown, Ohio

Elizabeth Ballroom A (Hyatt)

372
Infusing Technology into Math Education for Latino and At-Risk Students
(6–12, Higher Education) Session
This session will report on five years of Title V and what technology worked best for Latino and at-risk students. These emerging learning technologies should be used to supplement mathematics education for today’s media-hungry, twenty-first-century student.

Richard Gardner
Alliant International University, San Diego, California

6 E (Convention Center)

373
Linking Best Mentoring Practices and Online Support for Beginning Teachers
(6–12, Higher Education, Preservice and In-Service) Session
A mentor or cooperating teacher plays a crucial role in beginning or student teachers’ development. Strategies will be discussed for guiding them to effective mathematics teaching and dealing with their classroom challenges. The effectiveness of a new approach using on-line support for discussion and reflection will be presented.

Nina R. Girard
University of Pittsburgh at Johnstown

Manchester Ballroom D (Hyatt)

374
Using Interesting Problems to Link Concepts to Context
(6–12, Preservice and In-Service) Session
Interesting problems from many aspects of real life and from mathematics itself will be connected to concepts in the middle school curriculum. Problems will be solved with audience participation and discussion of how they can be used in a packed program.

Jack Price
Past President, National Council of Teachers of Mathematics, Newport Beach, California

Manchester Ballroom A (Hyatt)

375
Exploring Exponentials and Logarithms in an AP Calculus Class
(9–12) Session
Students need a deep understanding of functions in order to derive their integrals and derivatives. Too often students memorize formulas with little understanding of what the formulas mean. Come explore the calculus of functions and their inverses visually, numerically, algebraically, and verbally using technology and cooperative learning.

Lyn Orletsky
Titusville High School, Florida

Molly A/B (Hyatt)
Visit booth #1922 for:
- Product demonstrations
- In-booth workshops
- See new products
- Free gift

EAleducation.com
800.770.8010
376
Probing Understanding: What Can We Learn from Students’ Responses in Large-Scale Assessments?
(9–12) Session
The speakers will examine geometry problems from assessment instruments used in a longitudinal study. They will share students’ work and look at the strategies students used. Specifically, what strategies are successful students using? What are common misconceptions? What are the implications for geometry teaching?

Oscar Chavez
University of Missouri—Columbia
Dan James Ross
University of Missouri—Columbia

San Diego Ballroom B (Marriott)

377
Board Games, Markov Chains, and Matrices
(9–12, Higher Education) Session
What’s the average length of a game of Chutes and Ladders? This question and others can be answered using Markov chains, a branch of probability closely tied to linear algebra. Participants will explore Markov chains using materials from an NSF-funded curriculum currently in development. Sample materials will be provided.

Bowen Kerins
Education Development Center, Inc., Newton, Massachusetts

Salon 3 (Marriott)

378
Energy—the Sixth E: Enhancing the Five-E Model with Whistles and Bells
(9–12, Higher Education) Session
This session will discuss the implementation of, and results from, having teachers working as a finely tuned, collaborating, dream-team machine. It will include how to integrate the “Five E” model with SMART board technology, TI-Nspire calculators, thinking maps, white boards, and different hands-on activities.

Naomi Christine Molina de Wood
Cesar Chavez High School, Houston, Texas
Juanita Ramos
Cesar Chavez High School, Houston, Texas
Christie Ginson
Cesar Chavez High School, Houston, Texas

Manchester Ballroom C (Hyatt)

379
Authentic Discovery Learning Projects in Statistics
(9–12, Higher Education) Research Session
The speakers share results from a project funded by the National Science Foundation, including classroom-ready materials developed for using discovery learning projects in statistics, classroom implementation of these projects, and quantitative analysis of the success of these materials based on students’ attitudes and content knowledge.

Dianna Spence
North Georgia College and State University, Dahlonega
Robb Sinn
North Georgia College and State University, Dahlonega

17 B (Convention Center)

380
Developing Mathematical Thinking: Professional Development (PD) for Helping Teachers Meet the Needs of Diverse Learners
(Preservice and In-Service) Session
An overview of a PD model that increased achievement at elementary and middle school levels will be presented. PD facilitators and teachers from schools with high populations of English-language-learner and low-socioeconomic-status students will discuss their challenges and successes and how the program influenced their teaching.

Kimberly Bunning
Boise State University, Idaho
Sam Strother
Boise State University, Idaho
Gay Lynn Erb
Meridian School District, Idaho
Melissa Langan
Caldwell School District, Idaho

Elizabeth Ballroom C (Hyatt)

381
Interactive Digital Texts Engage Students in Algebra
(General Interest) Exhibitor Workshop
Use multiple forms of input to engage your students in algebra. Animations, audio, multiple self-assessment tools and more are built into a comprehensive digital text which has successfully completed the California state adoption.

Kinetic Books
Kinetic Books, Seattle, Washington

1 B (Convention Center)
**CW 381.1**

**Moving with Math: Assessment and Hands-On Lessons to Differentiate Instruction for Response to Intervention (RtI)!**  
*General Interest* Exhibitor Workshop

Moving with Math® is the RtI Solution that will reach preK–high school students in all tiers with proven results! Attendees will participate in hands-on activities and learn what makes Moving with Math the intervention leader.

Math Teachers Press  
Math Teachers Press, Minneapolis, Minnesota

*Torrey (Marriott)*

---

**CW 381.2**

**Writing in Mathematics**  
*General Interest* Exhibitor Workshop

How do you incorporate writing into the mathematics classroom? Math for America (MfA) master teachers highlight how communicating about math strengthens students’ learning and acts as an assessment tool. The presentation will explore the role of writing in math education, review real classroom scenarios and demonstrate learning logs and project-based writing.

Robert LaColla  
Math for America, New York, New York

Jeseca Long  
Math for America, New York, New York

*Columbia (Marriott)*

---

**CW 382**

**Improving Student Success Through Better Engagement: MathXL® for School**  
*(6–12)* Exhibitor Workshop

MathXL® for School allows teachers to focus on important aspects of teaching, such as measuring learning outcomes and identifying students who need help, while students receive a customized learning experience with automatic grading, immediate feedback, multiple help resources, and practice, practice, practice!

Pearson  
Pearson, Upper Saddle River, New Jersey

*1 A (Convention Center)*

---

**383**

**Link Up with Geometry Activities throughout the Seasons**  
*(Pre-K–2)* Gallery Workshop

Developing geometric concepts requires on-going learning activities to provide a solid foundation. Participants will create pattern-block animals, symmetrical rocks, and three-dimensional alphabet blocks. Link up with geometry activities that keep building geometry concepts throughout the year.

Charlene Steadman  
North Kansas City Public Schools, Missouri

Elise Sabaski  
North Kansas City Public Schools, Missouri

*14 A (Convention Center)*

---

**384**

**Mudpies, and Magnets, and Math, Oh My!**  
*(Pre-K–2)* Gallery Workshop

Follow the Yellow Brick Road to math and science integration. Participants will experience hands-on, Standards-based activities that facilitate the development of math and science concepts. Activities presented will highlight areas such as measurement, data analysis, classification, and more.

Latrenda Knighten  
Consultant, Baton Rouge, Louisiana

Betsy A/B/C (Hyatt)

---

**385**

**Effective Uses for Ten Frames**  
*(Pre-K–2)* Gallery Workshop

Ten frames are an effective tool to use to support the development of number sense. Mathematical routines, games, and problem-solving lessons using the ten frames will engage participants. Research complimenting the use of ten frames will be shared.

Melissa Conklin  
Math Solutions, Sausalito, California

Salon 6 (Marriott)

---

**386**

**Place Value: The Foundation for All Mathematics Begins in Primary School**  
*(Pre-K–5)* Gallery Workshop

Place value: what is it? Why is it important? How do you teach it and teach it well in kindergarten through third grade? Work on the development of place value through adding and subtracting whole numbers. See how place value is the foundation of future algebraic success for your students. You will really understand the value of place value!

Lori M. Hamada  
Fresno County Office of Education, California

*5 A (Convention Center)*
ARE YOUR STUDENTS STRUGGLING WITH FRACTIONS?

“Fraction proficiency is the most important foundational skill we can teach students as they prepare for algebra.”
– National Math Panel

The Case for Fraction Nation

• Research-based fraction instruction
• Adaptive Technology to meet each student’s needs
• Teacher Support to build capacity and expertise

Fraction fluency in 15 minutes a day!
by the creators of FAST Math

For your free professional paper on Fraction Fluency visit www.scholastic.com/fractionnation

Grades 4-8
Thank you to the Local Arrangements and Program Committee members. Your time and dedication made this year’s Annual Meeting a huge success!
8:30 a.m.–10:00 a.m.

393
 Benjamin Banneker: Reaching All Students—Observe Success in Action
 (3–8) Gallery Workshop
 Benjamin Banneker Association presentation
 Actions speak louder than words. See for yourself a typical class of elementary school students being taught high-level mathematics using Project SEED’s successful Socratic pedagogy. Observe proven strategies for increasing feedback, focus, and conceptual understanding that raise achievement and prepare students for success in algebra and beyond.

William Glee
Project SEED, Berkeley, California

Hamid Ebrahimi
Project SEED, Berkeley, California

11 A (Convention Center)

394
 Connecting Contexts to Concepts Using Fraction Division
 (3–8) Gallery Workshop
 Using multiple representations and strategies to connect context with the concept of fraction division, the speakers will explore several advanced models for thinking about fraction division. Participants will discover methods of dividing with fractions that are most helpful to students, and they will leave with ideas for classroom implementation.

Steve Klass
Encinitas Union School District, Encinitas, California

Nadine Bezuk
San Diego State University, California

8 (Convention Center)

395
 Spirals, Knots, Tessellations, Puzzles: Challenging and Engaging Geometry and Art Projects
 (3–8, Preservice and In-Service) Gallery Workshop
 Tessellate a circle with remarkable congruent shapes. Make a spiral of nesting squares. Design an ancient knot. Make a chambered nautilus of similar triangles. Cut a hexagon into congruent pentagons. These hands-on projects combine geometry with art and beautiful artifacts. Tested lesson plans from a geometry course for teachers will be included.

Patricia Baggett
New Mexico State University, Las Cruces

Andrzej Ehrenfeucht
University of Colorado, Boulder

Manchester Ballroom A (Hyatt)

396
 From Skip Counting to Linearity: How Do We Get There?
 (3–12) Gallery Workshop
 In this presentation the journey from skip counting to linearity will be explored through the mathematical idea of recursion. Algebraic thinking throughout the grades provides the connections necessary for a deep understanding of mathematics. Participants will experience hands-on activities that make this transition accessible for all students.

Mary Mooney
Milwaukee Public Schools, Wisconsin

Astrid Fossum
Milwaukee Public Schools, Wisconsin

San Diego Ballroom A (Marriott)

397
 Everyone Wins, When Everyone Plays!
 (6–8) Gallery Workshop
 Games provide an enjoyable, effective, and interactive way for students to practice and master skills by helping students develop the ability to think critically, solve problems, and investigate ideas about probability. You will learn games that can be played the next day in class.

Rochelle Fouts
McGraw Hill, Chicago, Illinois

Marina D (Marriott)

398
 Math Tasks and Processes That Work for Middle Grades Students
 (6–8, Preservice and In-Service) Gallery Workshop
 Classroom management and learning in a classroom can be helped significantly by building good tasks and good processes. Find out what makes a good task, how to develop and use them in your class, and what processes support more learning and less trouble.

Jenny Simmons
Saltillo High School, Tupelo, Mississippi

Barbara Dougherty
Board of Directors, National Council of Teachers of Mathematics; Iowa State University, Ames

9 (Convention Center)
399
Buses Aren’t That Small! Using Hot Wheels® to Examine Scale Factor
(6–12) Gallery Workshop
This presentation will share an activity published in *Mathematics Teaching in the Middle School* that uses Hot Wheels cars to examine the concept of scale factor and that can be connected to the concepts of similarity and proportionality. Students’ thinking and extensions to other real-world applications will also be addressed.

Matthew S. Winsor
Illinois State University, Normal

Elizabeth Ballroom B (Hyatt)

400
Connecting Algebra and Geometry: Activities to Promote Achievement for All Students
(6–12) Gallery Workshop
Participants will engage in a variety of classroom-ready activities designed to connect algebraic concepts to geometric concepts and representations. Activities will span introductory algebra, second-year algebra, and precalculus.

John A. Carter
Adlai E. Stevenson High School, Lincolnshire, Illinois

Gwen Zimmermann
Adlai E. Stevenson High School, Lincolnshire, Illinois

Darshan Jain
Adlai E. Stevenson High School, Lincolnshire, Illinois

Douglas Pavilion A (Hyatt)

401
Using Literacy Strategies to Increase Mathematical Understanding
(6–12) Gallery Workshop
Mathematics textbooks can contain more concepts per line, sentence, and paragraph than any other kind of textbook. This brings increased challenges for students. This presentation will incorporate literacy strategies that promote mathematical understanding, guide instruction, and engage students in powerful learning experiences.

Kathleen Dempsey
Mid-continent Research for Education and Learning, Denver, Colorado

Elizabeth Ballroom F (Hyatt)

402
You Can Do It! Technology Can Help!
(6–12) Gallery Workshop
Challenge students to make connections among mathematics, science, and technology using real-world phenomena. Use the TI-Nspire handheld technology, in conjunction with probes and other manipulatives, to explore linear, exponential, and quadratic functions.

Kathleen McKinley
School District of Lancaster, Pennsylvania

Alwina F. Green
School District of Philadelphia, Pennsylvania

Marina E (Marriott)

403
Strategies for Teaching Probability in the Middle Grades
(6–12, Higher Education) Gallery Workshop
This gallery workshop will begin with probability experiments to generate data for experimental probability. Three strategies for computing theoretical data for these experiments—sample spaces, probability trees, and an area model—will be covered, with comparisons made between the experimental and theoretical probability.

Sue Sundberg
University of Central Missouri, Warrensburg

15 A (Convention Center)

404
Students’ Work: What’s the Big Idea?
(6–12, Preservice and In-Service) Gallery Workshop
How is this student’s thinking developing? What is the core mathematical concept at stake? How can I respond in a way that engages and moves thinking forward while eliciting more information? Look at the insights gained from teams of researchers, mathematicians, and teachers looking at the work of students mentored in online problem solving.

Stephen Weimar
The Math Forum @ Drexel, Philadelphia, Pennsylvania

Marina F (Marriott)

405
Discrete Mathematics: Classroom-Ready Tasks for Cryptography, Graphs, Recursion, and More
(9–12) Gallery Workshop
Discrete math is engaging, powerful, and fun. It “should be an integral part of the school mathematics curriculum” (NCTM 2000). Come sample a collection of classroom-ready tasks that will make your class come alive with problem solving, reasoning, sense-making, connections, and contemporary contexts.

Eric Hart
Maharishi University of Management, Fairfield, Iowa

San Diego Ballroom C (Marriott)
**406**

_Deal or No Deal: Fair or Not Fair?_  
*(9–12, Higher Education) Gallery Workshop*

Participants will engage in an interactive presentation where they will calculate mathematical measures of mean, median, expectation, and fairness in order to analyze the offers from the “banker” in the game show _Deal or No Deal_ and predict offers as the game progresses until the final deal is accepted.

**Jason Gershman**  
Nova Southeastern University, Fort Lauderdale, Florida  
_16 A (Convention Center)_

---

**407**

_Multiple Representations of Calculus Concepts Using TI-Nspire™ CAS Technology_  
*(9–12, Higher Education) Gallery Workshop*

Participants will be given hands-on experience using the handheld TI-Nspire computer algebra system (CAS). They will work on activities that represent calculus concepts algebraically, graphically, and numerically.

**Patricia Sauquillo Brooks**  
Mount Carmel High School, San Diego, California  
_Manchester Ballroom E/F (Hyatt)_

---

**408**

_Under the Tip of the Iceberg: A Model for Assessment and Instruction_  
*(Higher Education, Preservice and In-Service) Gallery Workshop*

This interactive presentation will highlight assessment activities and teacher-designed materials used in professional development with elementary, middle, and high school math teachers. Participants will explore and discuss how an iceberg model can be used to support teachers’ classroom assessment practices and deeper understanding of mathematics.

**David C. Webb**  
University of Colorado at Boulder  
_Douglas Pavilion C (Hyatt)_

---

**409**

_Use Mathematics Homework with an Eye on Equity and on Mathematical Integrity_  
*(General Interest) Session*

Homework is widely used in mathematics teaching, but it can also amplify inequities. How can homework be designed and used in ways that support mathematical development and that are sensitive to the differences in students’ out-of-school contexts and responsibilities? The session will examine specific examples of homework and their design and use.

**Deborah Loewenberg Ball**  
University of Michigan—School of Education, Ann Arbor  
_20 A (Convention Center)_

---

**410**

_Worksheets Don’t Grow Dendrites: Twenty Instructional Strategies That Engage the Brain_  
*(General Interest) Session*

If students don’t learn the way we teach them, then we must teach them the way they learn. Experience 20 brain-compatible strategies that maximize understanding and memory. Explore research that shows why these strategies are preferable to others and ensure that brains retain important concepts, not only for tests, but for life!

Marcia Tate is a former executive director of professional development for the DeKalb County Schools, Decatur, Georgia. In her 30-year career with the district, she has been a classroom teacher, reading specialist, language arts coordinator, and staff development director. She has worked with administrators, teachers, parents, and business and community leaders and has authored five best-selling books.

**Marcia L. Tate**  
Developing Minds, Inc., Conyers, Georgia  
_20 D (Convention Center)_

---

**411**

_Bridge across the Americas: Connections for Strengthening Math Education in Latin America_  
*(General Interest) Session*

This session will be an overview of past linkages between professional organizations in the United States and Latin America with proposals for how they can be evaluated and improved, in order to understand the impact of both systems on immigrant students.

**Rick Scott**  
New Mexico Department of Higher Education, Santa Fe  
**Eduardo Mancera**  
Asociación Nacional de Profesores de Matemáticas, Mexico City, Distrito Federal, Mexico  
**Eliana Rojas**  
University of Connecticut, Storrs  
_Gregory A/B (Hyatt)_
SMI MATH INVENTORY

Grades 2-8+

Powerful Data for Raising Math Achievement

- Screen for Intervention
- Inform Instruction
- Monitor Progress

For your free professional paper on Quantiles visit www.scholastic.com/SMI
412
From Fingers to Figures
(Pre-K–2) Session
The speaker will show how math history helps students develop their mathematical understanding of place value and number sense. She will demonstrate the development of counting and share the stories and materials. Mathematical concepts will be more evident and easily understood if students are given a historical background.
Doris Lindberg
Carlssons Skola, Stockholm, Sweden
5 B (Convention Center)

413
Teaching and Assessing for Understanding
(Pre-K–2) Session
Connect assessment and instructional practices to provide meaningful information for classroom teachers. This session will share the development of an instructional plan with yearlong assessments that help classroom practices monitor students’ mathematical understanding. This plan correlates with strategies from cognitively guided instruction.
Jennifer Marie Johnson
Des Moines Schools, Iowa
Barbara Leise
Des Moines Schools, Iowa
Chris Curtis Mathews
Des Moines Schools, Iowa
Natalie Franke
Des Moines Schools, Iowa
John S. Johnson
Des Moines Schools, Iowa
Manchester Ballroom D (Hyatt)

414
The Singapore Math for Helping Children Solve Challenging Mathematical Problems
(Pre-K–5) Session
The TIMSS results show that Singapore students are consistently doing very well at the grade 4 math. How do they solve complicated and algebraic problems before learning algebra? The speaker will show Singapore Math methods in greater depth, linking theory, practice, and connection. The model method and other math strategies will be examined.
Ho-Kheong Fong
Univeristy of Bahrain, Bahrain
20 B/C (Convention Center)

415
Avoiding Misconceptions and Decreasing the Need for Intervention
(Pre-K–5) Session
If we focus on meaning and consider the crucial learning phases when children are beginning their study of mathematics, we can prevent many misconceptions that cause children to be unsuccessful in mathematics.
Kathy Richardson
Math Perspectives Teacher Development Center, Bellingham, Washington
6 F (Convention Center)

416
More than Just Rabbits: Why Fibonacci Matters
(Pre-K–8) Session
In this playful, highly visual presentation, the presenter will reveal how you can use the story of Fibonacci to teach more than just number patterns. Learn how this medieval mathematician’s tale connects with seven crucial disciplines: math, science, art, literature, history, language, and lasagna!
Joseph D’Agnese
Henry Holt Books for Young Readers, New York, New York
15 B (Convention Center)

417
Virtual or Not? Selecting Virtual Manipulatives for Effective Classroom Use
(Pre-K–8) Session
Exploring mathematics with virtual manipulatives can be engaging and exciting. The question is, how can teachers effectively select a virtual manipulative for classroom use? The session will provide some guidelines and questions to consider that will help you take advantage of their potential.
Johnna Bolyard
West Virginia University, Morgantown
Patricia Moyer-Packenham
Utah State University, Logan
6 E (Convention Center)

418
Can Students Get the Right Answers for the Wrong Reasons?
(Pre-K–8, Preservice and In-Service) Session
Are your current assessments revealing what your students truly understand? Take a mathematical journey with Sarah and her teacher to identify why she is getting the right answers for the wrong reasons. Use informative diagnostic tasks designed to elicit Sarah’s understandings, partial concepts, and misconceptions.
Terri Morrison
Grafton Public Schools, Massachusetts
Elizabeth Ballroom H (Hyatt)
Receive a free T-shirt: join or renew your NCTM membership onsite at the NCTM Member Showcase.

419
Teach to the Test for Deeper Understanding
(3–5) Session
Make the most of multiple-choice. Incorporate problem solving, critical thinking, and reading comprehension skills. These strategies are classroom-tested (pardon the pun) and proven to improve standardized test scores by as many as 30 percentile points while students gain deeper understanding of connections between math skills and concepts.

Christine Losq
Consultant, Palo Alto, California

Edward A/B/C/D (Hyatt)

421
Algebraic Thinking and the Language of Number Puzzles
(3–8) Session
The language used in many number puzzles requires students to think algebraically. Participants will solve a collection of number puzzles and discuss the role that language plays in the algebraic thinking needed to solve the puzzles.

Wade Hampton Sherard
Furman University, Greenville, South Carolina

2 (Convention Center)

422
Go Math: Mobile Applications to Support Families’ Everyday Math Use
(3–8) Research Session
The speakers interviewed families with middle school students to learn how families use and talk about math at home. From that, they developed mobile applications to support families’ problem-solving activities and discussions in everyday math. They will present the applications and discuss potential math links between home and the classroom.

Kristen Blair
Stanford University, California

April C. Alexander
Stanford University, California

Shelley Goldman
Stanford University, California

Manchester Ballroom B (Hyatt)

423
Changing the Culture of Language for the Hispanic ELL Student in Mathematics
(3–8, Preservice and In-Service) Session
Mathematics language and the mathematics register includes more than just the mathematical concepts; they are also vehicles to communicate mathematically. In multicultural classes, language is not only a tool but also a target. Come hear the challenges that our English language learner (ELL) students experience and some solutions to those challenges.

Noemi R. Lopez
Harris County Department of Education, Houston, Texas

7 B (Convention Center)

424
Mathematical Learning Styles: Teaching So Everyone Can Learn
(3–8, Preservice and In-Service) Session
Research shows that there are two very distinct learning styles in mathematics—linear and holistic. This session will teach characteristics of the two styles as well as teach strategies that meet the needs of both types of students in the same classroom.

Rita H. Barger
University of Missouri—Kansas City

Salon 3 (Marriott)

425
How SMART™ Is Your Chalkboard?
(6–8) Session
Transform your old math lessons into SMART lessons. Learn how to teach your current lessons using a SMART Board. See strategies to encourage students’ participation at the board. Classroom teachers will present ways to create and use SMART Board manipulatives and games to generate engaging lessons. Audience participation is required!

Michelle Meehan
Kenmore Middle School, Arlington, Virginia

Jill Lyttle
Kenmore Middle School, Arlington, Virginia

Elizabeth Ballroom A (Hyatt)
426
Casting for Knowledge in the Mathematics Classroom
(6–8) Session
Over the last three years, 80 middle school educators in North Texas have participated in Teacher Quality Grant programs producing podcasts and vodcasts. This presentation will demonstrate how to create, edit, and publish broadcasts that will enhance middle school mathematics teaching.

Vanessa E. Huse
Texas A & M University—Commerce
Maribeth L. McAnally
Texas A & M University—Commerce
Susan Bauer
Ursuline Academy of Dallas, Texas

427
Use Rich Problems to Teach, Connect, and Extend Hard Middle School Concepts
(6–8, Higher Education, Preservice and In-Service) Session
Develop rich problems that start with accessible questions but continue with probing questions that increase in difficulty to challenge the most able students. Rich problems provide all students the opportunity to succeed and allow the most able to continue to deepen knowledge about important concepts. A set of such problems is presented.

Carol Reed Findell
Boston University, Massachusetts

428
Using Small Groups with Linguistically Diverse Students
(6–12) Session
TODOs: Mathematics for ALL presentation
You can use groups with linguistically diverse students. The speakers will summarize research on using groups with bilingual students, work on a proportional reasoning task you can use in your classroom, discuss cases of linguistically diverse students working on the task, and consider how to apply principles from this presentation to your teaching.

William Zahner
University of California at Santa Cruz
Griselda Marlene Velazquez
University of California at Santa Cruz

429
Grow Beasts: Growing Students’ Understanding of Ratio, Proportions, and Slope
(6–12) Session
Grow Beasts: plunk ‘em in water and four days later they’ve grown! Students measure, estimate, predict growth rates, measure some more, compile data, plot points, crunch numbers, and generally get excited, using math to make sense in an inquiry environment. Come to the session and time-warp through the process. Leave with a plan and a Grow Beast.

Mark Roddy
Seattle University, Washington

430
Using Technology to Differentiate Instruction and Activate Learning for All Students in Your Math Classroom
(6–12) Session
SMART Boards and TI-Navigators in high school classrooms: share strategies for differentiating algebra instruction, and use these same tools in Algebra 2, statistics, and precalculus to deepen instruction. After a review of the SMART Board and the TI-Navigator, participants see new, advanced features that increase students’ achievement.

Donna Johnson
Caroline County Public Schools, Denton, Maryland

431
Newly Prepared Secondary School Mathematics Teachers in Urban Schools: Their Pedagogy and Students’ Learning
(6–12, Preservice and In-Service) Session
Benjamin Banneker Association presentation
This study examines the pedagogical approaches that urban secondary school mathematics teachers use in their classrooms and their effects on students’ learning. Data was collected through questionnaires and interviews and analyzed using a phenomenological approach revealing mixed results.

Pier Angeli Junor Clarke
Georgia State University, Atlanta
Denise Natasha Brewley-Corbin
Georgia Gwinnett College, Lawrenceville, Georgia
Marsha McCrary-Barron
Georgia State University, Atlanta
**432**
Mathematical Field Trips: Geometrical Entree to Worlds of Art and Cultures (6–12, Preservice and In-Service) Session
Examine multicultural artwork through the lens of geometry as you “visit” museums around the world. The presenters will share experiences of both actual and virtual fieldtrips that place geometry, symmetry, tessellations, and transformations in the context of art and culture. Students’ work will be shared.

*Cara Melina Goldberg*
Boston University, Massachusetts

*Pamela Ann Halpern*
Salem State College, Massachusetts

*Manchester Ballroom H (Hyatt)*

---

**433**
The Shape of Geometry and the Geometry of Shape (6–12, Preservice and In-Service) Session
Transformations, coordinate geometry, calculator and computer graphics, and the increased attention to applications have all caused, without any fanfare, changes in how we look at the shapes of figures. This talk will look at the changes in school geometry in grades 3–12 over the past half century from the standpoint of the concept of shape.

*Zalman Usiskin*
University of Chicago, Illinois

*Elizabeth Ballroom D/E (Hyatt)*

---

**434**
CAS: More than a Turbo Pencil (9–12) Session
Handheld computer algebra systems (CAS) have been around for more than twenty years. This session will focus on how they can be used as instruments that have pedagogic value. Issues of equity, symbolic fidelity, and using CAS to make mathematically meaningful connections will all be addressed.

*Mark Howell*
Gonzaga High School, Washington, D.C.

*6 C (Convention Center)*

---

**435**
Ruling Out Chance (9–12) Session
This session will examine the connections between probability and statistical inference. Activities will be presented that help students understand the concept of a sampling distribution and how the conclusions in hypothesis tests and the interpretation of confidence intervals and margin of error relate to probability.

*Roxy Peck*
California Polytechnic State University, San Luis Obispo

*Douglas Pavilion D (Hyatt)*

---

**436**
Using the Concept of Derivatives to Investigate Integrals: A Lesson Study (9–12) Session
How do you teach the concept of integrals prior to calculus? This session describes a lesson study connecting conceptual understanding of derivatives to integrals. You will watch video of eleventh graders working collaboratively using their knowledge of rate of change to predict graphs of original functions from graphs of derivatives.

*Matsuo Marti*
Jones College Prep High School, Chicago, Illinois

*Jessica Fulton*
Jones College Prep High School, Chicago, Illinois

*John Remiasz*
Jones College Prep High School, Chicago, Illinois

*Marina G (Marriott)*

---

**437**
Algebra Goes to the Movies (9–12) Session
How can a teacher introduce the material in the next chapter of an Algebra 1 or 2 textbook in an interesting way? Let the students help. Connect your students’ interests in movies with algebra through this unique and engaging poster project. Students will use communication, creativity, and evaluation to present the content of the new chapter.

*Lynda Wormell*
California State University, Northridge

*Salon 1/2 (Marriott)*
438
New Approaches to the Fourth Year of High School Mathematics
(9-12, Higher Education) Session
Linear algebra can bring algebraic and geometric thinking together in ways that reinforce both. Participants will sample activities from a new, NSF-funded curriculum, drawing on vector algebra, geometry, and equations of lines and planes, and look at some of the rich applications of the subject. The only background required is second-year algebra.
Kevin Waterman
Education Development Center, Newton, Massachusetts
Stephanie Ragucci
Andover High School, Massachusetts

439
Stimulating Interest in Statistics through the Use of Government Data
(9-12, Higher Education) Session
Much statistical information of interest to students’ daily lives are available on public Web sites maintained by federal statistical agencies. The speaker will show examples of this data, describe how to access it, and consider how to present it to stimulate students’ interest in statistics and encourage them to consider careers in public service.
Ron Wasserstein
American Statistical Association, Alexandria, Virginia

440
Unexpected Expectations
(9-12, Higher Education) Session
Mathematical expectation provides a means of quantifying the expected outcome of an experiment involving more than one possible outcome. This talk will present the quirkier (paradoxical) issues that can arise, including Newcomb’s paradox, Parrondo’s paradox, and the Prisoner’s Dilemma.
Leonard Wapner
El Camino College, Torrance, California

441
The Pythagorean Theorem and Ptolemy’s Theorem
(9-12, Higher Education) Session
The speaker will look at the Pythagorean theorem again, and show the result using a less famous theorem in geometry called Ptolemy’s theorem. Geometry problems for the classroom will be shown.
Gail Marie Nord
Gonzaga University, Spokane, Washington

442
Succeeding in Challenging Times: Where to Start and What Next
(9-12, Preservice and In-Service) Session
It’s probably not what you expected. Learn how to get ready; how to start; how to take the next steps to be successful; and how to finish the year. From working with challenging students to challenging students, from administrators to parents, look for ways to engage toward success.
Mike Stewart
Ventura Unified School District, California

443
A “Founders of Mathematics” Project: More than a Biographical Listing
(Higher Education, Preservice and In-Service) Session
Tired of student’s “cut and paste” papers? This Founders of Mathematics project requires insights from the student beyond summarizing. Students must estimate a founder’s worth to a particular field as well as predict what it will take for the student to become “famous” in the course being taken. A “recipe for success” will be available.
Stephen LaVerne Brown
Olivet Nazarene University, Bourbonnais, Illinois

444
Response to Intervention (RtI) and Mathematics: Help for Struggling Students
(Higher Education, Preservice and In-Service) Session
The three-tiered RtI strategy will be discussed using examples of problem-solving instructional strategies that focus on teaching mathematics in context. Relevant research on RtI initiatives in mathematics, including technology resources, will be presented and synthesized into a take-home checklist.
Dolores Burton
New York Institute of Technology, Old Westbury
9:30 a.m.–10:30 a.m.

445
Doing What Works: A Multimedia Web Site Highlighting Research-Based Practices (Preservice and In-Service) Session
Explore learning what works, seeing how it works, and doing what works for mathematics topics included in the Web site “Doing What Works.” Topics will include response to intervention in mathematics, encouraging girls in mathematics and science, crucial foundations of algebra, and major topics for school algebra.

Clare Heidema
RMC Research Corporation, Denver, Colorado
Arlene Mitchell
RMC Research Corporation, Denver, Colorado

San Diego Ballroom B (Marriott)

446
Challenging Preservice Elementary School Teachers to Confront their Mathematical Knowledge: Opportunities in Content and Methods Courses (Preservice and In-Service) Session
Helping preservice elementary school teachers develop deep mathematical knowledge for teaching is a goal in elementary programs. The speakers will share course projects that we have found useful for helping preservice teachers confront their gaps and develop deep mathematical knowledge for teaching.

Kay A. Wohlhuter
University of Minnesota—Duluth
M. Lynn Breyfogle
Bucknell University, Lewisburg, Pennsylvania
Amy Roth McDuffie
Washington State University—Tri-Cities, Richland

6 A (Convention Center)

Come, Connect, Communicate
Inclusion and special education
Meet with educators who share your interests in inclusion and special education to discuss how we might improve the teaching and learning of mathematics. This colloquium provides an opportunity to network and establish relationships that can continue beyond the conference as a resource for your professional growth.

Carlsbad (Marriott)

Come, Connect, Communicate
Intervention, Grades Pre-K–2
Meet with educators who share your interests in intervention, grades pre-K–2, to discuss how we might improve the teaching and learning of mathematics. This colloquium provides an opportunity to network and establish relationships that can continue beyond the conference as a resource for your professional growth.

Del Mar (Marriott)

10:00 a.m.–11:00 a.m.

EW 446.1
Raising Math Achievement through Adaptive Technology and Differentiated Instruction (General Interest) Exhibitor Workshop
Learn about three innovative programs—Scholastic Math Inventory, Fraction Nation, and FASTT Math—that use computer-adaptive technology to provide universal screening, and adaptive instruction, and that build fraction and math fact fluency for grade 2 and up.

Scholastic/Tom Snyder Productions
Scholastic/Tom Snyder Productions, Watertown, Massachusetts

Torrey (Marriott)

EW 447
Do Word Problems Scare the Daylights Out of Your Students? (4–9) Exhibitor Workshop
Find out how Hands-On Equations® enables students to visually represent and solve word problems using game pieces, including age and consecutive number problems.

Borenson and Associates, Inc.
Borenson and Associates, Inc., Allentown, Pennsylvania

Columbia (Marriott)

EW 448
Math Innovations: A New Middle Grades Mathematics Program (6–8) Exhibitor Workshop
Developed using Curriculum Focal Points, Math Innovations encourages students to think like mathematicians with focus on verbal and written communication. Concepts are developed in depth with connections across grade levels in conjunction with computational fluency.

Kendall Hunt Publishing Co.
Kendall Hunt Publishing Co., Dubuque, Iowa

1 B (Convention Center)

EW 449
CME Project: Math with a Twist (8–12) Exhibitor Workshop
Somewhere between an instructional approach that is traditional and one that is progressive lives another way to teach math: the CME Project. This four-year, NSF-funded project takes a problem-based, student-centered approach balancing instruction elements, forming good Habits of Mind, and developing a deep understanding of mathematics.

Pearson
Pearson, Upper Saddle River, New Jersey

1 A (Convention Center)
450

**Wake Up! Shake Up! Pick My Brain!**
*(Pre-K–2) Gallery Workshop*

Discover quick, motivational ways of engaging students with brain teasers, puzzles, and more. Get your lessons off with a bang, recover from midday slumps, or add pizzazz to daily routines. With quick, ready-to-use tasks for all year, your class will be brimming with not-so-typical, very cool investigations.

**Giselle Irene Benoit-Humber**
Eastern School District, St. John’s, Newfoundland and Labrador, Canada

**Colleen Cheryl King**
Eastern School District, St. John’s, Newfoundland and Labrador, Canada

**Sharon Anne Power**
Eastern School District, St. John’s, Newfoundland and Labrador, Canada

10:30 a.m.–12:00 noon  
451 A (Convention Center)

451

**A Star Model Makes the Mathematics Shine for All**
*(Pre-K–2) Gallery Workshop*

**TODOS: Mathematics for ALL presentation**
**Presidents’ Series presentation**

We all know that children learn in many ways and that multiple representations provide opportunities for all students to learn mathematics. Participants will experience classroom tasks, use a star model that emphasizes multiple representations to plan and initiate tasks, and consider the important mathematical ideas of the tasks.

**Nora G. Ramirez**
TODOS: Mathematics for ALL, Tempe, Arizona

11 A (Convention Center)

452

**Singing to the Tune of Integrating Math, Literature, and Music**
*(Pre-K–2) Gallery Workshop*

This presentation will incorporate child-created songs into the elementary school classroom to reinforce math skills. Using Stuart Murphy’s Math Start books as a springboard, the speaker will introduce participants to songs that integrate math, music, and literature.

**Minerva Harrell Smith**
Discovery School @ Reeves Rogers, Murfreesboro, Tennessee

Manchester Ballroom I (Hyatt)

453

**Ten, It’s Bigger than You Think**
*(Pre-K–2) Gallery Workshop*

When you think of a student with good number sense, what comes to mind? Can your students link what they know about ten to larger numbers? The lessons in this participatory presentation build on early number sense, including counting; more, less and equal; writing and recognizing numerals; part-part-total relationships; and anchors of 5 and 10.

**Cheryl Akers**
Howard County Public Schools, Columbia, Maryland

**Randi Blue**
Howard County Public Schools, Elkridge, Maryland

Manchester Ballroom I (Hyatt)
454

Using Mathematical Connections to Build Fact Fluency
(Pre-K–2, Preservice and In-Service) Gallery Workshop

Asking students to make the leap from counting to memorizing addition facts may hinder their understandings and fluency with basic facts. This interactive presentation will focus on methods for getting students fluent with facts by moving them from counting strategies to derived facts and making mathematical connections along the way.

Christina Tondevold
Initiative for Developing Mathematical Thinking, Boise State University, Idaho

10:30 a.m.–12:00 noon

455

A Visit to the Zoo = Having Fun with Math
(Pre-K–5) Gallery Workshop

Plan a trip to a zoo by using math as a means of reaching all your students at all levels. Participants will explore different ways of finding the best way to see all the animals, vote for their favorite animal, and get ideas for using discrete math. Participants will leave with a wealth of ideas to help their class plan the zoo trip.

Susan L. Weiss
Solomon Schechter Day School, Newton, Massachusetts

Elizabeth Ballroom F (Hyatt)

456

Response to Intervention (RtI): A Framework for Effective Math Instruction
(Pre-K–5, Preservice and In-Service) Gallery Workshop

RtI focuses on integrating assessment, instruction, early prevention, and the student’s learning process. Little is known still of how RtI can be integrated into math instruction. This gallery workshop will use examples from RtI math projects in grades pre-K–2 to explain the approach and provide a step-by-step guide on how to implement RtI in a classroom.

Michael P. Mueller
Hospital for Sick Children, Toronto, Ontario, Canada

Douglas Pavilion A (Hyatt)

457

Engaging the Struggling Students: Building Understanding and Skill with Numbers
(Pre-K–5, Preservice and In-Service) Gallery Workshop

How do we help struggling students (and all students) build the core understandings of number along with the skills to use apply math? Learn activities and approaches to engage in the development of important number concepts. Learn how to engage your students as they go from understanding to skill development.

Neil Pateman
University of Hawaii, Honolulu

Joseph Zilliox
University of Hawaii, Honolulu

8 (Convention Center)

458

The Question-Discourse Connection: What Questions Should You Be Asking?
(Pre-K–8, Preservice and In-Service) Gallery Workshop

We all want to involve our students in thought-provoking discourse, but how do we get there? A variety of question types will be described, including those based on the revised Bloom’s taxonomy, question stems, alternative-response questions, and talk moves. Criteria for “quality questions” will be explored.

Sharon Young
Seattle Pacific University, Washington

Marina E (Marriott)

459

Picture This: A New Sketchpad® in Grades 3–6
(3–5) Gallery Workshop

The latest release of The Geometer’s Sketchpad adds new, dynamic opportunities for exploring transformations with digital photographs. Attendees will receive teachers’ notes and students’ worksheets for a variety of activities. Bring a laptop with battery power so that you can jump right in!

Daniel Scher
Key Curriculum Press Technologies, New York, New York

San Diego Ballroom A (Marriott)
Frida Ay 10:30 a.m.–12:00 noon

460
Games as Assessment? How to Get More from Game Time
(3–8) Gallery Workshop
Math games engage students and offer a great opportunity for assessment. Participants will play games and learn strategies to gather data formally and informally about students as they play. The presenters will share resources and discuss challenges of expanding the role of games in your classroom to strengthen reasoning, writing, and more!

Sara Torpey
Linden Public Schools, New Jersey
Paul V. Ridgway
Encyclopaedia Britannica, Chicago, Illinois

461
Moving beyond Ratio Tables in the Development of Proportional Reasoning
(3–8) Gallery Workshop
Participants will explore proportional-reasoning problems and analyze the potential of the problems. The goal will be to understand the evolution of proportional reasoning with tasks that demand higher levels of reasoning than can be solved with ratio tables.

Signe Kastberg
Indiana University Purdue University Indianapolis
Beatriz S. D’Ambrosio
Miami University, Oxford, Ohio
Kathleen Lynch-Davis
Appalachian State University, Boone, North Carolina

462
Hands-On Activities and Questions That Stimulate Number Sense with Fractions
(3–12) Gallery Workshop
Experience lessons showing how to use manipulatives and questioning to teach fractions, equivalent fractions, and operations with fractions. All activities and questions focus on students making sense of the mathematics being taught. Lessons are based on three stages of learning—concrete, pictorial, and abstract.

