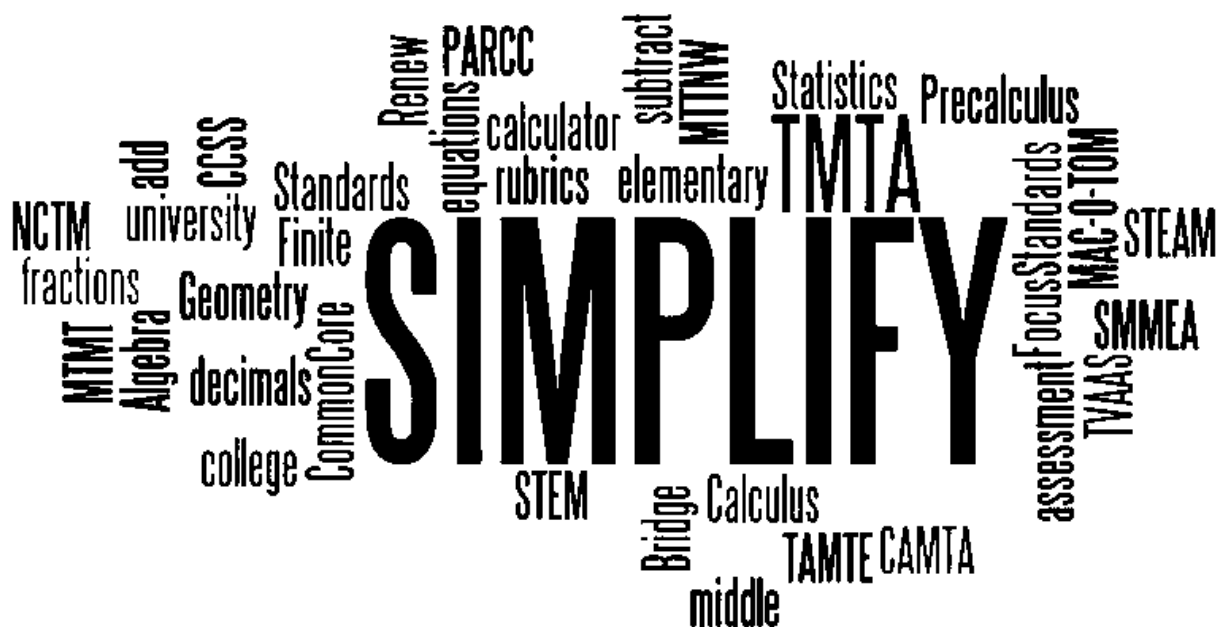




TENNESSEE MATHEMATICS TEACHERS ASSOCIATION

State Conference

September 26 & 27, 2014



HOSTED BY

Smoky Mountain Mathematics Educators' Association

Webb School of Knoxville, Knoxville, TN

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TMTA EXECUTIVE COMMITTEE

President: Desireé McCullough

University of Tennessee at Martin
327 Administration Building
Martin, TN 38238
Work: 731.881.7014
Fax: 731.881.7503
Email: dmccull1@utm.edu

Past President: Holly Anthony

Tennessee Tech University
Box 5042
Cookeville, TN 38505
Work: 931.372.3854
Email: hanthony@tntech.edu

**President-Elect: To Be Elected
in September 2014****Secretary: Steve Gadbois**

Memphis University School
6191 Park Avenue
Memphis, TN 38119
Cell: 901.278.4116
Fax: 901.260.1325
Email: steve.gadbois@musowls.org

Treasurer: Stephanie Kolitsch

University of Tennessee at Martin
424 Humanities
Martin, TN 38238
Work: 731.881.7477
Fax: 731.881.1407
Email: styler@utm.edu

**NCTM Representative and
Parliamentarian: Ann Indingaro**

Home: 4666 Marcel Avenue
Memphis, TN 38122
Home: 901.818.1218
Cell: 901.828.2176
Email: aindingaro@gmail.com

Vice-President for Elementary:**Julie Martin**

Email: julie.martin@wcs.edu

Vice-President for Middle Schools:**Lois Coles**

Brentwood Middle School
Home: 211 St. Andrews
Franklin, TN 37069
Home: 615.646.2861
Work: 615.472.4250
Cell: 615.974.2565
Email: loisc@wcs.edu