Barbara Schallau
East Side Union High School District, San Jose, California

463
Infusing Technology into the Classroom
(3–12, Preservice and In-Service) Gallery Workshop
Benjamin Banneker Association presentation
Participants will sample five free and five inexpensive methods to “infuse twenty-first century learning” into the classroom. This hands-on presentation will introduce ten ways to enable students to experience complex concepts through engaging engineering, math, and science applications.

Vanessa R. Wimberly

464
Milking Graphs for All They Are Worth!
(6–8) Gallery Workshop
Is a graph worth 1000 words? Can we find the mean, median, and mode from a pie chart? Bar graph? Histogram? Box plot? Pictogram? What else do graphs tell us? Can we draw a histogram from a pie chart and vice versa? You will use graphs like never before and leave with activities your students can sink their teeth into on Monday.

Polina Dina Sabinin
Boston University, Massachusetts
Jenny K. Tsankova
Roger Williams University, Bristol, Rhode Island

465
In the Real World, No Measurement Is Exact: Precision and Accuracy in Middle School
(6–8) Gallery Workshop
This gallery workshop will help middle school teachers and trainers of teachers experience ideas related to precision and accuracy in a hands-on method using calculators and manipulatives. Participants will receive handouts and a CD of activities for a teaching unit.

Mary Sarli
Edgewood Independent School District, San Antonio, Texas
**466**

**Generalizing Algebraic Expressions Using Picture Patterns**

*(6–8) Gallery Workshop*

Join the speakers as they explore patterns using tiles and snap cubes. Use these patterns to help your students learn to write an algebraic expression for the nth term of a sequence. Leave with classroom ready activities that focus on using pictures rather than numbers to develop these algebraic expressions.

**Vivian Flora Cyrus**
Morehead State University, Kentucky

**Christie Perry**
Morehead State University, Kentucky

*San Diego Ballroom C (Marriott)*

---

**467**

**Don’t Box Me In! Statistical Analysis and Interpretation**

*(6–12) Gallery Workshop*

Come construct a human box plot. Box plots are an important tool to compare data sets. Twenty-first century students need to be savvy consumers of data. Learn a variety of classroom-tested ways to build students’ understanding of this research-based tool, including unpacking data sets of box plots and possible bar graph data displays.

**Lee Ann Pruske**
Milwaukee Public Schools, Wisconsin

**Paige Richards**
School District of South Milwaukee, Wisconsin

*Betsy A/B/C (Hyatt)*

---

**468**

**Let’s Play with Robots: Making Connections among Technology, Geometry, and Algebra**

*(6–12) Gallery Workshop*

Want to play with a robot and learn mathematics? Come explore geometric and algebraic activities while using robotics! Participants will receive lessons and activities that allow students to make connections among technology, algebra, and geometry. The presenters will also share students’ feedback from such activities.

**Rachelle Meyer**
Baylor University, Waco, Texas

**Trena Wilkerson**
Baylor University, Waco, Texas

**Geoff Price**
Carver Academy, Waco, Texas

*Elizabeth Ballroom G (Hyatt)*

---

**469**

**Interesting Ideas, Manipulatives, and Activities for Teaching Geometry Topics**

*(6–12, Preservice and In-Service) Gallery Workshop*

Participants will use hinged mirrors, rubber bands, patty paper, paper plates, and other manipulatives, as well as interesting problems, to develop and apply geometry concepts and review vocabulary such as similarity, triangle heights, transformations, central angles, polygons, polyhedra, area, and more.

**Chris Mikles**
College Preparatory Mathematics, Sacramento, California

*Salon 5 (Marriott)*

---

**470**

**Hot Air Ballooning: An Integrated Calculus-Chemistry Unit**

*(9–12) Gallery Workshop*

Connect science and math with this integrated, exciting, hands-on unit. Participants will make a small balloon, watch videos of students designing and flying their balloons, and receive the unit plan along with rubrics.

**Robin Washam**
Office of the Superintendent of Public Instruction, Olympia, Washington

**Russ Ballard**
Kentlake High School, Kent, Washington

*5 A (Convention Center)*

---

**471**

**Taking Advantage of Increasing Computer Access to Connect Mathematical Ideas**

*(9–12) Gallery Workshop*

Participants will use the public domain software CPMP-Tools to solve problems that encourage mathematical reasoning and sense-making and contribute to recognizing connections among mathematical ideas. Bring your laptop with battery power.

**Beth Ellen Ritsema**
Western Michigan University, Kalamazoo

*Douglas Pavilion C (Hyatt)*
Fundamentals of Algebra
Foundations of Algebra, and Algebra 1

Teach and reach all levels of students anytime, in class or at home, with standards-aligned digital versions of our problem-solving based mathematics curriculum.

Print and/or Digital Editions
Choose what works best for you!

Special Features:
- True to Text Representation
- Audio-Enabled Glossary
- URL Linking
- Highlighting and Customizing
- Instant Download
- Quick and Easy to Navigate
- Full Tutorials
- Zoom

ProgressInMathematics.com

A special thank you to all the volunteers that have assisted with the Annual Meeting.
Connections for Equity:
Math, Language, Culture, and Context
(General Interest) Session
Iris M. Carl Equity Address
We don't teach mathematics; we teach students who come to us with diverse academic backgrounds, cultures, and languages—even if they were born in the United States. The speaker will discuss strategies for differentiating instruction to address these differences and to promote learning with understanding—for ELL and ALL.

The annual Iris M. Carl Equity Address was established to underscore the critical need for collective action in advancing understanding of equality and equity in education. Inaugurated in 2008, the address commemorates Iris Carl’s lifelong commitment to educational equity and celebrates the vision and inspiration that she provided for achieving the goal of “more and better mathematics for all children.” Each year a distinguished scholar who is recognized for leadership and action related to equality in mathematics education is invited to deliver this featured address.

Miriam A. Leiva
TODOS: Mathematics for ALL, Harrisburg, North Carolina

The Power of Articulation through a Mathematics Vertical Team
(General Interest) Session
Five nonunified, rural districts have made it to their ninth year as a successful mathematics vertical team. Using books and blogging has empowered this team not only to survive but also to thrive despite leadership changes and financial cutbacks. A panel will share how they have bridged grade level, school, and district boundaries for shared success.

Stephanie Verners
Fresno County Office of Education, California

Understanding Title 1 and What It Can Mean for You and Your Math Students
(General Interest) Session
Learn from two Title 1 state directors what Title 1 can (and cannot) do in districts, schools and classrooms. Learn why this is important for teaching and learning math and what you need to know to go back and connect with the right people in your school and district.

Nancy Konitzer
Arizona Department of Education, Phoenix
Roberta Schlicher
Virginia Department of Education, Richmond

A Closer Look at Primary Programs and Developing Number Sense
(Pre-K–2) Session
Math programs at the primary level vary in how they develop number sense and base ten unitizing. Even when similar tools are used, strategies and implementation may vary and affect student understanding differently. Drawing from Asian and U.S. texts/programs, we will discuss the implications of these differences.

Mary N. Leer
School District of Lancaster, Pennsylvania
Makoto Yoshida
William Paterson University, Wayne, New Jersey

A Foundation in Number Sense Affects All Grades
(Pre-K–2) Session
See how one school has analyzed number sense from kindergarten to second grade. This presentation will include discussing the importance of number sense for the success in future grades and how we have developed a number-sense recovery program for our youngest students.

Katie Gilmore
Mount Vernon Woods Elementary School, Alexandria, Virginia
Megan Gregory
Mount Vernon Woods Elementary School, Alexandria, Virginia
Elizabeth Sampson
Mount Vernon Woods Elementary School, Alexandria, Virginia

Teaching with a SMART™ Board: It’s a SMART Thing to Do
(Pre-K–2) Session
Are you looking for more ways to use a SMART Board in your classroom? Learn how to use SMART Board technology in everyday math lessons and receive a list of Web sites that include math games and lessons that meet each of the NCTM strands for primary school students. Be prepared to get involved in this fun, interactive session!

Heather Youngblood
Springfield Public Schools, Missouri
Cary Sikes
Springfield Public Schools, Missouri

Elizabeth Ballroom A (Hyatt)
### 484
**The Amazing Race: A Mathematical Adventure**  
*(Pre-K–5) Session*

Looking for a fun theme to stimulate your family math night? Come to our session to hear about an exciting theme that provides rigorous mathematics activities within a social studies and geography theme. Participants will receive an extensive handout as well as many good tips for planning a successful family math night.

**Rebecca Sue Borowski**  
Ponderosa Elementary School, Fayetteville, North Carolina

**Kathelyn Denman**  
Ponderosa Elementary School, Fayetteville, North Carolina

---

### 487
**Singapore Math: Contextual Word Problem Solving Leads to Conceptual Mastery**  
*(Pre-K–8) Session*

“Sam bought 3 shirts and 2 pairs of pants for $67.30. Each pair of pants costs $2.40 more than each shirt. What was the cost of 1 pair of pants?” This Singapore Math fifth-grade problem is an example of a challenging, real-life problem that students solve using bar models rather than algebra. Learn the how and why of Singapore Math.

**Tricia Salerno**  
Benchmark School, Phoenix, Arizona

---

### 488
**Math with Meaning—Success the Singapore Way: Foundations of Number Sense**  
*(Pre-K–8) Session*

Attendees will learn practical—not theoretical—place-value, computation, and mental-math strategies used in Singapore, where students consistently score highest in international math studies. Learn how to emphasize conceptualization and incorporate computation and mental-math strategies into your existing math curriculum.

**Rolff Christensen**  
Staff Development for Educators, Peterborough, New Hampshire

---

### 489
**Making Sense of Math: Demystifying the Algorithms My Teacher Taught Me**  
*(Pre-K–8, Preservice and In-Service) Session*

Rule #1: Math makes sense. Rule #2: Everyone will be good at math. Experience how to help grades K–7 students learn the foundations to algebra through arithmetic. Get students to make sense of math without tricks and rules they don’t understand. Learn how to support teachers in building in-class interventions focused on big math ideas.

**Ivan Leonel Alba**  
San Diego Unified School District, California

---

### 486
**Seeing Is Believing: Communication and Problem Solving Using Lesson Studies**  
*(Pre-K–5, Preservice and In-Service) Session*

The presentation team from a grades K–5 urban elementary school will engage participants in a multimedia presentation and discussion of their journey to increase students’ achievement in mathematics through a modified lesson study approach focused on problem solving and communication in mathematics. Professional development protocols will be shared.

**Thelma A. Davis**  
Robert Lunt Elementary School, Las Vegas, Nevada

**Jennifer Spinos**  
Robert Lunt Elementary School, Las Vegas, Nevada

**Peter Schmit**  
Robert Lunt Elementary School, Las Vegas, Nevada

**Jamie Galgana**  
Robert Lunt Elementary School, Las Vegas, Nevada

**Virginia Usnick**  
University of Nevada, Las Vegas

---

---

**Make time to explore the Exhibit Hall for the latest educational resources.**
490
Teaching Mathematics to Students with Special Needs: Connecting and Collaborating
(3–5, Preservice and In-Service) Session
Hear the results of a coplanned and cotaught mathematics methods course for teachers of students with special needs. Aligned with NCTM Standards as well as recent Response to Intervention initiatives, successful activities and the results of teachers implementing these strategies in their classroom will be shared.

Amy Lingo
University of Louisville, Kentucky
Karen Karp
Board of Directors, National Council of Teachers of Mathematics; University of Louisville, Kentucky
Monica Delano
University of Louisville, Kentucky
Ginevra Courtade
University of Louisville, Kentucky

491
You’re Doing Algebra: Making Algebraic Reasoning Explicit for Young Learners
(3–8) Session
Algebra remains the gatekeeper for advanced math classes, yet using algebraic reasoning begins in elementary school. Join the speakers to investigate math tasks across content strands that facilitate elementary and middle school students’ algebraic thinking. Make generalizations about patterns in our number system and the world around us.

Temple A. Walkowiak
University of Virginia, Charlottesville
Kateri Thunder
University of Virginia, Charlottesville
Beth Buchholz
Albemarle County Public Schools, Charlottesville, Virginia

492
Making Memories in the Math Classroom
(3–8) Session
Enter the wonderful world of recreational mathematics and math magic. Enthusiastic teaching will be modeled as mathematical concepts are presented in a spirit of play. Teachers will learn hands-on activities that connect concepts with context. Come prepared to experience the beauty and fun of mathematics.

Charles Sonenshein
Wright State University, Dayton, Ohio

493
Making Connections: Long Division of Whole Numbers and Algebraic Expressions
(3–8) Session
This session will feature middle school students from diverse linguistic backgrounds discussing connections they made between the long division arithmetic processes and understanding of whole numbers and algebraic expressions. Videotaped interview clips and discussion of analyses will be shared to highlight students’ mathematical thinking.

Cynthia Oropesa Anhalt
University of Arizona, Tucson
Joseph Cuprak
Tucson Unified School District, Arizona

Manchester Ballroom D (Hyatt)

494
Fraction as Ratio on the Cartesian Coordinate Plane
(3–8) Session
The speaker will investigate how using the Cartesian coordinate plane to represent fraction as ratio can provide a visual representation of least common multiples, equivalent fractions, fraction addition and subtraction, and converting fractions to decimals and percents, all done graphically.

Anne M. Collins
Lesley University, Boston, Massachusetts

Salon 3 (Marriott)

495
Paint Bucket Polygons: Geometry Concepts in High Definition
(3–8, Preservice and In-Service) Session
What is a polygon in elementary school? The answer is not as simple or closed as you may think! Experience activities the speakers have developed with children and their teachers to build more sophisticated notions of geometry. They discuss features of photo-editing software as a tool to foster discussion and debate.

Suzanne Harper
Miami University, Oxford, Ohio
Michael Todd Edwards
Miami University, Oxford, Ohio

6 F (Convention Center)
11:00 a.m.–12:00 noon

**496**

**Good Questions: A Great Way to Differentiate Instruction**  
(3–12) Session

Asking just the right questions allows for differentiating instruction to meet a broad range of students’ needs without ignoring curricular requirements. Examples, along with students’ responses, will be shared to show how a rich mathematical environment can be created for all students in the class, whether struggling, average, or gifted.

*Marian Small*  
University of New Brunswick, Fredericton, Canada

20 D (Convention Center)

**497**

**Increasing Mathematics Achievement through Simple, Research-Based Strategies**  
(6–8) Session

This interactive presentation will explore strategies that help diverse learners connect to the content and increase mathematical achievement. Participants will walk away with seven effective, easy-to-use, research-based strategies that can be implemented immediately.

*Mary J. Mitchell*  
Kean University, Union, New Jersey

*Robin D. Roberts*  
Fairfax Public Schools, Virginia

5 B (Convention Center)

**498**

**Stem-and-Leaf Plots: It’s Not a Botany Activity!**  
(6–8) Session

Stem-and-leaf plots organize data, but can students use the plots to analyze a situation? This session will explore organizing basic science experiment data in enhanced stem-and-leaf plots, relating them to multiple bar graphs, and identifying the information presented. Box-and-whisker plots will further illustrate characteristics of the data set.

*Patricia Lucido*  
Rockhurst University, Kansas City, Missouri

*Cheryl Malm*  
Northwest Missouri State University, Maryville

6 D (Convention Center)

**499**

**Infusing Algebraic Thinking into All Strands of the Math Curriculum**  
(6–8) Session

Do you sometimes think there just isn’t enough time to teach algebraic thinking? Take heart. The presenters will share practical, classroom-tested ideas for including algebraic thinking as natural extensions of your current work in number, measurement, geometry, and chance and data.

*Ann Lawrence*  
Consultant, Washington, D.C.

*Charlie Hennessy*  
Holy Trinity School, Washington, D.C.

Douglas Pavilion B (Hyatt)

**500**

**Adding, Subtracting, Multiplying, and Dividing Fractions Using NCTM Resources**  
(6–8) Session

Have you ever wondered about the math of changing gears on your bicycle? Gear ratios are just one application of operating on fractions that you will explore in this session. You will gain hands-on experience investigating multiple ways of making operations on fractions more engaging for students, by using applets, games, and writing prompts.

*Sarah DeLeeuw*  
National Council of Teachers of Mathematics, Reston, Virginia

*Julia Zurkovsky*  
National Council of Teachers of Mathematics, Reston, Virginia

Manchester Ballroom C (Hyatt)

**501**

**Implementing the SIOP Model in the Middle School Mathematics Classroom**  
(6–8) Session

Learn how to use the sheltered instruction observation protocol (SIOP) model to plan and deliver instruction in the math classroom. SIOP unifies a variety of methods and best practices for teaching content to English language learners (ELLs). See how to customize instruction for ELLs at different levels of English proficiency using research based strategies and techniques.

*Melinda Riccardi*  
Fresno County Office of Education, California

*Jonathan R. Dueck*  
Fresno County Office of Education, California

San Diego Ballroom B (Marriott)
Increase Algebra Understanding with NEW Hands-On, Interactive Resources!

**NEW!**

**EXCLUSIVE!**

**NEW!**

**Hands-On Standards®, Deluxe Edition**
Algebra 1
Step-by-step, full-color lessons enable every teacher to successfully integrate a range of manipulatives into the algebra classroom!

**NEW AND IMPROVED!**

**Algeblocks® 2nd Edition**
Help students visualize algebra concepts with lessons that use three-dimensional area models and interactive whiteboard resources!

**NEW!**

**EXCLUSIVE!**

**VersaTiles® Algebra Readiness and Algebra 1**
Motivating, standards-aligned independent practice activities increase students’ confidence and prepare them for algebra success!

Stop by booth #631 and receive a FREE gift!

**NEW! Interactive Whiteboard Resources!**

**Hands-On Standards®, Deluxe Edition**
Algebra 1
Step-by-step, full-color lessons enable every teacher to successfully integrate a range of manipulatives into the algebra classroom!

**NEW AND IMPROVED!**

**Algeblocks® 2nd Edition**
Help students visualize algebra concepts with lessons that use three-dimensional area models and interactive whiteboard resources!

**NEW!**

**EXCLUSIVE!**

**VersaTiles® Algebra Readiness and Algebra 1**
Motivating, standards-aligned independent practice activities increase students’ confidence and prepare them for algebra success!
502
Findings from Four Countries Regarding Prospective Teachers’ Knowledge of Addition of Fractions
(6–8, Preservice and In-Service) Research Session
Prospective elementary school teachers in Northern Ireland, South Africa, Hong Kong, and the United States have similar difficulties understanding fraction addition. Participants will create and analyze fraction addition problems, making connections of concepts and context. They will see how the research findings connect to classroom practices.
Rose Elaine Carbone
Clarion University, Pennsylvania
Gregory A/B (Hyatt)

503
Linear Functions: Much More than \(y = mx + b\)
(6–12) Session
Every linear function is not a line. Yet, many algebra students react to the equation \(y = 3x + 6\) by making a table, plotting the points, and connecting them to form a line. This session will examine class-tested ways of helping students get a deep understanding of these important functions.
Jim Rubillo
Former Executive Director, National Council of Teachers of Mathematics; DeSales University, Center Valley, Pennsylvania
6 A (Convention Center)

504
Telescoping Sequences: The Mathematics of Recursively Imbedded Expressions
(6–12, Higher Education) Session
In their studies, most students will encounter simple imbedded expressions, like a fraction where both numerator and denominator contain fractions, or a radical inside a radical. The speaker will explore these types of expressions more deeply, relate them to sequences or recursion, and discover the unique reasoning that “telescoping” invokes.
Mike Reiners
Christ’s Household of Faith School, Saint Paul, Minnesota
17 B (Convention Center)

505
Fostering Conceptual Understanding through Reading-Math Connections
(6–12, Higher Education) Session
The conceptual density of mathematics texts presents a challenge to secondary school students who struggle to understand how what they read translates into mathematics. This session addresses this challenge by focusing on reading strategy as a way to foster connections among texts and other forms of conceptual mathematics representations.
Antony T. Smith
University of Washington Bothell
Robin Angotti
University of Washington Bothell
Manchester 1/2 (Marriott)

506
Making Connections: Multiple Representations in Algebra 1
(6–12, Preservice and In-Service) Session
Participate in activities that help find the connections between a rule, graph, table, and context. Learn ways to help students move from each representation to the others, developing deep understanding of multiple ways to solve problems. Teachers will receive ideas and materials that they can use in their own algebra classrooms.
Glenda Arlene Wilkins
California Mathematics Council, Forest Falls, California
16 B (Convention Center)

507
It’s Their Web 2.0 World: You’re Just Teaching in It
(9–12) Session
So take advantage of all the opportunities that Web 2.0 provides! Look at practical, useable, classroom-tested ideas on expanding formative and summative assessments onto the Web and using free, and almost free, online instructional tools to enliven and enrich classes from Algebra 1 through calculus.
Calvin Armstrong
Appleby School, Oakville, Ontario, Canada
6 B (Convention Center)
**508**

**Polygons: Inside-Out and Beyond**  
(9–12, Higher Education, Preservice and In-Service)  
**Session**

Reflect a regular polygon across an edge, and repeat. Explore fascinating results with any polygon. Form fractional and negative polygons, derive the formula, and consider polygons with an irrational number of sides, all on the TI-Nspire. A tns file will be given.

**Paul Williams**  
Red Deer College, Alberta, Canada

*Manchester Ballroom B (Hyatt)*

---

**509**

**Creating Connections with Inquiry Questions and Action/Consequence Documents**  
(9–12, Preservice and In-Service)  
**Session**

This presentation will discuss types of inquiry questions that promote student understanding of mathematical content. Examples of such questions will be used with computer-based environments (action/consequence documents) where students are allowed to act on mathematical objects and transparently observe the consequences of their actions.

**Wade Ellis**  
West Valley College, Saratoga, California

*Elizabeth Ballroom C (Hyatt)*

---

**510**

**Teach AP Statistics Next Year, with TI-Nspire™!**  
(9–12, Preservice and In-Service)  
**Session**

Considering teaching AP Statistics? A member of the College Board’s AP Statistics (Test) Development Committee will give you an introduction to the course using TI-Nspire, examples of typical problems, a guided timeline so that you can be prepared to teach the course successfully starting in August, and (hopefully) the confidence to do so.

**John F. Mahoney**  
Benjamin Banneker Academic High School, Washington, D.C.

*Salon 4 (Marriott)*

---

**511**

**Building a Community of Scholars in a Teacher Education Program**  
(Higher Education)  
**Session**

The speakers are committed to placing highly qualified teachers in high-need schools. They will discuss their Mathematics Education Teaching Scholars program for future secondary school teachers, including criteria development, standards, and programmatic details.

**Harry T. Washington**  
North Carolina State University, Raleigh

**Hollylynne Stohl Lee**  
North Carolina State University, Raleigh

*6 E (Convention Center)*

---

**512**

**Rethinking Classroom Assessment with a Purpose in Mind: An International Perspective**  
(Higher Education)  
**Session**

This session will explore classroom assessment in two-year colleges in the United States and in nonuniversity tertiary institutions in other countries. Cultural and educational experiences from different countries using classroom assessment to guide, improve, and modify teaching to enhance students’ learning will be discussed.

**Richelle Blair**  
Lakeland Community College, Concord, Ohio

**Sadie Bragg**  
Borough of Manhattan Community College, New York, New York

*Elizabeth Ballroom H (Hyatt)*

---

**513**

**Better Teacher Retention through Lesson Study**  
(Higher Education, Preservice and In-Service)  
**Session**

The speaker will examine the collaborative practice of Japan’s model of preservice introduction, Lesson Study, and how we are using this model at the university level. We are preparing preservice teachers to enter the education profession as partners who are ready to build learning communities centered on students’ learning and styles in the field.

**Tracey Everett Carter**  
Chicago Lesson Study Group, Chicago, Illinois

*Salon 4 (Marriott)*

---

**Come, Connect, Communicate**

**Coaching**

Meet with educators who share your interests in coaching to discuss how we might improve the teaching and learning of mathematics. This colloquium provides an opportunity to network and establish relationships that can continue beyond the conference as a resource for your professional growth.

**Carlsbad (Marriott)**
**11:00 a.m.–12:00 noon**

**Come, Connect, Communicate**

**Intervention, Grades 6–12**

Meet with educators who share your interests in intervention, grades 6–12, to discuss how we might improve the teaching and learning of mathematics. This colloquium provides an opportunity to network and establish relationships that can continue beyond the conference as a resource for your professional growth.

_Del Mar (Marriott)_

**11:30 a.m.–12:30 p.m.**

**CW 514**

**PowerTeaching: Mathematics—an Equitation for Success!**

_(General Interest) Exhibitor Workshop_

Developed by the Success for All Foundation, PowerTeaching: Mathematics is a curricular framework that is composed of research-proven instructional strategies that increase student achievement. PowerTeaching provides teachers with a clear and simple structure for framing their mathematics instruction no matter which curriculum or textbook they use.

_Success for All Foundation_

Success for All Foundation, Baltimore, Maryland

_1 A (Convention Center)_

**CW 515**

**Come Discover “We Discover Math” for Pre-K Students**

_(Pre-K) Exhibitor Workshop_

Newly released in fall 2009, “We Discover Math” is Kendall Hunt’s research-based Pre-K mathematics program. Through children’s literature, students explore the important mathematical content recommended by both NCTM and NAEYC.

_Kendall Hunt Publishing Co._

Kendall Hunt Publishing Co., Dubuque, Iowa

_1 B (Convention Center)_

**12:30 p.m.–1:30 p.m.**

**517**

**Spreadsheets: An Amazing Tool to Enliven and Animate Mathematics**

_(General Interest) Session_

This talk will give numerous examples of how spreadsheets may be used to animate different graphs that arise in the secondary school curriculum.

_Robert L. Devaney_

Boston University, Massachusetts

_6 B (Convention Center)_

**518**

**Building a Productive Classroom Environment: Talking Mathematics and Connecting Ideas**

_(General Interest) Session_

The language of mathematics is a powerful, but underdeveloped, skill in our classrooms. Helping students learn to talk mathematics and connect ideas is a challenge; however, the payoff is worth the effort. The speaker will focus on ways of developing mathematical discourse.

_Glenda T. Lappan_

Past President, National Council of Teachers of Mathematics; Michigan State University, East Lansing

_Douglas Pavilion D (Hyatt)_

**519**

**Coaching: It’s Not Just for Athletics!**

_(General Interest) Session_

Come and hear how a math coach can assist with staff development, curriculum alignments, disaggregating data, differentiating instruction, resources and demonstrating master teacher skills. With the help of our coach, our school has received four gold-star performance awards in math from the Texas Education Agency.

_Melissa Cooper McCracken_

Huntsville Independent School District, Texas

_6 C (Convention Center)_

**520**

**It All Adds Up: Games to Strengthen Number Sense**

_(Pre-K–2) Session_

It’ll all “add” up as you see student’s number sense “multiply” with more than 20 fun games and activities. The best part is they require little to no preparation time, so you can “subtract” that and just start “adding” up all the learning you’ll see on Monday.

_Cary Sikes_  
Springfield Public Schools, Missouri

_Heather Youngblood_  
Springfield Public Schools, Missouri

_4 (Convention Center)_
**521**

**Word Problems: How Do They Make a Difference in Children’s Development of Number Sense?**  
*(Pre-K–2) Session*

The presentation will discuss the main ideas of cognitive guided instruction, highlighting different types of word problems, and the development of children’s strategies. The speaker will review several video clips from research and discuss how the distinctions among problem types are reflected in children selection of strategies.

**Myoungwhon Jung**  
Northern Illinois University, DeKalb

*Molly A/B (Hyatt)*

---

**522**

**Knock, Knock! Who’s There?**  
*(Pre-K–5) Session*

New ways to assess, that’s who! Tired of the same old photocopied tests? So are your students! Take review and assessment to new levels that are engaging, thought provoking, and information filled. See students’ practice and assessments from podcasts to PowerPoints to videos to fit-for-a-frame. Open the door to a new way to demonstrate mastery.

Catherine Kuhns has more than 25 years of teaching experience in grades K–4 classrooms, currently teaching fourth grade. She is the author of several books, including *Number Wonders, Mathematical Art-o-Facts, Building Number Sense,* and *Word Problems for Model Drawing Practice (levels 1 and 5).* She enjoys working with fellow teachers and sharing her passion for making math meaningful, connected, and engaging.

**Catherine Kuhns**  
Country Hills Elementary School, Coral Springs, Florida

*20 B/C (Convention Center)*

---

**523**

**Using Repeating Patterns to Think Functionally**  
*(Pre-K–5) Session*

Looking to go beyond “What’s the core unit?” and “What comes next?” Young children are capable of thinking functionally at an early age, and exploring repeating patterns offers a solid starting point for this work. Come explore powerful strategies and activities that support the development of functional thinking in your students.

**Melissa E. Hedges**  
Milwaukee Public Schools, Wisconsin

**Beth Ann Schefelker**  
Milwaukee Public Schools, Wisconsin

*6 F (Convention Center)*

---

**524**

**A Comprehensive Approach to Improving Mathematics Achievement: A Math-Science Partnership in Rural Wyoming**  
*(Pre-K–5) Session*

Participants will discover a comprehensive assessment framework that identifies students’ deficiencies in early numeracy. While identifying the deficiencies, participants will experience interventional activities that will help to build on conceptual understanding in numeracy.

**Catherine Ann McAtee**  
Carbon County School District #2, Saratoga, Wyoming

*Elizabeth Ballroom C (Hyatt)*

---

**525**

**Supporting Children’s Sense Making in Number**  
*(Pre-K–5) Session*

**Presidents’ Series presentation**

The speaker will share activities that foster number sense through the exploration of patterns and relationships. Emphasis will be on thinking in collections and constructing meaning for ten as a unit. The activities can be used immediately in the classroom.

**Anne Reynolds**  
Kent State University, Ohio

*Manchester Ballroom B (Hyatt)*

---

**526**

**Number Sense versus Nonsense**  
*(Pre-K–5, Preservice and In-Service) Session*

We all know you can’t teach common sense, so can you really teach number sense? Yes, you can! Learn strategies to help students with number sense. The speaker will also discuss some of the “nonsense” teachers sometimes use to foster number sense, and how it may unintentionally hurt a child’s mathematical understanding later on.

**Heather Nichol Larrabee**  
Louisa County Public Schools, Mineral, Virginia

*Elizabeth Ballroom H (Hyatt)*

---

**527**

**Zooming In on Number Lines: Connecting Whole Numbers, Decimals, and Fractions**  
*(3–5) Session*

The image is fun and crystal clear. It’s also deeply mathematical. The connections allow children to understand decimals and fractions and work as confidently and skillfully with them as with whole numbers. Practical ideas for your teaching will let you and students see numbers in a new way. Classroom video, handouts, PowerPoint will be available.

**Cindy Carter**  
Rashi School, Newton, Massachusetts

*14 B (Convention Center)*
presents

PRIMER MATHMATICS

The Proven Math Program That Has Kids Across America With Their Hands Held High!

Our Singapore Math™ programs, the Earlybird Kindergarten and Primary Mathematics Standards Editions, are the acclaimed math programs that have been improving math literacy in America for years.

Approved for adoption by the California State Board of Education and on the Oregon State Board of Education’s Instructional Materials List, these comprehensive K-5 programs allow you to teach confidently and realize positive results.

Singapore students who were tops in TIMSS in 1995, 1999, and 2003, were all taught using Primary Mathematics books. The Singapore Math™ Primary Mathematics Standards Edition is where east meets west... bringing you the best!

For more info and to read exciting success stories, visit www.SingaporeMath.com or call (503) 557-8100
FRI

Base-Ten Blocks: What Is Their Educational Value?
(3–5) Research Session
Children have to have the idea of “tens” to count objects by tens. The speaker asked 81 children in grades 2–4 to count (1) 123 cubes by tens and (2) 6 ten-blocks and 12 one-blocks. Base-ten blocks were found to make counting by tens easier but did not teach the idea of tens. In second grade, only 58 percent counted the base-ten blocks by tens.

Constance Kamii
University of Alabama at Birmingham

Mathematics Education for the Twenty-first Century: Spanning the Digital Divide
(3–5, 9–12, Preservice and In-Service) Session
This interactive session will explore effective use of instructional strategies to meet the needs of all students in mathematics by integrating NCTM’s Principles and Standards with the National Educational Technology Standards and Performance Indicators for Teachers and the Technology and Pedagogy Content Knowledge model.

Rhonda Bonnstetter
Southwest Minnesota State University, Marshall
Debbie Van Overbeke
Southwest Minnesota State University, Marshall
Michelle Beach
Southwest Minnesota State University, Marshall

Modeling and Relating Fractions and Ratios in the Multiplication Table
(3–8, Preservice and In-Service) Session
Learning and teaching paths will be reported from grades 3–6 classroom research on differentiating and then relating fractions and ratios. These approaches enable students to outperform older students and reach high levels of understanding. Making math drawings and using the multiplication table enables students at all levels to understand.

Karen C. Fuson
Northwestern University (Emerita), Evanston, Illinois
Dor Abrahamson
University of California, Berkeley

Are You Surrendering in Teaching Fraction Operations?
(3–8, Preservice and In-Service) Session
This presentation will discuss how to incorporate different visual representations, including computer software and interactive Internet resources, to teach procedural knowledge and conceptual understanding of fraction operations. Participants will be guaranteed not to surrender in teaching fraction operations after attending this session!

Cheng-Yao Lin
Southern Illinois University Carbondale
Rong-Ji Chen
California State University San Marcos
Hsing Wen Hu
University of Wisconsin—River Falls

Skill Building versus Comprehensible Input: Live Demonstration of an EL Classroom
(3–12) Session
TODOS: Mathematics for ALL presentation
Teachers will experience firsthand how students learn in an English learner (EL) classroom by participating in a fishbowl activity that uses two live demonstrations. One will use a traditional approach; the other, effective comprehensible input strategies. A whole-group discussion will follow.

Pedro Vazquez
Bridgeport Public Schools, Connecticut
Herminio Manuel Planas
Bridgeport Public Schools, Connecticut

Video Study Groups: The Focus Is on Your Students’ Learning
(3–12) Session
Video of students at work in each teacher’s classroom will launch professional discussions about students’ interactions, questions, and responses to instruction. This session will share lessons learned as well as protocols and sample video from the speakers’ experience as facilitators of video study groups.

Lisa Lavelle
Education Northwest, Portland, Oregon
Linda Griffin
Northwest Regional Educational Laboratory, Portland, Oregon

Video Study Groups: The Focus Is on Your Students’ Learning
(3–12) Session
Video of students at work in each teacher’s classroom will launch professional discussions about students’ interactions, questions, and responses to instruction. This session will share lessons learned as well as protocols and sample video from the speakers’ experience as facilitators of video study groups.

Lisa Lavelle
Education Northwest, Portland, Oregon
Linda Griffin
Northwest Regional Educational Laboratory, Portland, Oregon

Video Study Groups: The Focus Is on Your Students’ Learning
(3–12) Session
Video of students at work in each teacher’s classroom will launch professional discussions about students’ interactions, questions, and responses to instruction. This session will share lessons learned as well as protocols and sample video from the speakers’ experience as facilitators of video study groups.

Lisa Lavelle
Education Northwest, Portland, Oregon
Linda Griffin
Northwest Regional Educational Laboratory, Portland, Oregon
Solving Equations + Multiple Representations = Students’ Success
(3–12, Preservice and In-Service) Session
Treat algebra as a handy language for “unlocking secrets” (equation solving) and building mathematical models. Participate in a variety of innovative, engaging, nontraditional approaches for solving equations. These methods have been researched and tested and are designed to empower your students and move them to mastery!

Donna M. Davis
Baltimore City Public Schools, Maryland
Elizabeth Ballroom D/E (Hyatt)

“How Steep It Is!” Connecting Geometric Angle and Algebraic Slope
(6–8) Session
Prepare your students for the study of slope while helping them develop proportional reasoning. Help them describe, construct, and imagine their way from what they already know about steepness to the concept of slope.

Diana Cheng
Boston University, Massachusetts
20 D (Convention Center)

A Nontraditional Equation-Solving Sequence for Struggling Learners
(6–8) Session
Algebra for All: experience a nontraditional, multilesson, linear-equation-solving sequence, accessible to all learners, which employs the use of meaningful contexts, visuals, and manipulatives.

Mark Goldstein
University of California at Los Angeles
Helen Chan
University of California at Los Angeles
5 B (Convention Center)

Writing Activities in Mathematics for Middle and High School Students
(6–12) Session
Participants will learn writing-to-learn activities, such as annotation strategies for equations, graphs, or word problems, which will help students to monitor their understanding of those problems. They will also learn writing-as-assessment activities that will provide students with fun ways to demonstrate their knowledge of mathematical concepts.

Amy Alexandra Wilson
University of Georgia, Athens
Aaron Ross Wilson
Cottonwood High School, Salt Lake City, Utah
16 B (Convention Center)

Connections, Blogs, and Lesson Study
(6–12) Session
Learn about how to use connections through a lesson-study approach. Collaboratively planned lessons will be analyzed using technology, assessment alignment with instruction, and students’ work. Student-response-centered blogs will be used to foster recognizing and using connections among mathematical ideas and in contexts outside mathematics.

José Francisco Sala Garcia
Instituto de Educación Secundaria Sa Colomina, Ibiza, Balearic Islands, Spain
2 (Convention Center)

The Golden Ratio: Connections to the World around Us from Ancient to Modern Times
(6–12) Session
The golden ratio has been an integral part of art and architecture for centuries. Known as the golden mean, it appears in basic constructions, Egyptian pyramids, Greek statuary and temples, Islamic Art, and paintings from the Renaissance to modern times. Historical examples and the creation of relevant projects will be explored.

Stephanie H. Cooperman
Chatham Middle School, New Jersey
Salon 1/2 (Marriott)
12:30 p.m.–1:30 p.m.

**540**

Algebra Readiness Tests: Is There One?
(6–12) Session
In spite of efforts to teach algebra at all grade levels and to include all students in algebra, educators continue to seek an “algebra readiness” test. But algebra readiness tests generally don’t work. What can or should we use instead? We will consider alternatives to standard testing for “algebra readiness.”

Judith Mary Kysh
San Francisco State University, California

Salon 4 (Marriott)

**541**

Sketchpad® Dynagraphs Reveal Domain, Range, Composition, and Inverses of Functions
(6–12) Session
Dynagraphs are dynamic, behavioral representations of functions that promote an understanding of important properties of functions and are easily related to other representations. Dynagraphs emphasize the role of variables and the mapping of an input variable to an output variable. Participants will receive several ready-to-use activities.

Andres Marti
Key Curriculum Press, Emeryville, California

17 B (Convention Center)

**542**

Classroom Management and Motivation: How It Can Work for You
(6–12, Preservice and In-Service) Session
Understand how motivation and management works and does not work with students. What can you do? Learn to create situations and environments that motivate and engage students. Improve your classroom management skills, and support you in teaching math.

James Middleton
Arizona State University, Tempe

10 (Convention Center)

**543**

Titilating Topics from Trigonometry
(9–12) Session
There is more to trigonometry than the unit circle. This session will explore the relationships of sides, angles, and cevians in a triangle; some unusual trigonometric identities; trigonometric representation of complex numbers; and inverse trig functions.

David Wilson
Wake Forest University, Winston-Salem, North Carolina

11 B (Convention Center)

**544**

Using Maps in Mathematics: A Connections Activity
(9–12) Session
This activity connects mathematics to other subjects and areas such as cartography, art, and social justice and gives teachers a method for convincing their students of the merits of collaborative learning. There are three stages: motivation for collaborative group work, the four-color theorem, and social justice in maps.

Brian Evans
Pace University, New York, New York

6 D (Convention Center)

**545**

Algebra in Motion: Improving Algebra Understanding through Interactive Computer Animations
(9–12) Session
Harness the aptitude of your visual learners by exploring interactive computer animations (Sketchpad) that remove the abstraction from algebra and give it meaning. Appropriate teaching strategies also will be emphasized. Many assorted topics will be taken from Algebra 1, Algebra 2, and precalculus.

Audrey Weeks
Calculus In Motion, Burbank, California

Douglas Pavilion B (Hyatt)

**546**

Engaging and Challenging Tasks for Capstone Mathematics
(9–12) Session
NCTM says, “Every student should study mathematics every year through high school, progressing to a more advanced level each year.” This talk will present cognitively demanding problems and projects that solidify and connect a wide range of mathematical content that seniors have found engaging in a post–Algebra 2 alternative to precalculus.

Gregory D. Foley
Ohio University, Athens

Gregory A/B (Hyatt)
**547**

Be a SMART Educator: Enhancing Mathematics Instruction using SMART™ Software  
(9–12) Session  
Want to be an effective teacher with dynamic notes, interactive examples, and a way to save all this hard work using an interactive whiteboard? This introductory session will include creating lesson plans using Notebook Software, Senteo Response Systems for assessments, and the new SMART Document Camera.

Barbara Mutch  
Miramichi Valley High School, New Brunswick, Canada

*Manchester Ballroom C (Hyatt)*

**548**

The SAT in a Flat World  
(9–12) Session  
How does the SAT mathematics test relate to a dynamically changing world? How can the SAT skills insight help students improve their skills and reach their goals in college and beyond? How does the SAT prepare students to be flexible problem solvers and leaders in the workforce? Come hear the answers to these questions and more.

Robin O’Callaghan  
College Board, New York, New York  
Andrew Schwartz  
College Board, New York, New York

*Salon 3 (Marriott)*

**549**

Creating and Using Guided Discovery Lessons  
(9–12) Session  
Participants will learn how to create, find, adapt, and use guided discovery lessons. These lessons offer students unique opportunities to become “archeologists on a mathematical dig” by sequentially uncovering layers of mathematical information one step at a time. Guided discovery lessons can be customized to fit the needs of all students.

Richard J. Sgroi  
Fox Lane High School, Bedford, New York

*San Diego Ballroom B (Marriott)*

**550**

Issues of the Transition from High School to College Mathematics  
(9–12, Higher Education) Session  
This talk will focus on what we know, what we don’t know, and what we need to know about the transition from high school to college mathematics, with a description of what the Mathematical Association of America is doing about these issues.

David Bressoud  
Macalester College, Saint Paul, Minnesota

*Manchester Ballroom D (Hyatt)*

**551**

Integrating Math Study Skills into Developmental Math Classes  
(Higher Education) Session  
Do your developmental math students have even a clue about study skills needed for college success? Do they know that there are specific strategies they can use to become successful in mathematics? Learn about worksheets and activities that are designed to help develop effective study skills using very little class time.

Lynn M. Marecek  
Santa Ana College, California  
MaryAnne Anthony  
Santa Ana College, California

*6 A (Convention Center)*

**552**

Don’t We Always Ask Good Questions? Don’t We? Don’t We?  
(Preservice and In-Service) Session  
Questioning is probably the single most important instructional strategy that we use everyday, and too often it is the single most ignored strategy in our planning. In a lively, interactive presentation, participants will consider the do’s and don’ts of effective questioning.

James J. Clayton  
Saint Peter’s College, Jersey City, New Jersey

*Marina G (Marriott)*
12:30 p.m.–1:30 p.m.

553
Developing Number Sense with Technology-Based Experiments: Reflections on Classroom Practice in Preservice Education
(Preservice and In-Service) Session
This session will share inquiry-based lab activities designed to develop number sense in preservice elementary school teachers. Qualitative data collected from the preservice teachers suggests that teacher candidates developed greater number sense as a result of their participation in these classroom activities.

Irina Lyublinskaya
City University of New York—College of Staten Island
Judit Kerekes
City University of New York—College of Staten Island

6 E (Convention Center)

Come, Connect, Communicate
Curriculum Focal Points
Meet with educators who share your interests in curriculum focal points to discuss how we might improve the teaching and learning of mathematics. This colloquium provides an opportunity to network and establish relationships that can continue beyond the conference as a resource for your professional growth.

Carlsbad (Marriott)

554
Math-U-See: Making a Difference in Special Education!
(General Interest) Exhibitor Workshop
Math-U-See’s unique approach has shown students’ 100 percent improvement three years in a row in the Albuquerque Public Schools. Come see how we can help you to “close the gap” in this dynamic, multi-sensory exhibitor workshop that will clearly demonstrate the Math-U-See difference!

Math-U-See
Math-U-See, Fallbrook, California

1 A (Convention Center)

1:00 p.m.–2:00 p.m.

555
Math Innovations: A New Middle Grades Mathematics Program
(6–8) Exhibitor Workshop
Developed using Curriculum Focal Points, Math Innovations encourages students to think like mathematicians with focus on verbal and written communication. Concepts are developed in depth with connections across grade levels in conjunction with computational fluency.

Kendall Hunt Publishing Co.
Kendall Hunt Publishing Co., Dubuque, Iowa

1 B (Convention Center)

556
Building Number Sense with Meaningful Practice
(Pre-K–2) Gallery Workshop
Children enter school with an informal sense of number gained through natural curiosity. Let’s examine how we facilitate the development of number in students as we consider what number sense is and the experiences that would enhance its acquisition.

Lisa Rogers
Math Solutions, Sausalito, California

Elizabeth Ballroom G (Hyatt)

557
Math Intervention: Building Number Power for Struggling Students
(Pre-K–5) Gallery Workshop
Learn how to use formative assessment and motivating games to help students increase conceptual knowledge as they engage in math discourse. The speaker will compare conceptual knowledge to procedural knowledge and analyze specific math concepts to help struggling multilingual students, special-needs students, and others who are having difficulties.

Jennifer Taylor-Cox
Taylor-Cox Instruction, LLC, Severna Park, Maryland

5 A (Convention Center)
### 1:00 p.m.–2:30 p.m.

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Description</th>
<th>Speakers</th>
<th>Room</th>
</tr>
</thead>
</table>
| **558** | Outsmarting Your SMART™ Board: Combining Interactive High-Tech and Low-Tech Solutions | (Pre-K–5) Gallery Workshop  
Explore the many ways to use interactive technology in conjunction with low-tech manipulatives as a teaching tool for whole-class lessons, differentiated instruction, individual centers, and students’ assessment. No SMART Board? No problem!  
Kelli Ann Cox  
San Diego Jewish Academy, California  
Shelly Moses  
San Diego Jewish Academy, California | Manchester Ballroom E/F (Hyatt) |
| **559** | Are There Really Six Tens in 268? The Language of Place Value | (Pre-K–5, Higher Education, Preservice and In-Service) Gallery Workshop  
The gallery workshop’s goal is to raise participants’ awareness of the importance of language in the learning of place value. In particular, participants will make connections among research on children’s learning of place value, teachers’ knowledge of place value, and place-value instruction for preservice teachers in methods and content courses.  
Christopher Danielson  
Normandale Community College, Bloomington, Minnesota | Elizabeth Ballroom F (Hyatt) |
| **560** | Raising Questions, Finding Answers: Applying Concepts of Statistics and Probability | (Pre-K–5, Preservice and In-Service) Gallery Workshop  
This gallery workshop presents five developmentally appropriate activities exploring fundamental concepts of statistics, data analysis, and probability. Activities include raising questions, gathering data, using statistical methods to create visual and mathematical representations, and developing predictions based on data analysis.  
Barbara Biglan  
Chatham University, Pittsburgh, Pennsylvania  
Martha Hildebrandt  
Chatham University, Pittsburgh, Pennsylvania | Betsy A/B/C (Hyatt) |
| **561** | Language Links: Connecting Vocabulary to Math Concepts | (3–5) Gallery Workshop  
Do your students have trouble making connections to math concepts because of the “language” involved? Students are interested in geometry, measurement, data, and so on, but can struggle with all the words. Participants will engage in activities that give students visual, concrete ways to build vocabulary associated with math concepts.  
Elise Sabaski  
North Kansas City Public Schools, Missouri  
Charlene Steadman  
North Kansas City Public Schools, Missouri | 14 A (Convention Center) |
| **562** | Geometry Fun with Two Guys | (3–5) Gallery Workshop  
This presentation will demonstrate geometry activities that the speakers have learned through math specialist courses at the University of Virginia. The activities will connect mathematics to the NCTM Geometry Standards as well as the five Process Standards. Participants will engage in several hands-on activities that can be used in the classroom.  
Tres Wells  
Albemarle County Schools, Charlottesville, Virginia  
Justin Hose  
Frederick County Public Schools, Winchester, Virginia | 16 A (Convention Center) |
| **563** | Got Fraction Frustration? No-Tears Strategies for Students (and Teachers) | (3–5) Gallery Workshop  
Explore engaging lessons that build fraction knowledge. Hands-on tasks will teach concepts, operations, and problem solving and use strategies such as facilitating discussions and effective questioning. Students’ work and observations of the teacher and coach will reveal outcomes. Walk away with lessons that make fraction frustrations disappear.  
Elizabeth Gehron  
Seminole County Public Schools, Sanford, Florida  
Tiffany Garrison  
Seminole County Public Schools, Sanford, Florida | 17 A (Convention Center) |
1:00 p.m.–2:30 p.m.

564
Math Activities for the Special Student in the Regular Classroom
(3–5) Gallery Workshop
Are you having difficulty teaching computation to your students with special needs? Using the NCTM Math Computation Standard, you will be actively involved with games and activities that develop concepts, then practice these concepts and apply them to solve problems.
Shirley H. Bradsby
Jefferson County Public Schools, Lakewood, Colorado
Douglas Pavilion C (Hyatt)

565
Math and Literature: A Joint Effort for Success
(3–5, Preservice and In-Service) Gallery Workshop
Understanding math concepts begins with children being actively engaged. Literature helps link math concepts through real-world applications. Together, success is achieved. Experience the math and literature connection by participating in hands-on activities that are motivating, simple, and relevant.
Sharon Huber
Chesapeake Public Schools, Virginia
Carolyn Belson
Retired, Chesapeake Public Schools, Virginia
San Diego Ballroom C (Marriott)

566
Fractions, Ratios and Patterns: Helping Elementary School Students Get Ready for Algebra
(3–5, Preservice and In-Service) Gallery Workshop
The core concepts and skills students learn in elementary school set the stage for success in algebra. Learn how to teach the important concepts and skills that support future success in algebra.
Joseph Zilliox
University of Hawaii, Honolulu
Eomailani Bettencourt
University of Hawaii, Manoa, Honolulu

567
Building Connections through Problem Solving
(3–8) Gallery Workshop
Successful problem solvers draw on past experiences and apply their knowledge to new situations. The speakers will share strategies for using problems to help students (1) understand the interconnectedness of mathematical ideas, (2) recognize and take advantage of prior learning, and (3) forge new connections to help make sense of challenges.
Claire Mead
The Math Forum @ Drexel, Philadelphia, Pennsylvania
Manchester Ballroom I (Hyatt)

568
Fantastic Folding Feats
(3–8) Gallery Workshop
In this gallery workshop, participants create familiar two-dimensional shapes by folding metric paper. The simple steps yield some captivating patterns and designs. A truly fantastic way to represent and examine two-dimensional shapes and their properties.
Allan Turton
Origo Education, Brisbane, Queensland, Australia
Calvin Irons
Queensland University of Technology, Brisbane, Australia

569
It's Not in the Textbook: Now What?
Hands-On, Discrete Mathematics in the Middle School
(3–8) Gallery Workshop
Join the speakers for some hands-on examples in discrete math! Activities on vertex edge maps, four-color theorem, origami, combinations, and more can be applied right away in the classroom and adapted easily to multiple ages and grade levels. You will leave knowing how to get your kids excited about problem solving!
Alanna Webb
Dysart Unified School District, Surprise, Arizona
Ashley Hinsberg
Dysart Unified School District, Surprise, Arizona

April 21–24, 2010 • San Diego, California
1:00 p.m.–2:30 p.m.

570
Lets Be Rational: Making Sense of Fractions, Decimals, and Integers
(6–8) Gallery Workshop
Middle school students struggle to understand fractions, decimals, and integers. This gallery workshop will teach new approaches to help students make sense of these topics. You will explore activities and games that build understanding and learn some new computational algorithms that will help students avoid errors.
Suzanne H. Chapin
Boston University, Massachusetts
8 (Convention Center)

571
Percents without Proportions
(6–8) Gallery Workshop
Participants will try fun, easy-to-implement activities in which students learn to calculate percents using multiples, graphic organizers, and logic. The activities are perfect for improving estimation skills, number sense, and operation sense and for English language learners and special-education students.
Susan Mercer
Santa Ana Unified School District, California
Manchester Ballroom A (Hyatt)

572
Exploring Integers: Relevant Applications, Engaging Activities, and Instructional Strategies
(6–8) Gallery Workshop
Explore applications of integers, make connections in multiple domains, explore students’ misconceptions and strategies, and enhance pedagogical and content knowledge to improve students’ conceptual understanding, which leads to flexibility when applying that knowledge to new situations.
Sarah Jane Harris
University of Texas at Austin
Salon 5 (Marriott)

573
Measurement for All
(6–12) Gallery Workshop
Ever wonder how to develop measurement concepts for all students? Making a ruler and a trundle wheel will help extend linear measurement to area concepts while providing context for students struggling to make connections. Experience activities just as students do in our transition to high school math camp.
Judith L. Carlin
Nikki Rowe High School, McAllen, Texas
Faynna Guerrero
Cathey Middle School, McAllen, Texas
Felipe Santiago Rico
Nikki Rowe High School, McAllen, Texas
Marina D (Marriott)

574
I Get It! Developing Linear Concepts Using Clever, Meaningful Tasks
(6–12) Gallery Workshop
Participants will be actively engaged in hands-on activities that will enhance students’ understanding of linear functions and rate of change. The activities will focus on multiple representations of linear functions, developing an understanding of slope, and real-world applications.
Kristy Marie Thompson
Muncie Community Schools, Indiana
Katie Marie Metz
Muncie Community Schools, Indiana
Gloria Frasier
Muncie Community Schools, Indiana
Rollin Ty Gill
Muncie Community Schools, Indiana
San Diego Ballroom A (Marriott)

575
Making Sense of Algebra
(6–12) Gallery Workshop
This presentation will discuss the role that algebra currently plays in schools and explore ways of teaching algebra with a focus on increasing algebraic sense making in the classroom. Participants will engage in student-centered algebra activities, examine their own conceptualization of algebra, and reflect on the needs of their students.
Jill Newton
Purdue University, West Lafayette, Indiana
Rachael Kenney
Purdue University, West Lafayette, Indiana
Lindsay M. Umbeck
Purdue University, West Lafayette, Indiana
Douglas Pavilion A (Hyatt)
576
Tennis Balls, Lines, and Geometric Transformations
(6–12, Preservice and In-Service) Gallery Workshop
Students roll a wet tennis ball across a horizontal sheet of easel grid paper then investigate the characteristics of the line left by the path of the wet ball. Their exploration leads from traditional algebraic concepts to making connections to ideas in measurement, coordinate geometry, and transformational geometry.
Kathleen Mittag
University of Texas at San Antonio

577
Lights! Logs! And Lines!
(9–12) Gallery Workshop
Light intensity is an illuminating context for studying logarithms. Come gather light-intensity data and see how this exploration connects to logarithmic transformation and linear regression, while teaching basic spreadsheet skills as learners determine and justify a best-fit model. Bring a laptop with battery power. Other technology will be provided.
Janice L. Krouse
Illinois Mathematics and Science Academy, Aurora

578
Errors, Mishaps, and Misconceptions: Understanding Quadratic Functions
(9–12) Gallery Workshop
Connect theory to practice by investigating quadratic functions and students’ common errors. Analyze students’ work, integrate technology, and investigate methods that will make this topic accessible for all students and enable them to move beyond rote procedures to connections between the symbolic and graphical forms of quadratics.
Karen L. Terrell
Boston College, Chestnut Hill, Massachusetts
Lillie R. Albert
Boston College, Chestnut Hill, Massachusetts

579
Nspring™ Students: How New Technology Changes Instruction
(9–12) Gallery Workshop
The new TI-Nspire has changed the speaker’s lessons from direct instruction to interactive, exploratory, small-group activities that promote students’ mathematical thinking and reasoning. Participants will complete student activities focusing on Algebra 1, geometry, and Algebra 2. No previous technology experience required.
Kimberley Ann Thomas
Valley Vista High School, Surprise, Arizona

580
The Matrix: Applying Matrices to Plant Life Histories and Conservation
(9–12, Higher Education) Gallery Workshop
Discover practical applications of scientific concepts in the math classroom. Learn how to apply matrices to ecology and evolutionary biology. Through the use of a simple matrix population-growth model, using a system of linear equations, teachers can explore the evolution of different plant-life histories.
Alberto Macias-Duarte
iPlant Collaborative—Tucson, Arizona
Lisa Howells
iPlant Collaborative—Tucson, Arizona

581
The First Ten Minutes of Class Can Ensure Students’ Success!
(9–12, Preservice and In-Service) Gallery Workshop
Use the beginning of class to assess each student’s readiness for the lesson. Learn how to develop an “opener” for any lesson, techniques to collect and review the “opener”, ideas for using this information to structure your lesson, and materials to meet each student’s needs in a typical classroom. All levels of technology will be used.
Allan Bellman
University of California, Davis
Katie Allard
Canyon Crest High School, San Diego, California
2:00 p.m.–3:00 p.m.

582 NCTM Business Meeting (General Interest) Session

This session will provide a summary of the past year’s significant accomplishments and an overview of NCTM’s current and future strategic directions.

Kichoon Yang
Executive Director, National Council of Teachers of Mathematics, Reston, Virginia

583 M. C. Escher Took Islamic Art to Infinity, and So Can You! (General Interest) Session

Escher used tessellations from Islamic art as a basis for intriguing transformational masterpieces. Learn how to construct triangular and square grids, recognize patterns, arrange stars, use a “nibbling” technique to create designs, and see Adobe Photoshop–enhanced images. Handouts, Powerpoint, and Photoshop instructions will be available.

Carol D. Desoe
Scarsdale High School, New York

584 Creating a Curriculum Map: The GPS for Effective Curriculum Implementation and Assessment (General Interest) Session

This session will share strategies and procedures for compacting curriculum, using available resources, making connections, capitalizing on prior knowledge, building students’ retention of big ideas in mathematics, and “recalculating” for school interruptions. This interactive session will include a comprehensive handout with sample maps.

Joan Josephine Vas
Kean University, Union, New Jersey

585 Research Insights into Mathematics Instruction for Females (General Interest) Research Session

Women and Mathematics Education presentation

Research-based instructional methods that support and encourage females in mathematics will be presented with attention to how other social identities—especially race, ethnicity, and social class—intersect with gender. The presentation will incorporate audience discussion, and resources will be provided.

Lynda R. Wiest
University of Nevada, Reno
Rebecca McGraw
University of Arizona, Tucson

586 Teaching and Learning Mathematics: Translating Research to the Classroom (General Interest) Session

Participants will learn what research tells us about important questions and issues related to mathematics teaching and learning posed by grades pre-K–12 teachers and administrators. The presenters will use information gleaned from the Second Handbook of Research on Mathematics Teaching and Learning.

Frank K. Lester
Indiana University Bloomington
Diana V. Lambdin
Board of Directors, National Council of Teachers of Mathematics; Indiana University Bloomington

587 Capitalizing on Connections: Place Value Concepts in Real-World Contexts (Pre-K–2) Session

Learn how to use real-world contexts to support development of place value concepts. A framework for designing contextualized problems that encourage base-ten thinking will be shared. Emphasis will be given to examining students’ work samples and discussing how children’s problem solutions can be used to promote base-ten thinking.

Wendy Bray
Rollins College, Winter Park, Florida
**Unlocking Story Problems without Key Words**

(Pre-K–2) Session

Learn how to use the context a story problem to build conceptual understanding of operations without using “key words.” Through video and students’ work samples, see how students make sense of stories, use variables, and represent and connect the action to mathematical operations.

Maria DaSilva  
University of Hawaii, Honolulu

Hannah Slovin  
University of Hawaii, Honolulu

Linda Venenciano  
University of Hawaii, Honolulu

11 B (Convention Center)

---

**Kinesthetic Exploration of Number Using a 100-Square Floor Grid**

(Pre-K–2) Session

This is a highly interactive session that will introduce teachers to the numerous and creative ways of teaching children to explore number physically on a large, 100-square floor grid. Teachers will experience fun, foolproof strategies for calendar work, number patterns, greater than, less than, and basic addition and subtraction operations.

Wendy Ellen Hill  
Retired, Huntsville, Ontario, Canada

6 A (Convention Center)

---

**Math Room Time**

(Pre-K–2) Session

A math room, designed around math recovery philosophy, strongly emphasizes assessment. All students grades K–2 will join the math room for 20 minutes. The room is divided into learning centers with one technology center that consists of a SMART Table, SMART Board, and computers. The SMART Table allows teachers to customize lessons.

Jaime Lodge  
Chester Grade School, Illinois

Douglas Pavilion D (Hyatt)
Change the equation.

Become a Math for America Fellow.

Let your passion for math lead you to a winning career choice. Step up and teach in New York City public secondary schools to make a difference in mathematics education and help solve our nation’s math literacy problem.

**MfA provides aspiring math teachers with:**

- A full scholarship for a master’s degree or teacher credentialing program in Mathematics Education
- Up to $100,000 in stipends, in addition to a full-time New York City teacher’s salary
- Mentoring, job search support and ongoing professional development opportunities
- Membership in a national corps of highly qualified secondary math teachers

MEET US AT BOOTH 1444

www.mathforamerica.org

Helping Scores of Students
**2:00 p.m.–3:00 p.m.**

### 593

**Does Singapore Mathematics (SM) Enhance Students’ Learning in the United States?**

*(Pre-K–8) Session*

Many teachers want to use SM with their students, but they have been unable to provide data on its effectiveness in the United States. The speakers will report results of a longitudinal study of SM implementation, offer examples of concepts students learn, and offer ways in which all students can learn math to high levels.

- **Richard Askey**
  Retired, University of Wisconsin—Madison
- **Madge Goldman**
  Gabriella and Paul Rosenbaum Foundation, Bryn Mawr, Pennsylvania
- **Patsy Wang-Iverson**
  Gabriella and Paul Rosenbaum Foundation, Stockton, New Jersey
- **Ban-Har Yeap**
  Nanyang Technological University, Singapore
- **Marian Palumbo**
  Bernards Township Public Schools, Basking Ridge, New Jersey

*6 F (Convention Center)*

### 594

**Meaningful Multiplication: Visualizations and Independent, Task-Time Activities**

*(3–5) Session*

Create an environment involving all students in meaningful multiplication activities. Ensure that students make sense of multiplication before memorizing abstract facts. Provide a variety of tools to assess students’ understanding and to challenge students to think by combining problem solving with computational practice.

- **Marcy Cook**
  Consultant, Balboa Island, California

*20 D (Convention Center)*

### 595

**Helping Students Understand Fractions by Making Connections**

*(3–5) Session*

Do your students struggle to understand fractions? Are you looking for new ideas to support student learning? In this session, you will gain insight on how to support student learning by examining connections between math content, student thinking, assessment and curricula.

- **Teruni Lamberg**
  University of Nevada, Reno

*Manchester Ballroom C (Hyatt)*

### 596

**Build an Understanding of Fractions**

*(3–5) Session*

In the same way students develop an understanding of whole numbers, they need to develop an understanding of fractions. Explore ways to develop that understanding using linear and area models. Connect linear models to a number line to see fractions as numbers. Apply conceptual understanding to fraction addition and subtraction.

- **Jaine Kopp**
  Bay Area Mathematics Project, Berkeley, California

*Marina G (Marriott)*

### 597

**Combining Math and Literacy: Using Picture Books to Teach Content and Reading**

*(3–5) Session*

Children’s literature will be highlighted in this presentation with an emphasis on using math content picture books to teach reading and math simultaneously. Participants will leave the session with classroom activities and lessons that integrate literacy and math in an engaging way for students.

- **Julie Marie Amador**
  University of Nevada, Reno

*Salon 3 (Marriott)*

### 598

**Differentiating Mathematics Instruction and Practice for Inclusive Environments: Math Stations**

*(3–5, Preservice and In-Service) Session*

Learn how to provide effective instruction and practice for all learners in inclusive settings using process, content, and product differentiation; learning supports; and task modifications. The speaker will illustrate and discuss examples using the concept of math stations. Ideas will be based on the instruction and practice of fraction operations.

- **Jessica Heather Hunt**
  University of Central Florida, Orlando
- **Kimberly Davis**
  University of Central Florida, Orlando

*Elizabeth Ballroom D/E (Hyatt)*
599
Tools to Help Teachers and School Leaders Understand Curriculum Implementation
(3–12) Research Session
A research team will share classroom-tested, research-based tools to help practitioners identify and understand issues of curriculum implementation. Participants will examine—and leave with—lesson logs, surveys, and unit guides that capture pedagogical and mathematical storylines for grades K–12 curricula.

Steven W. Ziebarth
Western Michigan University, Kalamazoo
Nicole L. Fonger
Western Michigan University, Kalamazoo
Alden J. Edson
Western Michigan University, Kalamazoo

600
Spicing It Up: A Five-Step Recipe for Adding Flavor to Bland Word Problems
(6–8) Session
Are your students tired of the application word problems given at the bottom of the textbook page? You’ll leave this session with a fistful of “good” word problems that you have created. Learn five easy revision strategies that transform plain, old word problems into worthwhile mathematical tasks. Your students will eat them up!

Carrie S. Cutler
University of Houston, Texas

601
Help! I Need a Fun, Hands-On Math Activity
(6–8) Session
Hands-on math activities will be presented that were used in classrooms, were adapted for a family math night, and can be easily modified for use at all grade levels. You will leave this presentation with several ideas for fun, engaging, and educational activities that you can implement right away or at your next family math night.

Paul V. Ridgway
Encyclopaedia Britannica, Chicago, Illinois
Sara Torpey
Linden Public Schools, New Jersey

602
Using Arithmetic Sequences to Make Sense of Linear Equations
(6–8, Preservice and In-Service) Session
The speaker will describe an approach to learning linear equations that is based on first understanding arithmetic sequences. Because students find arithmetic sequences more intuitive and easier to grasp, this approach allows them to learn not by memorizing a set of formulas but by deriving and making sense of the important ideas.

Ryota Matsuura
Boston University School of Education, Massachusetts

603
Formative Assessment: A Practical Approach
(6–8, Preservice and In-Service) Session
In education, it seems that each day brings a new classroom practice that teachers need to embrace and implement with their students. A closer look at formative assessment may help you recognize how you are already using this important practice, as well as how you can more fully engage in and learn from it.

Nickie Rizzo
Math Solutions, Sausalito, California

604
Activities on Data Analysis and Probability Using Technology
(6–12) Session
Data analysis and probability are imperative concepts in mathematical thinking and often hard to teach and learn. A number of online activities and visual tools will be presented on data analysis and probability to be used in the middle and high school mathematics classroom.

Gary Bitter
Arizona State University Technology-Based Learning and Research, Scottsdale
Rusen Meylani
Arizona State University, Tempe
2:00 p.m.–3:00 p.m.

605
Socratic Seminar: Fostering Mathematical Discourse for English Language Learners (ELLs) and All Students
(6–12) Session
This session is aimed at helping teachers organize and facilitate Socratic seminars for ELLs in mathematics. Students will gain confidence in analyzing mathematics textbooks as well as asking and answering complex questions. The seminar is designed to give all students responsibility in maintaining equity during the discussion.

Angela Thompson
University of California, Santa Cruz

7 B (Convention Center)

606
Hands-On Experiences to Develop the Concepts of Variable and Function
(6–12) Session
Participants will learn how to use real-world phenomena to help students develop the concept of a variable as something that actually varies! Participants will also experience data streaming from common physical phenomena and learn how the streaming itself mirrors and develops the concept of function. The new HP Data Streamer will be demonstrated.

Michael Grasse
Elk Grove High School, Elk Grove Village, Illinois
G. T. Springer
Hewlett-Packard Company, San Diego, California

Edward A/B/C/D (Hyatt)

607
Use Practical Strategies to Increase English Language Learners’ (ELLs’) Math Progress Dramatically
(6–12) Session
ELLs and other students benefit from instruction in algebra that incorporates multiple representations, frequent formative assessment, and opportunities to “talk math.” The speaker will discuss ELL teaching strategies for mathematical concept and academic language development, along with classroom routines that increase engagement.

Debra Coggins
Alliant International University, San Francisco, California

Salon 1/2 (Marriott)

608
Cultural Context and Teaching for Social Justice
(6–12) Session
Presidents’ Series presentation
Benjamin Banneker Association presentation
Teachers who use cultural relevance or social justice as a context for teaching mathematics must not underestimate the difficulty of finding appropriate examples. Using these crucial pedagogies in the mathematics classroom is not a panacea. Teachers should avoid making them routine, which may create a new form of marginalization.

Jacqueline Leonard
Temple University, Philadelphia, Pennsylvania
16 B (Convention Center)

609
Formative Assessment Tools for High School Mathematics Teachers
(9–12) Session
This session will describe formative assessment tools developed for high school teachers in Kentucky. The tools include mathematics content prerequisite trees, students’ common misconceptions, and strategies for addressing misconceptions. The tools were developed by teams of mathematicians, mathematics educators, and teachers.

William S. Bush
University of Louisville, Kentucky
Wanda Weidemann
Western Kentucky University, Bowling Green
Gina Foletta
Northern Kentucky University, Highland Heights
Christie Perry
Morehead State University, Kentucky

14 B (Convention Center)

610
Applications of Polynomial Functions
(9–12) Session
Learn some real-world and mathematical-world phenomena that can be modeled by higher-degree polynomial functions. Some are exact, such as the bending of beams and sums of powers of integers. Others are empirical and involve fitting functions to data. Even complex zeros of a cubic function can be made to show up on the graph.

Paul A. Foerster
Alamo Heights High School, San Antonio, Texas

20 B/C (Convention Center)
611
**States Moving toward Common Core Standards**
*(9–12) Session*

The presenters will discuss the process used to arrive at the NGA- and CCSSO-led Common Core State Standards in mathematics and the implications for students’ achievement, including equity and access, curriculum development, teacher capacity, and U.S. success.

Laura Slover
Achieve, Washington, D.C.

*6 B (Convention Center)*

612
**Reasoning and Sense Making in Algebra**
*(9–12) Session*

NCTM has recognized the need to promote new discussion around high school mathematics. This session will provide participants an opportunity to discuss and engage with examples from NCTM’s *Reasoning and Sense Making in Algebra* document.

Karen Graham
University of New Hampshire, Durham

Al Cuoco
Education Development Center, Inc., Newton, Massachusetts

Gwen Zimmermann
Adlai E. Stevenson High School, Lincolnshire, Illinois

*6 D (Convention Center)*

613
**How to Make Your Classroom 24-7**
*(9–12) Session*

Want to discover the full capabilities of the technology in your classroom? From basic to advanced lessons to formal assessments and 24-7 access for students, watch as we demonstrate the endless possibilities of SMART Board, SMARTview, and Blackboard. Learn how to apply this knowledge in courses ranging from Algebra 1 to AP calculus.

Sam V. Gero
Fairfax County Public Schools, Lorton, Virginia

Kate Wolling
Fairfax County Public Schools, Lorton, Virginia

Melissa Rushing
Fairfax County Public Schools, Lorton, Virginia

*Elizabeth Ballroom A (Hyatt)*

614
**Cool Geometry**
*(9–12) Session*

Geometry is fundamentally different than other high school subjects, for many reasons. It can get students turned on to mathematics. The speaker will share some things that have gotten him and his students excited about geometry in the last forty years. He will share interesting problems, applications, and connections.

John Allen Benson
Evanston Township High School, Illinois

*Salon 4 (Marriott)*

615
**Distance Learners and the Processes of Learning Mathematics**
*(9–12, Higher Education) Research Session*

Research in distance learning has focused mainly on success rates, as measured by course completion, and college-level learners. This session will discuss the preliminary findings of qualitative research devoted to examining evidence of the NCTM Process Standards in distance learners at the high school level.

Jodie A. Miller
Morristown-Beard School, Morristown, New Jersey

*Gregory A/B (Hyatt)*

616
**Links to Literacy**
*(Higher Education, Preservice and In-Service) Session*

Reading mathematically-themed children’s books can help college students improve their English-language literacy and gain a better understanding of mathematical concepts. Class-tested activities will be shared.

MaryAnne Anthony
Santa Ana College, California

*Manchester Ballroom H (Hyatt)*

617
**The Activity and Impact of Elementary School Mathematics Coaches on Students’ Achievement**
*(Higher Education, Preservice and In-Service) Session*

Mathematics coaches serve as resources for content, pedagogy, and curriculum. This session will address how coaches spend their time and how those activities do and do not relate to students’ achievement. Findings will be shared from a three-year, NSF-funded study that examined coaches’ impact on students’ achievement and teachers’ beliefs.

Patricia F. Campbell
University of Maryland, College Park

*2 (Convention Center)*
2:00 p.m.–3:00 p.m.

618
Making Cultures Count in the Classroom: How to Get Started
(Preservice and In-Service) Session
TODOS: Mathematics for ALL presentation
Teachers who integrate the role of language and culture in the learning of mathematics create equitable, rigorous, and coherent instruction. Many people strive to accomplish this but do not know how to get started. Participants will learn “how-to” steps to enhance their own effectiveness as the presenters share tried and tested techniques.
Jim Barta
TODOS: Mathematics for ALL, Salt Lake City, Utah
Susie Hakansson
California Mathematics Project, Los Angeles, California
17 B (Convention Center)

619
Transforming School Culture through New Teacher Induction
(Preservice and In-Service) Session
Transform school culture from teaching in isolation to public and collaborative work through current best practices, from information-rich hiring and orientation to comprehensive mentoring and faculty rounds. By raising the level of authentic discourse about teaching and learning, schools can truly build a professional learning community.
Reena Freedman
Gann Academy, Boston, Massachusetts
Elizabeth Ballroom C (Hyatt)

Come, Connect, Communicate
Core Content Standards
Meet with educators who share your interests in Core Content Standards to discuss how we might improve the teaching and learning of mathematics. This colloquium provides an opportunity to network and establish relationships that can continue beyond the conference as a resource for your professional growth.
Carlsbad (Marriott)

Come, Connect, Communicate
Differentiated Instruction
Meet with educators who share your interests in Differentiated Instruction to discuss how we might improve the teaching and learning of mathematics. This colloquium provides an opportunity to network and establish relationships that can continue beyond the conference as a resource for your professional growth.
Del Mar (Marriott)

2:30 p.m.–3:30 p.m.

620
Make Sense of Numbers using Mathematical Models from Math in Context®
(General Interest) Exhibitor Workshop
Experience realistic mathematics education and problem solving while exploring multiple number models. These models will move students to a deeper understanding of number and operations. Each participant will receive a free Number Tools® workbook.
Britannica Digital Learning
Britannica Digital Learning, Chicago, Illinois
1 A (Convention Center)

621
Project M2 and Project M3: Developing Mathematical Talent in Elementary Students
(Pre-K–5) Exhibitor Workshop
Help your students assume the role of mathematicians as they develop critical- and creative-thinking skills to solve real problems. Project M3 and the new Project M2 for primary students are both challenging and motivational.
Kendall Hunt Publishing Co.
Kendall Hunt Publishing Co., Dubuque, Iowa
1 B (Convention Center)

3:00 p.m.–4:30 p.m.

622
Movin’ with Math: Connecting Kids, Concepts, and Kinesthetics
(Pre-K–2) Gallery Workshop
Kinesthetic activities offer variety in differentiated instruction and practice that supplements and enriches concepts being taught. This multisensory approach motivates, promotes mastery, requires few materials, and gives immediate feedback. Kinesthetic activities for important math concepts will be presented and provided.
Joquita McKibben
Houghton Mifflin Harcourt, Orlando, Florida
Marina F (Marriott)

623
Place Value: Making Connections One Paper Clip at a Time
(Pre-K–2) Gallery Workshop
With a box of paper clips, participants will represent deep, meaningful understanding of place value and its connection to their world. Participants will use familiar objects and ordinary language to represent one of the big ideas in mathematics—place value!
Elizabeth Arcement
Iberia Parish School System, New Iberia, Louisiana
Salon 5 (Marriott)
3:00 p.m.–4:30 p.m.

624
Math Talk: Teaching Concepts and Skills through Illustrations and Stories
(Pre-K–2, Preservice and In-Service) Gallery Workshop

Using illustrations of nursery rhymes, fairy tales, and themes, learn how math talk can give your students interactive opportunities to practice and master early math concepts and skills in a language-based setting. Based on an approach from Singapore, math talk is a powerful way for students to create and solve math stories.

Char Forsten
Staff Development for Educators, Peterborough, New Hampshire

Elizabeth Ballroom F (Hyatt)

625
The Japanese Abacus, Soroban, Can Boost Mental Calculation Skills
(Pre-K–5) Gallery Workshop

Join us as the presenter demonstrates how the soroban works and how it is used. Soroban-trained students are capable of performing mental calculation—addition, subtraction, multiplication, and division—by visualizing soroban beads in their mind.

Hiroo Kodama
Tomoe MI Academy, Shinjuku-ku, Tokyo, Japan

Manchester Ballroom I (Hyatt)

626
Stop! Re-evaluate! I Thought You Understood Fractions
(3–5) Gallery Workshop

This presentation will focus on a lesson study presented to fourth- and fifth-grade students. Participants will take active part in the lesson, which incorporates the understanding of three different fraction models, and examine the different error patterns in the students’ work.

Laura Gray
Norfolk Public Schools, Virginia

11 A (Convention Center)

627
LCC: Links between Concepts and Content
(3–5) Gallery Workshop

Participants will experience hands-on activities that highlight natural links to concepts and content in the mathematics of grades 3–5. The activities will enhance the connections to real life and to other disciplines, such as language arts, science, and technology.

Maria Diamantis
Southern Connecticut State University, New Haven

15 A (Convention Center)

628
Mathematics Notebooking That Works: Reaching All Learners
(3–5) Gallery Workshop

During this presentation, participants will examine and actively explore using notebooking as a tool to increase students’ mathematical thinking and understanding while meeting individual needs. Notebook entry types and strategies for use will be highlighted as organizational elements to support student learning.

Mary Knuck
Arizona Department of Education, Phoenix

3 (Convention Center)

629
Making Connections: Problems from Singapore Classrooms
(3–5) Gallery Workshop

Come with a sharp pencil and experience solving mathematics problems used in Singapore schools. Some of these problems help students use context to learn content. Others help students link different content areas. Learn how teachers can help students make all sorts of connections in solving problems. Go home with a bunch of problems.

Ban-Har Yeap
Nanyang Technological University, Singapore

Douglas Pavilion A (Hyatt)

630
Technologically Challenged But Still Using a SMART™ Board
(3–5) Gallery Workshop

Educators of different technological skill levels will learn to use a SMART Board as a tool for linking concepts and context. Learn the tricks of this technology, learn how to develop instructional activities, and be able to edit previously created lessons. Participants will leave with multiple ideas and resources to make the connections.

Jan A. Puls
Norman Public Schools, Oklahoma

Johnnie Keel
Norman Public Schools, Oklahoma

Manchester Ballroom E/F (Hyatt)
3:00 p.m.–4:30 p.m.

631
What’s the Big Idea? Connecting Fractions, Decimals, and Percents
(3–5) Gallery Workshop
The presenter’s hands-on gallery workshop will show participants how to use manipulatives and pictorial representations to acquire strategies that can be used to help students understand the “big ideas” about fractions, decimals, and percents and how the three are all interconnected.

Carolyn Doyle
Richmond City Public Schools, Virginia

San Diego Ballroom A (Marriott)

632
Using Music Composition to Teach Math
(3–5, Preservice and In-Service) Gallery Workshop
Color bars will be used to represent music scales, and the numbers of bars to represent notes’ durations. Combinations of color bars will be used to represent chords. Based on a typical pop music chord sequence, students will compose music by choosing colors. Statistics tables and graphs will be created based on students’ composition notes.

Song An
Texas A&M University, College Station

Shuhua An
California State University, Long Beach

Salon 6 (Marriott)

633
Rational Number Project: Fraction Operations and Initial Decimal Ideas
(3–8) Gallery Workshop
Latest curriculum project from the NSF-funded Rational Number Project (RNP) will be shared. Twenty-eight lessons are available at no cost on the RNP Web site. The presentation provides participants opportunity to explore sample lessons, view video clips of actual lessons, and analyze students’ work.

Terry Wyberg
University of Minnesota—Twin Cities

Kathleen Cramer
University of Minnesota—Twin Cities

Seth Leavitt
Minneapolis Public Schools, Minnesota

Elizabeth Ballroom B (Hyatt)

634
Surface Area and Volume: Help! I Can’t Memorize All These Formulas
(3–8, Preservice and In-Service) Gallery Workshop
Participants will actively engage in hands-on activities using tape measures, square tiles, cubic units, and even sand in order to develop a conceptual understanding of perimeter, area, and volume formulas. These activities will begin with rectangles, triangles, parallelograms, trapezoids, and circles and will end with prisms and pyramids.

Joy W. Darley
Georgia Southern University, Statesboro

Barbara B. Leopard
Eastern Michigan University, Ypsilanti

17 A (Convention Center)

635
ABC’s of Problem Solving: An Approach to Building Mathematical Knowledge
(3–8, Preservice and In-Service) Gallery Workshop
Experience an approach to problem solving that builds knowledge and confidence in grades K–12 students and preservice teachers alike, and share in the joys, frustrations, breakthroughs, and growth of attempting, solving, and presenting problems. Materials and an overview of a preservice capstone course based on this model will be provided.

Janet Nichols
Colorado State University—Pueblo

Janet Heine Barnett
Colorado State University—Pueblo

Marina D (Marriott)

636
Math Nights That Work
(6–8) Gallery Workshop
Learn the secrets to success in planning and implementing math activity nights at your school. You should be prepared to participate in actual math night activities, including a warm-up, a group game, and a featured activity. You will leave with a CD full of activities you can use or modify.

Elizabeth Warren
Estacada Junior High School, Oregon

Sally Wood
Estacada Junior High School, Oregon

Julie Norrander
Estacada Junior High School, Oregon

9 (Convention Center)
637

**All Aboard for Function Junction**  
**(6–8) Gallery Workshop**

Pack your thinking bags, get your brain ticket, and travel from station to station where you will explore functions in a variety of ways. Your travels will also take you on a tour where literature is integrated into the study of the different types of functions. All aboard!

Emily Combs  
Clinton Middle School, Missouri

Ann McCoy  
University of Central Missouri, Warrensburg

Joann Barnett  
Ozark Upper Elementary School, Missouri

Melody Ollison  
University of Central Missouri, Warrensburg

Ashley Burns  
Park Hill Schools, Park Hill, Missouri

Jami Smith  
Archie Schools, Archie, Missouri

Elizabeth Ballroom G (Hyatt)

638

**NASA Smart Skies: Applying Math to Air Traffic Control**  
**(6–8) Gallery Workshop**

Apply proportional reasoning and distance-rate-time relationships to explore flight problems through an experiment, a graphing tool, and an air traffic control simulator. Use multiple representations to connect equations, their graphs, and real-world scenarios. All materials are free online.

Gregory Condon  
NASA Ames, Moffett Field, California

Miriam Landesman  
NASA Ames, Moffett Field, California

Manchester Ballroom G (Hyatt)

639

**Mathematics through Paper Folding**  
**(6–8) Gallery Workshop**

Participants will join in an interactive, hands-on experience folding waxed and regular paper to illustrate geometric concepts. The presentation will begin with how to fold the basic constructions and then apply paper folding to lines, angles, squares, circles, triangles, parabola, and more. This will be an active mathematical experience.