Vice-President for Secondary Schools:**Alice Carson**

Knox County Schools
1223 Hearthstone Lane
Knoxville, TN 37923
Cell: 865.216.9541
Email: alice.carson@knoxschools.org

Vice President for Two-Year Colleges:**Susan Mosteller**

Pellissippi State Community College
10915 Hardin Valley Road
Knoxville, TN 37933
Phone: 865.694.6660
Email: scmosteller@pstcc.edu

Vice-President for Colleges/University:**Carroll Wells**

Lipscomb University
Department of Mathematics
One University Park Drive
Nashville, TN 37204-3951
Work: 615.966.5835
Fax: 615.966.1830
Email: Carroll.Wells@lipscomb.edu

Examinations Director: Thomas Bass

Carson-Newman College
Department of Mathematics & Physics
Box 72037
Jefferson City, TN 37760
Work: 865.471.3263
Fax: 865.471.3826
Email: tbass@cn.edu

Contest Coordinator: Jackie Vogel

Austin Peay State University
AP Box 4626
Clarksville, TN 37044
Work: 931.221.7637
Fax: 931.221.6354
Email: vogelj@apsu.edu

Contest Awards Chair:

Desireé McCullough

University of Tennessee at Martin
327 Administration Building
Martin, TN 38238
Work: 731.881.7014
Fax: 731.881.7503
Email: dmccull1@utm.edu

TMTA Bulletin Editor: Andre Crafford

Shelby County Schools
2930 Airways Boulevard
Memphis, TN 38116
Work: 901.416.9523
Email: craffordaj@scsk12.org

Membership Coordinator: Pat Tyree

Brentwood Academy
Home: 6329 Mapledale Lane
Brentwood, TN 37027
Home: 615.373.8449
Cell: 615.210.3390
Email: pat_tyree@brentwoodacademy.com

Statistician: Barbara Ward

Belmont University
1900 Belmont Blvd.
Nashville, TN 37212
Work: 615.460.6200
Fax: 615.460.5458
Email: barbara.ward@belmont.edu
Home: 5884 Fredericksburg Drive
Nashville, TN 37215

Webmaster: Eddie Keel

Southwest CORE Center
100 Berryhill Drive
Jackson, TN 38301
Cell: 731.780.5934
Fax: 731.265.0418
E-mail: ekeel@battelleforkids.org
Home: 560 Indian Trail
Medina, TN 38355

TMTA AFFILIATES

CAMTA

Chattanooga Area Mathematics Teachers' Association

Deborah McAllister

University of Tennessee - Chattanooga

Deborah-McAllister@utc.edu

MAC-O-TOM

Memphis Area Council of Teachers of Mathematics

Celia Keiko Anderson and

Nancy J D'Surney@scsk12.org

croussea@memphis.edu

DSurneyNJ@scsk12.org

MT²-NW

Mathematics Teacher of Tennessee - Northwest

Joyce Swan

University of Tennessee - Martin

jswan@utm.edu

(MT)²

Middle Tennessee Mathematics Teachers

Cyndy Howes

Ravenwood High School

cyndyh@wcs.edu

SM²EA

Smoky Mountain Mathematics Educators' Association

Jennifer Axley

Blount County Schools

jennifer.axley@blountk12.org

TMATYC

Tennessee Mathematics Association for Two Year Colleges

Maggie Flint

Northeast State Technical Community College

mrflint@NortheastState.edu

UETCTM

Upper East Tennessee Council of Teachers of Mathematics

Tara Harrell

Hawkins County Schools

harrellt@rcschool.net

TAMTE

Tennessee Association of Mathematics Teacher Educators

JoAnn Cady

University of Tennessee - Knoxville

jcady@utk.edu

*Affiliates will meet during lunch on Saturday. See page 20 for room assignments.

WEBB SCHOOL OF KNOXVILLE CAMPUS

DIRECTIONS

Webb School of Knoxville is located at 9800 Webb School Drive, Knoxville, TN 37923. We are north of I-40/75, approximately 12 miles west of downtown Knoxville, TN.