Jim Fulmer  
University of Arkansas at Little Rock

Suzanne Mitchell  
Arkansas State University, Jonesboro

Marina E (Marriott)

640

**People Count: Math and Demography in the Year of the Census**  
**(6–8) Gallery Workshop**

In this census year, discover timely and innovative hands-on activities for drawing connections between math and social studies. Students will learn about U.S. demographic trends past and present while honing their skills in algebra, data analysis, problem solving, measurement, and more. A free CD-ROM of activities will be available.

Sara Jenkins  
Population Connection, Washington, D.C.

San Diego Ballroom C (Marriott)

641

**Written Formative Feedback: Building Problem Solving and Mathematical Understanding**  
**(6–12) Gallery Workshop**

Participants will explore a guide developed by the Northwest Regional Educational Laboratory to help teachers make constructive written comments. Opportunities will be provided to examine follow-up instructional activities using written feedback to advance students’ problem-solving performance and mathematical understanding.

Jessica Strowbridge Cohen  
University of Idaho, Moscow

Edith S. Gummer  
Northwest Regional Educational Laboratory, Portland, Oregon

Claire Gates  
Northwest Regional Educational Laboratory, Portland, Oregon

Traci Fantz  
Northwest Regional Educational Laboratory, Portland, Oregon

Sarah Enoch  
Portland State University, Oregon

Karen Marrongelle  
Portland State University, Oregon

Betsy A/B/C (Hyatt)

642

**Reaching the “I Don’t Know How to Teach” Students in Algebra**  
**(6–12) Gallery Workshop**

Participants will use assessment, hands-on activities with manipulatives, and Marzano’s research-based strategies to prepare middle school students for success in algebra. Differentiated instructional activities with fractions, geometry, and integers for all students will be demonstrated.

Amy Johnson  
Math Teachers Press, Inc., Minneapolis, Minnesota

Douglas Pavilion C (Hyatt)
Helping All Algebra Students Recognize That They Are Smart
(6–12) Gallery Workshop
Participate in sample activities modeling a new approach for all students to learn rich mathematics. Teachers will receive practical ideas, whereas administrators will learn about strategies successful with heterogeneous groups. These ideas allow students to connect their algebra understanding with real-life applications.

Carol Cho
Alhambra High School, Martinez, California
Manchester Ballroom A (Hyatt)

Patterns of Change
(6–12, Higher Education, Preservice and In-Service) Gallery Workshop
Change—one of the big ideas in mathematics. Participants will engage in tasks to identify, describe, and analyze patterns of change mathematically using a variety of tools, including combinatorics, Pascal’s triangle, and statistical methods. Understanding and predicting change changes our view of mathematics!

Timothy Hendrix
Meredith College, Raleigh, North Carolina
5 A (Convention Center)

Teaching Algebra through Building the Right Tasks
(6–12, Preservice and In-Service) Gallery Workshop
How you approach algebra affects how your students learn it. Learn how to develop and design tasks that engage students and apply the full range of processes—problem solving, reasoning, connections, communications, and more.

Barbara Dougherty
Board of Directors, National Council of Teachers of Mathematics; Iowa State University, Ames
8 (Convention Center)

Connecting Geometry to Algebra, Probability, and Logic
(9–12) Gallery Workshop
This presentation will investigate math problems that connects geometry with other mathematical topics. Specifically, we will connect geometry to algebra, probability, and logic. Pictures, tables, and logic puzzles are used to solve mathematical problems.

Nicole Williams
Winona State University, Minnesota
14 A (Convention Center)

Projects and Precalculus: Putting Concepts in Context
(9–12) Gallery Workshop
You will explore alternative assessments that use precalculus concepts in a real-world context. Graphing calculators will link linear and exponential regression with the Olympics, sine curves with tide changes, and equations of functions with art. You will leave with examples and rubrics, ready to implement these projects immediately.

Ingrid Williams
Shawnee High School, Medford, New Jersey
Amy Gersbach
Seneca High School, Tabernacle, New Jersey
16 A (Convention Center)

Sense Making in Mathematics: Where Have We Been, and Where Would We Like to Go?
(General Interest) Session
Throughout our history, there have been a number of calls for students’ sense making in mathematics. This session will remind us of some of those past pleas and then discuss the Council’s current goals for sense making for all our students.

J. Michael Shaughnessy
President-Elect, National Council of Teachers of Mathematics; Portland State University, Oregon
20 B/C (Convention Center)

Becoming an Inspirational Teacher: Creating a Context for Commitment
(General Interest) Session
Presidents’ Series presentation
This highly motivational, humorous session will examine research on students’ motivation and commitment to learning. Participants will discuss and discover six specific behaviors of teachers that make the undesirable desirable and motivate students to maximize their effort and commitment to learn.

Timothy D. Kanold
National Council of Supervisors of Mathematics, Denver, Colorado
20 D (Convention Center)
Emerging Strategies in Strengthening Math Education for All Students
(General Interest) Session

Districts have responded to higher mathematics expectations for all students with new approaches to such difficult problems as serving children with special learning needs, academic language development, and motivating students to persist in challenging courses. Learn of new work to solve urgent problems of educational practice for all students.

Philip “Uri” Treisman is a professor of mathematics and public affairs at the University of Texas and is also the executive director of the Charles A. Dana Center. He chairs the steering committee of the Urban Mathematics Leadership Network, a coalition that works to improve grades pre-K–12 mathematics teaching and learning. For his work on nurturing minority students' high achievement in mathematics, he was named a MacArthur Fellow for 1992–1997.

Uri Treisman
Charles A. Dana Center, University of Texas at Austin

The Five “Secrets” to Effective Instruction
(General Interest) Session

In this humorous, heart-warming talk, the speaker—diagnosed once as having “neurological impairment” and no academic potential, but who later earned a Ph.D. in mathematics from MIT—will give five research-based, easy-to-apply yet powerful techniques for improving teaching effectiveness and inspiring teachers to help students of all ages achieve success.

Frank Y. Wang
Wang Education, LLC, Plano, Texas

Coaching Strategies That Address Students’ Learning
(General Interest) Session

What coaching work will increase the probability that students will be successful? Learn the structure of different coaching models and the advantages of each model. Hear the perspectives from a teacher and a principal about how focusing on formative assessment principles in conjunction with coaching has made a difference in their school.

Janis L. Freckmann
Milwaukee Public Schools, Wisconsin

Connie Laughlin
Milwaukee Public Schools, Wisconsin

Susan Chiemilinski
Wauwatosa Public Schools, Wisconsin

Better Research, Better Schools: Connecting Quality Research to the Classroom
(General Interest) Session

The What Works Clearinghouse (WWC) offers guidance on the effectiveness of interventions in mathematics instruction. WWC researchers will discuss what marks quality research, detail how educators use research effectively, highlight useful products, and open a discussion on strengthening communication between educators and researchers.

Mark Dynarski
What Works Clearinghouse, Washington, D.C.

Roberto Agodini
Mathematica, Princeton, New Jersey

San Diego Ballroom B (Marriott)

Young Children and the Voice of Reason
(Pre-K–2) Session

This session will provide resources to assist teachers in presenting activities that require young children to reason and prove. In each activity, children will have to give a rationale to support their answer. Manipulative activities using teddy bears, ladybugs and grasshoppers, puppy dogs, and snakes will be presented.

Sue Brown
University of Houston—Clear Lake, Texas

San Diego Ballroom B (Marriott)

Finding Math in the Museum
(Pre-K–5) Session

Come learn how children can be involved in mathematical thinking during visits to informal learning sites such as museums and zoos. Activities will be shared that will provide participants with the resources to include more mathematical experiences during field trips.

Sandi Cooper
Baylor University, Waco, Texas

Jordan Sandefur
Baylor University, Waco, Texas

Manchester Ballroom H (Hyatt)

No Paper, No Pencil: No Problem!
(Pre-K–5) Session

Participate in math lessons that connect hands-on activities to pictorial and abstract representations through the use of pocket charts and miniature whiteboards. Classroom video clips will be used to show how to enhance learning by increasing students’ engagement during guided practice activities.

Judy Diane Devens-Seligman
Hacienda-La Puente Unified School District, Valinda, California

Manchester Ballroom H (Hyatt)
657
Lesson Study: Developing Meaningful Mathematical Ideas in the Elementary School Classroom
(Pre-K–5) Session
The lesson study cycle helps teachers evaluate their current instructional best practices and the practices’ impact on students’ understanding. Video clips, examples of students’ work, and activities that build conceptual understanding will be shared.

Susan Call
Annandale Terrace Elementary School, Annandale, Virginia

658
Meeting the Needs of All Students through Differentiated Mathematics Instruction
(3–5) Session
All teachers face the challenge of meeting the needs of a wide range of students. This session helps teachers understand what it means to meet students’ needs through differentiation. Teachers experience a variety of approaches that help them make instructional adjustments that address how different students learn.

Lu Ann Weynand
Math Solutions, Sausalito, California

659
Games That Promote Students’ Success in Mathematics
(3–5) Session
Participants will experience a variety of games that actively engage all students, particularly those from diverse populations, while reinforcing math skills. The games can involve whole families in math as well as promote problem solving and reasoning and reinforce number sense. A handout will include rules and additional resources.

Louise Vandling
Vista Unified School District, Vista, California

Dr. Frank Wang
Mathemagician and Edutainer

Come hear Dr. Wang deliver his talk
The Five “Secrets” to Effective Instruction (session 651)
• 3:30 - 4:30 pm Friday, April 23, Elizabeth Ballroom D/E at the Hyatt
• Educators who have heard Dr. Wang have described his talks as inspiring, entertaining, thoughtful, thought-provoking, and full of passion. Some have written to say the talk “made the conference for them” and was the best and most useful talk at the show. Come early to get a seat!

Visit the Wang Education booth (# 944)
• Register at the Wang Education booth and get a free “I Love Nerds” or “Geek is Chic” pocket protector (a $3.95 value).
• Get a free sample of FracBars, the first and only manipulative that can easily and visually illustrate fraction division as well as do everything else that other fraction manipulatives can do.
• Get a bookmark sample of Wittzle Pro, an easy-to-learn mental math game that is so addictive and fun students won’t want to stop playing.
• See unique products such as the DVD-based classroom kits Beauty and Mathematics and Group Theory with Fruits, the Secrets of Mental Math book, the Whaley three-line gradebook, and the geometric laser game Khet.
Does Math Make Sense? Switching the Light Bulb On
(3–5, Preservice and In-Service) Session
To make math meaningful for each student, teachers must have a robust understanding of the mathematics, reliable tools to diagnose students’ understanding, and strategies that provoke students’ thinking. Two teachers will show how they engage every student through the use of diagnostic tasks, differentiated instruction, and focus questions.

Christine Lyons
STEPS Professional Development, Norwell, Massachusetts

Formative Assessment: A Sensible Approach
(3–5, Preservice and In-Service) Session
In education, it seems that each day brings a new classroom practice that teachers need to embrace and implement with their students. A closer look at formative assessment may help you recognize how you are already using this important practice, as well as how you can more fully engage in and learn from it.

Patty Clark
Math Solutions, Sausalito, California

Geometry through the Five Strands of Mathematics Proficiency
(3–5, Preservice and In-Service) Session
This hands-on, interactive presentation will guide participants through activities and discussions for facilitating plane and solid geometry instruction through the NRC’s Five Strands of Mathematics Proficiency: adaptive reasoning, strategic competence, conceptual understanding, productive disposition, and procedural fluency.

Thomasenia Lott Adams
University of Florida, Gainesville

Lessons from Singapore: Using Visual Models to Teach Algebra and Number
(3–8) Session
Singapore’s success in math education is in part a result of carefully designed lessons that help students represent and visualize mathematical relationships. These models begin with the four operations and word problems, then are connected to more complex problems and eventually algebra. This presentation will demonstrate the power of these models.

Andy Clark
Great Source Education Group, Portland, Oregon

Number Sense and Rational Numbers: Challenges, Clarity, and Coherence
(3–8) Session
This session will examine issues about whole numbers and rational numbers and the lack of students’ sense making with such numbers. Participants will engage in strategies, activities, and technology (including YouTube videos) that can lead to building better number and fraction sense. They will also consider issues around curricular coherence.

Eric Milou
Rowan University, Glassboro, New Jersey
Jill Perry
Rowan University, Glassboro, New Jersey

Using “Strip Diagrams” to Solve Algebra Word Problems
(3–8) Session
You will learn how to use simple drawings—“strip diagrams”—to make sense of and solve a wide variety of word problems. These simple drawings can also be connected directly to algebraic equations and to standard algebraic techniques for solving equations. Strip diagrams are widely used in grades 3–6 in Singapore.

Sybilla Beckmann
University of Georgia, Athens
Jon R. Star
Harvard University, Cambridge, Massachusetts
Math has never been so much fun!

Your students will love DOMA + Unique Math®/Pre-Algebra Pathways®
It's our exciting, interactive online math diagnostic and instruction system that really engages students.

Join in on the fun at Booth 1433
Come see a free demo!
### 3:30 p.m.–4:30 p.m.

#### 666

**Intervention Strategies: The Singapore Way**  
*(3–8) Session*

Do you have students who struggle with retaining their facts, basic computation or remembering a skill that you taught them last week? This session will provide you with valuable strategies that you can use as intervention tools to help the struggling student. These strategies come from Singapore, the world’s leader in math achievement.

**Ann Elizabeth Stipek**  
Staff Development for Educators, Peterborough, New Hampshire  
*10 (Convention Center)*

#### 667

**Podcasting: You Can Do It, We Can Help!**  
*(3–8) Session*

This session will present ways to use podcasting for teachers’ professional development and capturing important classroom episodes. The speakers will describe their experience with podcasting. See how to create a podcast, view some sample podcasts, and discuss its benefits and challenges.

**Eleanor Pusey**  
Columbus County Schools, Whiteville, North Carolina  
**Leslie Bellamy**  
Guideway Elementary School, Tabor City, North Carolina  
*Salon 1/2 (Marriott)*

#### 668

**Focusing on Students’ Learning**  
*(3–8, Higher Education, Preservice and In-Service) Session*

This presentation will explain a model for, and the accompanying results of, implementing the Japanese lesson study model in both preservice and in-service programs designed to examine lessons in algebra, geometry, and measurement topics of concern identified in international and national testing.

**Sally A. Robison**  
University of Arkansas, Little Rock  
*6 D (Convention Center)*

#### 669

**See Beyond What You Know: Explore Visually with Cabri® and Cabri® Elem**  
*(3–8, Preservice and In-Service) Session*

For students to develop algebraic and geometric understandings, they must reach beyond a static world of knowing. In Cabri environments, visually explore and link real-world experiences with reasoning and abstractions of mathematics. Topics will include reasoning, geometric objects and relations, graphing, transformations, and 2D and 3D modeling.

**Barbara Pence**  
San Jose State University, California  
**Janet Smith**  
Franklin McKinley School District, San Jose, California  
*6 E (Convention Center)*

#### 670

**Laws of Exponents: Linking Concepts and Context**  
*(6–8) Session*

Learn how to link concepts and context involving laws of exponents in and outside mathematics. Why is any number to the zero power equal to one? Why is $1/10$ equal to $10^{-1}$? Why is the square root of 25 equal to $25^{1/2}$? Learn the answer to these students’ questions and more.

**Estella P. De Los Santos**  
University of Houston—Victoria, Texas  
*5 B (Convention Center)*

#### 671

**Connecting Mathematics to the Culture of Industry**  
*(6–8) Session*

Students often ask, “When will I ever use this?” This session will engage participants in lessons that connect mathematics content to graphic design, industrial engineering, and construction, addressing this age-old question. Ideas for participants constructing their own contextual mathematics lesson will also be discussed.

**Desha L. Williams**  
Kennesaw State University, Georgia  
*Marina G (Marriott)*
672
Developing Students’ Proportional Reasoning: Lessons through Research
(6–8) Session
One of the primary goals of middle school mathematics classes is to help students develop proportional reasoning. This session will provide teachers with research-based suggestions for teaching concepts related to proportions. The sessions will engage teachers in active ways as they solve problems and discuss their solution strategies.

Gwendolyn J. Johnson
University of South Florida, Tampa, Florida

Salon 4 (Marriott)

673
South Dakota Counts in Middle School Mathematics
(6–8, Higher Education) Session
South Dakota Counts is a professional development program designed to deepen middle school teachers’ mathematical understanding while giving teachers a constructivist teaching approach using cognitively guided instruction. Learn about this successful project, including the activities used to teach middle school mathematics concepts through inquiry.

Christine Lynne Larson
South Dakota State University, Brookings

Edward A/B/C/D (Hyatt)

674
Everyone Can Achieve: Reaching All Your Student Population
(6–8, Preservice and In-Service) Session
This session will focus on middle school math standards and how to adapt the grade-level standards to meet the different needs and learning styles of all the students in your classroom, including special education students.

Ilene Foster
California State Polytechnic University, Pomona

Erik Foster
Etiwanda School District, Hesperia, California

Douglas Pavilion B (Hyatt)

675
Developing the Concept of Integers in the Context of Finance
(6–8, Preservice and In-Service) Session
Integer concepts constitute the building blocks of algebra where students perform operations with negative numbers. Participants will receive a series of problems grounded in a finance context that support students’ understanding of integer concepts and lead them to reinvent the rules for integer operations.

Michelle Stephan
Lawton Chiles Middle School, Oviedo, Florida

Didem Akyuz
University of Central Florida, Orlando, Florida

Elizabeth Ballroom A (Hyatt)

676
Getting Your Reps for a Great Algebra Workout
(6–12) Session
In olden times, getting in your “reps” meant doing many instances of the same type of problem. Now, we are using multiple “rep”resentations in algebra to help students understand problem solving. Dynamic problems from Algebra 1 and Algebra 2 will demonstrate how representations allow students multiple access points to real-world problems.

Edward C. Nolan
Albert Einstein High School, Kensington, Maryland

20 A (Convention Center)

677
Using TI-Nspire™ to Discover the Corner Point Principle
(6–12) Session
Participants will use TI-Nspire calculators to graph the formulation of a real-world linear programming problem. Next, they will learn how to use the interactive geometry tools of Nspire to discover the corner point principle. Finally, extensions to the activity and the potential of the use of Nspire to affect students’ learning will be discussed.

Thomas G. Edwards
Wayne State University, Detroit, Michigan

S. Asli Ozgun-Koca
Wayne State University, Detroit, Michigan

Douglas Pavilion D (Hyatt)
Join Math Solutions for . . .

**Sessions** by Math Solutions master educators.

**Assessment**
Individual Assessments: The Key to Student’s Skills and Understanding
Marilyn Burns, Founder of Math Solutions
April 22, 2:00 P.M.–3:00 P.M.

Formative Assessment: A Pathway to Enhanced Learning
Renee Everling, Education Specialist
April 22, 10:30–12:00 P.M.

Formative Assessment: A Practical Approach
Nickie Rizzo, Associate Director of Professional Development
April 23, 2:00–3:00 P.M.

Formative Assessment: A Sensible Approach
Patty Clark, Education Specialist
April 23, 3:30–4:30 P.M.

**Differentiation**
Differentiation: Supporting and Challenging All Students
Amy Mayfield, Education Specialist
April 22, 8:00–9:00 A.M.

Meeting the Needs of All Students through Differentiated Mathematics Instruction
Lu Ann Weynand, Education Specialist
April 23, 3:30–4:30 P.M.

**Number Sense**
Building Number Sense with Meaningful Practice
Lisa Rogers, Education Specialist
April 23, 1:00–2:30 P.M.

Effective Uses for Ten Frames
Melissa Conklin, Education Specialist
April 23, 8:30–10:00 A.M.

**Algebraic Thinking**
Linking Arithmetic and Algebraic Thinking
Genni Steele, Education Specialist
April 22, 9:30–10:30 A.M.

**Live demonstrations** of web-based ePD services:
- ePD Coaching
- ePD Webinars
- ePD Ask Me Now™—virtual office hours

Customizable, interactive services provide continuous and assessable support for all teachers.

**Book signings** by award-winning Math Solutions authors.

Marilyn Burns
Founder of Math Solutions
April 22, 3:30–4:30 P.M.

Rusty Bresser & Kathy Melanese
Co-Authors of Supporting English Language Learners in Math Class
April 22, 12:30–1:30 P.M.

Cathy Seeley
NCTM past president and author of Faster Isn’t Smarter: Messages About Math, Teaching, and Learning in the 21st Century
April 23, 2:00–3:00 P.M.

**Enter to win** a new Netbook and gift cards for Math Solutions resources!
Quantitative Investigations of the Financial Crisis
(9–12) Session
Clearly understanding the causes and significance of the current financial crisis in America requires both quantitative and financial literacy. This presentation will provide teaching ideas using data and statistics to describe the housing bubble, the loss of capitalization, global interconnectedness, the bailout, and other current economic events.

Paul Young
Colorado Springs School, Colorado

Tackling Functions: Concept, Operations, and Transformations from Multiple Perspectives
(9–12) Session
Ready to deepen your students’ understanding of functions? Learn how to approach function operations from multiple representations. We’ll dive deep into function transformations with an emphasis on the use of The Geometer’s Sketchpad. Prepare for light bulb moments involving inverse functions and transforming polar functions.

Vincent LaVergne
Shawnee Mission South High School, Overland Park, Kansas

Shape-Changing Transformations: Hands-On Activities That Demonstrate Linearization in Regression Modeling
(9–12) Session
Using simple activities, students can collect inherently nonlinear data and carry out shape-changing transformations to linearize the data while developing regression models. Regression diagnostics will assess the fit and appropriateness of the models. Teachers’ and students’ materials, along with background information, will be available.

Stephen Miller
Winchester Thurston School, Pittsburgh, Pennsylvania

Solving Optimization Problems by Using Technology
(9–12, Higher Education) Session
Providing students a visual and algebraic understanding of optimization problems by using technology is important for having a deep understanding in calculus. Explore how to use the dynamic nature of technology to illustrate optimization problems.

Sirin Coskun
University of Central Florida, Orlando

The Cube Contains All, Explains All
(9–12, Higher Education) Session
A series of models will be used to demonstrate how formulas for the volumes of every solid studied in Geometry 1—and many that are not—spring from the very shape whose name symbolizes volume: the cube. The concept will be expanded to develop formulas for volumes of new shapes, culminating in the formula for the volume of the Dynamic Tower.

Kenn L. Pendleton
GED Testing Service, Washington, D.C.

Investigating Students’ Concepts of Standard Deviation
(9–12, Higher Education) Research Session
This session will investigate rich tasks in statistics that tease out the fundamental ways students understand standard deviation. Students’ artifacts and videos will be shared. After working through several problems, participants will reflect on the prototypes we have found and help discuss future directions for this research.

Alan Russell
Elon University, North Carolina
Janet Mays
Elon University, North Carolina
Amanda Ketner
Elon University, North Carolina

Gregory A/B (Hyatt)
3:30 p.m.–4:30 p.m.

684
Learning from African-American Teachers of African-American Students in High-Stakes Testing Environments
(9–12, Higher Education, Preservice and In-Service) Session
Benjamin Banneker Association presentation
The speakers will present cases of how African-American teachers in predominately African-American classrooms foster the development of students’ mathematics identities. These cases promote inquiry into the importance of understanding students’ relationship to mathematics and strategies for fostering students’ positive mathematics identities.

Julius Davis
University of Maryland, College Park
Ann Edwards
University of Maryland, College Park
Lawrence Clark
University of Maryland, College Park
Dan Chazan
University of Maryland, College Park
Whitney Johnson
University of Maryland, College Park
Farhaana Nyamekye
University of Maryland, College Park
Kelwyn Farlow
University of Maryland, College Park
Andrew Brantlinger
University of Maryland, College Park
Steven Jones
University of Maryland, College Park

15 B (Convention Center)

4:45 p.m.–5:30 p.m.

686
New Teacher Celebration!
(Preservice and In-Service) Session
Celebrate the progress and possibilities. We are looking for all new and early-career teachers and students working toward entering this exciting profession. Learn a little, laugh more, meet some great folks and win wonderful prizes. Come celebrate with us. You are the future.

4 (Convention Center)

685
Problem Solving in Dynamic Mathematics Environments
(9–12, Higher Education, Preservice and In-Service) Session
Dynamic learning environments afford a variety of new approaches to classic problems in school mathematics. Using conic sections, the speakers will investigate implications of formal definitions and paper-folding tasks in GeoGebra’s interactive, dynamic environment, focusing on two strategies—understanding dependency and working backward.

Erhan Selcuk Haciomeroglu
University of Central Florida, Orlando
Lingguo Bu
Southern Illinois University Carbondale

Manchester 1/2 (Marriott)
Jane F. Schielack and Dinah Chancellor understand that a focal-points based curriculum requires special planning. In *Mathematics in Focus, K–6* they provide math leaders and teachers strategies for instructional design that helps students achieve deeper understanding.

Gr K–6 / 978-0-325-02578-0 / 208pp / $22.00

Raising students’ math achievement doesn’t have to mean starting from scratch. Steven Leinwand shows how small shifts in teaching can make a big difference in student learning. In *Accessible Mathematics* he offers ideas for immediate use to achieve a solid mathematics program.

Gr K–12 / 978-0-325-02656-5 / 128pp / $17.00

Steven Leinwand gives leaders a roadmap for change that aligns with NCTM’s Principles and Standards series. In *Sensible Mathematics* he shows how to clearly communicate what change must occur, why it has to, and what must be done to implement it.

Gr K–12 / 978-0-325-00277-4 / 144pp / $22.00

In *Math, Culture, and Popular Media*, Michaele Chappell and Denisse Thompson offer a unique multicultural resource for teachers to incorporate popular media in engaging math investigations.

Gr. 6–8 / 978-0-325-02122-5 / 160 pp + CD / $21.00

Give students these 50 cool problems that connect math to the real world. In *Understanding Middle School Math*, Arthur Hyde offers field-tested problems that lead to deep thinking and fun.

Gr. 6–8 / 978-0-325-01386-2 / 280pp / $27.00

Judy Storeygard gives you instructional strategies to help struggling math learners to move along the path toward grade-level competency. In *My Kids Can: Making Math Accessible to All Learners, K–5*, you’ll find practical answers to difficult questions of practice. The DVD includes classroom footage and interviews with teachers who have had success using Judy’s approach.

Gr K–5 / 978-0-325-01724-2 / 240pp + DVD / $27.00

Apply非物质点基于的课程需要特殊的规划。在《数学焦点，K–6》中，他们为数学领导者和教师提供了教学设计策略，帮助学生实现更深层次的理解。

Gr K–6 / 978-0-325-02578-0 / 208pp / $22.00

提高学生的数学成就并不意味着要从头开始。Steven Leinwand展示了教学中如何通过小的改变来产生大的差异。在《可访问的数学》中，他提供了立即可用的思路来实现一个坚实的数学课程。

Gr K–12 / 978-0-325-02656-5 / 128pp / $17.00

Steven Leinwand为领导者提供了一套变革的路线图，这与NCTM的原则和标准系列相符合。在《明智的数学》中，他展示了如何清晰地传达必须发生的变化，原因是什么，以及必须采取什么措施来实施。

Gr K–12 / 978-0-325-00277-4 / 144pp / $22.00

在《数学，文化和流行媒体》，Michaele Chappell和Denisse Thompson提供了一种独特的跨文化资源，供教师在数学活动中融入流行媒体。

Gr. 6–8 / 978-0-325-02122-5 / 160 pp + CD / $21.00

提供给学生这些50个有趣的数学问题，将数学与真实世界联系起来。在《理解中学数学》，Arthur Hyde提供了经过实地测试的问题，引导学生进行深入的思考和趣味。

Gr. 6–8 / 978-0-325-01386-2 / 280pp / $27.00

Judy Storeygard给出了帮助学习困难的数学学习者的教学策略，帮助他们沿着通向学科学习能力的路径前进。在《我的孩子可以：使数学对所有学习者都可访问，K–5》，你会发现解决实践中的难题的实用答案。DVD包含课堂片段和有成功的教师访谈。

Gr K–5 / 978-0-325-01724-2 / 240pp + DVD / $27.00

VISIT heinemann.com FOR SAMPLE CHAPTERS, PODCASTS, AND MORE.
Three great conferences at three fabulous locations!

Do something to help you advance your professional skills, knowledge, and career. Regional Conferences offer so much to help you move in the right direction:

- **Challenge yourself** with new ideas and approaches
- **Meet other teachers** with similar issues, concerns, and interests
- **Gather actionable insights** that you can implement immediately

NCTM Regional Conferences have what you need to start your school year off right!

*For more information, visit [www.nctm.org/meetings](http://www.nctm.org/meetings).*
SCHEDULE OF EVENTS

Registration Hours
7:00 a.m.–10:00 a.m.

Exhibits and Cyber Café Hours
9:00 a.m.–12:00 noon

Bookstore and Member Showcase Hours
8:30 a.m.–12:00 noon

Fire Codes
We have made every attempt to provide adequate seating for participants at the conference, but for your safety and because of fire regulations, only those with seats will be allowed in meeting rooms. To conform to fire codes, it will be necessary to ask persons sitting on the floor or standing to leave the room.

NCTM Committee Presentation

HIGHLIGHTS
• Closing Session: Unlocking the Secrets of Happiness (Presentation 753)
Don’t miss the Closing Session on Saturday afternoon with featured speaker Dan Buettner.

687
STEM: More than an Acronym?
(General Interest) Session
Everyone is talking about STEM. Do they agree on its meaning? Is there a shared strategy on implementation? The answer to both questions is “no.” Let’s think of this as an opportunity, rather than a challenge. How can the mathematics education community benefit from the fact that STEM is in the forefront of many conversations?

Linda Rosen
Former Executive Director, National Council of Teachers of Mathematics; Education and Management Innovations, Inc., Bethesda, Maryland

688
How to Develop Computational Skills without Drill, During Problem Solving
(General Interest) Session
You can develop your students’ computational skills through problem solving. You will see how this can be done in the context of excellent problems that engage students’ thinking and give computational practice, at the same time. Don’t believe it? Come and see.

Jerry P. Becker
Southern Illinois University Carbondale

689
Responsive Routines for Early Number Sense
(Pre-K–2) Session
Early number sense is at the core of making meaning in mathematics. Participants will learn ways to develop strong but quick routines that will provide students opportunities to interact with number sense ideas every day. Video clips and students’ work will be shared to deepen understanding of how to be responsive to students’ number-sense needs.

Jessica Shumway
Fairfax County Public Schools, Alexandria, Virginia

690
Getting to the Heart of Measurement (When We Usually Don’t)
(Pre-K–5) Research Session
U.S. textbooks do some things well and some things poorly in helping elementary school students learn spatial measurement—length, area, and volume. This session will take you to the heart of the measurement process, explore students’ confusions and errors, and give you tools—tasks and prompts—with which your students can make sense of measurement.

Jack Smith
Michigan State University, East Lansing

691
Scaffolding Math Academic Language and Literacy for English Language Learners (ELLs)
(Pre-K–8) Session
This session will focus on ways to develop academic content vocabulary, increase comprehension, and differentiate math instruction while addressing a variety of reading levels. Particular emphasis will include supporting the needs of ELLs in the regular literacy or content area classroom.

Tammy Jones
National Literacy Consultant, Conway, Arkansas

692
Infusing Measurement in Math and Science
(3–5) Session
This session will investigate the role estimation strategies play in teaching the measurement standards. These roles will assist in developing the benchmarks for various measurement and assessing the reasonableness of the results. Attributes of measure will be discussed.

Marti Kuntz
South Carolina Teachers of Mathematics, Charleston

693
Division Problem Types and Remainder Types: Context Does Strange Things!
(3–5, Higher Education, Preservice and In-Service) Session
Participants will explore the difference between “grouping” and “sharing” division word problems and how those differences can be best used in teaching. Further, participants will inductively “discover” four types of division remainders and learn to use these types to sequence lessons and improve students’ understanding.

James E. Schwartz
Saint John Fisher College, Rochester, New York
8:00 a.m.–9:00 a.m.

694
Making Meaning through a Student-Led Math Night
(3–8) Session
As students plan and lead a family math night, teachers step out of the way as students step up. Learning opportunities abound throughout the planning process and during the event. Handouts include activity ideas, resources, and practical suggestions for starting a new school tradition.

Wendy Petti
Washington International School, Washington, D.C.
2 (Convention Center)

695
Equity through Group Work: Complex Instruction (CI) Benefiting Diverse Learners
(3–8) Session
TODOS: Mathematics for ALL presentation
Drawing on experiences with Latino students in grades 3–8, including English language learners, this session illustrates how CI principles can motivate and engage all students in rigorous mathematics. Session activities and handouts will focus on how norms, roles, and sample tasks support students applying mathematics in relevant contexts.

Kathleen Ross
University of Arizona, Tucson
Marta Civil
University of Arizona, Tucson
Belin Tsinnajinnie
University of Arizona, Tucson
10 (Convention Center)

696
Connect to Content through Coaching
(3–12) Session
Engage in activities from a successful, multilevel coaching model for schools with students of low socioeconomic status. Participants will gain awareness of three commitments to coaching and connect with journaling, communication, conferencing, and parental involvement strategies. The model is aligned with NCTM’s standards and focal points.

Pam L. Warrick
Walden University, Little Rock, Arkansas
C. Neelie Dobbins
University of Arkansas at Little Rock
6 C (Convention Center)

697
What Do Magnets Have to Do with Geometry and Developing Geometric Vocabulary?
(6–8) Session
This session will explore how to teach geometric concepts and vocabulary through hands-on manipulation of magnets. Teaching concepts such as angles, types of polygons and their specific properties, polyhedra, and nets with magnets will be demonstrated. This process is a valuable tool for students struggling with geometric thinking and vocabulary.

Eric William Shippee
College of William and Mary, Williamsburg, Virginia
Robert L. Provost
King and Queen Elementary School, Mattaponi, Virginia
Marguerite (Margie) Mason
College of William and Mary, Williamsburg, Virginia
15 B (Convention Center)

698
Hook, Line, and Thinker
(6–12) Session
Take a tour of a vertical series of lessons in number, algebra, geometry, and probability created by grade 6–10 teachers. Mirrors, marbles, rabbits, “line dancing,” birthday candles, and fruit punch are among the hooks that motivate students to construct and extend lines of reasoning through the grade levels and build understandings that last.

Ralph S. Pantozzi
Scotch Plains – Fanwood Public Schools, New Jersey
6 A (Convention Center)

699
Making the Connection: Solving Problems with Graph Theory
(6–12) Session
Graphs can be very useful tools in solving problems, especially counting problems. Participants will engage in some problems that will be solved through graph theory. Handouts will include activities ready for the classroom. If you feel intimidated by the term graph theory, this session is for you.

Clifton Wingard
Delta State University, Cleveland, Mississippi
6 B (Convention Center)
8:00 a.m.–9:00 a.m.

**700**
**Focus on High School: Reasoning and Sense Making in Statistics**  
*(9–12) Session*

As part of its vision for reasoning and sense making in secondary school mathematics, NCTM has commissioned a series of companion books to focus on reasoning and sense making. This session will present some of the reasoning and sense making activities to appear in the forthcoming companion book on data analysis and probability.

*Beth Chance*  
California Polytechnic State University, San Luis Obispo

*J. Michael Shaughnessy*  
President Elect, National Council of Teachers of Mathematics; Portland State University, Oregon

*Henry Kranendonk*  
Rufus King High School, Milwaukee, Wisconsin

5 B (Convention Center)

---

**701**
**Mathematical Masterpieces**  
*(9–12, Higher Education) Session*

Participants will take a guided tour through some of the most important, ingenious proofs in the history of math. Though these masterpieces come from different eras and different cultures, what they all have in common is that they can be enjoyed by high school students—gems from Euclid, Archimedes, Ptolemy, Napier, Euler, and more!

*Gary Rubinstein*  
Stuyvesant High School, New York, New York

6 E (Convention Center)

---

**702**
**Opening Your Class by Mathematizing African History**  
*(9–12, Preservice and In-Service) Session*

This session will offer examples of mathematics openings to start class activities. The session is designed for mathematics educators to realize a need for a paradigm shift in order to bring students of African descent into the mathematics. The openings will include a variety of mathematical topics.

*Kwame Anthony A. Scott*  
Benjamin Banneker Association, Inc., Oak Park, Illinois

17 B (Convention Center)

---

8:30 a.m.–10:00 a.m.

**703**
**A Different Approach to Teaching First-Grade Mathematics**  
*(Pre-K–2) Gallery Workshop*

Counting discrete objects is a common basis for introducing children to mathematical ideas. A different approach is to begin with generalized notions without using number. This approach enables first graders to reason algebraically. Participants will engage in activities designed to study fundamental mathematical ideas without having to count.

*Claire Okazaki*  
Curriculum Research and Development Group, University of Hawaii, Honolulu

*Fay Zenigami*  
Curriculum Research and Development Group, University of Hawaii, Honolulu

3 (Convention Center)

---

**704**
**Game-Talk: The Value of Discourse**  
*(3–5) Gallery Workshop*

Games may be fun, but if we want students to learn from them, we have to do more than just play! Mathematical learning is not in the fun. It is not even in the play. Mathematical learning takes place in the thinking and discourse about the play. Come to play, think, and share.

*Mary Altieri*  
SUMTCHR, Inc., Putnam Valley, New York

5 A (Convention Center)

---

**705**
**Connect the Dots! Mathematics, Literature, and the Visual Arts**  
*(3–8) Gallery Workshop*

The visual arts present an ideal medium through which students can express their ideas, thoughts, emotions, and understanding of mathematical concepts such as pattern, line, shape, and form. Experience literature-based activities designed to help students make connections. From Pollock to Dali, we explore what happens when a line bends.

*Mary Elizabeth Baker*  
University of North Dakota, Grand Forks

16 A (Convention Center)
Online Math Strategy Games for the Middle School Curriculum
(3–8) Gallery Workshop
Calculation Nation, an online world of math strategy games, is part of the Illuminations project and was launched at the 2009 NCTM Annual Meeting. In the past year, the site has improved and added new games. You will learn how to use these games with students as part of your middle school curriculum.

Patrick Vennebush
National Council of Teachers of Mathematics, Reston, Virginia

Fraction Computation Emerges from Models Used to Solve Worded Problems
(6–8) Gallery Workshop
Children often lack understanding of why “invert and multiply” makes sense for dividing fractions. Participants will explore fraction multiplication and division through worded problems and models. They will examine actions implied by words within problems and analyze how actions provide a rationale for the fraction division algorithm.

Melfried Olson
Curriculum Research and Development Group, University of Hawaii, Honolulu
Judith Olson
Curriculum Research and Development Group, University of Hawaii, Honolulu
Mary Pat Sjostrom
Chaminade University of Honolulu, Honolulu

Building Origami Polyhedra = Building Spatial Reasoning
(6–12) Gallery Workshop
Come build face, edge, and skeletal models to see how unit origami can engage a wide range of students in exploring deep 3-D geometric concepts—surface and dihedral angles, axes and planes of symmetry, chirality, and duality. Folding becomes vocabulary review. Assembling takes visualization and reasoning. Resulting models invite further study.

Margaret (Peg) Cagle
Lawrence Gifted Magnet School, Chatsworth, California

Fractal Functions: Connecting Geometry, Measurement, and Algebra
(6–12, Preservice and In-Service) Gallery Workshop
Use geometry and measurement concepts to make fractals. Then, use your fractals to develop the concept of function by representing their characteristics with words, symbols, tables, and graphs. Examine how the activities can be used to differentiate instruction in diverse classrooms and serve as assessments.

Mandy McDaniel
Boise State University, Idaho
Teri Willard
Central Washington University, Ellensburg

Beyond Means, Medians, and Modes: Bringing More Authentic Statistical Inquiry to Your Mathematics Classroom
(9–12) Gallery Workshop
Participate in a statistical study. Learn how to better help your students ask statistical questions, collect and analyze data, and make good conclusions from data. Activities in this presentation will help teachers develop their own activities to go beyond the tasks typically found in mathematics textbooks.

William Conrad Thill
Harvard Westlake, Los Angeles, California

Using NCTM Enhanced Journal Articles to Build Mathematics Learning Communities
(Preservice and In-Service) Gallery Workshop
Participants will actively engage in exploring journal articles that have been enhanced by NCTM’s Professional Development Services Committee. The facilitators will model the process of using the journal articles to build school-based, professional learning communities.

Professional Development Services Committee
National Council of Teachers of Mathematics, Reston, Virginia
712
Take the Chain Off Your Brain
(General Interest) Session
Benjamin Banneker Association presentation
Imagine the power of raised expectations and beliefs for all learners. The speaker will use class lessons to demonstrate the impact of awareness that intelligence is not fixed. Drawing on social psychology, problem solving, and neuroscience, discussion will focus on how this affects the teaching and learning of African American students.

Salik Mukarram
Benjamin Banneker Association, Chicago, Illinois
17 B (Convention Center)

713
Learning about Number: Natural and Complex for Young Children
(Pre-K–2) Session
Learning about number is natural for children as they work with resources, draw pictures, and recognize symbols in a mathematics-rich environment. A range of number representations such as different arrangements of quantity, five- and ten-frame organizers, and number tracks support a strong conceptual understanding of number.

Rosemary Reuille Irons
Queensland University of Technology, Brisbane, Australia
6 D (Convention Center)

714
For Math Coaches: Maintaining Your Balance (and Your Sanity)!
(Pre-K–5) Session
How do you successfully balance responsibilities as a math teacher, coach, and school and division leader during your first years as a math specialist and coach? What do you have to keep in mind when working with new teachers, veteran teachers, and those in between? The speakers will share insights as to how they have worked through these issues.

Rebecca Parker
Stafford County Public Schools, Virginia
Susan Sydla
Stafford County Public Schools, Virginia
Branch Wyatt Pronk
Stafford County Public Schools, Virginia
Cindy Sypolt
Stafford County Public Schools, Virginia
5 B (Convention Center)

715
Teaching the Children We Have: Simple Yet Effective Differentiation Techniques
(3–5) Session
Join the speakers for lively discussions, engaging activities, and videos as they identify practical ways to bridge mathematics instruction for English language learners, students who need support, or students who need additional challenges. Move from theory to practice to make fractions comprehensible for all your students.

Chris Confer
Consultant, Tucson, Arizona
Marco Ramirez
Tucson Unified School District, Arizona
11 B (Convention Center)

716
Number-Sense Approach to X Facts: Every Day Counts
(3–5) Session
Experience a schoolwide approach used in a Title 1 school to teach basic facts in a way that encourages students’ reasoning and thinking while building fluency for all. A special array of flash cards and games help break harder facts into easier ones. Students focus on connections among x, division, and fractions of a set.

Janet Gillespie
Great Source/Houghton Mifflin Harcourt, Portland, Oregon
15 B (Convention Center)

717
Let’s Make Triangles with Sticks! Geometry in Asian Textbooks
(3–5) Session
This session will explore the teaching of triangles and angles in Japanese and Singapore textbooks. The presenters will share video clips of actual geometry lessons developed through lesson study and discuss the results and implications of their research.

William Jackson
Scarsdale Public Schools, New York
6 E (Convention Center)

718
1, 2, 3, 4: Let Me Count the Ways
(3–5, Preservice and In-Service) Session
This session features several multiplication algorithms and a nonstandard division algorithm to explore and verify. Come learn how to use the Egyptian, Russian, lightning, and more multiplication methods along with the scaffolding method of long division.

Teresa Banker
Kennesaw State University, Georgia
14 B (Convention Center)
719
Analyzing, Interpreting, and Connecting Data Relationships Using Virtual Manipulatives
(3–8) Session
Participants explore data relationships using several virtual manipulatives. They will make connections among statistical concepts including data analysis, trend lines, correlations, and the strength and direction of relationships. Virtual manipulatives provide a visual tool in modeling these connections and their applications for students.

Patricia Moyer-Packenham
Utah State University, Logan
Arla Westenskow
Utah State University, Logan

720
Stories from the Community: Problem-Solving Experiences in Middle Grades
(6–8, Preservice and In-Service) Session
Learn how online math education community members are successfully implementing contextual problem solving in middle grade classrooms. One teacher says, “… when students truly develop problem-solving skills, they should be able to use them even on standardized tests.” Activities, techniques, sample problems, and resource documents will be shared.

Suzanne Alejandre
The Math Forum @ Drexel, Philadelphia, Pennsylvania

721
Inclusion Strategies for Strong Connections and Successful Inclusion
(6–12) Session
See how to establish a strong foundation of connections and understanding for your intervention students that will allow them to build a solid problem structure of mathematical proficiency. Classroom-tested and data-supported strategies will be demonstrated. An extensive, ready-to-teach handout will be available.

Known throughout the country for motivating and engaging teachers and students, Fulton has coauthored more than a dozen books that provide easy-to-teach yet mathematically rich activities for busy teachers. Drawing on his 28 years in education, he is a frequent presenter, cohosts a Web site that provides resources to teachers (www.ttppress.com), and in 2005 was selected as California’s middle school educator of the year.

Brad Fulton
Mistletoe Elementary School, Redding, California

722
Construction Site Geometry: A Lesson in Cooperative Learning
(6–12) Session
Interested in implementing cooperative learning, problem-solving, or performance assessment into your geometry course? Students will work in groups to design a corporate park in this activity developed in cooperation with the University of Cincinnati’s STEP program. Each team has to solve problems, perform calculations, and compromise.

Sara Garrison
Norwood High School, Cincinnati, Ohio
Brad Hunt
Norwood High School, Cincinnati, Ohio

723
Teaching Math to Transient Students
(6–12) Session
This session will give teachers strategies to catch transient students up with their current students. The speaker will look at several different districts who have successfully transitioned these students into their classrooms. She will also examine some of the language and cultural differences transient students have.

Tracey Zak Johnson
Consultant, Aledo, Texas

724
Exploring Democratic Education, Opportunity, and Equity
(6–12) Session
Be prepared to think about how the opportunity to learn mathematics is related to democracy. Learn how democratic education is accessible to all students and is based on the assumption that all students can learn given the right circumstance. Explore mathematics in a context that addresses social justice.

Carol Elaine Malloy
### 9:30 a.m.–10:30 a.m.

<table>
<thead>
<tr>
<th>Session Number</th>
<th>Title</th>
<th>Description</th>
<th>Presenter(s)</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>725</td>
<td>Bacterial Mathematics and What It Means for Mathematics Education</td>
<td>(6–12, Higher Education) Session&lt;br&gt;New research debunks the myth of bacteria as primitive organisms; they are actually communicative, collaborative problem solvers capable of doing simple mathematics. This session compares video of collaborating bacteria and middle school mathematics classes to highlight salient social principles advocated by the current reform math movement.</td>
<td>Thomas Ricks&lt;br&gt;Louisiana State University, Baton Rouge</td>
<td>4 (Convention Center)</td>
</tr>
<tr>
<td>726</td>
<td>English Learners in My Classroom: What Do I Do?</td>
<td>(6–12, Preservice and In-Service) Session&lt;br&gt;TODOS: Mathematics for ALL presentation&lt;br&gt;This session will model effective strategies for engaging English language learners in meaningful mathematics and giving them access to the core curriculum. Attendees will be active participants in lessons that support English learners in acquiring academic language while making sense of the mathematics.</td>
<td>Ana Elisa England&lt;br&gt;University of California, Santa Cruz&lt;br&gt;Patricia Valdez&lt;br&gt;Pajaro Valley Unified School District, Watsonville, California</td>
<td>16 B (Convention Center)</td>
</tr>
<tr>
<td>727</td>
<td>Using a Computer Algebra System (CAS) to Promote Engagement and Access to Algebra for All Students</td>
<td>(9–12) Session&lt;br&gt;Learn how a CAS can be used to engage all students in learning algebra. See how the classroom becomes an active learning center where students hypothesize, justify, and communicate. Explore sample lessons and create CAS activities. Data will show changes in students’ attitudes, teachers’ attitudes, and students’ achievement.</td>
<td>Larry Osthus&lt;br&gt;Consultant, Des Moines, Iowa</td>
<td>6 C (Convention Center)</td>
</tr>
</tbody>
</table>

### 10:30 a.m.–12:00 noon

<table>
<thead>
<tr>
<th>Session Number</th>
<th>Title</th>
<th>Description</th>
<th>Presenter(s)</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>728</td>
<td>Differentiation through the Process Standards</td>
<td>(Pre-K–5) Gallery Workshop&lt;br&gt;The process standards provide teachers with a pathway to meet the needs of all students. This presentation will identify ways to use the process standards to develop and maintain a differentiated classroom. Instructional strategies and activities will be shared.</td>
<td>Heather C. Dyer&lt;br&gt;Howard County Public Schools, Ellicott City, Maryland&lt;br&gt;John SanGiovanni&lt;br&gt;Howard County Public Schools, Ellicott City, Maryland</td>
<td>9 (Convention Center)</td>
</tr>
<tr>
<td>729</td>
<td>Tangrams with a Different Twist</td>
<td>(3–5, Preservice and In-Service) Gallery Workshop&lt;br&gt;Participants will use tangrams to identify convex and concave polygons; measure area using nonstandard units of measure with monetary applications; name fractional parts of a shape; add, subtract, multiply, and divide fractions; and measure area and perimeter with standard units.</td>
<td>Celine J. Przydzial&lt;br&gt;Kutztown University, Pennsylvania</td>
<td>3 (Convention Center)</td>
</tr>
<tr>
<td>730</td>
<td>“Stacking” for Success: A Strategy for Response to Intervention (RtI) Tier 2 Students</td>
<td>(3–8) Gallery Workshop&lt;br&gt;Come learn about Stacking, a new, interactive process bringing math success to more than 11,000 students. Math activities are constructed in such a way that RtI Tier 2 students can take the lead to help the class solve math problems using the eight components of stacking. Participants will receive a copy of the activities to use in their classrooms.</td>
<td>Nancy Tanner Edwards&lt;br&gt;Missouri Western State University, Saint Joseph&lt;br&gt;Jean Morrow&lt;br&gt;Emporia State University, Kansas</td>
<td>8 (Convention Center)</td>
</tr>
</tbody>
</table>
731
Origami: A Tool for Reinforcing Angle Relationships
(6–8) Gallery Workshop
Participants will create an origami book of angles. This activity will provide middle school students with an opportunity to make connections among multiple angle concepts by comparing and contrasting terms and ideas. The speaker will also discuss ways to connect angle relationships to students’ daily life experiences.
Martha Y. Parrott
Northeastern State University, Broken Arrow, Oklahoma
5 A (Convention Center)

732
The Patterns of Algebra: Linear Functions
(6–12) Gallery Workshop
The study of mathematics is the study of patterns. Algebra is accessible to every student when it is taught as patterns. You will discover the patterns relating to linear functions and discover how easily they can be generalized into a personal understanding of the function, its graph, and its solutions.
Deena M. Lyons
Del Webb Middle School, Henderson, Nevada
14 A (Convention Center)

733
English Language Learners Achieving Success with Handheld Technology
(6–12) Gallery Workshop
TODOS: Mathematics for ALL presentation
With Texas Instrument support, TODOS created lessons on proportional reasoning that incorporate research-based practices for teaching English language learners with handheld technology. The lessons, field tested in California, facilitate the acquisition of academic language and enable students to enhance their mathematics achievement.
Jose Marcelino Franco
University of California at Berkeley
Christine Montes
Los Amigos High School, Huntington, California
16 A (Convention Center)

734
Making It Happen: Re-engaging Students Who’ve Been Turned Off to Mathematics
(6–12) Gallery Workshop
For too many students, the cost of learning mathematics is too high for them. Unlike failed learners, who at least try, intentional nonlearners believe that if they don’t try, then they can’t fail. In this interactive presentation, participants will learn strategies for re-engaging students who have decided that mathematics is not for them.
Pamela Annette Seda
DeKalb County Schools, Decatur, Georgia
15 A (Convention Center)

735
Three Ways to Teach Linear Regression Using Illuminations Resources
(9–12) Gallery Workshop
Why should students with individual learning styles struggle with an instructional method they find difficult when you can use 3 different methods in the same class? Differentiate your instruction. Join in this gallery workshop to explore linear regression using cooperative learning, writing, and interactive tools, all from the Illuminations Web site.
Julia Zurkovsky
National Council of Teachers of Mathematics, Reston, Virginia
11 A (Convention Center)

736
The Coaching Connection: Linking Instruction and Reflection
(Preservice and In-Service) Gallery Workshop
Are you grappling with what effective support for math instruction looks like? A grades K–8 math specialist shares insights from coaching individual teachers, facilitating grade-level team meetings, and encouraging vertical collaboration—all designed to foster a reflective practice and enhance instruction. Please join us to share your thinking!
Danusia Therese Gerlach
Chicago Public Schools, Illinois
17 A (Convention Center)
737
Equity in the Mathematics Classroom: A Tool for Lesson Planning and Reflection
(General Interest) Session
How do teachers promote equity in the mathematics classroom? What are some characteristics of equitable mathematics classrooms? Participants will engage in a math activity and use an equity lens tool that is valuable for lesson planning and reflection and promotes meaningful discussion about reaching all students in the math classroom.
Nancy Terman  
University of California Santa Barbara
Maria Guzman  
Oxnard High School, California

11 B (Convention Center)

738
International Perspectives on Gender and Mathematics Education
(General Interest) Session
Women and Mathematics Education presentation
This session will discuss results from a new volume synthesizing research on gender and mathematics from an international perspective. The editors of the volume will give an overview of the volume’s contents and highlights of the current state of research on issues of gender and mathematics in the developed and developing countries.
Joanne Rossi Becker  
San José State University, California
Olof Bjorg Steinthorsdottir  
University of North Carolina at Chapel Hill

15 B (Convention Center)

739
Math Night: So Easy a Caveman Can Do It!
(Pre-K–2) Session
Have you ever wanted to host a math night, but were afraid? This team of a teacher, a district supervisor, and a college math professor have run highly successful math nights for many years and have coached many other teachers and schools to begin their own math nights. They will share the how-to’s and a low-stress, step-by-step process.
Joyce A. Moon  
Sangaree Elementary School, Summerville, South Carolina
Sandra M. Powers  
Retired, College of Charleston, South Carolina

17 B (Convention Center)

740
Using Guided Math to Differentiate Instruction
(Pre-K–2) Session
Experience practical strategies to differentiate your math instruction using small-group instruction and open-ended math centers. Learn how the principles of guided reading can work for your math instruction! You can teach, reteach, and extend mathematical concepts every day.
Barbara Blanke is a teacher, author, and teacher educator. She taught 22 years in grades K–12 classrooms. For the past eight years she has been a professor and university supervisor in teacher education for the College of Education at California Polytechnic. She is currently an educational consultant for school districts throughout the country, providing professional development workshops and coaching for grades K–8 mathematics teachers and administrators.

Barbara Lynn Blanke  
California PolyTechinic State University, San Luis Obispo

7 B (Convention Center)

741
Telling the “Whole” Story: Making Sense of Fraction Language
(3–8) Session
Correct language use can give students a foundation for being successful in conceptualizing mathematical situations. This is particularly true with difficult topics such as fraction concepts and operations. Explore language use with fractions and learn strategies to help students develop fluency when describing these situations.
Jennifer M. Tobias  
Illinois State University, Normal
Juli K. Dixon  
University of Central Florida, Orlando
Janet Andreasen  
University of Central Florida, Orlando

10 (Convention Center)

742
A Process for Developing STEM Curriculum and Instructional Materials
(3–8) Session
The Science, Technology, Engineering, and Mathematics Curriculum Integration Project is an innovative approach to the design of curriculum and instruction materials in which these disciplines are connected as one. Teachers will examine a process that results in products that answer the question “Why do I need to know this?”

Joseph L. Mills, Jr.  
CurrTech Integrations, LLC, Baltimore, Maryland
Hays Lantz  
CurrTech Integrations, LLC, Baltimore, Maryland

2 (Convention Center)
Developing Algebraic Reasoning: A Sequence of Geometric Pattern Tasks
(6–8) Session

How can students better understand fundamental algebraic concepts prior to a formal course in algebra? This session will present a sequence of geometric pattern tasks designed to promote students’ ability to generalize and their understanding of functions and variables. Teachers will come away with lessons for their own classrooms.

Kimberly Ann Markworth
University of North Carolina at Chapel Hill

Assessing Mathematical Concepts in Context
(6–8) Session

Several engaging mathematical investigations and activities appropriate for assessing middle school students will be presented. Examples of students’ work, assessment guidelines, and students’ reflections will also be included. A variety of content strands will be addressed.

Winnie J. Peterson
Kutztown University, Pennsylvania

(6–12) Session

It is becoming imperative to equip students with the tools needed for financial literacy. We will discuss problems that focus on core math competencies and are situated within financial contexts. These problems can introduce important personal finance concepts while helping develop students’ problem-solving and critical-thinking skills.

Mai M. Sidawi
The Math Forum @ Drexel, Philadelphia, Pennsylvania

Putting Proof into Practice
(6–12) Session

The ability to understand and use mathematical proof is an essential skill in mathematics, but it’s rarely integrated into the curriculum outside geometry. This session will offer a model for teaching proof strategies in middle and high school, along with specific lessons that successfully incorporate proofs into any mathematics class.

Carlos Rodriguez
Johns Hopkins University Center for Talented Youth, Baltimore, Maryland
Stuart Gluck
Johns Hopkins University Center for Talented Youth, Baltimore, Maryland

Exploring 3-D Geometry Using Google™’s SketchUp™
(6–12, Higher Education) Session

Three-dimensional geometry can be taught and learned in new and exciting ways using Google’s free, 3-D design software package, SketchUp. Learn how to explore the traditional topics of solid geometry such as prisms and pyramids and the Platonic solids using this easy-to-use, powerful software package.

Jonathan Choate
Groton School, Massachusetts
Bonnie Roskes
3Dvinci, Washington, D.C.

I’m Going to Be a Math Teacher: Why Didn’t I Know This Before?
(6–12, Higher Education, Preservice and In-Service) Session

Provides participants with some of what a secondary methods teacher and his students have discovered are some deficiencies concerning conceptual understanding of several math procedures and formulas. Many preservice and in-service math teachers confess that they “should have known these things a long time ago.”

Steven Todd Williams
Lock Haven University of Pennsylvania
### 11:00 a.m.–12:00 noon

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>749</td>
<td>Sizing Things Up: Helping Students Understand Geometric Measurement (6–12, Preservice and In-Service) Session</td>
<td>Through a series of hands on activities, participants will explore the concepts of area, perimeter, and volume and then apply them to methods of teaching the formulas for two and three dimensional shapes. Specifically, methods of teaching these formulas will be developed so that students can recall or reconstruct them.</td>
<td>14 B (Convention Center)</td>
</tr>
<tr>
<td>Matthew Claren Chedister</td>
<td>Boston University, Massachusetts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 750

**Demystifying Conditional Probabilities: Not as Hard as It Looks (9–12) Session**

Independence, conditional probabilities, and versus or—it all seems so confusing! Students don’t understand, and teachers believe that they barely have a solid grip on how to apply the definitions and formulas. Ways exist to approach the subject that make sense, and the speaker will work through some of them.

**Ruth Miller**

Roland Park Country School, Baltimore, Maryland

6 A (Convention Center)

### 751

**Enhancing Students’ Schema of Functions: Transformations, Compositions, and Inverses (9–12) Session**

Research indicates that students rely on memorization to respond to function transformation questions. This limits them from seeing and using relationships between transformations and other concepts, such as compositions and inverses. Participants will examine some transformation tasks and how they relate to compositions or inverses.

**Patrick M. Kimani**

California State University, Fullerton

6 C (Convention Center)

### 752

**Antagonist and Protagonist Discourse Model: African American and Latino(a) Students Conceptualizing AP Calculus (9–12, Higher Education, Preservice and In-Service) Session**

The antagonist-protagonist discourse model was created to help increase the conceptualization of calculus by African American, Latino, and Latina students. This model emerges from culturally responsive pedagogy, essential questioning, inquiry-based learning, and issues regarding cognitive development in oral-based traditions.

**Dante Abdul-Lateef Tawfeeq**

Adelphi Univerity, Long Island, New York

6 F (Convention Center)

### 12:30 p.m.–1:30 p.m.

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>753</td>
<td>Unlocking the Secrets of Happiness Closing Session</td>
<td>The speaker is close to a discovery—unlocking the secrets to happiness. He discovered hot spots of contentment and will share secrets of life satisfaction. Identifying the “happiest” regions on three continents and combining the data with information from interviews of well-being experts, he created a cross-cultural formula for life satisfaction. New York Times best-selling author Dan Buettner has delivered the secrets to living longer to more than 250 audiences nationwide. Using National Geographic photography, he tells the stories of four of the world’s longest-lived cultures and offers nine habits for people to get up to ten more good years out of life.</td>
<td>6 A (Convention Center)</td>
</tr>
<tr>
<td>Dan Buettner</td>
<td>Quest Network, Inc., Minneapolis, Minnesota</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Kaplan creates success stories, one student at a time.

Partner with Kaplan to receive significant discounts on expert classroom and after-school instruction.

K-8 Programs
After-School Programs, Private Tutoring, Online Academic Software
➤ kaplantutoring.com | 1-800-497-2673

9-12 Programs
Classroom, Small Group Tutoring & Private Tutoring for all college admissions exams: SAT, ACT, PSAT, SAT Subject Tests, AP Exams
➤ kaptest.com/college | 1-800-KAP-TEST
School-sponsored classroom courses for SAT & ACT Prep
➤ kaplanK12.com | 1-888-KAPLAN8

Call or visit us online to learn how Kaplan can partner with your school to propel student achievement.
WE APOLOGIZE FOR NOT BEING ABLE TO FIT ALL OUR TITLES
VISIT US IN BOOTH 1548 TO SEE THEM ALL
Registration and Access to Presentations

Badges must be worn to enter all presentations and the NCTM Exhibit Hall. Please be aware that a $10 fee will be charged for replacement badges.

By registering for the 2010 NCTM Annual Meeting and Exposition, participants grant NCTM the right to use, in promotional materials, their likeness or voice as recorded on, or transferred to, videotape, film, slides, audiotapes, or other media.

Research Presession

The Research Presession, jointly sponsored by the NCTM Research Committee and the Special Interest Group on Research in Mathematics Education of the American Educational Research Association, will be held in the San Diego Convention Center prior to the 2010 NCTM Annual Meeting and Exposition. The Research Presession Registration Area is in the Ballroom 6 Lobby (upper level) of the convention center.

The opening session will be held at 7:00 p.m. on Monday, April 19. Concurrent sessions will be held from 8:30 a.m. to 6:00 p.m. on Tuesday, April 20, and from 8:30 a.m. to 4:30 p.m. on Wednesday, April 21. There is no additional fee for on-site registration for the Research Presession. Registered Annual Meeting attendees may attend Wednesday’s Research Presession presentations at no extra charge.

For Your Child’s Safety

Due to the size and nature of the 2010 NCTM Annual Meeting and Exposition, this event is not the appropriate setting for children under 16 years of age. Your hotel concierge will be able to recommend activities for children while you are attending the conference. We appreciate your understanding and cooperation. Children 16 years and over will need to register as nonteaching guests. To register a nonteaching guest, stop by the Registration Area at the San Diego Convention Center.

Member Showcase

Everything you need to know about NCTM Membership—and how we can help you succeed as a teacher (and in your classroom)—is at the Showcase; from teachers’ resources, including activities, lessons, and sample journals, to member certificates, personalized news releases, and more! Whether you are a new member, a current member, or thinking of joining, stop by to learn how NCTM can help you!

Also at the Member Showcase, members of the journal staff and the editorial panels will hold brief discussion groups on such topics as “Write for the Journal: It’s Not as Scary as You Think,” “Become a Reviewer and Beef Up Your Knowledge,” and “Using Literature in Your Math Class.” Be sure to stop by to chat or pick up a schedule, which will also be available in the onsite Daily News.

Stop by the Member Showcase in the lobby outside of Exhibit Hall B at the San Diego Convention Center.

Bookstore

Save 25 percent off the list price on all purchases made at the onsite NCTM Bookstore, located in the Exhibit Hall at the San Diego Convention Center. View first-hand all the publications that NCTM has to offer. You will also find a variety of specialty products that you can use as gifts, prizes, and incentives to spread the word about the importance of math. Start your wish list today by previewing NCTM’s wealth of resources at www.nctm.org/catalog.

**Note on Sales Tax Exemptions:** In order to be considered exempt from sales tax in the NCTM Bookstore, you must provide a copy of a [California tax exemption certificate](#), issued by the state, at the time of purchase. NCTM is required by law to keep a copy of the certificate, and will be unable to return it to you. In order to qualify, payment must be made with a purchase order, check, or credit card from the school to which the California Exemption Certificate is issued. Personal checks, personal credit cards, and cash cannot be accepted in conjunction with tax exemption certificates.

The NCTM Bookstore is not equipped to handle shipping from the meeting site. A Business Center located at each meeting facility is ready to assist you with your shipping needs.

The NCTM Bookstore is partially sponsored by BeAnActuary.org.

Shuttle Bus Service

Attendees who reserved their hotel room through NCTM’s official housing company will receive complimentary shuttle bus service from hotels in the NCTM housing block to the San Diego Convention Center. Some of the hotels are within walking distance of the convention center and will not require shuttle bus service. Routes and schedules will be posted in your hotel lobby. The schedule will be followed as closely as possible. For a shuttle bus schedule or if you have questions, please visit the shuttle desk located at the shuttle area outside of Exhibit Hall B & C.

Tour Information

An exciting array of sightseeing tours will be available to NCTM attendees and guests through NCTM’s shuttle company. For the complete offering, including descriptions, prices, dates, and times, please visit the tour desk located in the lobby area at the San Diego Convention Center.

Information Booth

The NCTM Information Booth is located in the lobby area of the San Diego Convention Center, where local staff from San Diego will be on hand to answer any questions you may have and to assist you with directions and local information, from transportation and historical sites to shopping and entertainment.

Lost-and-Found

Items for lost-and-found may be retrieved or turned in at the NCTM Information Booth. At the end of the conference, all
lost-and-found items brought to the Information Booth will be turned over to Convention Center Security.

**Restaurant Reservations**
Explore the fabulous restaurants of San Diego! Stop by the Restaurant Reservations desk located in the lobby at the San Diego Convention Center. The friendly staff will be available to offer recommendations and make reservations.

**Bag and Coat Check**
A bag and coat check is available for you to store your belongings during the conference hours for a nominal charge of $3.00 per item. You can check your items at the bag check located in the San Diego Convention Center Thursday through Saturday during the program hours. All items are to be picked up each day by closing time; items may not be left overnight.

**First Aid Station**
A first-aid station is staffed at the San Diego Convention Center during the NCTM program. If you need medical services while in San Diego, please check with the hotel concierge for the closest medical facilities. As with any medical emergency, call 911 without hesitation.

**NCTM Clear Air Act**
In accordance with a resolution of the 1978 Delegate Assembly, smoking is permitted only in designated areas.

**Your Opinion Counts!**
Thank you for attending the NCTM 2010 Annual Meeting and Exposition. In the days following the Annual Meeting, you will receive an e-mail asking for an evaluation of your meeting experience. Please take a moment to complete the conference attendee survey. Your feedback is important to us and will be instrumental in the future Annual Meeting and Exposition planning process.

---

**Exhibit Hall Information**

**Exhibits**
Be sure to make time in your schedule to visit the NCTM Exhibit Hall. The hours allow ample opportunity to explore, try out, and purchase products and services for use in your classroom or to help you meet your career goals. You’ll also have the opportunity to meet the people who produce these products, get fresh ideas, and see demonstrations of how products work. Be sure to check out the list of exhibits and a map of the Exhibit Hall on pages 176–89.

**Exhibitor Workshops**
Do you want more in-depth and personal interaction with exhibitors? If you do, plan to attend the Exhibitor Workshops. These workshops are held on Thursday, Friday, and Saturday and offer a wide variety of topics. See the program for Exhibitor Workshop offerings, indicated by **EW** before the presentation number.

**Cyber Café and Calculation Nation™**
Stop by the NCTM Cyber Café to check email or surf the Web. There are two Cyber Cafés each located in the back of the NCTM Exhibit Hall in the San Diego Convention Center. Wireless connections are available at the Convention Center for a fee.

Calculation Nation, part of NCTM’s Illuminations Project, offers online math strategy games that can be played individually or against an online opponent. Come try out a game and learn more about Illuminations and other online resources from NCTM in the Cyber Café.
A special thank-you goes to our sponsors for generously supporting NCTM by providing products and services to enhance your conference experience. Please stop by to thank the following sponsors when you are in the Exhibit Hall.
Join an NCTM Affiliate Today!

Once you have joined NCTM, membership in an NCTM Affiliate is a terrific way to round out your professional involvement. Affiliates offer you an opportunity to link with teachers in your state, region, or city for support, professional development opportunities, community outreach, political advocacy, and information sharing.

The host Affiliates for the NCTM 2010 Annual Meeting and Exposition and the Affiliates-at-Large are listed below. To join one of these groups, e-mail the Affiliate contact for membership information.

NCTM has more than 230 Affiliates throughout the U.S. and Canada. For a list of all organizations affiliated with NCTM and information on how to join, please see the Affiliate Directory on the NCTM Web site at www.nctm.org/affiliates.

### Affiliate Information

#### Host Groups

- **California Mathematics Council, Southern Section**  
  Mike Contino, cmc-math@sbcglobal.net

- **Greater San Diego Mathematics Council (California)**  
  Joan Commons, jcommons@ucsd.edu

#### Affiliates-at-Large

- **Adult Numeracy Network**  
  Margaret Rogers, marogers-princess@sbcglobal.net

- **Association of Mathematics Teacher Educators**  
  Gary Martin, martiwg@auburn.edu

- **Benjamin Banneker Association, Inc.**  
  Lois Moseley, loismoseley@gmail.com

- **Council for Technology in Mathematics Education**  
  Stephanie Cooperman, shc283@worldnet.att.net

- **North American Study Group on Ethnomathematics**  
  Blidi Stemn, catbss@hofstra.edu

- **National Council of Supervisors of Mathematics**  
  Terri Belcher, tbelcher@berkeley.edu

- **Society of Elementary Presidential Awardees**  
  Lisa Black, lisazblack@yahoo.com

- **TODOS: Mathematics for ALL**  
  Bob McDonald, mac@todos-math.org

- **Women and Mathematics Education**  
  Dorothy Buerk, buerk@ithaca.edu
A representative from the NCTM Housing Bureau is available on-site for housing assistance in the registration area in Exhibit Hall B/C at the San Diego Convention Center.

### Housing Desk Hours
- **Tuesday**: 12:00 noon – 6:00 p.m.
- **Wednesday**: 9:00 a.m. – 7:00 p.m.
- **Thursday**: 8:30 a.m. – 4:00 p.m.
- **Friday**: 8:30 a.m. – 4:00 p.m.
- **Saturday**: 8:30 a.m. – 10:00 a.m.

### Hotel Information

<table>
<thead>
<tr>
<th>Hotel</th>
<th>Single (1 person/1 bed)</th>
<th>Double (2 persons/1 bed)</th>
<th>Double/Double (2 persons/2 bed)</th>
<th>Triple (3 persons/2 beds)</th>
<th>Quad (4 persons/2 beds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Best Western Bayside Inn</td>
<td>$170</td>
<td>$170</td>
<td>$179</td>
<td>$188</td>
<td>$188</td>
</tr>
<tr>
<td>2 Courtyard by Marriott San Diego Downtown</td>
<td>$199</td>
<td>$199</td>
<td>$199</td>
<td>$219</td>
<td>$239</td>
</tr>
<tr>
<td>3 Doubletree Hotel San Diego Downtown</td>
<td>$199</td>
<td>$199</td>
<td>$199</td>
<td>$209</td>
<td>$219</td>
</tr>
<tr>
<td>4 Embassy Suites Hotel San Diego Bay—Downtown</td>
<td>$249</td>
<td>$249</td>
<td>$269</td>
<td>$289</td>
<td>$309</td>
</tr>
<tr>
<td>5 Hampton Inn by Hilton San Diego Downtown</td>
<td>$179</td>
<td>$179</td>
<td>$189</td>
<td>$199</td>
<td>$209</td>
</tr>
<tr>
<td>6 Hard Rock Hotel San Diego</td>
<td>$260</td>
<td>$260</td>
<td>$260</td>
<td>$280</td>
<td>$280</td>
</tr>
<tr>
<td>7 Hilton San Diego Bayfront One Park Boulevard</td>
<td>$220</td>
<td>$220</td>
<td>$220</td>
<td>$240</td>
<td>$260</td>
</tr>
<tr>
<td>8 Hilton San Diego Gaslamp Quarter 401 K Street</td>
<td>$242</td>
<td>$262</td>
<td>$262</td>
<td>$282</td>
<td>$302</td>
</tr>
<tr>
<td>9 Holiday Inn San Diego on the Bay 1355 North Harbor Drive</td>
<td>$210</td>
<td>$210</td>
<td>$210</td>
<td>$225</td>
<td>$240</td>
</tr>
<tr>
<td>10 Horton Grand Hotel, 311 Island Avenue</td>
<td>$179</td>
<td>$179</td>
<td>$199</td>
<td>$219</td>
<td>$239</td>
</tr>
<tr>
<td>11 Hotel Salamar, 435 6th Avenue</td>
<td>$229</td>
<td>$239</td>
<td>$239</td>
<td>$259</td>
<td>$279</td>
</tr>
<tr>
<td>12 Andaz San Diego (formerly Ivy Hotel), 600 F Street</td>
<td>$199</td>
<td>$199</td>
<td>$199</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>13 Manchester Grand Hyatt San Diego*</td>
<td>$250</td>
<td>$265</td>
<td>$265</td>
<td>$305</td>
<td>$330</td>
</tr>
<tr>
<td>14 Omni San Diego Hotel, 675 L Street</td>
<td>$254</td>
<td>$274</td>
<td>$274</td>
<td>$294</td>
<td>$314</td>
</tr>
<tr>
<td>15 Residence Inn by Marriott 1747 Pacific Highway</td>
<td>$219</td>
<td>$219</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>16 San Diego Marriott Gaslamp Quarter 660 K Street</td>
<td>$253</td>
<td>$273</td>
<td>$288</td>
<td>$293</td>
<td>$313</td>
</tr>
<tr>
<td>17 San Diego Marriott Hotel &amp; Marina*</td>
<td>$259</td>
<td>$259</td>
<td>$259</td>
<td>$284</td>
<td>$309</td>
</tr>
<tr>
<td>18 The Sofi a Hotel, One-Fifty West Broadway</td>
<td>$279</td>
<td>$279</td>
<td>$279</td>
<td>$304</td>
<td>$329</td>
</tr>
<tr>
<td>19 The US GRANT—Luxury Collection Hotel 326 Broadway</td>
<td>$229</td>
<td>$249</td>
<td>$249</td>
<td>$269</td>
<td>$289</td>
</tr>
<tr>
<td>20 The Westgate Hotel 1055 Second Avenue</td>
<td>$229</td>
<td>$229</td>
<td>$229</td>
<td>$239</td>
<td>$249</td>
</tr>
<tr>
<td>21 W San Diego Hotel, 421 West B Street</td>
<td>$229</td>
<td>$229</td>
<td>$229</td>
<td>$254</td>
<td>$299</td>
</tr>
<tr>
<td>22 Westin Gaslamp Quarter 910 Broadway Circle</td>
<td>$229</td>
<td>$249</td>
<td>$249</td>
<td>$269</td>
<td>$289</td>
</tr>
<tr>
<td>23 Westin San Diego, 400 West Broadway</td>
<td>$230</td>
<td>$230</td>
<td>$230</td>
<td>$250</td>
<td>$270</td>
</tr>
</tbody>
</table>

*Headquarters Hotel

Rates do not include current tax of 12.64%; subject to change.

Hotels identified with a "icon are within walking distance of the convention center.

For a shuttle schedule visit www.nctm.org/sandiego.
Rev up your professional skills and keep your knowledge and career on track.

NCTM’s Annual Meeting offers numerous opportunities to help you move in the right direction. There’s something for everyone—whether you’re a classroom teacher, administrator, teacher educator, preservice teacher, or math specialist. Attendees will:

- **Discover** new strategies to use in the classroom
- **Network**, network, network
- **Assess** current teaching methods and find what works best for them
- **Evaluate** new products and technology
- **Collaborate** with colleagues and gain new insights

You’ll speed back to the classroom excited to share what you’ve learned!

Visit [www.nctm.org/meetings](http://www.nctm.org/meetings) for up-to-date information.
Directory and Special Locations

ADA Services/Special Needs....................................................Information Booth
Bag Check ..................................................................................Lobby
Bookstore..................................................................................Exhibit Hall B
Business Center........................................................................Lobby outside Hall D
Cyber Café ..................................................................................Exhibit Hall B/C
Exhibits.....................................................................................Exhibit Hall B/C
Exhibitor Check-In .................................................................Exhibit Hall B/C
First Aid Room............................................................................Exhibit Hall B
Housing Desk............................................................................Exhibit Hall B/C
Information Booth .................................................................Lobby
Lost-and-Found .......................................................................Information Booth
Mathematics Education Trust ..............................................Lobby/Member Showcase
Member Showcase .....................................................................Lobby
Press Room................................................................................Room 12
Registration ..............................................................................Exhibit Hall B/C
Shuttle Desk ............................................................................Shuttle Area on Harbor Drive
Speaker Check-In .................................................................Exhibit Hall B/C
Sponsorship Items Distribution .............................................Exhibit Hall B/C
Tours ......................................................................................Lobby
Volunteer Check-In...............................................................Lobby
Officers and Committees

NCTM Board of Directors

Henry S. Kepner, Jr., President; University of Wisconsin—Milwaukee
J. Michael Shaughnessy, President-Elect; Portland State University, Oregon
Kichoon Yang, Executive Director, NCTM
Marshaly E. Baker, Messalonskee Middle School, Maine
Frederick L. Dillon, Strongsville High School, Ohio
Barbara J. Dougherty, Iowa State University
Karen Karp, University of Louisville, Kentucky
Diana V. Lambdin, Indiana University Bloomington
Vena M. Long, University of Tennessee
David K. Masunaga, Iolani School, Hawaii
Jennifer J. Salls, Sparks High School, Nevada
Jacqueline Goodloe Smith, Scott Montgomery Elementary School, Washington, D.C.
Christine Suurtamm, University of Ottawa, Ontario
Christine D. Thomas, Georgia State University
Judith Zawojewski, Illinois Institute of Technology

San Diego Program Committee

Program Chair
Bonnie Hagelberger, Plymouth, Minnesota

Program Committee
Cindy Bryant, Marshfield, Missouri
Gail Burrill, East Lansing, Michigan
Cindy Chapman, Albuquerque, New Mexico
Mark Ellis, Buena Park, California
Gail Englert, Norfolk, Virginia
Gladis Kersaint, Tampa, Florida
Trudy Mitchell, San Diego, California
Tom Muchinski, Plymouth, Minnesota
Mari Muri, Cromwell, Connecticut
Susan Ryan, St. John’s, Newfoundland and Labrador, Canada
John Staley, Randallstown, Maryland

San Diego Local Arrangements Committee

Local Arrangements Committee
William Bokesch, Cochair
Carol Treglio, Cochair

Cyber Café
Daryl Stermon, Cochair
Jeannie Toshima, Cochair

Meeting Rooms
Barbara Post, Cochair
Louise Vandling, Cochair
Rick Willard, Cochair

Volunteer
Cheryl Avalos, Cochair
Janet Trentacosta, Cochair

The National Council of Teachers of Mathematics is a public voice of mathematics education, supporting teachers to ensure equitable mathematics learning of the highest quality for all students through vision, leadership, professional development, and research. With nearly 90,000 members and more than 230 Affiliates, NCTM is the world’s largest organization dedicated to improving mathematics education in prekindergarten through grade 12. The Council’s Principles and Standards for School Mathematics includes guidelines for excellence in mathematics education and issues a call for all students to engage in more challenging mathematics. NCTM is dedicated to ongoing dialogue and constructive discussion with all stakeholders about what is best for our nation’s students.

To learn more about NCTM products or services, including membership benefits and opportunities, visit www.nctm.org, email nctm@nctm.org, or call (800) 235-7566.
This certificate is presented to

in recognition of attendance and participation at the NCTM 2010 Annual Meeting and Exposition

San Diego, California • April 21–24, 2010

Henry S. Kepner, Jr.
President, NCTM
Name of Provider: National Council of Teachers of Mathematics

Educator’s Name: ________________________________________________________________

Description of Professional Development Activity: This is a three-day annual conference sponsored by the National Council of Teachers of Mathematics. Hundreds of presentations are offered for teachers of prekindergarten through college. Topics range from administration to geometry, precalculus to statistics.

Note: PD time earned should be the time actually spent in sessions and/or workshops.

<table>
<thead>
<tr>
<th>Date</th>
<th>Session #</th>
<th>Session Title</th>
<th>Presenter(s) Name(s)</th>
<th>Start/End Time</th>
<th>PD Time earned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL Professional Development Hours Accrued:

I certify that the above named educator accrued the indicated number of Professional Development hours.

Kichoon Yang
Executive Director, NCTM

Henry S. Kepner, Jr.
President, NCTM

Please check with your state education agency and local administration to determine if these conference hours can be used for professional development credits.
NCTM Individual Membership Application
Visit www.nctm.org/membership to learn more and join!

CONTACT INFORMATION (PLEASE PRINT) All fields marked with an * are required for processing

First Name* ___________________________________________ Last Name* ___________________________________________

Please check ONE box for preferred mailing address, but please complete both columns for our records:

☐ Institutional Address

☐ Home Address

Institution* ___________________________________________

Address* ___________________________________________

City* _______________________________________________

State/Prov* ___________ ZIP/PC* ________________

Country* ___________________________________________

Phone* _____________________________________________

Primary E-mail* ______________________________________

Phone* _____________________________________________

Phone* _____________________________________________

Your grade level interest (check all that apply)*:  ☐ PreK–2  ☐ 3–5  ☐ 6–8  ☐ 9–12  ☐ Higher Education

☐ I was referred by an NCTM Member: ___________________________ Member ID: ______________________

☐ Check here to remove your name from rental lists (companies renting lists must obtain approval from NCTM before using lists).


OPTION 1

Full Individual Membership
Includes a print subscription to one NCTM journal (print version includes online access). Select ONE journal below:

$78  ☐ Teaching Children Mathematics (PreK–6)

☐ Mathematics Teaching in the Middle School (5–9)

☐ Mathematics Teacher (8–14)

$105  ☐ Journal for Research in Mathematics Education

Additional Print Journals:
May be selected to enhance your membership for as little as $33 (print version includes online access).

☐ $33 Teaching Children Mathematics (PreK–6)

☐ $33 Mathematics Teaching in the Middle School (5–9)

☐ $33 Mathematics Teacher (8–14)

☐ $60 Journal for Research in Mathematics Education

OPTION 2

E-Membership
Includes full online access, including online archives to one NCTM school journal. E-Membership does not include a print journal or the research journal. Select ONE journal below:

$66  ☐ Teaching Children Mathematics (PreK–6)

☐ Mathematics Teaching in the Middle School (5–9)

☐ Mathematics Teacher (8–14)

Additional Online Journals:
May also be included with Option 1. May be selected to enhance your membership for as little as $21.

☐ $21 Teaching Children Mathematics (PreK–6)

☐ $21 Mathematics Teaching in the Middle School (5–9)

☐ $21 Mathematics Teacher (8–14)

PAYMENT SUMMARY

Membership Dues (Option 1 or 2)  .......................................................... $ ..........................................................

Additional Print Journals (if choosing Option 1)  .......................................................... $ ..........................................................

Additional Online Journals (if choosing Option 1 or 2)  .......................................................... $ ..........................................................