• FROM EASTBOUND & WESTBOUND INTERSTATE 40:

Eastbound: From Interstate 40/75, take Exit 376A onto the Pellissippi Parkway headed toward Oak Ridge (also known as Interstate 1-40). Take the first exit onto Dutchtown Road. At end of exit ramp, go straight across through the traffic light onto Sherrill Boulevard. Travel about 0.6 miles and turn left onto Mabry Hood Road. The school entrance will be on your right.

OR

Westbound: From Interstate 40/75, take Exit 378 Cedar Bluff North. Turn right onto Cedar Bluff, past several fast food restaurants (McDonald's, Wendy's, Arby's). Travel through the first traffic light (Pilot gas station/Taco Bell will be on your left; North Cedar Bluff shopping center will be on your right), then turn left at the next traffic light onto Dutchtown Road. Webb School of Knoxville is about 1.5 miles on the left.

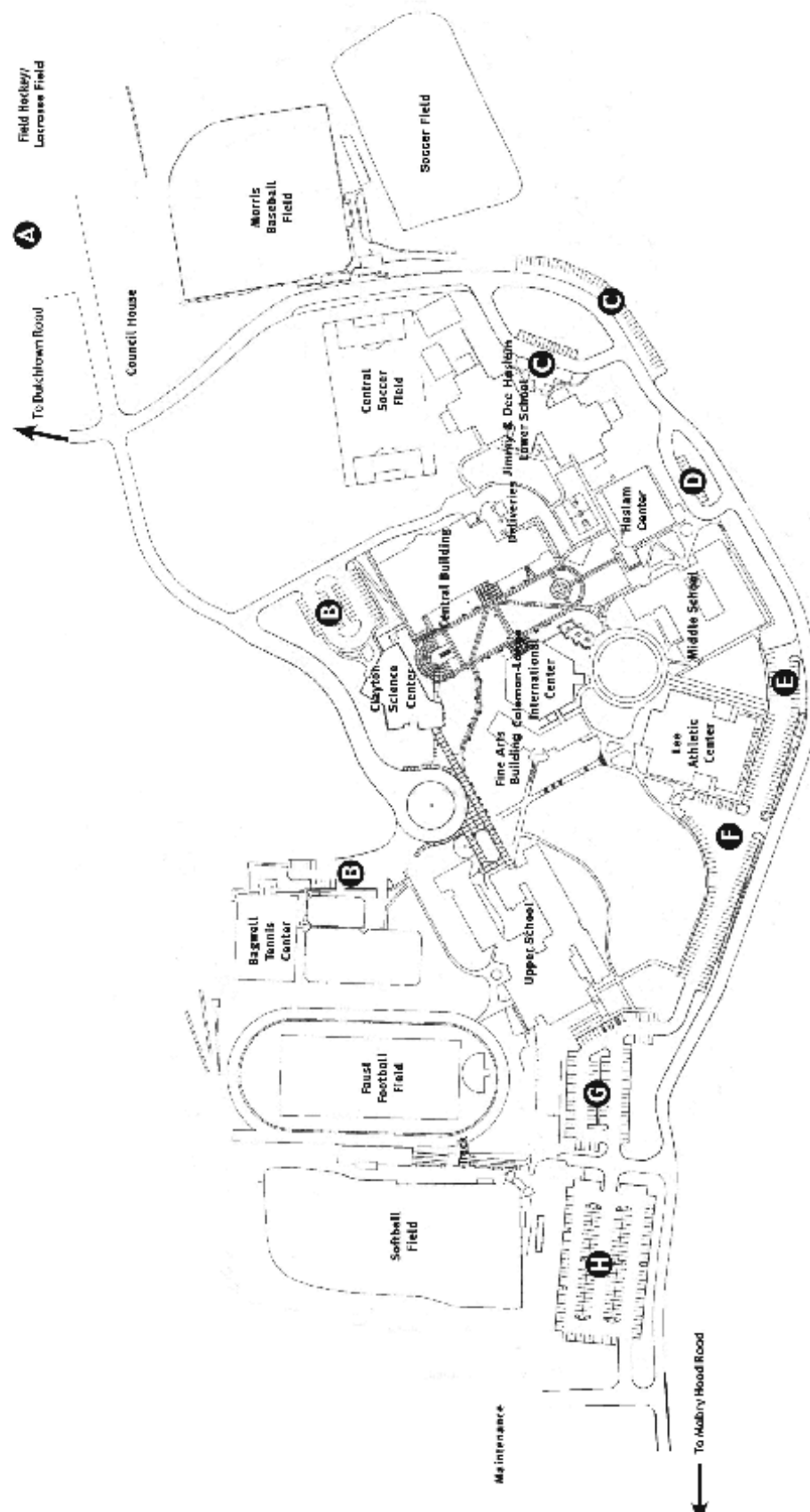
• FROM MARYVILLE, TN:

Take the Pellissippi Parkway, headed toward Oak Ridge. Cross over Interstate 40. Take the first exit onto Dutchtown Road. At end of exit ramp, go straight across through the traffic light onto Sherrill Boulevard. Travel about 0.6 miles and turn left onto Mabry Hood Road. The school entrance will be on your right.

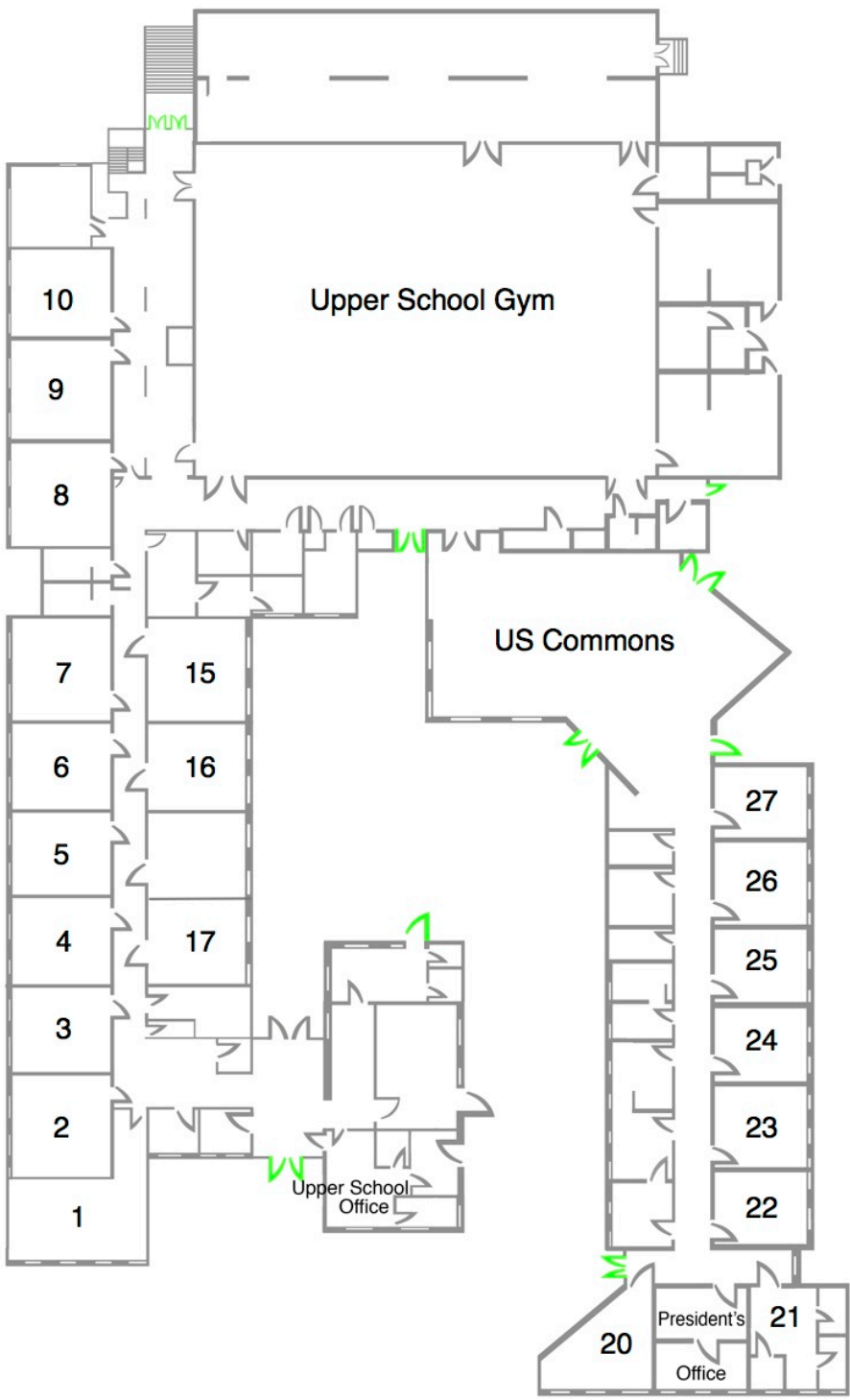
• FROM OAK RIDGE, TN:

Take Pellissippi Parkway, headed toward the McGhee Tyson Airport and Maryville. Take the Dutchtown Road exit (the exit before Interstate 40.) At the end of the exit ramp, turn left onto Dutchtown, crossing over the Pellissippi Parkway. Turn right at the next traffic light onto Sherrill Boulevard. Travel about 0.6 miles and turn left onto Mabry Hood Road. Entrance to Webb School is on your right.

WEBB SCHOOL OF KNOXVILLE CAMPUS



WEBB SCHOOL OF KNOXVILLE UPPER SCHOOL



TMTA VENDORS

Carnegie Learning, Inc

Casio America

CPM Educational Program

ETA hand2mind

Houghton Mifflin Harcourt

Math and Movement

NCTM Bookstore

Pearson Education

TenMarks Education

Texas Instruments*

Western Governors University Tennessee

*TI “Mini-Camp Training Sessions” - Exploring CCSS through Technology
(TI-84/ TI-Nspire/ iPad app) Come for training or just to explore and discover new tricks. Leave with Teacher Software!

-Morning Session (9:30 – 11:30): TI-84: “*Old Reliable* takes on a new mission with CCSS” Room US-9

-Afternoon Session (12:30 – 2:30): TI Nspire: “Model the Math and Master Formative Assessment” (includes hands-on iPad app!) Room US-9

AWARDS DINNER AND KEYNOTE SPEAKER

6:00-8:30 p.m.

LEE ATHLETIC CENTER

The Real Worlds

The Common Core Standards require teachers to incorporate more “real world” activities into their instruction, but what does “real” even mean? Mathalicious founder Karim Ani will discuss three different versions of reality, and how they interact to create an authentic – and real! — math experience for students.



Karim is the founder of Mathalicious, which is rewriting middle and high school math around real-world topics. Mathalicious provides classroom teachers with lessons and projects that help them teach the Common Core Standards while challenging their students to think more critically about the world.

Previously, Karim taught eighth grade math in Virginia and New York City, and was later a middle school math coach. He has degrees from Stanford University and University of Virginia, and was named in *Education Week* as one of the top young leaders transforming education in America.

SESSION TIMES AND PLANNING SHEET

FRIDAY, SEPTEMBER 26, 2014

4:00-4:50	Session A	_____
5:00-5:50	Session B	_____
6:00-8:30	AWARDS BANQUET AND SPEAKER	Lee Athletic Center

SATRDAY, SEPTEMBER 27, 2014

7:30-8:30	CONTINENTAL BREAKFAST	Upper School Commons
8:30-9:20	Session C	_____
9:30-10:20	Session D	_____
10:30-11:20	Session E	_____
11:30-12:30	LUNCH WITH YOUR AFFILIATE	
12:30-1:20	Session F	_____
1:30-2:20	Session G	_____
2:30-3:30	BUSINESS MEETING, DOOR PRIZES	Bishop Center