Membership and Additional Journals Total  .......................................................... $ ..........................................................

For 2-year membership, multiply by 2 and deduct 10%  .......................................................... $ ..........................................................

For 3-year membership, multiply by 3 and deduct 15%  .......................................................... $ ..........................................................

Foreign Postage (if applicable): For mailings outside the U.S., add $18 for the first journal subscription and $4 for each additional print journal subscription per year. For multiyear membership, please multiply foreign postage by 2 or by 3 and add to payment line at right. .......................................................... $ ..........................................................

Mathematics Educational Trust (MET) Support (Your contribution is tax deductible)  .......................................................... $ ..........................................................

TOTAL Payment to NCTM in U.S. Dollars  .......................................................... $ ..........................................................

METHOD OF PAYMENT

☐ Check  ☐ Money Order  ☐ AMEX  ☐ MC  ☐ VISA  ☐ P.O. # (include signed copy)

Credit Card Number Exp. Date

Signature (required for credit card payments)
**2Know!™ Classroom Response System/Renaissance Learning**  
**Booth: 1841**  
Wisconsin Rapids, Wisconsin  
Ph: 715-424-3636 Fx: 715-424-4242  
www.renlearn.com  
2Know!™ combines easy-to-use software, wireless handheld remote devices, and a custom toolbar to help you get all your students engaged in learning, while you instantly access performance. The system’s state-of-the-art radio-frequency technology provides students with a fun and interactive way to take quizzes, tests, and surveys in virtually any subject!

**AccuCut**  
**Booth: 1337**  
Fremont, Nebraska  
Ph: 800-288-1670 Fx: 800-369-1332  
www.accucut.com  
AccuCut(R) offers the most versatile die cutting system on the market today for teachers and media specialists to use in creating classroom teaching aids, manipulative activities, and embellishments.

**The Actuarial Foundation**  
**Booth: 2026**  
Schaumburg, Illinois  
Ph: 847-706-3599  
www.actuarialfoundation.org  
The Actuarial Foundation offers free math-enhancement materials to every educator who comes to see us! Solve geometry challenges with the Geometrics Stage Crew! Or teach financial literacy with ease using our newest workbook, Building Your Future. To find out more about the Foundation or our math grants visit http://www.actuarialfoundation.org/programs/for_teachers.shtml

**Adaptive Curriculum**  
**Booth: 1750**  
Scottsdale, Arizona  
Ph: 480-884-1689 Fx: 480-884-1888  
www.adaptivecurriculum.com

**AIMS Education Foundation**  
**Booth: 1040**  
Fresno, California  
Ph: 1-888-733-2467 Fx: 1-559-255-6396  
aimsedu.org

**ALEKS Corporation**  
**Booth: 2023**  
Tustin, California  
Ph: 714-245-7191 x. 152 Fx: 714-245-7190  
www.aleks.com  
ALEKS is a unique, Web-based program that provides precise mathematics assessment and personalized learning correlated to all 50 states’ standards. Through an artificial intelligence engine and adaptive questioning, ALEKS accurately assesses a student’s knowledge and delivers highly targeted instruction on the exact topics a student is most ready to learn.

**America’s Choice**  
**Booth: 1548**  
Washington, DC  
Ph: 202-783-3668 Fx: 202-783-3672  
www.americaschoice.org

America’s Choice is a new kind of educational organization. We offer comprehensive, proven solutions to the complex problems educators face in the era of accountability. America’s Choice has an unparalleled history as a national thought leader and as the creator of research-based school improvement solutions that work for states, districts, and schools.

**American Book Company**  
**Booth: 2133**  
Woodstock, Georgia  
Ph: 888-264-5877 Fx: 866-827-3240  
www.americanbookcompany.com

FREE preview books available for CAHSEE, CST, EOCs, EOCEP, HSPE, LEAP, CRCTs, AIMSs, TAKS, FCAT, GHSGT, HSAP, OGT, MIAs, ECAs, HSA, SAT, ACT, and many other test preparation mathematics materials. HURRY to booth 2133.

**American Contract Bridge League**  
**Booth: 1350**  
Horn Lake, Mississippi  
Ph: 901-332-5586  
www.acbl.org

The American Contract Bridge League, founded in 1937 and headquartered in Horn Lake, MS, is one of the largest bridge organizations in the world with over 165,000 members in North America, including the United States, Canada, Mexico, and Bermuda. The Not-for-profit organization (501C-4) determines North American rules of bridge, assists with international rules, sanctions club games and tournament games, and sponsors three North American Bridge Championships annually. The mission of the ACBL is to serve the bridge-related interests of its members and to promote and sustain the game of bridge. Visit www.acbl.org for more information.

**American Educational Products LLC**  
**Booth: 1245**  
Fort Collins, Colorado  
Ph: 800-446-8767 Fx: 970-484-1198  
amep.com

American Educational Products, LLC, with divisions: Scott Resources, Hubbard Scientific, National Teaching Aids, Ginsberg Scientific, and Tuzzles® Puzzles, is a leading manufacturer of educational materials for Grades PreK-12.

**American Regions Mathematics League (ARML)**  
**Booth: 1945**  
New York, New York  
Ph: 212-724-9843  
www.arml.com

ARML, an annual mathematics competition for high school students held each year on the weekend following Memorial Day simultaneously at Penn State, U. of Georgia, U. of Iowa, UNLV. Teams of 15 compete in four types of mathematical rounds. ARML brings together the best math students in the country for an exciting and provocative weekend.

**American Statistical Association**  
**Booth: 2122**  
Alexandria, Virginia  
Ph: 703-684-1221 Fx: 703-684-3768  
www.amstat.org/education

**Amsco School Publications, Inc.**  
**Booth: 1935**  
New York, New York  
Ph: 212-886-6500 Fx: 212-886-6515  
www.amscopepub.com

Amsco publishes textbooks, workbooks, test-prep and supplementary programs for Integrated Algebra, AP Calculus, Algebra 2 & Trigonometry, Geometry, AP Statistics etc. for students in grades 7-12.

**Apperson Education Products**  
**Booth: 2031**  
Renton, Washington  
Ph: 800.827.9219 Fx: 800.321.8558  
appersonedu.com/go/NCTM

Apperson offers test scoring solutions for both the classroom and district level. Combine any Apperson scanner with our FREE DataLink software and gain immediate access to data-rich reports. Contact us to register for a free, no-risk 30-day trial.

**Association of Mathematics Teacher Educators**  
**Booth: 228**  
San Diego, California  
Ph: 619-594-3971 Fx: 619-594-0725  
amte.net

AMTE and its members work together to promote and improve the education of preservice and inservice teachers of mathematics.
Award Publishing Limited
Booth: 2130
New York, New York
Ph: 212-246-0405 Fx: 212-246-0406
www.awardinteractive.com
AWARD Math partners print with technology to teach mathematics with a 21st-century perspective. The new math program from AWARD Publishing is for grades K–2. The animated texts and the activities, which are delivered online, will motivate students to problem solve and use mathematical reasoning in their learning.

Bach Company
Booth: 1348
Palo Alto, California
Ph: 800-248-2224 Fx: 650-494-1995
www.bachcompany.com
The Bach Company, the largest educational distributor on the West Coast, has been serving the educational market for over 28 years. We provide high quality products and superior customer service! Product lines include, but are not limited to, Texas Instruments, Casio, Hewlett Packard, Sharp, Stokes, Top Rhino, Vernier & Franklin.

BeAnActuary.org
Booth: 2028
Schaumburg, Illinois
Ph: 847-706-3501 Fx: 847-706-3599
www.beanactuary.org
BeAnActuary.org is responsible for increasing the recognition of the actuarial profession among students, educators, and career counselors in high schools, colleges, and universities. Please stop by for career information for your students!

Bedford, Freeman & Worth (BFW) Publishers and W.H. Freeman & Company
Booth: 1823
Cranbury, New Jersey
Ph: 866-843-3715 Fx: 609-409-0297
bfwpub.com/highschool
Bedford, Freeman & Worth (BFW) Publishers is the most trusted source for educational materials for high school mathematics in print, on CD, and on the Web. We publish the best-selling books in Advanced Placement and general level statistics, calculus,

Benchmark Education
Booth: 632
Pelham, New York
Ph: 1-877-236-2465 Fx: 1-877-732-8273
www.benchmarkeducation.com
Benchmark Education provides you with the resources that you need to build Math Literacy and Math Concepts. Products include standards based leveled texts; Content Connections Big Books, for teaching and modeling Math skills, strategies, and language; and Math Explorers differentiated text sets, that improve the understanding of Math language, concepts, and skills.

Big Ideas Learning
Booth: 1551
Erie, Pennsylvania
Ph: 877-552-7766 Fx: 814-824-6377
www.bigideaslearning.com

The BizWorld Foundation
Booth: 340
San Francisco, California
Ph: 415-503-5880 Fx: 415-863-2072
www.bizworld.org

Borenson and Associates, Inc.
Booth: 423
Allentown, Pennsylvania
Ph: 800-993-6284 Fx: 610-398-7863
www.borenson.com
Hands-On Equations® demystifies the learning of algebra for students in grades 3 - 8. Since 1990 more than 50,000 teachers have taken the Making Algebra Child’s Play® workshop. Visit our website www.borenson.com for additional information and workshop schedule.

Box Cars & One-Eyed Jacks
Booth: 1647
Edmonton, Alberta Canada
Ph: 780-440-6284 Fx: 780-440-1619
www.boxcarsandoneeyedjacks.com
Award winning math game resources K - 12 dice, cards, math manipulatives overhead material and more. Great for regular and afterschool programs. Find out about our excellent workshops.

Britannica Digital Learning
Booth: 1434
Chicago, Illinois
Ph: 800-621-3900 Fx: 800-344-9624
info.eb.com
Britannica mathematics: innovative products with the assurance of Britannica quality! SmartMath, a web-based practice and assess program for elementary students, allows teachers to assign, evaluate, and assess with ease! Mathematics in Context, a NSF funded standards-based mathematics curriculum for the middle grades, with new! Companion Workbooks and expanded online resources.

BuzzMath.com
Booth: 1235
Montreal, Quebec
Ph: 888-528-8878
www.buzzmath.com

C

Carnegie Learning, Inc.
Booth: 1441
Dover, New Jersey
Ph: 973-968-3061 Fx: 973-537-8964
www.casio.com

Cengage Learning
Booth: 535
Belmont, California
www.cengage.com

Clark County School District - Las Vegas, Nevada
Booth: 326
Las Vegas, Nevada
Ph: 702 -799-5427 Fx: 702- 799-5439
www.ccsd.net/jobs
The Clark County School District is currently the fifth largest nationwide. Excellent teaching and career advancement opportunities, competitive salaries, and geographical location continue to make our school district highly attractive for professional educators. For more information or to submit an interest form visit our website at www.ccsd.net/jobs

Classroom Products Warehouse
Booth: 1946
Vernon Hills, Illinois
Ph: 888-271-8305 Fx: 888-280-6110
www.shopcpw.com
Math and Science Classroom Supplies at Warehouse Prices
Coastline Graphics
Booth: 941
Valencia, California
Ph: 661-254-4707 Fx: 661-254-4702
www.coastlinepromotions.com
Coastline Graphics provides a full-service screen printing, embroidery, and novelty selection for many schools, businesses, sports teams, and individuals throughout the United States.

The College Board
Booth: 741
New York, New York
Ph: 212-713-8331 Fx: 212-649-8442
www.collegeboard.com

CORD Communications
Booth: 342
Waco, Texas
Ph: 254-772-8756 Fx: 254-772-8972
www.cord.org

Corwin
Booth: 1049
Thousand Oaks, California
Ph: 800-233-9936 Fx: 800-417-2466
www.Corwin.com
Corwin’s research-based books, journals, and multimedia resources are written for PreK–12 teachers, administrators, counselors, specialists, and staff developers in areas such as staff development, leadership, mathematics, teaching methods, learning styles, instructional equity, counseling, diversity, exceptional students, curriculum development, student assessment, classroom management, student behavior, community relations, technology, and research.

Council for Technology in Math Education – CLIME
Booth: 230
White Plains, New York
Ph: 914-815-0843
CLIME’s mission is to enhance the teaching & learning of mathematics by providing venues for sharing information and resources relating to effective and creative uses of technology in mathematics education especially in a Web 2.0 world. Visit us and learn what Math 2.0 is all about.

CPM Educational Program
Booth: 2123
Sacramento, California
Ph: 916-391-3301
www.cpm.org
CPM courses—6th grade through Calculus—engage students in structured explorations and mathematical dialogues using student-centered materials. The courses incorporate the research-based principles of problem-based learning, structured student study teams, and spaced practice. Each course is supported with several days of funded professional development.

Creative Instruction LLC
Booth: 223
Yorba Linda, California
Ph: 714-996-7900 Fx: 714-970-7451
www.creativeinstruction.net
As Southern California math teachers, we saw our students struggle with vocabulary. Students often learn a concept during the chapter, but quickly forgot the meaning of words and concepts after the chapter test. We needed to move the learning into their long-term memory. We created Math Graffiti to address this need. Math Graffiti aids English learners and special education students as well as your average student.

Curriculum Associates
Booth: 1433
North Billerica, Massachusetts
Ph: 800-225-0248 Fx: 800-366-1158
www.CurriculumAssociates.com
Curriculum Associates publishes high quality supplemental materials for reading, writing, language arts, mathematics, science, test prep, and special education assessment programs that are guaranteed to help students succeed. Programs are designed to affordably meet the needs of today’s diverse classrooms. Research-based and classroom-proven, they deliver content aligned with national and state standards.

CurrTech Integrations, LLC
Booth: 1650
Baltimore, Maryland
Ph: 410-340-8860 Fx: 410-298-2589
www.curtechintegrations.com

D & H Distributing Company
Booth: 1347
Harrisburg, Pennsylvania
Ph: 800-340-1006 Fx: 717-255-6750
www.buyiscalcs.com
“The Nation’s # 1 Calculator Supplier to Schools”

Didax, Inc.
Booth: 945
Rowley, Massachusetts
Ph: 978-997-4385 Fx: 800-350-2345
www.didax.com

Dinah-Might Adventures, LP/
Dinah Zike Academy
Booth: 1151
San Antonio, Texas
Ph: 210-698-0123 Fx: 210-698-0095
www.dinah.com/www.dzacademy.com
Dinah-Might Adventures is an Educational Publishing and Consulting Company owned by Dinah Zike, Author/Speaker, and creator of “Foldables®” 3-D interactive graphic organizers. Dinah Zike Academy is a unique trainer of trainers facility in the beautiful Texas Hill Country town of Comfort. A variety of 3-day intensive institutes are offered.

EAI Education
Booth: 1922 & 1923
Oakland, New Jersey
Ph: 800-770-8010 Fx: 201-891-5689
www.EAIeducation.com
EAI Education is your source for teaching supplies, hands-on educational products, manipulatives, calculators, teacher resources, and more for grades PreK–12. We carry over 5,000 products, including our exclusive SmartPAL® transparent sleeves, QuietShape® foam manipulatives, GeoModel® solids, and Geared for Time® clocks.

Educators Outlet, Inc.
Booth: 341
Timmath, Colorado
Ph: 970-224-3811 Fx: 970-224-3822
www.EducatorsOutlet.com

Educo International, Inc.
Booth: 644
Clarkston, Georgia
Ph: 770-506-9224 Fx: 770-506-9243
www.educosoft.com/

EduStic – “Learning That Sticks!”
Booth: 1929
San Diego, California
Ph: 858-578-5668 Fx: 858-578-9620
www.edustic.com
EduStic is the ultimate learning material to hit the educational market! Discover why EduStic resources are better than magnetic, better than plastic, better than foam manipulatives. This quiet, reusable product sticks to any glossy surfaces. EduStic is the #1 choice of teachers, parents and kids for learning, fun, and creativity.

Ellison
Booth: 2040
Lake Forest, California
Ph: 949-598-8822 Fx: 949-598-8838
www.ellisoneducation.com

Emines, Inc.
Booth: 533
Santa Clara, California
Ph: 408-247-3298 Fx: 408-247-0962
www.ellisonpromotions.com
Emines specializes in developing educational math games that make “Learning Fun and Engaging”. Our games encourage cooperative learning in highly motivating ways. Each game introduces different basic math skills and reinforces math concepts necessary to succeed in school. The games are fun and can easily fit into small slots of extra time in the classroom or at home. We believe that when children are having fun, they learn. And when children learn, they succeed.
**ETA/Cuisenaire**  
Booth: 631 & 641  
Vernon Hills, Illinois  
Ph: 800-445-5985 Fx: 888-659-0057  
www.etacuisenaire.com  
ETA/Cuisenaire is a leading supplier of products, manipulatives, and programs for students of all learning styles. We offer literacy, math, and science programs that engage students, support educators and parents, and empower children.

**Excel Math**  
Booth: 543  
Poway, California  
Ph: 858-513-7900 Fx: 858-513-2764  
www.excelmath.com

**Exemplars**  
Booth: 422  
Underhill, Vermont  
Ph: 800-450-4050 Fx: 802-899-4825  
www.exemplars.com  
Exemplars publishes standards-based assessment and instruction material in the areas of Math, Science and Writing. Our material is easily differentiated and includes rubrics aligned to state and national standards as well as annotated anchor papers and teacher notes for assessment and instruction. Exemplars math tasks have been differentiated.

**ExploreLearning**  
Booth: 1934  
Charlottesville, Virginia  
Ph: 434.293.7043 Fx: 434.464.0029  
www.ExploreLearning.com  
ExploreLearning delivers the largest online library of interactive math and science simulations, called Gizmos, for grades 3-12. Gizmos help teachers bring research-proven instructional strategies to life through easy-to-use, fun, hands-on exploration.

**Eye On Education**  
Booth: 1449  
Larchmont, New York  
Ph: 888-299-5350 Fx: 914-833-0761  
http://www.eyeoneducation.com  
Eye On Education publishes practical reference books for teachers, administrators, and other educators. Our books provide busy educators with information on literacy, professional development, educational leadership, differentiated instruction, student assessment, data analysis, and related topics.

**F**

**FACEing MATH**  
Booth: 1026  
Hemet, California  
Ph: 951 492-8341  
FACEingMATH.com  
FACEing MATH books provide teachers with unique standards-based supplemental lessons that blend math and art. The lessons are great for review days, homework assignments, and substitute lesson plans! The books range from elementary level math to high school level math.

**First In Math-Suntex International**  
Booth: 1341  
Easton, Pennsylvania  
Ph: 610-253-5255 Fx: 610-258-2180  
www.firstinmath.com  
Suntex’s First In Math® Online Program complements any curriculum. Minutes a day, in the classroom or at home, gives K-12 students the “deep practice” necessary for skill retention and improved test scores. Engaging, substantive, self-paced content enables students to take ownership of learning process—with no additional load on teachers.

**FoxMind Games**  
Booth: 1822  
Montreal, Canada  
Ph: 514-369-7777 Fx: 514-221-2271  
www.foxmind.com  
FoxMind Games publishes games that offer the International Baccalaureate (IB) Diploma and Middle Years programs. Our books and software for schools, mainly for schools elsewhere in the Program Book offering a free GeoLeg.

**GetMath**  
Booth: 545  
North Highlands, California  
Ph: 916.799.6017  
www.getmath.info  
GetMath, a California small business, is a distributor of Efofex Software. We provide nationwide sales and support, and offer training on Efofex Software in California. Efofex Software provides graphing, geometric diagram creation, equation editing, statistics, and more directly from within Microsoft Word.

**H**

**Haese & Harris Publications**  
Booth: 427  
Adelaide, South Australia  
Ph: +61 8 8355 9444 Fx: +61 8 8355 9471  
www.haeseandharris.com.au  
We are a specialist publisher of math textbooks and software for schools, mainly for schools that offer the International Baccalaureate (IB) Diploma and Middle Years programs. Our books are noted for their student-friendly approach and our own specially designed interactive software on the CDs that accompany each of our textbooks.

**HandyGraph**  
Booth: 2029  
Corvallis, Oregon  
Ph: 541-752-1545 Fx: 866-583-6735  
www.getmath.info

**Heinemann Publishers**  
Booth: 2032  
Portsmouth, New Hampshire  
Ph: 603-431-7894 Fx: 603-431-7840  
www.heinemann.com

**GeoLeg Geometry**  
Booth: 636  
Monroe, Louisiana  
Ph: 888-595-5347 Fx: 318-324-1546  
www.geoleg.com  
GeoLeg provides students with a single dynamic tool to replace the protractor and compass that also builds to form quantitative polygons. We also offer a comprehensive geometry/measurement curriculum for grades 3-high school that engages students for greater learning. Look for our coupon elsewhere in the Program Book offering a free GeoLeg.
Exhibitor Directory

Helps4Teachers
Booth: 2128
Fallbrook, California
Ph: 760-728-2217
www.helps4teachers.com
Helps4Teachers specializes in unique Kindergarten-3rd grade math and language arts products. This includes both math and language arts manipulatives as well as great teacher resource books. We offer 20% off all books at educational conventions because we feel educators deserve a break! For more information email us at rsten@roadrunner.com.

Hotmath, Inc.
Booth: 1927
Kensington, California
Ph: 510-524-5525 Fx: 510-372-2756
We have operated Hotmath.com, a website for textbook-correlated homework help, for 10 years. Our new website, Catchupmath.com, provides personalized remediation for middle school, high school, and community college math. Catchupmath.com assesses student learning gaps with short quizzes, and then fills those gaps with lessons, videos, activities and practice problems.

Houghton Mifflin Harcourt
Booth: 723
Evanston, Illinois
Ph: 847-424-3718
www hmhpub.com
Houghton Mifflin Harcourt offers a broad array of educational products and services that help educators engage K-12 students and prepare them for life beyond school, high school, and community college math. Our new website, Catchupmath.com, provides personalized remediation for middle school, high school, and community college math.

HP Calculators
Booth: 2035
San Diego, California
Ph: 858-655-6748 Fx: 858-655-6971
http://www hp.com/calculators
HP Calculators provides technology solutions for the mathematics classroom. From basic and scientific calculators to full-featured graphing calculators, we have it all. Our CAS and non-CAS graphing calculators for secondary mathematics are totally compatible and both work identically with our data streamer to collect data from sensors. Drop by!

Instructional Images
Booth: 1637
Belmont, California
Ph: 650-508-8844 Fx: 650-508-9444
www.instructionalimages.com
Instructional Images specializes in unique Kindergarten-3rd grade math and language arts products. This includes both math and language arts manipulatives as well as great teacher resource books. We offer 20% off all books at educational conventions because we feel educators deserve a break! For more information email us at rsten@roadrunner.com.

InterLingua Educational Publishing
Booth: 943
Redondo Beach, California
Ph: 310-792-3635 Fx: 310-356-3578
www.TADELL.com
InterLingua Education Publishing is focused on helping schools meet the growing needs of the English Language Learner population. We offer a wide variety of publications including TADELL, a math assessment tool that determines the language and math skills of your Spanish-speaking students; available both online and in hardcopy.

Johns Hopkins University Center for Talented Youth
Booth: 225
Baltimore, Maryland
Ph: 410-735-4100 Fx: 410-735-6187
http://cty.jhu.edu
Since 1979, the Center for Talented Youth at Johns Hopkins University has focused on the needs of students with high academic abilities. Our 27 summer programs offer students from around the world the opportunity to engage in challenging academic work with peers who share their abilities and love of learning.

Jossey-Bass
Booth: 751
Hoboken, New Jersey
Ph: 201-748-6518 Fx: 201-748-6617
http://www josseybass.com/WileyCDA/
Jossey-Bass, an imprint of Wiley is the leader in providing cutting-edge resources for conflict resolution professionals - from mediators and attorneys to teachers and therapists. In the rapidly developing world of conflict resolution and dispute mediation, we continue to bring you the latest practical leadership from the top practitioners and teachers in the field.

Key Curriculum Press
Booth: 1041
Emeryville, California
Ph: 800-995-MATH Fx: 800-541-2442
www.keypress.com
Key Curriculum Press (www.keypress.com) is a leader in inquiry-based mathematics, developing award-winning software, textbooks, and supplements. Key publishes the country’s most widely used math software, The Geometer’s Sketchpad® with Sketchpad LessonLink™, and inquiry-based textbook series, Discovering Mathematics. Founded by mathematics educators in 1971, the company also offers effective professional development.

Kinetic Books
Booth: 2927
Seattle, Washington
Ph: 877-411-5266 Fx: 206-374-2918
www.kinetickbooks.com
As a digital curriculum publisher, our goal is to provide comprehensive, interactive, standards-based educational materials at lower costs than traditional print textbook providers.

Kinetic TextbooksTM are comprehensive text-
books built from the ground up to take advantage of computers. They are fully interactive, including hundreds of simulations, thousands of animations, audio, video, multiple self-assessment tools for students and work with all types of learning styles.

Lakeshore Learning Materials
Booth: 1623
Carson, California
Ph: 310-537-8600 Fx: 310-900-2190
www.lakeshorelearning.com
Lakeshore Learning Materials offers a wide variety of publications including TADELL, a math assessment tool that determines the language and math skills of your Spanish-speaking students; available both online and in hardcopy.

The Learning Carpet - TLC, Inc.
Booth: 1549
Hunstville, Ontario
Ph: 705-789-8912 Fx: 705-789-8016
www.thelearningcarpet.ca/site
Kinetic TextbooksTM are comprehensive text-
books built from the ground up to take advantage of computers. They are fully interactive, including hundreds of simulations, thousands of animations, audio, video, multiple self-assessment tools for students and work with all types of learning styles.

Learning Resources
Booth: 1446
Vernon Hills, Illinois
Ph: 800-222-3909 Fx: 847-281-1717
www.learningresources.com
Learning Resources offers a wide variety of publications including TADELL, a math assessment tool that determines the language and math skills of your Spanish-speaking students; available both online and in hardcopy.

Learning Upgrade LLC
Booth: 1149
Escondido, California
Ph: 800 998 8864 Fx: 866 792-9183
www.learningupgrade.com
Learning Upgrade publishes the Algebra Upgrade and Math Upgrade online courses featuring songs, video and games. Transform your class with interactive lectures using data projectors, smartboards, and activboards. Bring each student up to proficiency with high interest online student courses.

Learning Upgrade LLC
Booth: 1149
Escondido, California
Ph: 800 998 8864 Fx: 866 792-9183
www.learningupgrade.com
Learning Upgrade publishes the Algebra Upgrade and Math Upgrade online courses featuring songs, video and games. Transform your class with interactive lectures using data projectors, smartboards, and activboards. Bring each student up to proficiency with high interest online student courses.
Learning Wrap ups, Inc
Booth: 646
Layton, Utah
Ph: 800 992 4966 Fx: 801 497 0050
learningwrapups.com
Learning Wrap ups, Inc. is a supplemental publisher of Learning Wrap ups which is designed to build Fact Fluency and develop Automaticity of Basic Math Skills and Learning Palette which creates Standard Based Learning Centers.

LL Teach
Booth: 323
Bridgewater, New Jersey
Ph: 908-575-8830 Fx: 908-704-1730
www.Lteach.com

Lone Star Learning
Booth: 1635
Lubbock, Texas
Ph: 806-281-1424 Fx: 806-281-1407
www.LoneStarLearning.com
User friendly math, science, and reading supplementary products that reinforce learning standards, effectively teach problem-solving and engage students in quick daily activities using interactive bulletin boards and vocabulary picture cards.

M
MAA - American Mathematics Competitions
Booth: 1046
Lincoln, Nebraska
www.unl.edu/amc
For over 60 years, the MAA has offered the nation’s premier series of mathematics contests so students will have an opportunity to participate in enriching math experiences. The AMC contests are intended for everyone from the average student who enjoy math to the very best students.

Manga.High.com
Booth: 1248
Henderson, Nevada
www.mangahigh.com

The Markerboard People
Booth: 1400
Lansing, Michigan
Ph: 800-DRY-ERASE (800-379-3727) Fx: 888-DRY-ERASE (888-379-3727)
www.DryErase.com

Marshall Cavendish Online
Booth: 2126
Singapore
www.learnevedvantage.com
Marshall Cavendish Online (MC Online) is the digital arm of Marshall Cavendish Publishing Group. Marshall Cavendish who brought the popular Primary Mathematics (US and Standard Edition) textbooks based on Singapore’s syllabus to the United States, will now be accompanied with MC Online’s e-learning content, making it a complete learning experience.

The Master Ruler/ Master Innovations, LLC
Booth: 328
Alpha, New Jersey
Ph: 908-859-1788 Fx: 908-859-3141
www.themasterruler.com
Award winning, scientifically research-based manipulatives to teach measurement skills, reading a ruler, fractions: recognition of, equivalence, simplification, adding/subtracting fractions with common and uncommon denominators, scale drawing, perimeter, area, PLUS MORE! clocks, fractions, angles, accompanying workbooks, and staff development available. Teacher/student success, ease, and enjoyment!

Math for America
Booth: 1444
New York, New York
Ph: 646-434-0460 Fx: 212-421-0471
www.mathforamerica.org
We are a nonprofit organization with a mission to improve math education in secondary public schools in the United States by recruiting, training, and retaining outstanding mathematics teachers.

The Math Forum @ Drexel
Booth: 1148
Philadelphia, Pennsylvania
Ph: 19104 Fx: 215.895.2964
mathforum.org
For almost 20 years, the Math Forum has been at the forefront of math education, tackling the challenges of teachers, schools and school districts head on. We are the world’s leading online mathematics education community, and our mission is clear: To help teachers teach and help students learn.

The Math Learning Center
Booth: 1048
Salem, Oregon
Ph: 503-370-8130 Fx: 503-370-7961
www.mathlearningcenter.org

Math Recovery Council
Booth: 1744
Brentwood, Tennessee
Ph: 615-369-0700 Fx: 615-369-0701
www.mathrecovery.org
Math Recovery K-5 programs (Intervention Specialist, Add-VantageMR, and SNAP) provide a powerful framework that gives teachers unique techniques and tools to help elementary children achieve lifetime results! Using highly-effective professional development programs, Math Recovery is changing the way teachers and administrators look at the teaching and learning of mathematics.

Math Solutions
Booth: 1833
Sausalito, California
Ph: 800-868-9092 Fx: 877-942-8837
mathsolutions.com
Founded 25 years ago by renowned educator Marilyn Burns and focused exclusively on mathematics education, Math Solutions is the foremost authority on transforming instruction so that all students become confident and successful learners of mathematics. Our expert educational consultants create solutions for accelerated, sustainable improvement in teacher effectiveness, student learning, and test results.

Math Teachers Press, Inc.
Booth: 1723
Minneapolis, Minnesota
Ph: 800-852-2435 Fx: 952-546-7502
www.movingwithmath.com

MATHCOUNTS
Booth: 1344
Alexandria, Virginia
Ph: 703-299-9006 Fx: 703-299-5009
www.mathcounts.org
The MATHCOUNTS Foundation is a non-profit organization that works with middle school students to promote excellence in mathematics. Free MATHCOUNTS materials are currently distributed to every middle school in the U.S., impacting the lives of over 250,000 middle school students annually.
Mathematical Olympiads for Elementary & Middle Schools
Booth: 1943
Bellmore, New York
Ph: 866-781-2411 Fx: 516-785-6640
www.moems.org

For 31 years the Math Olympiads have developed problem-solving skills in students through its monthly contests. Visit booth 1943 and win a set of 25 rich, engaging problems to bring back to your school.

MathLine at Howbrite Solutions, Inc.
Booth: 531
Cokato, Minnesota
Ph: 320-286-2597 Fx: 320-286-6338
www.howbrite.com

MathType by Design Science
Booth: 845
Long Beach, California
Ph: 562-432-2920 Fx: 562-432-2857
www.dessci.com

New version for Windows! Besides including equations in Word, PowerPoint, and SMART Notebook, you can graph a MathType equation with Wolfram/Alpha, include math in Gmail, and much more! MathType now works with over 500 apps and websites. Stop by booth 845 for a demo and a special NCTM price.

Math-U-See
Booth: 1135
Fallbrook, California
Ph: 800-454-6284 Fx: 760-451-0096
www.mathusee.com

SPED TEACHERS! Math-U-See’s unique approach has shown 100% student improvement 3 years in a row! Come see how we can help you “close the gap” with this explicit, systematic, multi-sensory program!

McGraw-Hill School Education Group
Booth: 1423
Columbus, Ohio
Ph: 1.800.442.9685 Fx: 614.430.4241
www.mhsegsolutions.com

McGraw-Hill School Education Group is the leading PreK-12 publisher, providing comprehensive instructional programs with the highest quality teacher and student materials in mathematics. With products from Glencoe, Macmillan/McGraw-Hill, SRA and Wright Group, our programs offer dynamic digital solutions, are research and standards-based, have proven efficacy, and provide extensive support and professional development for educators. Visit mhsegsolutions.com

Media4Math
Booth: 1746
Silver Spring, Maryland
Ph: 301-841-5221 Fx: 301-933-9703
www.media4math.com

Media 4 Math products are dedicated to bringing math educators the best media resources to supplement their math instructional materials.

Michigan State University
Booth: 630
East Lansing, Michigan
Ph: 517-355-1708 ext. 105 Fx: 517-432-9868
www.dsm.edu

The Doctoral Program in Mathematics Education at Michigan State University is designed for those who show promise of becoming researchers and leaders in state, national and international mathematics education communities. It also prepares researchers to address critical issues in mathematics teaching, learning, curriculum and policy.

Mimio
Booth: 233
Cambridge, Massachusetts
Ph: 617-902-2040 Fx: 617-902-2041
www.mimio.com

mimio® is a recognized provider of interactive teaching technologies that make it possible to capture, manage, share, and interactively create and present information and ideas.

MIND Research Institute
Booth: 445
Santa Ana, California
Ph: 714-751-5443 x285 Fx: 714-751-5915
www.mindresearch.net

The MIND Research Institute is a neuroscience and education research-based, non-profit corporation. MIND applies its distinctive visual approach to illustrating math concepts and building problem-solving skills as the basis for innovative, research-proven instructional math education programs for elementary and secondary schools.

Minitab Inc.
Booth: 1933
State College, Pennsylvania
Ph: 800-448-3555 (US/ CANADA 814-238-3280) Fx: 814-238-4383
www.minitab.com

Minitab® 15 is the leading software for statistics and education research-based, non-pro

Mintab Integrates into curriculums seamlessly and affordably. Minitab is used at more than 4,000 colleges and universities. Free trial version at www.minitab.com/minitab

Mountain Math/Language,, LLC
Booth: 927
Ogden, Utah
www.mtm.com

Mu Alpha Theta
Booth: 1249
Norman, Oklahoma
Ph: 405-325-4489 Fx: 405-325-7184
www.mualphatheta.org

Mu Alpha Theta, the National High School and Two-Year College Mathematics Honor Society, serves over 1700 chapters and expects 80,000 members by June, 2010. We provide free math competitions, grants, scholarships, and awards. Chi Alpha Mu, for middle school students interested in math, has recently been reactivated.

Nasco
Booth: 547
Modesto, California
Ph: 209-545-1600 Fx: 209-846-6571
www.eNasco.com

National Assessment of Educational Progress (NAEP)
Booth: 743
Washington, DC
Ph: 202-842-3600 Fx: 202-842-4032
www.naep.org

National Council of Supervisors of Mathematics (NCSM)
Booth: 224
Emeryville, California
Ph: 510-601-6276 Fx: 510-547-6276
www.mathedleadership.org

NCSM is an international leadership organization for those who serve the NCSM vision of excellence and equity for student achievement in mathematics. Those leaders include district or county coaches, grade-level team leaders, course-level team leaders, curriculum directors, principals, superintendents & all who work to ensure success of every child in mathematics.

Navajo Jewelry & Crafts
Booth: 1152
Albuquerque, New Mexico
Ph: 505-345-2808

Neufeld Learning Systems, Inc.
Booth: 1733
Silver Spring, Maryland
Ph: 301-924-4830 Fx: 781-890-2799
www.ontheavenuemarketing.com

The New York Times
Booth: 1645
Weston, Massachusetts
Ph: 781-890-2799
www.ontheavenuemarketing.com
Northpoint Horizons
Booth: 1351
Vernon Hills, Illinois
Ph: 866-466-7047 Fx: 888-286-8681
www.northpointhorizons.com
Northpoint Horizons is the newest division of a 25 year old company dedicated to the development of innovative, research-based programs meeting the needs of struggling learners in all tiers. Math Elevations, 3-8 Intervention and Content Academic Vocabulary Systems K-8 for Math and Science are comprehensive programs including hands-on components.

ORIGO Education, Inc.
Booth: 329
St. Charles, Missouri
Ph: 888-674-4601 Fx: 888-674-4604
www.origoeducation.com
ORIGO Education is a math resource company based in St. Charles, MO (and Australia) dedicated to being the source of inspiration in helping to develop computational fluency. We do this not only by our printed materials but by our dynamic professional development.

PBS TeacherLine
Booth: 1851
Arlington, Virginia
Ph: 800-572-6386 Fx: 703-739-8495
www.pbsteacherline.org
PBS TeacherLine provides high-quality, affordably priced professional development to teachers through facilitated online courses, a supportive learning community, and exemplary Internet-based resources. More than 130 courses span the entire curriculum: Reading/Language Arts, Mathematics, Instructional Technology, Instructional Strategies, and Science. We also offer PBS TeacherLine Peer Connection, a professional learning community which delivers powerful online support for instructional coaches, mentors, and teacher leaders. With these tools you can search, save, and share the best professional development resources from PBS and other respected education content providers.

Pearson
Booth: 1023
Upper Saddle River, New Jersey
Ph: 1-800-848-9500
www.PearsonSchool.com
Pearson, the global leader in education content, services and technology, provides innovative print and digital solutions for Pre-K through college, student information systems and learning management systems, teacher professional development, career certification programs, and testing and assessment products that set the standard for the industry.

The Pi-Dye Shop
Booth: 652
Salt Lake City, Utah
Ph: 801-413-3070
www.pidyecom
Do you know the Fundamental Theorem of Nerdiness?
Nerdy + Groovy = The Pi-Dye Shop
So, come on down to get Pi t-shirts, posters, cookie cutters, puzzles, backwards clocks, Pi Day classroom resources and more. Make sure to stop by to participate in our Pi recitation contests!

Pierrot Math
Booth: 1044
Seoul, Korea
Ph: 82-2-3475-2446 Fx: 82-2-3475-2446

Queue, Inc.
Booth: 1648
Shelton, Connecticut
Ph: 203-944-0087 Fx: 800-775-2729
www.qworkbooks.com
Queue, Inc. publishes the very best state-specific, standard-aligned test prep workbooks; supplemental curriculum workbooks; and remedial and intervention workbooks available. We have a large selection of math titles from which to choose. Our books are packed with instruction and practice for your students. We can help make you a more effective educator.

Renaissance Learning
Booth: 1741
Wisconsin Rapids, Wisconsin
Ph: 715-424-3636 Fx: 715-424-4242
www.renlearn.com
Accelerated Math™ helps you give students personalized practice that is aligned to your textbook and linked to your state standards, ensuring math success. Plus, the software helps you easily manage the daily math activities of a wide range of students who are all working at their own levels and pace.

Rhymes ‘n’ Times
Booth: 2124
Baton Rouge, Louisiana
Ph: 888-684-6376 Fx: 888-684-6177
www.rhymesntimes.com
Rhymes ‘n’ Times is a research-based, MULTI-SENSORY math program to teach Times Tables in ONLY 3 WEEKS—Guaranteed! If class average isn’t 90% or above on final test, you get 100% refund. Program addresses all 4 learning styles to meet needs of ALL students, regular/SPED/ Gifted. RtI-Optimized. Ask about sister products: Fishin’ for Addition, Subtraction in Action, and Divide ‘n’ Slide. Visit www.rhymesntimes.com for 3-minute video.

Rosen Classroom
Booth: 448
New York, New York
Ph: 800-237-9932 Fx: 888-436-4643
www.rosenclassroom.com

Raytheon
Booth: 1053
Waltham, Massachusetts
Ph: 781-522-5112 Fx: 781-522-5877
www.raytheon.com/responsibility/stem/mmu/index.html
Raytheon’s MathMoves™ program is committed to increasing U.S. students’ interest in STEM (Science, Technology, Engineering and Math) through unique, interactive learning initiatives, contests, events, tutoring programs and more. Raytheon awards more than $2 million annually in scholarships and grants to students, teachers and schools nationwide. Nominate a Math Hero today!

Queue, Inc.
Booth: 1648
Shelton, Connecticut
Ph: 203-944-0087 Fx: 800-775-2729
www.qworkbooks.com
Queue, Inc. publishes the very best state-specific, standard-aligned test prep workbooks; supplemental curriculum workbooks; and remedial and intervention workbooks available. We have a large selection of math titles from which to choose. Our books are packed with instruction and practice for your students. We can help make you a more effective educator.

Qwizdom, Inc.
Booth: 1234
Puyallup, Washington
Ph: 253-845-7738 Fx: 253-845-1909
www.qwizdom.com
Qwizdom combines advanced student-response technology with standards-based curriculum, classroom, school/district-wide management tools, online assessment, and content sharing software to provide a complete instructional solution for classrooms. Qwizdom’s Interactive Learning System includes student remotes and a Q7 Presenter Tablet, allowing teachers to view data, ask spontaneous questions and much more.
School Specialty Intervention
Booth: 522
Cambridge, Massachusetts
Ph: 617-547-6706
www.intervention.schoolspecialty.com
Our company description: School Specialty Intervention brings together the educational expertise of EPS and AutoSkill to provide K-12 blended-media solutions to help students progress to grade level and beyond. Visit intervention.schoolspecialty.com or call 1-800-225-5750 for more information.