Friday, September 26

REGISTRATION
3:00-6:00 p.m.
Upper School Commons

EXHIBITS
3:00-6:00 p.m.
Upper School Commons

SESSION A *4:00-4:50 p.m.*

Room	Session	Grade Band
US-2	Leading Mathematically Productive Discussions We will explore teaching practices that enable all students to participate in productive mathematics discussions while encouraging students to build collective understanding of content. Jennifer Meadows	K-2, 3-5
US-3	Using Number Talks to Enhance Students' Conceptual Understanding Number talks are an exciting way to engage your students in explaining their mathematical reasoning. Number talks will be introduced and modeled. Holly Anthony	K-2, 3-5
US-4	More Than One Right Answer: Alternative Strategies for Multiplication and Division Experience a variety of methods to help students successfully master multiplication and division without using traditional means. Tammy Wall and Rhonda Burns	3-5
US-5	Engaging Students Through Manipulatives Using manipulatives purchased through the TMTA mini-grant to engage students' learning with a focus on fractions. Tammi Terry	3-5
US-6	Using Fairness to Teach Probability Concepts and Beyond How can fairness help teach concepts like probability distribution, area, circumference, expected value, and other tough-to-grasp probability concepts? See how using simulators and the idea of fairness make probability easier to learn and teach. Ismael Zamora	Middle, High
US-1 Lab Mac	How Do I Know Before They Go? Explore formative assessment strategies that allow for understanding what students know and making sound instructional decisions. A variety of tasks and ideas will be presented. Melinda Pierce and Ellen Matheny	Middle, High

US-7	Math – Vocabulary = ? Experience a variety of hands-on strategies, games and activities used to develop academic vocabulary in the math classroom. <i>(Part 1 of a back-to-back double session.)</i> Ashley P. Walther	Middle, High
US-26	Hand-Held Technology + Hands-On Activities = CCSS Success Hand-held technology coupled with inquiry-based learning enables students to model real-world applications of algebraic functions. Participants will be provided with classroom-ready, hands-on lessons. <i>(Part 1 of a back-to-back double session.)</i> Tom Beatini	High
US-25	Response to Instruction (RTI): Success and Challenges (Secondary) Mathematics One issue all mathematics educators face is the daily facilitation of mathematics learning that challenges and engages all students. The expectation is that all means all. That is, all children are entitled to a high-quality learning experience every day. All children should be challenged by the mathematics they are learning and should be supported in their learning. Dr. Jacquelyn Walton	High
International Center Computer Lab	Some Interactive Teaching Tools Introduction of some teaching tools that I have been using and which helped create dynamic and interesting classes. Caroline Maher-Boulis	High, College
US-23	Aligning Next Generation Assessment Resources to Create a Cohesive Math Curriculum Participants will learn how to engage with CCSS assessment resources to determine alignment in a math curriculum. Dr. April Irvin	All

SESSION B
5:00-5:50 p.m.

Room	Session	Grade Band
US-2	The What and How of Number Talks Number Talks are purposeful, daily routines that develop deep conceptual understanding of and efficiency with numbers, operations and mathematics. Tammy Roberts and Melanie Kosko	K-2
US-10	Common Core Activities with the Smart Board This presentation will introduce participants to a number of Common Core elementary math activities/games using the Smart Board. Deborah T. Cantrell	K-2,3-5

US-4	More Than One Right Answer: Alternative Strategies for Multiplication and Division Experience a variety of methods to help students successfully master multiplication and division without using traditional means. Tammy Wall and Rhonda Burns	3-5
US-5	Engaging Students Through Manipulatives Using manipulatives purchased through the TMTA mini-grant to engage students' learning with a focus on fractions. Tammi Terry	3-5
US-6	Using Fairness to Teach Probability Concepts and Beyond How can fairness help teach concepts like probability, distribution, area, circumference, expected value, and other tough-to-grasp probability concepts? See how using simulators and the idea of fairness make probability easier to learn and teach. Ismael Zamora	Middle, High
US-7	Math – Vocabulary = ? Experience a variety of hands-on strategies, games and activities used to develop academic vocabulary in the math classroom. <i>(Part 2 of back-to-back double session)</i> Ashley P. Walther	Middle, High
US-8	Whet Your Students' APPetites for Mobile Engagement BYOD. Download these APPS if you want to practice with us: GoClass, FluidMath (one week free) Educreations, ShowMe. Judy Fethe and Susan Mosteller	Middle, High. College, Pre-Service
US-9	"It's All in the Bucket" and Reinforcing CCSS This session will focus on quick activities that promote mastery of the content standards and mathematical practices. Dr. Elaine Vaughan and Christine Henry	Middle, High
US-26	Hand-Held Technology + Hands-On Activities = CCSS Success Hand-held technology coupled with inquiry-based learning enables students to model real-world applications of algebraic functions. Participants will be provided with classroom-ready, hands-on lessons <i>(Part 2 of a back-to-back double session.)</i> Tom Beatini	High
US-25	Response to Instruction(RTI): Success and Challenges (Secondary) Mathematics One issue all mathematics educators face is the daily facilitation of mathematics learning that challenge and engages all students. The expectation is that all means all. That is, all children are entitled to a high-quality learning experience every day. All children should be challenged by the mathematics they are learning and should be supported in their learning. Dr. Jacquelyn Walton	High
US-3	Post-Secondary Common Core-Aligned Model Tasks This presentation will include an overview of several resources developed for use in post-secondary mathematics courses. Holly Anthony and Melissa Stugart	High, College

US-20	A Place for Camtasia and LiveScribe in the Math “Classroom” We plan to discuss and show examples and/or techniques of using Camtasia videos and LiveScribe Smartpens to enhance our classes and increase student success. Brenda Ammons and Ashley Boone	High, College, General
US-23	Forensic Photography: CSI for the Eccentric(ity) A round table has a circular tabletop. So why does it look elliptical in a photograph? Use mathematical forensics to deduce angles, lengths and distances. Mike Reiners	High, College, Pre- Service
US-24	Tennessee Scholars “Do the Math” Participants will view and receive a copy of the “Do the Math” DVD. This session will focus on why math is important in a career. <i>Interactive session.</i> Ruth Woodall	All
US-22	Geometry with Magformers Create and investigate two and three-dimensional shapes (hands-on). Dr. Art Stoner	All

6:00-8:30

AWARDS BANQUET

Lee Athletic Center

Saturday, September 27

7:30-8:30

CONTINENTAL BREAKFAST Upper School Commons

REGISTRATION

7:30-11:30 p.m.

Upper School Commons

EXHIBITS

8:00-2:30 p.m.

Upper School Commons

SESSION C

8:30-9:20 a.m.

Room	Session	Grade Band
US-5	Mathematical Literacy: Key to Unlocking Math Task Understandings Participants investigate linguistic barriers children must overcome when comprehending written mathematical tasks. Ideas are shared for supporting students as they make sense of multiplication word problems. Geri A. Landry and Jennifer J. Jordan	K-2, 3-5
US-6	Building Computational Mathematical Fluency This session will discuss why fluency is important to student success, strategies for creating effective tools, plus specific activities and games to help build fluency. Martin Esterman	K-2, 3-5, Middle
US-4	Robotics and Mathematics for Elementary and Middle Grades This presentation will focus on the work accomplished, and the mathematics skills addressed, using Mindstorms robotics with pre-service teachers in elementary and middle grade programs. Dr. Deborah A. McAllister and Shirley A. McDonald	K-2, 3-5, Middle
US-2	Area is When You Multiply, Add for Perimeter! Getting past memorizing a rule to developing understanding of area and perimeter with hands-on discover activities. Theresa Hopkins	3-5
US-1	Being “Techie” with Our “Techie Students” Using technology and the Internet in the math classroom with today’s “Techie Students.” Connie Boyd	3-5, Middle