Sharp Electronics
Booth: 933
Mahwah, New Jersey
Ph: 201-529-8200 Fx: 201-512-2072
www.sharpusa.com

School Specialty Math/Delta Education
Booth: 745
Nashua, New Hampshire
Ph: 603-579-3467 Fx: 603-821-2979
www.delta-education.com

Shell Education
Booth: 1735
Huntington Beach, California
Ph: 877-777-3450 Fx: 888-877-7606
www.shelleducation.com
Shell Education develops supplemental educational resources that are research based, and meet the standards of all 50 states. By working closely with teachers to develop top quality resources, Shell provides practical, classroom-tested ideas and professional development resources to administrators and educators around the globe.

SingaporeMath.com Inc.
Booth: 2127
Oregon City, Oregon
Ph: 888-419-4408 Fx: 503-557-8103
www.singaporemath.com
Since 1998, SingaporeMath.com has been proud to bring world-class mathematics curriculum materials from Singapore to the US and Canada. We are the exclusive distributors of the highly regarded Primary Mathematics series, a key part of Singapore’s rise to the top in TIMSS, published by Marshall Cavendish International.

Singin’ & Signin’
Booth: 424
Fallbrook, California
Ph: 866-696-4259 Fx: 918-582-0608
www.nickynote.com
Singin’ & Signin’ is a revolutionary supplemental math program designed for primary and intermediate grade classrooms. Through easily recalled songs and chants, the program teaches complex concepts using accompanying signs and gestures that easily adapt to any adopted curriculum. Grand prize winner of the 2009 Classroom of the Future Award!

Stenhouse Publishers
Booth: 923
Portland, Maine
Ph: 800 988 9812 Fx: 800 833 9164
www.stenhouse.com
Stenhouse books and videos help K-12 teachers enhance their professional knowledge and build their students’ skills as readers, writers, and thinkers.

STEPS Professional Development
Booth: 1251
Norwell, Massachusetts
Ph: 978-927-0038 Fx: 978-759-9990
www.stepspd.com
Looking for proven, practical, and powerful professional development and resources to help improve student outcomes in mathematics and literacy? STEPS Professional Development is dedicated to helping teachers at all levels improve student achievement by providing a range of comprehensive, research-based, and highly practical professional development courses based on award-winning teacher resource books.
Educators around the globe.

Teacher Created Materials provides classroom-materials and professional development training, K-12 classrooms. Specializing in supplemental and standards-based educational resources for educational publishing company with worldwide

www.tcmpub.com
Ph: 800-858-7339 Fx: 888-877-7606
Baltimore, Maryland
Booth: 1334

Tessellations
Booth: 642
Phoenix, Arizona
Ph: 800-655-5341 Fx: 480-763-6948
www.tessellations.com

Think It By Hand
Booth: 437
Santa Ana, California
Ph: 888-723-4402 Fx: 888-723-0660
www.thinkitbyhand.com

Recognized for its leadership, innovation, and quality, Think It By Hand provides materials and training for Math and Science education with uncommon effectiveness and success for teachers and students.

TODOS: Mathematics for ALL
Booth: 232
Tempe, Arizona
www.todos-math.org
TODOS is an international organization dedicated to support teachers, teacher educators and their students in the area of mathematics education and equity. Stop by our booth to learn more about TODOS and peruse our materials, including our new scholarly journal for educators, Teaching for Excellence and Equity in Mathematics (TEEM).
Exhibitor Directory

Universal Publishing
Booth: 526
Waymart, Pennsylvania
Ph: 1-800-940-2270
www.upub.net
Universal Publishing offers effective and affordable products such as: Learning Essential Math Skills math program; Mastering Essential Math Skills math program; math journals; history journal; science journals; handwriting books for grades pre-K-8; handwriting supplementals including the Alphamation Animated Alphabet; and more!

Valley Business Machines
Booth: 1451
West Valley City, Utah
Ph: 800-462-2019 Fx: 801-969-4013
www.valleybusinessmachines.com

Vernier Software & Technology
Booth: 1252
Beaverton, Oregon
Ph: 503-277-2299 Fx: 503-277-2440
www.vernier.com

Virtual Nerd
Booth: 1849
Ph: 314-422-8959
www.virtualnerd.com

Voyager Expanded Learning
Booth: 1832
Dallas, Texas
Ph: 214-932-3298 Fx: 214-932-9490
www.voyagerlearning.com

W.H. Freeman & Company
Booth: 1823
Cranbury, New Jersey
Ph: 866-843-3715 Fx: 609-409-0297
bfwpub.com/highschool
Bedford, Freeman & Worth (BFW) Publishers is the most trusted source for educational materials for high school mathematics in print, on CD, and on the Web. We publish the best-selling books in Advanced Placement and general level statistics, calculus, geometry, algebra, discrete mathematics and elective courses.

Wang Education LLC
Booth: 944
Plano, Texas
Ph: 866-362-9264 Fx: 413-638-2574
www.wangeducation.com
Dr. Frank Wang is a motivational speaker for math teachers whose passion and mission is to help them be as effective as possible. His company, Wang Education, provides manipulatives (including the only manipulative that illustrates fraction division), books, and DVD programs to help enliven and enrich students’ learning.

Whaley Gradebook Co., Inc.
Booth: 1932
Grand Junction, Colorado
Ph: 970-241-7777 Fx: 970-241-0016
www.whaleygradebook.com

Wikki Stix Co.
Booth: 1247
Phoenix, Arizona
Ph: 602-870-9937 Fx: 602-870-9877
www.wikkistix.com

Wiley
Booth: 749
Hoboken, New Jersey
Ph: 201-748-6000
www.wiley.com

Wireless Generation
Booth: 337 & 436
Brooklyn, New York
Ph: 212-796-2475 Fx: 212-796-2311
www.wirelessgeneration.com
Wireless Generation helps educators teach smarter by creating tools, systems, and services that provide greater visibility into students’ needs, expand capacity for effective and targeted instruction, and connect educators with each other, students and parents.

WKB Publishing
Booth: 1346
Maynard, Massachusetts
Ph: 978-897-1800 Fx: 978-897-1806
www.wkbradford.com

Wolfram Research, Inc.
Booth: 1824
Champaign, Illinois
Ph: 217-398-0700 Fx: 217-398-0747
www.wolfram.com
Wolfram Research, Inc. is the technical innovation powerhouse behind the world’s most powerful global computation system Mathematica, and the world’s first-ever computational knowledge engine, Wolfram|Alpha. Wolfram Research continues its strong commitment to technology and education with resources like MathWorld, load-on-demand curated data, and the Wolfram Demonstrations Project. http://wolfram.com

Women and Mathematics Education
Booth: 222
Laramie, Wyoming
www.wme-usa.org
WME’s general purpose is to promote the mathematics education of girls and women.

YMIR Inc./The Ultimate Puzzle
Booth: 1828
Los Angeles, California
Ph: 1-617-379-2988 Fx: 1-978-762-5607
www.YouCanDoTheCube.com
Everyone’s Favorite Puzzle Is Now Your Student’s Favorite Math Lesson! In response to teacher’s requests, the You Can Do the Rubik’s Cube Program provides a range of Lesson Plans, Activities, Homework Sheets w/answers that support Geometry, Algebra and General Math, appropriate for 3rd – 12th Grades for $49.99.
www.YouCanDoTheRubik’sCube.com
<table>
<thead>
<tr>
<th>Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrahamson, Dor</td>
<td></td>
</tr>
<tr>
<td>Adams, Thomasenia</td>
<td>662</td>
</tr>
<tr>
<td>Addington, Susan</td>
<td>121</td>
</tr>
<tr>
<td>Adu-Gyamfi, Kwaku</td>
<td></td>
</tr>
<tr>
<td>Affiliate Services Committee, NCTM</td>
<td>4</td>
</tr>
<tr>
<td>Agodini, Roberto</td>
<td>653</td>
</tr>
<tr>
<td>Agranoff, Paul</td>
<td>224</td>
</tr>
<tr>
<td>Akers, Cheryl</td>
<td>453</td>
</tr>
<tr>
<td>Akyz, Didem</td>
<td></td>
</tr>
<tr>
<td>Alba, Ivan</td>
<td>489</td>
</tr>
<tr>
<td>Albert, Lillie</td>
<td>578</td>
</tr>
<tr>
<td>Alejandro, Suzanne</td>
<td>720</td>
</tr>
<tr>
<td>Alexander, April</td>
<td>422</td>
</tr>
<tr>
<td>Aliaga, Martha</td>
<td>369</td>
</tr>
<tr>
<td>Allard, Katie</td>
<td>581</td>
</tr>
<tr>
<td>Allend, Amelia</td>
<td>39</td>
</tr>
<tr>
<td>Allen, Harvey</td>
<td>39</td>
</tr>
<tr>
<td>Altieri, Mary</td>
<td>704</td>
</tr>
<tr>
<td>Amador, Julie</td>
<td>597</td>
</tr>
<tr>
<td>Amidon, Joel</td>
<td>208</td>
</tr>
<tr>
<td>An, Shihua</td>
<td>632</td>
</tr>
<tr>
<td>An, Song</td>
<td>632</td>
</tr>
<tr>
<td>Andersen, Janet</td>
<td>148, 741</td>
</tr>
<tr>
<td>Angotti, Robin</td>
<td>505</td>
</tr>
<tr>
<td>Anhalt, Cynthia</td>
<td>493</td>
</tr>
<tr>
<td>Anthony, MaryAnne</td>
<td>551, 616</td>
</tr>
<tr>
<td>Apple, Donna</td>
<td>303</td>
</tr>
<tr>
<td>Arcement, Elizabeth</td>
<td>623</td>
</tr>
<tr>
<td>Arko, John</td>
<td>272</td>
</tr>
<tr>
<td>Armstrong, Calvin</td>
<td>507</td>
</tr>
<tr>
<td>Askey, Richard</td>
<td>116, 593</td>
</tr>
<tr>
<td>Aslan Tutak, Fatma</td>
<td>18</td>
</tr>
<tr>
<td>Asturias, Harold</td>
<td>226</td>
</tr>
<tr>
<td>AutoSkill International</td>
<td>341</td>
</tr>
<tr>
<td>Baccagni-Frank, Anna</td>
<td>336</td>
</tr>
<tr>
<td>Baggett, Patricia</td>
<td>395</td>
</tr>
<tr>
<td>Bahr, Damon</td>
<td>253</td>
</tr>
<tr>
<td>Baker, Betty Ruth</td>
<td>244</td>
</tr>
<tr>
<td>Baker, Mary</td>
<td>705</td>
</tr>
<tr>
<td>Balka, Don</td>
<td>50, 295</td>
</tr>
<tr>
<td>Ballard, Russ</td>
<td>470</td>
</tr>
<tr>
<td>Banker, Theresa</td>
<td>718</td>
</tr>
<tr>
<td>Banks, Catherine</td>
<td>365</td>
</tr>
<tr>
<td>Barger, Rita</td>
<td>424</td>
</tr>
<tr>
<td>Barnes, David</td>
<td>302.1</td>
</tr>
<tr>
<td>Barnett, Janet</td>
<td>635</td>
</tr>
<tr>
<td>Barnett, Joann</td>
<td>637</td>
</tr>
<tr>
<td>Baron, Lorraine</td>
<td>168</td>
</tr>
<tr>
<td>Barta, Jim</td>
<td>618</td>
</tr>
<tr>
<td>Bartlo, Joanna</td>
<td>305</td>
</tr>
<tr>
<td>Bass, Laurie</td>
<td>35</td>
</tr>
<tr>
<td>Bates, Phyllis</td>
<td>82</td>
</tr>
<tr>
<td>Batliner, Diana</td>
<td>177</td>
</tr>
<tr>
<td>Bauer, Susan</td>
<td>426</td>
</tr>
<tr>
<td>Bay-Williams, Jennifer</td>
<td>252, 388</td>
</tr>
<tr>
<td>Bazik, Edna</td>
<td>261</td>
</tr>
<tr>
<td>Beach, Michelle</td>
<td>529</td>
</tr>
<tr>
<td>Beatin, Thomas</td>
<td>300</td>
</tr>
<tr>
<td>Beaudrie, Brian</td>
<td>298</td>
</tr>
<tr>
<td>Becker, Jerry</td>
<td>688</td>
</tr>
<tr>
<td>Becker, Joanne</td>
<td>738</td>
</tr>
<tr>
<td>Beckman, Charlene</td>
<td>234</td>
</tr>
<tr>
<td>Beckmann, Sybilla</td>
<td>137, 665</td>
</tr>
<tr>
<td>Bell, Amy</td>
<td>34</td>
</tr>
<tr>
<td>Bellamy, Leslie</td>
<td>667</td>
</tr>
<tr>
<td>Bellman, Allan</td>
<td>581</td>
</tr>
<tr>
<td>Belson, Carolyn</td>
<td>114, 565</td>
</tr>
<tr>
<td>Benenson, Gary</td>
<td>222</td>
</tr>
<tr>
<td>Bennett, Jennie</td>
<td>227</td>
</tr>
<tr>
<td>Benoist-Humber, Giselle</td>
<td>450</td>
</tr>
<tr>
<td>Benson, Christine</td>
<td>154, 329</td>
</tr>
<tr>
<td>Benson, John</td>
<td>614</td>
</tr>
<tr>
<td>Beswick, Gloria</td>
<td>120</td>
</tr>
<tr>
<td>Betts, Emanu</td>
<td>566</td>
</tr>
<tr>
<td>Bezk, Nadine</td>
<td>257, 394</td>
</tr>
<tr>
<td>Biglan, Barbara</td>
<td>92, 560</td>
</tr>
<tr>
<td>Billstein, Rick</td>
<td>324</td>
</tr>
<tr>
<td>Bird, Sean</td>
<td>232</td>
</tr>
<tr>
<td>Bitter, Gary</td>
<td>604</td>
</tr>
<tr>
<td>Blair, Kristen</td>
<td>422</td>
</tr>
<tr>
<td>Blair, Richelle</td>
<td>512</td>
</tr>
<tr>
<td>Blanke, Barbara</td>
<td>740</td>
</tr>
<tr>
<td>Blue, Randi</td>
<td>453</td>
</tr>
<tr>
<td>Board of Directors, NCTM</td>
<td>1, 3</td>
</tr>
<tr>
<td>Bock, David</td>
<td>28</td>
</tr>
<tr>
<td>Bogert, Ronnah</td>
<td>382</td>
</tr>
<tr>
<td>Bolyard, Johnna</td>
<td>147, 417</td>
</tr>
<tr>
<td>Bonnstetter, Rhonda</td>
<td>529</td>
</tr>
<tr>
<td>Borenson and Associates, Inc</td>
<td>108, 447</td>
</tr>
<tr>
<td>Borowski, Rebecca</td>
<td>484</td>
</tr>
<tr>
<td>Bos, Beth</td>
<td>326</td>
</tr>
<tr>
<td>Boschmans, Barbara</td>
<td>298</td>
</tr>
<tr>
<td>Bosse, Michael</td>
<td>335</td>
</tr>
<tr>
<td>Boswell, Laurie</td>
<td>126</td>
</tr>
<tr>
<td>Bowen, Kim</td>
<td>309</td>
</tr>
<tr>
<td>Bradsky, Shirley</td>
<td>564</td>
</tr>
<tr>
<td>Bragg, Sadie</td>
<td>512</td>
</tr>
<tr>
<td>Brantlinger, Andrew</td>
<td>684</td>
</tr>
<tr>
<td>Bray, Wendy</td>
<td>587</td>
</tr>
<tr>
<td>Bressler, Bernard</td>
<td>142</td>
</tr>
<tr>
<td>Bressler, David</td>
<td>58, 367</td>
</tr>
<tr>
<td>Brexley-Corbin, Denise</td>
<td>431</td>
</tr>
<tr>
<td>Breyfogle, M. Lynn</td>
<td>144, 446</td>
</tr>
<tr>
<td>Briars, Diane</td>
<td>135</td>
</tr>
<tr>
<td>Bridge, Laura</td>
<td>166</td>
</tr>
<tr>
<td>Bristol, Laura</td>
<td>337</td>
</tr>
<tr>
<td>Britannica Digital Learning</td>
<td>276, 620</td>
</tr>
<tr>
<td>Brooks, Patricia</td>
<td>407</td>
</tr>
<tr>
<td>Brown, David</td>
<td>180</td>
</tr>
<tr>
<td>Brown, Elizabeth</td>
<td>71, 388</td>
</tr>
<tr>
<td>Brown, Stephen</td>
<td>443</td>
</tr>
<tr>
<td>Brown, Sue</td>
<td>654</td>
</tr>
<tr>
<td>Bu, Lingguo</td>
<td>685</td>
</tr>
<tr>
<td>Buchholz, Beth</td>
<td>491</td>
</tr>
<tr>
<td>Buerman, Margaret</td>
<td>474</td>
</tr>
<tr>
<td>Buettner, Dan</td>
<td>753</td>
</tr>
<tr>
<td>Bunning, Kimberly</td>
<td>380</td>
</tr>
<tr>
<td>Burg, Josie</td>
<td>315</td>
</tr>
<tr>
<td>Burg, Samantha</td>
<td>308</td>
</tr>
<tr>
<td>Burnett, James</td>
<td>113</td>
</tr>
<tr>
<td>Burns, Ashley</td>
<td>637</td>
</tr>
<tr>
<td>Burns, Marilyn</td>
<td>250</td>
</tr>
<tr>
<td>Burroughs, Elizabeth</td>
<td>325</td>
</tr>
<tr>
<td>Burton, Dolores</td>
<td>444</td>
</tr>
<tr>
<td>Bush, William</td>
<td>609</td>
</tr>
<tr>
<td>Butkus, Heidi</td>
<td>281</td>
</tr>
<tr>
<td>Cagle Margaret</td>
<td>708</td>
</tr>
<tr>
<td>Cahill, Jessica</td>
<td>282</td>
</tr>
<tr>
<td>Caldwell, Janet</td>
<td>16</td>
</tr>
<tr>
<td>Call, Susan</td>
<td>657</td>
</tr>
<tr>
<td>Callan, Richard</td>
<td>50</td>
</tr>
<tr>
<td>Campbell, Larry</td>
<td>321</td>
</tr>
<tr>
<td>Campbell, Patricia</td>
<td>617</td>
</tr>
<tr>
<td>Capper, Jessica</td>
<td>315</td>
</tr>
<tr>
<td>Carbone, Rose</td>
<td>502</td>
</tr>
<tr>
<td>Carlin, Judith</td>
<td>573</td>
</tr>
<tr>
<td>Carlyle, Ann</td>
<td>349</td>
</tr>
<tr>
<td>Carolina Biological Supply Company</td>
<td>41</td>
</tr>
<tr>
<td>Carter, Cindy</td>
<td>527</td>
</tr>
<tr>
<td>Carter, John</td>
<td>400</td>
</tr>
<tr>
<td>Carter, Tracey</td>
<td>513</td>
</tr>
<tr>
<td>Cartwright, Lisa</td>
<td>184</td>
</tr>
<tr>
<td>Casa, Tutia</td>
<td>112, 178</td>
</tr>
<tr>
<td>Cavanagh, Mary</td>
<td>316</td>
</tr>
<tr>
<td>Champagne, Zachary</td>
<td>312</td>
</tr>
<tr>
<td>Chan, Helen</td>
<td>536</td>
</tr>
<tr>
<td>Chance, Beth</td>
<td>700</td>
</tr>
<tr>
<td>Chancellor, Dinah</td>
<td>43</td>
</tr>
<tr>
<td>Chandler, Kristen</td>
<td>87</td>
</tr>
<tr>
<td>Chapin, Suzanne</td>
<td>570</td>
</tr>
<tr>
<td>Chappell, Michaela</td>
<td>304</td>
</tr>
<tr>
<td>Chapuis, Greg</td>
<td>81</td>
</tr>
<tr>
<td>Chavez, Oscar</td>
<td>376</td>
</tr>
<tr>
<td>Chazan, Dan</td>
<td>684</td>
</tr>
<tr>
<td>Chedister, Matthew</td>
<td>749</td>
</tr>
<tr>
<td>Chen, Rong-Ji</td>
<td>531</td>
</tr>
<tr>
<td>Cheng, Diana</td>
<td>535</td>
</tr>
<tr>
<td>Chiemilinski, Susan</td>
<td>652</td>
</tr>
<tr>
<td>Childs, Leigh</td>
<td>286</td>
</tr>
<tr>
<td>Cho, Carol</td>
<td>643</td>
</tr>
<tr>
<td>Choate, Jonathan</td>
<td>747</td>
</tr>
<tr>
<td>Choate, Laura</td>
<td>7</td>
</tr>
<tr>
<td>Cholmsky, Paul</td>
<td>352</td>
</tr>
<tr>
<td>Christensen, Rolff</td>
<td>488</td>
</tr>
<tr>
<td>Cianca, Sherri</td>
<td>133</td>
</tr>
<tr>
<td>Civil, Marta</td>
<td>695</td>
</tr>
<tr>
<td>Clark, Andy</td>
<td>663</td>
</tr>
<tr>
<td>Clark, Lawrence</td>
<td>684</td>
</tr>
<tr>
<td>Clark, Patty</td>
<td>661</td>
</tr>
<tr>
<td>Clayton, James</td>
<td>552</td>
</tr>
<tr>
<td>Cleaves, Wendy</td>
<td>303</td>
</tr>
<tr>
<td>Clements, Douglas</td>
<td>137</td>
</tr>
<tr>
<td>Cliche, Cindy</td>
<td>51</td>
</tr>
<tr>
<td>Coes, Loring</td>
<td>162</td>
</tr>
<tr>
<td>Coggins, Debra</td>
<td>607</td>
</tr>
<tr>
<td>Cohen, Jessica</td>
<td>641</td>
</tr>
<tr>
<td>Collins, Anne</td>
<td>494</td>
</tr>
<tr>
<td>Collins, Ken</td>
<td>68</td>
</tr>
<tr>
<td>Combs, Emily</td>
<td>637</td>
</tr>
<tr>
<td>Compere, Karen</td>
<td>26</td>
</tr>
<tr>
<td>Condon, Gregory</td>
<td>638</td>
</tr>
<tr>
<td>Conley, 115</td>
<td>615</td>
</tr>
<tr>
<td>Conklin, Melissa</td>
<td>385</td>
</tr>
<tr>
<td>Conroy, Connie</td>
<td>391</td>
</tr>
<tr>
<td>Cook, Marcy</td>
<td>594</td>
</tr>
<tr>
<td>Cooper, Sandi</td>
<td>655</td>
</tr>
<tr>
<td>Cooperman, Neil</td>
<td>265</td>
</tr>
<tr>
<td>Cooperman, Stephanie</td>
<td>539</td>
</tr>
<tr>
<td>Corcoran, Carol</td>
<td>351</td>
</tr>
<tr>
<td>Coskun, Sirin</td>
<td>681</td>
</tr>
<tr>
<td>Cote, Mark</td>
<td>204</td>
</tr>
<tr>
<td>Courtade, Ginevra</td>
<td>490</td>
</tr>
<tr>
<td>Cox, Dana</td>
<td>256</td>
</tr>
<tr>
<td>Cox, Kelli</td>
<td>558</td>
</tr>
<tr>
<td>Cramer, Kathleen</td>
<td>633</td>
</tr>
<tr>
<td>Crocker, Deborah</td>
<td>296</td>
</tr>
<tr>
<td>Cullen, Craig</td>
<td>79</td>
</tr>
<tr>
<td>Cuoco, Al</td>
<td>270, 612</td>
</tr>
<tr>
<td>Cuprak, Joseph</td>
<td>493</td>
</tr>
<tr>
<td>Curry, Jane</td>
<td>279</td>
</tr>
<tr>
<td>Cutler, Carrie</td>
<td>600</td>
</tr>
<tr>
<td>Cyr, Eileen</td>
<td>350</td>
</tr>
<tr>
<td>Cyrus, Vivian</td>
<td>466</td>
</tr>
<tr>
<td>Speaker Index</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Hindy, Sandy</td>
<td>118</td>
</tr>
<tr>
<td>Hinsberg, Ashley</td>
<td>569</td>
</tr>
<tr>
<td>Hoffert, Sharon</td>
<td>59</td>
</tr>
<tr>
<td>Hogan, Marie</td>
<td>152</td>
</tr>
<tr>
<td>Hollinger, Rosann</td>
<td>231</td>
</tr>
<tr>
<td>Holmes, Julie</td>
<td>290</td>
</tr>
<tr>
<td>Hopfensperger, Patrick</td>
<td>15</td>
</tr>
<tr>
<td>Horgan, Connie</td>
<td>52</td>
</tr>
<tr>
<td>Hose, Justin</td>
<td>562</td>
</tr>
<tr>
<td>Houghton Mifflin Harcourt</td>
<td>172.1</td>
</tr>
<tr>
<td>Howell, Mark</td>
<td>434</td>
</tr>
<tr>
<td>Howells, Lisa</td>
<td>223, 580</td>
</tr>
<tr>
<td>Hu, Hsing Wen</td>
<td>531</td>
</tr>
<tr>
<td>Huber, Sharon</td>
<td>114</td>
</tr>
<tr>
<td>Huber, Sharon</td>
<td>565</td>
</tr>
<tr>
<td>Hughes, Elizabeth</td>
<td>22, 161</td>
</tr>
<tr>
<td>Hughes, Kevin</td>
<td>99</td>
</tr>
<tr>
<td>Hull, Susan</td>
<td>271</td>
</tr>
<tr>
<td>Hunt, Brad</td>
<td>722</td>
</tr>
<tr>
<td>Hunt, Jessica</td>
<td>598</td>
</tr>
<tr>
<td>Huse, Vanessa</td>
<td>45</td>
</tr>
<tr>
<td>Hutchison, Linda</td>
<td>322</td>
</tr>
<tr>
<td>Hwang, Jinnie</td>
<td>473</td>
</tr>
<tr>
<td>Hyde, Arthur</td>
<td>317</td>
</tr>
<tr>
<td>Hynes, Carol</td>
<td>63</td>
</tr>
<tr>
<td><strong>I</strong></td>
<td></td>
</tr>
<tr>
<td>Inzerillo, Carol</td>
<td>10</td>
</tr>
<tr>
<td>Irons, Calvin</td>
<td>311, 568</td>
</tr>
<tr>
<td>Irons, Rosemary</td>
<td>713</td>
</tr>
<tr>
<td>Irvin, Barbara</td>
<td>188</td>
</tr>
<tr>
<td>Irvin, Karen</td>
<td>79</td>
</tr>
<tr>
<td>It’s About Time</td>
<td>41.1, 106.1, 171.1</td>
</tr>
<tr>
<td><strong>J</strong></td>
<td></td>
</tr>
<tr>
<td>Jackson, William</td>
<td>356, 717</td>
</tr>
<tr>
<td>Jacobbe, Tim</td>
<td>283</td>
</tr>
<tr>
<td>Jain, Darshan</td>
<td>400</td>
</tr>
<tr>
<td>Jakucyn, Natalie</td>
<td>205</td>
</tr>
<tr>
<td>Jasper, Bill</td>
<td>96</td>
</tr>
<tr>
<td>Jenkins, Jeri</td>
<td>640</td>
</tr>
<tr>
<td>Jetter, Madeleine</td>
<td>121</td>
</tr>
<tr>
<td>Jilk, Lisa</td>
<td>389</td>
</tr>
<tr>
<td>Johnson, Amy</td>
<td>642</td>
</tr>
<tr>
<td>Johnson, Donna</td>
<td>430</td>
</tr>
<tr>
<td>Johnson, Gwendolyn</td>
<td>672</td>
</tr>
<tr>
<td>Johnson, Jennifer</td>
<td>413</td>
</tr>
<tr>
<td>Johnson, John</td>
<td>413</td>
</tr>
<tr>
<td>Johnson, Judy</td>
<td>301</td>
</tr>
<tr>
<td>Johnson, Tracey</td>
<td>723</td>
</tr>
<tr>
<td>Johnson, Whitney</td>
<td>684</td>
</tr>
<tr>
<td>Jolley, Willie</td>
<td>2</td>
</tr>
<tr>
<td>Jones, Steven</td>
<td>684</td>
</tr>
<tr>
<td>Jones, Tammy</td>
<td>451</td>
</tr>
<tr>
<td>Jones-Allen, Wanda</td>
<td>159</td>
</tr>
<tr>
<td>Jørgensen, Marcus</td>
<td>334</td>
</tr>
<tr>
<td>Jung, Myoungw hon</td>
<td>521</td>
</tr>
<tr>
<td>Junor Clarke, Pier</td>
<td>431</td>
</tr>
<tr>
<td><strong>K</strong></td>
<td></td>
</tr>
<tr>
<td>Kaichi-Imamura, Stacie</td>
<td>184</td>
</tr>
<tr>
<td>Kajitani, Alex</td>
<td>319</td>
</tr>
<tr>
<td>Kaib, Constance</td>
<td>528</td>
</tr>
<tr>
<td>Kanold, Timothy</td>
<td>649</td>
</tr>
<tr>
<td>Kanter, Patsy</td>
<td>70</td>
</tr>
<tr>
<td>Kapasi, Mansoor</td>
<td>60</td>
</tr>
<tr>
<td>Kapolka, David</td>
<td>66</td>
</tr>
<tr>
<td>Karafol, Paul</td>
<td>132</td>
</tr>
<tr>
<td>Karp, Karen</td>
<td>252, 490</td>
</tr>
<tr>
<td>Kaufeld, Signe</td>
<td>242, 461</td>
</tr>
<tr>
<td>Kearns, James</td>
<td>127</td>
</tr>
<tr>
<td>Keat, Jane</td>
<td>245</td>
</tr>
<tr>
<td>Keel, Johnmie</td>
<td>630</td>
</tr>
<tr>
<td>Kelley, Paul</td>
<td>368</td>
</tr>
<tr>
<td>Kendall Hunt Publishing Co</td>
<td>448, 515, 555, 621</td>
</tr>
<tr>
<td>Kennedy, Dan</td>
<td>477</td>
</tr>
<tr>
<td>Kenney, Margaret</td>
<td>328</td>
</tr>
<tr>
<td>Kenney, Rachel</td>
<td>575</td>
</tr>
<tr>
<td>Kepner, Henry</td>
<td>340</td>
</tr>
<tr>
<td>Karekes, Judit</td>
<td>553</td>
</tr>
<tr>
<td>Kerins, Bowen</td>
<td>31, 377</td>
</tr>
<tr>
<td>Ketner, Amanda</td>
<td>169, 683</td>
</tr>
<tr>
<td>Kidwells, Antoinette</td>
<td>332</td>
</tr>
<tr>
<td>Kieffchenfeld, Vincent</td>
<td>99</td>
</tr>
<tr>
<td>Kimani, Patrick</td>
<td>751</td>
</tr>
<tr>
<td>Kinetic Books</td>
<td>106, 381</td>
</tr>
<tr>
<td>King, Colleen</td>
<td>450</td>
</tr>
<tr>
<td>King, James</td>
<td>330</td>
</tr>
<tr>
<td>King, Patty</td>
<td>213</td>
</tr>
<tr>
<td>Klass, Steve</td>
<td>257, 394</td>
</tr>
<tr>
<td>Klavon, Michael</td>
<td>74</td>
</tr>
<tr>
<td>Klimek, Sarah</td>
<td>294</td>
</tr>
<tr>
<td>Knighten, Latrenda</td>
<td>384</td>
</tr>
<tr>
<td>Knuck, Mary</td>
<td>628</td>
</tr>
<tr>
<td>Kodama, Hiroo</td>
<td>625</td>
</tr>
<tr>
<td>Koechler, Mike</td>
<td>131</td>
</tr>
<tr>
<td>Komara, Cecile</td>
<td>347</td>
</tr>
<tr>
<td>Konitzer, Nancy</td>
<td>480</td>
</tr>
<tr>
<td>Koontz, Suzy</td>
<td>73</td>
</tr>
<tr>
<td>Kopp, Jaine</td>
<td>596</td>
</tr>
<tr>
<td>Kosiak, Jennifer</td>
<td>32</td>
</tr>
<tr>
<td>Koss, Roberta</td>
<td>238</td>
</tr>
<tr>
<td>Krawendonsk, Henry</td>
<td>780, 981</td>
</tr>
<tr>
<td>Kriegler, Shelley</td>
<td>264</td>
</tr>
<tr>
<td>Krouse, Janice</td>
<td>577</td>
</tr>
<tr>
<td>Kucera, Lee</td>
<td>235</td>
</tr>
<tr>
<td>Kuhns, Catherine</td>
<td>522</td>
</tr>
<tr>
<td>Kunz, Marti</td>
<td>692</td>
</tr>
<tr>
<td>Kysh, Judith</td>
<td>540</td>
</tr>
<tr>
<td>Laborde, Colette</td>
<td>236</td>
</tr>
<tr>
<td>Laborde, Jean-Marie</td>
<td>288</td>
</tr>
<tr>
<td>Laceyfield, William</td>
<td>338</td>
</tr>
<tr>
<td>LaFioriga, Anna</td>
<td>287</td>
</tr>
<tr>
<td>Lambdin, Diana</td>
<td>586</td>
</tr>
<tr>
<td>Lamborg, Teruni</td>
<td>595</td>
</tr>
<tr>
<td>Lancaster, Ron</td>
<td>198</td>
</tr>
<tr>
<td>Lance, Marilyn</td>
<td>141</td>
</tr>
<tr>
<td>Landesman, Miriam</td>
<td>638</td>
</tr>
<tr>
<td>Langan, Melissa</td>
<td>380</td>
</tr>
<tr>
<td>Lantz, Hays</td>
<td>742</td>
</tr>
<tr>
<td>Lappan, Glenda</td>
<td>518</td>
</tr>
<tr>
<td>LaRiccia, William</td>
<td>353</td>
</tr>
<tr>
<td>Larmon, Marilyn</td>
<td>182</td>
</tr>
<tr>
<td>Larrabee, Heather</td>
<td>526</td>
</tr>
<tr>
<td>Larsen, Sean</td>
<td>305</td>
</tr>
<tr>
<td>Larson, Christine</td>
<td>673</td>
</tr>
<tr>
<td>Larson, Matt</td>
<td>343</td>
</tr>
<tr>
<td>Lasater, Leslie</td>
<td>51, 184</td>
</tr>
<tr>
<td>Latulipipe, Christine</td>
<td>195</td>
</tr>
<tr>
<td>Laughlin, Connie</td>
<td>318, 652</td>
</tr>
<tr>
<td>Lavelle, Lisa</td>
<td>138, 533</td>
</tr>
<tr>
<td>LaVerigne, Vincent</td>
<td>679</td>
</tr>
<tr>
<td>Lawrence, Ann</td>
<td>5, 499</td>
</tr>
<tr>
<td>Le Maistre, Kate</td>
<td>591</td>
</tr>
<tr>
<td>Leopard, Barbara</td>
<td>634</td>
</tr>
<tr>
<td>Learning Upgrade, LLC</td>
<td>173, 212</td>
</tr>
<tr>
<td>Leary, Julie</td>
<td>244</td>
</tr>
<tr>
<td>Leavitt, Seth</td>
<td>633</td>
</tr>
<tr>
<td>Lee, Hollylyne</td>
<td>511</td>
</tr>
<tr>
<td>Lee, Hyomeni</td>
<td>339</td>
</tr>
<tr>
<td>Lee, Jean</td>
<td>359</td>
</tr>
<tr>
<td>Leer, Mary</td>
<td>481</td>
</tr>
<tr>
<td>Leinwand, Steven</td>
<td>69</td>
</tr>
<tr>
<td>Leise, Barbara</td>
<td>413</td>
</tr>
<tr>
<td>Leiva, Miriam</td>
<td>478</td>
</tr>
<tr>
<td>Leonard, Jacqueline</td>
<td>608</td>
</tr>
<tr>
<td>Lester, Frank</td>
<td>586</td>
</tr>
<tr>
<td>Lewis, Jim</td>
<td>9</td>
</tr>
<tr>
<td>Libeskind, Shlomo</td>
<td>134</td>
</tr>
<tr>
<td>Lin, Ching-Yao</td>
<td>531</td>
</tr>
<tr>
<td>Lindberg, Doris</td>
<td>412</td>
</tr>
<tr>
<td>Linder, Sandra</td>
<td>136</td>
</tr>
<tr>
<td>Lingo, Amy</td>
<td>490</td>
</tr>
<tr>
<td>Linn, Dan</td>
<td>174</td>
</tr>
<tr>
<td>Lins, Judy</td>
<td>26</td>
</tr>
<tr>
<td>Little, Richard</td>
<td>302</td>
</tr>
<tr>
<td>Lodge, Jaime</td>
<td>590</td>
</tr>
<tr>
<td>Loewenegg Ball, Deborah</td>
<td>409</td>
</tr>
<tr>
<td>Lonergan, Mark</td>
<td>366</td>
</tr>
<tr>
<td>Long, Betty</td>
<td>296</td>
</tr>
<tr>
<td>Long, Mike</td>
<td>237</td>
</tr>
<tr>
<td>Lopez, Noemi</td>
<td>423</td>
</tr>
<tr>
<td>Losq, Christine</td>
<td>419</td>
</tr>
<tr>
<td>Lott, Johnny</td>
<td>239</td>
</tr>
<tr>
<td>Lucas, Robyn</td>
<td>74</td>
</tr>
<tr>
<td>Lucito, Patricia</td>
<td>498</td>
</tr>
<tr>
<td>Luebeck, Jennifer</td>
<td>325</td>
</tr>
<tr>
<td>Luzziak, Christopher</td>
<td>327</td>
</tr>
<tr>
<td>Lynch, Monique</td>
<td>209</td>
</tr>
<tr>
<td>Lynch-Davis, Kathleen</td>
<td>461</td>
</tr>
<tr>
<td>Lyon, C.</td>
<td>668</td>
</tr>
<tr>
<td>Lyons, Deena</td>
<td>732</td>
</tr>
<tr>
<td>Lytle, Jill</td>
<td>93, 425</td>
</tr>
<tr>
<td>Lyublinskaya, Irina</td>
<td>201, 553</td>
</tr>
<tr>
<td>Mabott, Art</td>
<td>128</td>
</tr>
<tr>
<td>Macari, Alison</td>
<td>244</td>
</tr>
<tr>
<td>Macias-Duarte, Alberto</td>
<td>580</td>
</tr>
<tr>
<td>Mackmim, Chris</td>
<td>472</td>
</tr>
<tr>
<td>Mahoney, John</td>
<td>510</td>
</tr>
<tr>
<td>Maletsky, Evan</td>
<td>88</td>
</tr>
<tr>
<td>Malloy, Carol</td>
<td>724</td>
</tr>
<tr>
<td>Malm, Cheryl</td>
<td>154, 498</td>
</tr>
<tr>
<td>Malys, Laura</td>
<td>231</td>
</tr>
<tr>
<td>Mancera, Eduardo</td>
<td>411</td>
</tr>
<tr>
<td>Marecek, Lynn</td>
<td>551</td>
</tr>
<tr>
<td>Marks Kpan, Cathy</td>
<td>284</td>
</tr>
<tr>
<td>Markworth, Kimberly</td>
<td>743</td>
</tr>
<tr>
<td>Marrongelle, Karen</td>
<td>641</td>
</tr>
<tr>
<td>Marsh, Laurel</td>
<td>47</td>
</tr>
<tr>
<td>Marti, Andres</td>
<td>541</td>
</tr>
<tr>
<td>Marti, Matsuo</td>
<td>436</td>
</tr>
<tr>
<td>Martin, Tami</td>
<td>163</td>
</tr>
<tr>
<td>Martin, Taylor</td>
<td>249</td>
</tr>
<tr>
<td>Martin, W. Gary</td>
<td>100</td>
</tr>
<tr>
<td>Mason, MARGERIETE</td>
<td>697</td>
</tr>
<tr>
<td>Masunaga, David</td>
<td>345</td>
</tr>
<tr>
<td>Math For America</td>
<td>381.2</td>
</tr>
<tr>
<td>Math Teachers Press</td>
<td>381.1</td>
</tr>
<tr>
<td>Math-U-See</td>
<td>554</td>
</tr>
<tr>
<td>Mathew, Jerone</td>
<td>263</td>
</tr>
<tr>
<td>Mathews, Chris</td>
<td>413</td>
</tr>
<tr>
<td>Matsuura, Ryota</td>
<td>602</td>
</tr>
<tr>
<td>Matthews, James</td>
<td>57</td>
</tr>
<tr>
<td>Matthews, Mary Elizabeth</td>
<td>210</td>
</tr>
</tbody>
</table>
### Speaker Index

<table>
<thead>
<tr>
<th>Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maubach, Roberta</td>
<td>79</td>
</tr>
<tr>
<td>Mauldin, Guy</td>
<td>101</td>
</tr>
<tr>
<td>Mayberry, Sally</td>
<td>254</td>
</tr>
<tr>
<td>Mayes, Robert</td>
<td>200</td>
</tr>
<tr>
<td>Mayfield, Amy</td>
<td>8</td>
</tr>
<tr>
<td>Mays, Janet</td>
<td>169, 683</td>
</tr>
<tr>
<td>McAdam, John</td>
<td>260</td>
</tr>
<tr>
<td>McAnally, Maribeth</td>
<td>426</td>
</tr>
<tr>
<td>McAnany, Helen</td>
<td>40</td>
</tr>
<tr>
<td>McNelly, Nell</td>
<td>6</td>
</tr>
<tr>
<td>McAtee, Catherine</td>
<td>524</td>
</tr>
<tr>
<td>McCallum, William</td>
<td>23</td>
</tr>
<tr>
<td>McClain, Elizabeth</td>
<td>30</td>
</tr>
<tr>
<td>McCown, Gina</td>
<td>215</td>
</tr>
<tr>
<td>McCoy, Ann</td>
<td>56, 637</td>
</tr>
<tr>
<td>McCracken, Melissa</td>
<td>519</td>
</tr>
<tr>
<td>McCravy-Barron, Marsha</td>
<td>431</td>
</tr>
<tr>
<td>McCrone, Sharon</td>
<td>330</td>
</tr>
<tr>
<td>McDaniel, Mandy</td>
<td>65, 709</td>
</tr>
<tr>
<td>McDougal, Thomas</td>
<td>323</td>
</tr>
<tr>
<td>McGraw, Rebecca</td>
<td>585</td>
</tr>
<tr>
<td>McKibben, Joquita</td>
<td>622</td>
</tr>
<tr>
<td>McKinley, Kathleen</td>
<td>402</td>
</tr>
<tr>
<td>McLean, Peggy</td>
<td>392</td>
</tr>
<tr>
<td>McMullin, Lin</td>
<td>268</td>
</tr>
<tr>
<td>Mead, Claire</td>
<td>567</td>
</tr>
<tr>
<td>Meador, Adam</td>
<td>186</td>
</tr>
<tr>
<td>Medley, Allison</td>
<td>199</td>
</tr>
<tr>
<td>Meehan, Michelle</td>
<td>93, 425</td>
</tr>
<tr>
<td>Melanese, Kathy</td>
<td>142</td>
</tr>
<tr>
<td>Mercer, Susan</td>
<td>571</td>
</tr>
<tr>
<td>Metz, Katie</td>
<td>574</td>
</tr>
<tr>
<td>Metz, Mary Lou</td>
<td>92</td>
</tr>
<tr>
<td>Meyer, Rachelle</td>
<td>468</td>
</tr>
<tr>
<td>Meyani, Rusen</td>
<td>604</td>
</tr>
<tr>
<td>Mathematics Teaching in the Middle School Editorial Panel, NCTM</td>
<td>196</td>
</tr>
<tr>
<td>Middleton, James</td>
<td>542</td>
</tr>
<tr>
<td>Mikles, Chris</td>
<td>469</td>
</tr>
<tr>
<td>Miller, Ashley</td>
<td>152</td>
</tr>
<tr>
<td>Miller, Jodie</td>
<td>615</td>
</tr>
<tr>
<td>Miller, Ruth</td>
<td>750</td>
</tr>
<tr>
<td>Miller, Stephen</td>
<td>680</td>
</tr>
<tr>
<td>Mills, Joseph</td>
<td>742</td>
</tr>
<tr>
<td>Milou, Eric</td>
<td>664</td>
</tr>
<tr>
<td>Mitchell, Arlene</td>
<td>445</td>
</tr>
<tr>
<td>Mitchell, Marilyn</td>
<td>497</td>
</tr>
<tr>
<td>Mitchell, Suzanne</td>
<td>639</td>
</tr>
<tr>
<td>Mittag, Kathleen</td>
<td>576</td>
</tr>
<tr>
<td>Molina de Wood, Naomi</td>
<td>378</td>
</tr>
<tr>
<td>Monroe, Eula</td>
<td>253</td>
</tr>
<tr>
<td>Montes, Christine</td>
<td>733</td>
</tr>
<tr>
<td>Moomaw, Sally</td>
<td>179</td>
</tr>
<tr>
<td>Moon, Joyce</td>
<td>739</td>
</tr>
<tr>
<td>Mooney, Mary</td>
<td>396</td>
</tr>
<tr>
<td>Moore, Carolyn</td>
<td>355</td>
</tr>
<tr>
<td>Moore, Doug</td>
<td>12</td>
</tr>
<tr>
<td>Moore, Erika</td>
<td>260</td>
</tr>
<tr>
<td>Moore, Karen</td>
<td>82</td>
</tr>
<tr>
<td>Morgan, Brenda</td>
<td>124</td>
</tr>
<tr>
<td>Morrison, Terri</td>
<td>418</td>
</tr>
<tr>
<td>Morrow, Jean</td>
<td>77, 730</td>
</tr>
<tr>
<td>Moses, Shelly</td>
<td>558</td>
</tr>
<tr>
<td>Moskowski, Witzt</td>
<td>346</td>
</tr>
<tr>
<td>Moyer-Packenham, Patricia</td>
<td>417, 719</td>
</tr>
<tr>
<td>Mueller, Michael</td>
<td>456</td>
</tr>
<tr>
<td>Mueller, Michelle</td>
<td>79</td>
</tr>
<tr>
<td>Mukarram, Salik</td>
<td>712</td>
</tr>
<tr>
<td>Mulhearn, Dennis</td>
<td>19</td>
</tr>
<tr>
<td>Murphy, M. Shaun</td>
<td>354</td>
</tr>
<tr>
<td>Murphy, Stuart</td>
<td>13</td>
</tr>
<tr>
<td>Muscarello, Amber</td>
<td>27</td>
</tr>
<tr>
<td>Mutch, Barbara</td>
<td>547</td>
</tr>
<tr>
<td>Nagorski, Kimberly</td>
<td>266</td>
</tr>
<tr>
<td>Naresh, Nirmala</td>
<td>190</td>
</tr>
<tr>
<td>Nargund, Vanashri</td>
<td>359</td>
</tr>
<tr>
<td>Neagoy, Monica</td>
<td>105</td>
</tr>
<tr>
<td>Nelson, Karma</td>
<td>325</td>
</tr>
<tr>
<td>Nelson, Mary</td>
<td>103</td>
</tr>
<tr>
<td>Neral, John</td>
<td>189</td>
</tr>
<tr>
<td>Neufeld, Rudy</td>
<td>119</td>
</tr>
<tr>
<td>Newton, Jill</td>
<td>575</td>
</tr>
<tr>
<td>Nichols, Janet</td>
<td>635</td>
</tr>
<tr>
<td>Nichols, Rebecca</td>
<td>369</td>
</tr>
<tr>
<td>Nickerson, Susan</td>
<td>122</td>
</tr>
<tr>
<td>Niemi, Rhonda</td>
<td>120</td>
</tr>
<tr>
<td>Noblitt, Bethany</td>
<td>337</td>
</tr>
<tr>
<td>Nolan, Edward</td>
<td>676</td>
</tr>
<tr>
<td>Nord, Gail</td>
<td>441</td>
</tr>
<tr>
<td>Normington, Sara</td>
<td>184</td>
</tr>
<tr>
<td>Norrander, Julie</td>
<td>636</td>
</tr>
<tr>
<td>Norris, Carollee</td>
<td>44</td>
</tr>
<tr>
<td>Novakowski, Janice</td>
<td>140</td>
</tr>
<tr>
<td>Nurnberger-Haag, Julie</td>
<td>58</td>
</tr>
<tr>
<td>Nyanekye, Farhaana</td>
<td>684</td>
</tr>
<tr>
<td>O’Callaghan, Robin</td>
<td>548</td>
</tr>
<tr>
<td>O’Connell, Susan</td>
<td>145</td>
</tr>
<tr>
<td>O’Donnell, Michelle</td>
<td>194</td>
</tr>
<tr>
<td>Okazaki, Claire</td>
<td>280, 703</td>
</tr>
<tr>
<td>Oliver, Scott</td>
<td>157</td>
</tr>
<tr>
<td>Ollison, Melody</td>
<td>637</td>
</tr>
<tr>
<td>Olsen, James</td>
<td>637</td>
</tr>
<tr>
<td>Olson, Judith</td>
<td>707</td>
</tr>
<tr>
<td>Olson, Melfried</td>
<td>707</td>
</tr>
<tr>
<td>O’Meara, Jodi</td>
<td>149</td>
</tr>
<tr>
<td>Orrhuela, Yuria</td>
<td>330</td>
</tr>
<tr>
<td>Orletsky, Lyn</td>
<td>375</td>
</tr>
<tr>
<td>Osthus, Larry</td>
<td>727</td>
</tr>
<tr>
<td>Oguz-Koca, S. Asli</td>
<td>677</td>
</tr>
<tr>
<td>Packham, Joanna</td>
<td>264</td>
</tr>
<tr>
<td>Palomar, Marian</td>
<td>116, 593</td>
</tr>
<tr>
<td>Pantozzi, Ralph</td>
<td>698</td>
</tr>
<tr>
<td>Papakonstantinou, Anne</td>
<td>97</td>
</tr>
<tr>
<td>Papick, Ira</td>
<td>9</td>
</tr>
<tr>
<td>Parker, Rebecca</td>
<td>714</td>
</tr>
<tr>
<td>Parr, Richard</td>
<td>97</td>
</tr>
<tr>
<td>Parrott, Martha</td>
<td>731</td>
</tr>
<tr>
<td>Pateman, Neil</td>
<td>457</td>
</tr>
<tr>
<td>Patterson, Lynn</td>
<td>243</td>
</tr>
<tr>
<td>Peacock, Stephanie</td>
<td>249</td>
</tr>
<tr>
<td>Pearson</td>
<td>42, 107, 172, 211, 277, 342, 382, 449</td>
</tr>
<tr>
<td>Peck, Roxy</td>
<td>435</td>
</tr>
<tr>
<td>Pelton, Tim</td>
<td>82</td>
</tr>
<tr>
<td>Pence, Barbara</td>
<td>236, 669</td>
</tr>
<tr>
<td>Pendleton, Kemn</td>
<td>682</td>
</tr>
<tr>
<td>Pepin, Glenda</td>
<td>136</td>
</tr>
<tr>
<td>Perry, Christie</td>
<td>466, 609</td>
</tr>
<tr>
<td>Perry, Jill</td>
<td>664</td>
</tr>
<tr>
<td>Peterson, Ingrid</td>
<td>160</td>
</tr>
<tr>
<td>Peterson, Winnie</td>
<td>744</td>
</tr>
<tr>
<td>Petty, Wendy</td>
<td>694</td>
</tr>
<tr>
<td>Pfanz, Ginalouise</td>
<td>314</td>
</tr>
<tr>
<td>Plaisance, DesLey</td>
<td>171</td>
</tr>
<tr>
<td>Planas, Hermilio</td>
<td>532</td>
</tr>
<tr>
<td>Polen, Mary</td>
<td>282</td>
</tr>
<tr>
<td>Poole, George</td>
<td>221</td>
</tr>
<tr>
<td>Post, Tom</td>
<td>167</td>
</tr>
<tr>
<td>Potter, Ann</td>
<td>357</td>
</tr>
<tr>
<td>Power, Sharon</td>
<td>450</td>
</tr>
<tr>
<td>Powers, Sandra</td>
<td>739</td>
</tr>
<tr>
<td>Preston, Ron</td>
<td>335</td>
</tr>
<tr>
<td>Price, Geoff</td>
<td>468</td>
</tr>
<tr>
<td>Price, Jack</td>
<td>374</td>
</tr>
<tr>
<td>Professional Development Services Committee, NCTM</td>
<td>307, 711</td>
</tr>
<tr>
<td>Pronk, Branch</td>
<td>714</td>
</tr>
<tr>
<td>Provost, Robert</td>
<td>697</td>
</tr>
<tr>
<td>Pruske, Lee Ann</td>
<td>467</td>
</tr>
<tr>
<td>Przydzial, Celine</td>
<td>729</td>
</tr>
<tr>
<td>Puls, Jan</td>
<td>630</td>
</tr>
<tr>
<td>Pusey, Eleanor</td>
<td>667</td>
</tr>
<tr>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>Quander, Judith</td>
<td>100</td>
</tr>
<tr>
<td>Quinlan, Audrey</td>
<td>251</td>
</tr>
<tr>
<td>Quinn, Robert</td>
<td>187</td>
</tr>
<tr>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Radcliffe, Rich</td>
<td>326</td>
</tr>
<tr>
<td>Ragucci, Stephanie</td>
<td>438</td>
</tr>
<tr>
<td>Rahn, James</td>
<td>262</td>
</tr>
<tr>
<td>Ramirez, Marco</td>
<td>715</td>
</tr>
<tr>
<td>Ramirez, Nora</td>
<td>451</td>
</tr>
<tr>
<td>Ramos, Juaniita</td>
<td>378</td>
</tr>
<tr>
<td>Randall, Yvonne</td>
<td>40</td>
</tr>
<tr>
<td>Reardon, Tom</td>
<td>371</td>
</tr>
<tr>
<td>Reiners, Mike</td>
<td>504</td>
</tr>
<tr>
<td>Remiasz, John</td>
<td>436</td>
</tr>
<tr>
<td>Resek, Diane</td>
<td>192</td>
</tr>
<tr>
<td>Revuluri, Sendhil</td>
<td>94</td>
</tr>
<tr>
<td>Reynolds, Anne</td>
<td>525</td>
</tr>
<tr>
<td>Reys, Barbara</td>
<td>104</td>
</tr>
<tr>
<td>Reys, Robert</td>
<td>155</td>
</tr>
<tr>
<td>Reys, Rustin</td>
<td>155</td>
</tr>
<tr>
<td>Rhodes, Robyn</td>
<td>215</td>
</tr>
<tr>
<td>Riccardi, Melinda</td>
<td>501</td>
</tr>
<tr>
<td>Richards, Paige</td>
<td>467</td>
</tr>
<tr>
<td>Richardson, Kathy</td>
<td>415</td>
</tr>
<tr>
<td>Richardson, Sue Ellen</td>
<td>242</td>
</tr>
<tr>
<td>Rickert, Linde</td>
<td>360</td>
</tr>
<tr>
<td>Ricks, Thomas</td>
<td>725</td>
</tr>
<tr>
<td>Rico, Felipe</td>
<td>573</td>
</tr>
<tr>
<td>Ridgway, Paul</td>
<td>460, 601</td>
</tr>
<tr>
<td>Rimbev, Kimberly</td>
<td>485</td>
</tr>
<tr>
<td>Ritsema, Beth</td>
<td>471</td>
</tr>
<tr>
<td>Rosso, Nickie</td>
<td>603</td>
</tr>
<tr>
<td>Roberts, Johnette</td>
<td>110</td>
</tr>
<tr>
<td>Roberts, Robin</td>
<td>497</td>
</tr>
<tr>
<td>Robertson, Belinda</td>
<td>11</td>
</tr>
<tr>
<td>Robison, Sally</td>
<td>668</td>
</tr>
<tr>
<td>Roddick, Cheryl</td>
<td>84</td>
</tr>
<tr>
<td>Roddy, Mark</td>
<td>429</td>
</tr>
<tr>
<td>Rodriguez, Carlos</td>
<td>746</td>
</tr>
<tr>
<td>Rogers, Lisa</td>
<td>556</td>
</tr>
<tr>
<td>Rogge, William</td>
<td>102</td>
</tr>
<tr>
<td>Rojas, Eliana</td>
<td>411</td>
</tr>
<tr>
<td>Romich, Heather</td>
<td>391</td>
</tr>
<tr>
<td>Rosen, Linda</td>
<td>687</td>
</tr>
<tr>
<td>Rosenbaum, Joseph</td>
<td>5</td>
</tr>
<tr>
<td>Ross, Bonnie</td>
<td>747</td>
</tr>
<tr>
<td>Ross, Dan</td>
<td>376</td>
</tr>
<tr>
<td>Ross, Kathleen</td>
<td>695</td>
</tr>
<tr>
<td>Roth McDuffie, Amy</td>
<td>446</td>
</tr>
</tbody>
</table>

*April 21–24, 2010 • San Diego, California*
<table>
<thead>
<tr>
<th>Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roy, George</td>
<td>197</td>
</tr>
<tr>
<td>Rubenstein, Rheta</td>
<td>234</td>
</tr>
<tr>
<td>Rubillo, Jim</td>
<td>503</td>
</tr>
<tr>
<td>Rubinstein, Gary</td>
<td>701</td>
</tr>
<tr>
<td>Ruda, Christine</td>
<td>48</td>
</tr>
<tr>
<td>Rushall, Amy</td>
<td>143</td>
</tr>
<tr>
<td>Rushing, Melissa</td>
<td>613</td>
</tr>
<tr>
<td>Russell, Alan</td>
<td>169, 683</td>
</tr>
<tr>
<td>Rye, Jim</td>
<td>147</td>
</tr>
<tr>
<td>Slovin, Hannah</td>
<td>72, 588</td>
</tr>
<tr>
<td>Smith, Amy</td>
<td>181</td>
</tr>
<tr>
<td>Smith, Antony</td>
<td>505</td>
</tr>
<tr>
<td>Smith, Jack</td>
<td>690</td>
</tr>
<tr>
<td>Smith, Jamie</td>
<td>637</td>
</tr>
<tr>
<td>Smith, Janet</td>
<td>669</td>
</tr>
<tr>
<td>Smith, Minerva</td>
<td>452</td>
</tr>
<tr>
<td>Smith, Patty</td>
<td>20</td>
</tr>
<tr>
<td>Snipes, Vincent</td>
<td>100</td>
</tr>
<tr>
<td>Sonenschein, Charles</td>
<td>492</td>
</tr>
<tr>
<td>Spowder, Judith</td>
<td>122</td>
</tr>
<tr>
<td>Speer, William</td>
<td>193</td>
</tr>
<tr>
<td>Spence, Dianna</td>
<td>230, 379</td>
</tr>
<tr>
<td>Spinos, Jennifer</td>
<td>486</td>
</tr>
<tr>
<td>Spitzen, Julie</td>
<td>84</td>
</tr>
<tr>
<td>Springer, G</td>
<td>38, 606</td>
</tr>
<tr>
<td>Star, Jon</td>
<td>665</td>
</tr>
<tr>
<td>Starnes, Daren</td>
<td>130</td>
</tr>
<tr>
<td>Steadman, Charlene</td>
<td>383, 561</td>
</tr>
<tr>
<td>Steele, Genna</td>
<td>89</td>
</tr>
<tr>
<td>Steinhorsloff, Olof</td>
<td>738</td>
</tr>
<tr>
<td>Sten, Bidi</td>
<td>85</td>
</tr>
<tr>
<td>Stephan, Michelle</td>
<td>675</td>
</tr>
<tr>
<td>Stephens, Betty</td>
<td>17</td>
</tr>
<tr>
<td>Sterenberg, Gladys</td>
<td>354</td>
</tr>
<tr>
<td>Stewart, Adrian</td>
<td>181</td>
</tr>
<tr>
<td>Stewart, Mike</td>
<td>442</td>
</tr>
<tr>
<td>Stipek, Ann</td>
<td>766</td>
</tr>
<tr>
<td>Stokes, Ginney</td>
<td>389</td>
</tr>
<tr>
<td>Strother, Sam</td>
<td>139, 360</td>
</tr>
<tr>
<td>Struchens, Marilyn</td>
<td>225</td>
</tr>
<tr>
<td>Stupiansky, Nick</td>
<td>292</td>
</tr>
<tr>
<td>Success for All Foundation</td>
<td>514</td>
</tr>
<tr>
<td>Sueterlein, Theresa</td>
<td>285</td>
</tr>
<tr>
<td>Sundberg, Sue</td>
<td>403</td>
</tr>
<tr>
<td>Sutterfield, Beverly</td>
<td>215</td>
</tr>
<tr>
<td>Sutton, Kimberly</td>
<td>255</td>
</tr>
<tr>
<td>Sweeney, Mary</td>
<td>315</td>
</tr>
<tr>
<td>Sword, Sarah</td>
<td>31</td>
</tr>
<tr>
<td>Sydla, Susan</td>
<td>714</td>
</tr>
<tr>
<td>Syplt, Cindy</td>
<td>714</td>
</tr>
<tr>
<td>Takahashi, Akiko</td>
<td>21</td>
</tr>
<tr>
<td>Tang, Greg</td>
<td>76</td>
</tr>
<tr>
<td>Tapia, Martha</td>
<td>165</td>
</tr>
<tr>
<td>Tarlow, Lynn</td>
<td>24</td>
</tr>
<tr>
<td>Tate, Marcia</td>
<td>410</td>
</tr>
<tr>
<td>Tawfeq, Dante</td>
<td>752</td>
</tr>
<tr>
<td>Taylor, Janice</td>
<td>75</td>
</tr>
<tr>
<td>Taylor-Cox, Jennifer</td>
<td>557</td>
</tr>
<tr>
<td>Terman, Nancy</td>
<td>737</td>
</tr>
<tr>
<td>Terrell, Karen</td>
<td>578</td>
</tr>
<tr>
<td>Thill, William</td>
<td>710</td>
</tr>
<tr>
<td>Thomas, Kimberley</td>
<td>579</td>
</tr>
<tr>
<td>Thomas, Lina</td>
<td>71</td>
</tr>
<tr>
<td>Thompson, Angela</td>
<td>605</td>
</tr>
<tr>
<td>Thompson, Denisie</td>
<td>234, 304</td>
</tr>
<tr>
<td>Thompson, Kristy</td>
<td>574</td>
</tr>
<tr>
<td>Thompson, Tanya</td>
<td>115</td>
</tr>
<tr>
<td>Thomson, John</td>
<td>361</td>
</tr>
<tr>
<td>Thunder, Kateri</td>
<td>360, 491</td>
</tr>
<tr>
<td>Tohey, Cheryl</td>
<td>90</td>
</tr>
<tr>
<td>Tobias, Jennifer</td>
<td>148, 741</td>
</tr>
<tr>
<td>Tod, Philip</td>
<td>201</td>
</tr>
<tr>
<td>Tondevold, Christina</td>
<td>454</td>
</tr>
<tr>
<td>Torpey, Stephanie</td>
<td>460, 601</td>
</tr>
<tr>
<td>Tran, Rose</td>
<td>249</td>
</tr>
<tr>
<td>Treas, Jerelyn</td>
<td>181</td>
</tr>
<tr>
<td>Treisman, Uri</td>
<td>650</td>
</tr>
<tr>
<td>Tsankova, Jenny</td>
<td>29, 464</td>
</tr>
<tr>
<td>Tsinnajinnie, Belin</td>
<td>695</td>
</tr>
<tr>
<td>Tuft, Elaine</td>
<td>146</td>
</tr>
<tr>
<td>Turton, Allian</td>
<td>568</td>
</tr>
<tr>
<td>Tyminski, Andrew</td>
<td>242</td>
</tr>
<tr>
<td>Uccello, Liz</td>
<td>248</td>
</tr>
<tr>
<td>Umbeek, Lindsay</td>
<td>575</td>
</tr>
<tr>
<td>Usher-Staats, Lisa</td>
<td>364</td>
</tr>
<tr>
<td>Usiskin, Zalman</td>
<td>433</td>
</tr>
<tr>
<td>Usnick, Virginia</td>
<td>486</td>
</tr>
<tr>
<td>Valdez, Patricia</td>
<td>726</td>
</tr>
<tr>
<td>Van Garderen, Delinda</td>
<td>363</td>
</tr>
<tr>
<td>Van Overbeke, Debbie</td>
<td>529</td>
</tr>
<tr>
<td>Vandling, Louise</td>
<td>659</td>
</tr>
<tr>
<td>Vas, Joan</td>
<td>584</td>
</tr>
<tr>
<td>Vazquez, Pedro</td>
<td>532</td>
</tr>
<tr>
<td>Velazquez, Griselda</td>
<td>428</td>
</tr>
<tr>
<td>Venenciano, Linda</td>
<td>72, 588</td>
</tr>
<tr>
<td>Vennemus, Patrick</td>
<td>706</td>
</tr>
<tr>
<td>Venters, Diana</td>
<td>289</td>
</tr>
<tr>
<td>Verley, Jim</td>
<td>200</td>
</tr>
<tr>
<td>Verners, Stephanie</td>
<td>479</td>
</tr>
<tr>
<td>Vierra, Vicki</td>
<td>125</td>
</tr>
<tr>
<td>Vinogradova, Natalya</td>
<td>220</td>
</tr>
<tr>
<td>Waite-Stupiansky, Sandra</td>
<td>292</td>
</tr>
<tr>
<td>Walker, Rebecca</td>
<td>206</td>
</tr>
<tr>
<td>Walkowiak, Temple</td>
<td>491</td>
</tr>
<tr>
<td>Wall, Jennifer</td>
<td>329, 474</td>
</tr>
<tr>
<td>Wallenberg, Eyal</td>
<td>327</td>
</tr>
<tr>
<td>Wang, Frank</td>
<td>651</td>
</tr>
<tr>
<td>Wang-Iverson, Patsy</td>
<td>116, 593</td>
</tr>
<tr>
<td>Wapner, Leonard</td>
<td>440</td>
</tr>
<tr>
<td>Ward, Robin</td>
<td>241</td>
</tr>
<tr>
<td>Warren, Elizabeth</td>
<td>636</td>
</tr>
<tr>
<td>Warrick, Pam.</td>
<td>696</td>
</tr>
<tr>
<td>Washam, Robin</td>
<td>470</td>
</tr>
<tr>
<td>Washing, Harry</td>
<td>511</td>
</tr>
<tr>
<td>Wasserstein, Ron.</td>
<td>439</td>
</tr>
<tr>
<td>Watanabe, Tad</td>
<td>83</td>
</tr>
<tr>
<td>Waterman, Kevin</td>
<td>438</td>
</tr>
<tr>
<td>Watson, Colleen</td>
<td>55</td>
</tr>
<tr>
<td>Weaver, Donna</td>
<td>177</td>
</tr>
<tr>
<td>Webb, Alanna</td>
<td>569</td>
</tr>
<tr>
<td>Webb, David</td>
<td>408</td>
</tr>
<tr>
<td>Weeks, Audrey</td>
<td>545</td>
</tr>
<tr>
<td>Weidemann, Wanda</td>
<td>609</td>
</tr>
<tr>
<td>Weimar, Stephen</td>
<td>404</td>
</tr>
<tr>
<td>Weiss, Michael</td>
<td>202</td>
</tr>
<tr>
<td>Weiss, Susan</td>
<td>455</td>
</tr>
<tr>
<td>Wells, Pamela</td>
<td>310</td>
</tr>
<tr>
<td>Wells, Tres.</td>
<td>562</td>
</tr>
<tr>
<td>Werner, Judy</td>
<td>476</td>
</tr>
<tr>
<td>Westenskow, Arla</td>
<td>719</td>
</tr>
<tr>
<td>Weynand, Lu Ann</td>
<td>658</td>
</tr>
<tr>
<td>White, Sandra</td>
<td>78</td>
</tr>
<tr>
<td>Whitmire, Jane</td>
<td>229</td>
</tr>
<tr>
<td>Wiest, Lynda</td>
<td>585</td>
</tr>
<tr>
<td>Wilburne, Jane</td>
<td>245</td>
</tr>
<tr>
<td>Wilder, Ronda</td>
<td>79</td>
</tr>
<tr>
<td>Wilhoit, Gene</td>
<td>174</td>
</tr>
<tr>
<td>Wilkerson, Trena</td>
<td>244, 468</td>
</tr>
<tr>
<td>Wilkins, Glenda</td>
<td>506</td>
</tr>
<tr>
<td>Willard, Teri</td>
<td>65, 709</td>
</tr>
<tr>
<td>Williams, Desha</td>
<td>671</td>
</tr>
</tbody>
</table>
Williams, Ingrid ............................................. 647
Williams, Nicole ........................................... 646
Williams, Paul ............................................. 508
Williams, Steven ......................................... 748
Wills, Lynn .................................................. 332
Wilson, Aaron ............................................... 537
Wilson, Amy Alexandra ................................. 537
Wilson, David ............................................... 543
Wilson, Jan .................................................. 282
Wimberly, Vanessa ....................................... 463
Winarski, Elizabeth ....................................... 242
Wingard, Clifton .......................................... 699
Winston, Matthew ........................................ 399
Winter, Janet ............................................... 273
Winters, Jeremy ........................................... 51
Witkowski, Chepina ..................................... 79
Wohlhuter, Kay ............................................ 446
Wolfe, Joy .................................................. 184
Wolling, Kate ............................................... 613
Wood, Marcy ............................................... 389
Wood, Sally ................................................ 636
Wormell, Lynda ........................................... 437
Wray, Jon ................................................... 191
Wu, Hung-Hsi .............................................. 91
Wyberg, Terry ............................................. 633
Wysocki, James ........................................... 158

Y
Yamagata, Candace ........................................ 40
Yang, Kichoon ............................................. 175, 582
Yeap, Ban-Har ............................................. 593, 629
Yopp, David ............................................... 325
Yoshida, Makoto ......................................... 356, 481
You, Zhixia ................................................ 187
Young, Paul ............................................... 678
Young, Sharon .......................................... 458
Youngblood, Heather .................................. 483, 520
Yursa, Hope ............................................... 275

Z
Zahner, William .......................................... 428
Zbiek, Rose ............................................... 274
Zenigami, Fay ............................................ 280, 703
Ziebarth, Steven ......................................... 599
Zilliox, Joseph ............................................. 457, 566
Zimmermann, Gwen .................................. 400, 612
Zocchi, Mary ............................................. 357
Zollman, Alan ............................................. 176
Zurkovsky, Julia ......................................... 500, 735
Advertisers Guide

**Coupon Advertisers** (in order—back of program)
Stokes Publishing Company
Geoleg Geometry
American Educational Products, LLC
LL Teach Inc.
FoxMind Games
MIND Research Institute
Encyclopaedia Britannica, Inc.
You Can Do The Rubik’s Cube
Math Teacher's Press--Moving with Math.com
NCTM Educational Materials

**Advertisers** (in alphabetical order)
America’s Choice .................................................. Tab Page-General Info
Bach Company ....................................................... 23
Bedford, Freeman & Worth Publishing ......................... 57
Big Ideas Math ....................................................... 64
Borenson & Associates .............................................. 34, 103
Cambium Learning .................................................. 26
Carnegie Learning, Inc. ............................................. 83
Casio, Inc. ............................................................. Inside Front Cover
Curriculum Associates ............................................... 143
EAI Education ......................................................... 88, Coupon
Educators Outlet, Inc. .............................................. 51
ETA Cuisenaire ...................................................... 113
Exemplars ............................................................. 42
First In Math/Suntex International. .............................. 41
Heinemann .......................................................... TAB Pages-Thurs/Fri/Sat
Houghton Mifflin Harcourt ....................................... Outside Back Cover
International Schools Services .................................. 55
Kaplan ................................................................. TAB Page-General Info
Kendall/Hunt Publishing Company .............................. 10
Key Curriculum Press ............................................... TAB Page-Wednesday
Lakeshore ............................................................ 33
Learning Upgrade .................................................... 49
LL Teach Inc. ........................................................ 30, Coupon
Math for America ................................................... 130
Math Solutions ....................................................... 146
McGraw-Hill School Education Group .......................... Inside Back Cover
MIND Research Institute .......................................... 70, Coupon
Mu Alpha Theta ..................................................... 45
Nasco Math .......................................................... 60
Origo Education ...................................................... 12
Pearson ................................................................. 18
Queue ................................................................. 87
Raytheon - MathMovesU ........................................... 5
Sadlier ................................................................. 107
Scholastic ............................................................ 91, 96
Staff Development for Educators/SDE.com .................... 73
SingaporeMath.com Inc. ........................................... 118
Stenhouse Publishers ............................................... 36
Texas Instruments .................................................. 3
University of Northern Iowa-Overseas Placement ............. 129
Voyager Learning .................................................... 26
Wang Education .................................................... 141
You Can Do The Rubik’s Cube ................................... 7, Coupon

**National Council of Teachers of Mathematics**
NCTM Educational Materials ................................... TAB Pages-Thurs, Friday, Coupon
NCTM Member Benefits ............................................ 8, 195
NCTM Conferences .................................................. 167, TAB Page-Saturday
Online Professional Development ................................ Back of Program with Coupons
Don’t miss the NEW TeachTimer II
Stop by booth 1334-1336
Daily Drawing for a TeachTimer II
20% discount on TeachTimer II orders placed at NCTM

STOKES PUBLISHING COMPANY
www.stokespublishing.com

FREE* GeoLeg™
Replace your old protractor and compass with GeoLeg.
Dynamic Tool: Measure - Draw - Construct
Easy-to-use • Safe • Sturdy • Made in USA

*Sign up for our free GeoLeg Geometry and Measurement e-newsletter filled with teaching tips and ideas and receive one FREE GeoLeg.
Limit one free GeoLeg to the first 1,000 recipients with coupon.
Booth 636 – GeoLeg Geometry/Measurement

GOOD FOR ONE PYRAMATH™ CARD GAME
REDEEM COUPON AT BOOTH #1245
(LIMIT ONE COUPON PER PERSON)

American Educational Products LLC
TEACHING TOOLS FOR TEACHERS IN THE WORLD
Don’t miss the NEW TeachTimer II

Complete the following information to participate in our DAILY TeachTimer II drawing:

Name: __________________________________________________________________________

School: _________________________________________________________________________

Street: __________________________________________________________________________

City: ______________________________ State: ___________ Zip: _____________

Telephone: ( ____ ) ___________________ Email: ______________________________________

STOKES PUBLISHING COMPANY • Booth No. 1334-1336
Not Just A Powerful Response Tool...

Use the Communicator® to enhance conceptual understanding!

Visit www.LLTeach.com for FREE lesson ideas.

FREE Communicator® Clearboard SEE BACK

Keep for future reference!

1-866-FOX-MIND (369-6463) • www.FoxMind.com

MIND Research Institute
A neuroscience and education research-based non-profit corporation

VISIT US AT
BOOTH #445

& ENTER INTO OUR DAILY RAFFLE TO WIN
A KINDLE OR FLIP VIDEO

PLEASE FILL OUT YOUR INFO ON THE BACK & BRING TO OUR BOOTH. WINNER MUST BE PRESENT TO WIN.
Fill Out This Coupon and Hand In At Booth #323 For:
1) FREE Communicator® Clearboard sample
2) Automatic entry to win a Communicator® Classroom set*

Keep for future reference!

This Fox invites you for some fun
SMART fun that is . . .

1) Stop by our den - booth 1822
2) Solve a puzzle
3) Have some fun...and...

run the chance of winning a
FoxMind gift certificate!

200$
An in-depth program reaching students of all levels.

2010 Mathematics in Context
An in-depth program reaching students of all levels.

Funded in part by the National Science Foundation

Unlock The Secret to the World Famous Rubik’s Cube
FREE Rubik’s Cube Solution Guide and Solution DVD when you return this coupon to booth #302
- Valued at over $10.

Learn More about the Rubik’s Cube Math Education Kit at Booth #1847

smartmath.eb.com
Please print clearly.

Name  ____________________________
Title  ____________________________
School  __________________________
Address  _________________________
City, State, Zip Code  _________________________
Phone  ____________________________
E-mail  _____________________________

When is the best time to call:  ____________

---

Learn More about the Rubik’s Cube Math Education Kit at
Booth #1847

Name: ____________________________
School Name: _______________________
City: _____________________________
State: ____________________________
Email Address: _______________________

Learn more at  www.YouCanDoTheCube.com
Win a $250 Gift Card!

Stop by our booth and sign up for a chance to win ONE of FOUR $250 Moving with Math® Gift Cards!

Math Teachers Press, Inc.  Booths 1723, 1725, 1727, 1729

www.movingwithmath.com

FREE Poster!

Stop by our booth and receive a FREE Dropout Prevention Poster!

(While Supplies Last)

Math Teachers Press, Inc.  Booths 1723, 1725, 1727, 1729

www.movingwithmath.com

FREE Student Book!

Receive a FREE Moving with Math® Student Book for your grade level when you attend the Math Teachers Press, Inc. Exhibitor Workshop!

Friday, April 23rd 8:30am
Marriott Torrey Room

Math Teachers Press, Inc.  Booths 1723, 1725, 1727, 1729

www.movingwithmath.com
FREE Student Book!
When you attend the Math Teacher’s Press, Inc. Exhibitor Workshop

Name_______________________________________________________________
Title________________________________________________________________
School District________________________________________________________
Address_____________________________________________________________
City__________________________________ State________ Zip_______________
Email_______________________________________________________________
Phone________________________ Grade Level of Interest___________________

Visit www.movingwithmath.com for all of your Math Intervention needs!

FREE Poster!

MORE EDUCATION BRINGS MORE MONEY

Earning power increases greatly with a training certificate or education degree beyond high school.

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Median Hourly Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Degree</td>
<td>$27</td>
</tr>
<tr>
<td>Four-Year Degree</td>
<td>$22</td>
</tr>
<tr>
<td>Two-Year Degree</td>
<td>$18</td>
</tr>
<tr>
<td>Vocational Degree</td>
<td>$15</td>
</tr>
<tr>
<td>HS/GED</td>
<td>$10</td>
</tr>
<tr>
<td>No HS</td>
<td>$8</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Employment and Economic Development

Visit www.movingwithmath.com for all of your Math Intervention needs!

Win a $250 Gift Card!

- Response to Intervention
- Correlated to State Standards
- Scientifically Based Research and Results
- Hands-On Learning with Manipulatives
- Problem Solving in Every Lesson
- Web-Based Assessment Technology

Math Teachers Press, Inc.  Booths 1723, 1725, 1727, 1729

Visit www.movingwithmath.com for all of your Math Intervention needs!
A lesson in using Wolfram|Alpha and Mathematica to create a dynamic classroom environment.

Your choice of one of three cool prizes!*

A discount on Mathematica to make your own interactive classroom demonstrations, lessons, and instructional handouts.

Save $5.00 on your NCTM Bookstore Purchase!

Visit NCTM's Bookstore and save $5.00 off your purchase of $100.00 or more.

With nearly 200 publications written by mathematics educators for mathematics educators, NCTM's wealth of books, electronic content, and specialty products is unmatched.

Store Hours:

Wednesday 10:00 a.m. — 7:00 p.m.
Thursday 7:00 a.m. — 5:30 p.m.
Friday 7:30 a.m. — 5:30 p.m.
Saturday 8:30 a.m. — 12:00 p.m.


Bring math concepts to life and get three free gifts

Stop by booth #1922 to get your Free SmartPAL® Sleeve and enter to win a SmartPAL® classroom kit!
Fill out this form and bring it to the Wolfram Research booth #1824/1826 to receive three free gifts! Don’t delay!

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
</tr>
<tr>
<td>Organization:</td>
</tr>
<tr>
<td>State and Country:</td>
</tr>
<tr>
<td>Email Address:</td>
</tr>
<tr>
<td>Phone Number:</td>
</tr>
<tr>
<td>Spring 2010 Classes:</td>
</tr>
</tbody>
</table>

$5.00 OFF
Any One AIMS Book!

Use this coupon at AIMS booth 1040 and receive an additional $5.00 Off our already-reduced conference prices!

One per customer. Only for books purchased at NCTM 2010.

Helps 4 Teachers
Convention Special:
20% off retail price of all books

We specialize in unique teacher resource books and manipulatives (Light-up dice, specialty dice, spinners, rubber stamps, etc.)

*with this coupon save an additional $3.00 off orders of $30.00 or more
$5.00 off orders of $50.00 or more
We also offer a free daily drawing!

(only one coupon per customer)
Booth # 2128

10 FREE English/Spanish Online Math Assessments for your ELL students

Complete the information on the back of this card and return it to our booth #943

423 South Pacific Coast Highway, Suite 208
Redondo Beach, CA 90277 USA
Phone: (310) 792-3635 l Fax: (310) 356-3578
www.Tadell.com l E-mail: info@tadell.com
$5.00 off Hands-on Math and Science
Complete the following information to receive your $5.00 off:

Name: ________________________________
Address 1: ________________________________________
Address 2: ________________________________________
City: __________________ State: ______ Zip: ____________
Telephone: (___) ___________________ E-mail: ______________________

Booth No. 1040  AIMS Education Foundation
www.aimsedu.org
1.888.733.2467

Complete the following information and we will email you the instructions and access codes for 10 FREE English/Spanish TADELL Online Math Assessments.

Name: ____________________________________________ Position: ________________________
School: ____________________________________________
School Address: _____________________________________
City: __________________ State: ______ Zip: ____________
Telephone: (___) ___________________ Email: ______________________

ELL Languages in your school: _________________________

InterLingua Educational Publishing • Booth No. 943
Looking for a fun way to improve your students’ math and reasoning skills?

Come by Booth 1350 and the *American Contract Bridge League* will show you how!

And, don’t forget to complete the back of this coupon for a chance to win a Samsung Netbook.*


Visit us on the web at www.acbl.org
Complete the following information for a chance to win a Samsung Netbook.

Name:______________________________________________________
Address:____________________________________________________
City:__________________________  State:______ Zip:______________
Email:________________________________Phone: ________________

American Contract Bridge League  Booth 1350
NCTM Online Professional Development

Convenient, Affordable, and Immediately Useful!

Join mathematics educators from around the globe for NCTM’s interactive E-Workshops. You and your colleagues will gain a wealth of knowledge, learn the latest teaching strategies, and receive activities to use in the classroom—all without having to leave your school! These **two-part E-Workshops include 3 hours of Standards-based content** that you can apply immediately in your classroom—**all for one fee per site**. That’s right—just one low rate for a classroom full of teaching staff!

**Visit [www.nctm.org/eworkshops](http://www.nctm.org/eworkshops) to learn more about these and other upcoming topics:**

- Implementing the Algebra Standard
- Geometric Thinking
- Problem Solving
- Math Games
- Exploring Mathematics through Literature
- Reasoning with Data and Probability

Remember, you can **include as many people as you want for this one low fee!**

Nonmember Price: $179  
Member Price: $149

---

NCTM’s online E-Seminars provide a closer look at hot topics within mathematics education and provide professional development for teachers of all grades. These **one-time 60-minute seminars are presented by experienced mathematics educators** and include informative content, audience Q & A, and live polls. For one site fee, you can invite a classroom full of educators to participate with no travel required. Stay ahead of the learning curve with NCTM’s newest professional development tool!

**Visit [www.nctm.org/eseminars](http://www.nctm.org/eseminars) to learn about upcoming topics.**

**Include a classroom full of teaching staff** for this low rate!

Nonmember Price: $59  
Member Price: $49

---

Save $10 on E-Workshops by registering by June 30
McGraw-Hill School Education Group is now your one-stop solution for all PreK-12 math needs.

Everyday Mathematics® Grades K-6

Math Connects Grades K-8

Elementary Core Programs
- Macmillan/McGraw-Hill
- SRA
- Wright Group
800-442-9685

Secondary Core Programs
- Glencoe
800-334-7344

PreK-12 Intervention & Supplemental
- SRA
- Wright Group
800-648-2970

Visit us at Booths 1423 & 1623
The answer is 723*

We’re excited to present our newest math program – along with new editions of your current favorites.

Visit booth #723 to learn more about our math programs that provide real solutions to your math problems.