US-3	<p>“Numbers are OK. Symbols Scare Me, Man!” Don’t Worry – Extending Arithmetic Ideas to Algebraic Thinking</p> <p>This session will show how to easily transition from well-understood arithmetic principles to seemingly complicated algebra.</p> <p style="text-align: right;">Dr. Sam Narimetla</p>	3-5, Middle, High
US-8	<p>Solve It! Math Problems to Motivate Students</p> <p>Motivate your students to solve math problems from Mathematics Teaching in the Middle School with the possibility of getting their work published.</p> <p style="text-align: right;">Jo Ann Cady</p>	Middle
US-9	<p>Math: Real-Life Applications and Historical Connections</p> <p>A series of short presentations on the history and application of various middle mathematical concepts. Handouts with resources and practical ideas for teaching are included.</p> <p style="text-align: right;">Sister Cecilia Anne, O.P.</p>	Middle
US-10	<p>Data-Led Spiral Review in Middle School Math</p> <p>A data-driven instructional approach created to facilitate dialogue and sharing of strategies on problem solving in order to promote proficiency among middle school students.</p> <p style="text-align: right;">Lawrence Nussio</p>	Middle
US-17	<p>The What, Why and How of Mathematical Vocabulary</p> <p>The session will provide strategies that can be implemented immediately into the classroom to help students understand critical mathematical vocabulary.</p> <p style="text-align: right;">Kimberly Williams and Joyce Swan</p>	Middle, High
US-26	<p>Inspiring Instructional Technology Can Be Affordable</p> <p>This session will model the use of low cost/high impact technology to enhance math instruction and collaborative learning. The session should inspire creative, practical ideas – both for technology and for mathematics curriculum.</p> <p style="text-align: right;">Stephanie Ogden</p>	Middle, High
US-20	<p>Keeping it Real: Teaching Math Through Real-World Topics</p> <p>Is it ever a good idea to buy a lottery ticket? Do taller Olympic sprinters have an unfair advantage? In this session, we will model real-world lessons for middle and high school classrooms, and discover how math class can become the most interesting part of every student’s day.</p> <p style="text-align: right;">Karim Ani</p>	Middle, High
US-15	<p>Interesting Ideas, Manipulatives and Activities for Teaching Geometry Topics Highlighting the CCSSM Practices</p> <p>Participants will use hinged mirrors, rubber bands, patty paper, paper plates, and other manipulatives, as well as investigations, to develop geometry concepts such as similarity and triangle congruence, transformations, central angles, polygons, area, and more.</p> <p style="text-align: right;">Chris Mikles</p>	Middle, High

US-27	Activities and Handouts for Probability & Statistics The speaker will share activities and handouts she has developed for a Probability & Statistics course. Topics include sampling, probability, and Central Limit Theorem. Vicki Borlaug	High, College
US-25	The Mathematics of Angry Birds The game “Angry Birds” motivates explorations of projectile motion, focusing on parametric models and how the angle and velocity affect the motion and the game. John Diehl and Ismael Zamora	High, College
US-23	Building a Musical Scale . . . By Any “Means” Necessary An author of “Fostering Mathematics Through Music” will demonstrate how various mathematical means can be used to construct all the pitches on a piano keyboard. Mike Reiners	High, College, Pre-Service
US-22	Magic Squares: (Humor, History and Math Therein) Humor and magic in mathematics are possible and will be demonstrated. Magic square worksheets will be distributed for completion and hands-on experience. Cultural appearances throughout world history will be examined, especially in art and popular superstition. Doy O. Hollman	General

SESSION D
9:30-10:20 a.m.

Room	Session	Grade Band
US-15	Outstanding Math Guides – OMG Make a student reference containing graphic organizers with steps, examples and vocabulary for key concepts that put a year’s curriculum at your students’ fingertips Leslie Hilderbrand and Darby Jochem	K-2, 3-5
US-6	Building Computational Mathematical Fluency This session will discuss why fluency is important to student success, strategies for creating effective tools, plus specific activities and games to help build fluency. Martin Esterman	K-2, 3-5, Middle
US-2	Area is When You Multiply, Add for Perimeter! Getting past memorizing a rule to developing understanding of area and perimeter with hands-on discover activities. Theresa Hopkins	3-5
US-3	“Numbers are OK. Symbols Scare Me, Man!” Don’t Worry – Extending Arithmetic Ideas to Algebraic Thinking This session will show how to easily transition from well-understood arithmetic principles to seemingly complicated algebra. Dr. Sam Narimetla	3-5, Middle, High

US-1	Being “Techie” with Our “Techie Students” Using technology and the Internet in the math classroom with today’s “Techie Students.” Connie Boyd	3-5, Middle
US-4	Activities to Engage Middle Grade Students with Standards Participants will make and take samples of inexpensive activities that will engage middle grades students with multiple Common Core State Standards. Shirley A. McDonald and Dr. Deborah A. McAllister	Middle
US-8	Solve It! Math Problems to Motivate Students Motivate your students to solve math problems from Mathematics Teaching in the Middle School with the possibility of getting their work published. Jo Ann Cady	Middle
US-10	Data-Led Spiral Review in Middle School Math A data-driven instructional approach created to facilitate dialogue and sharing of strategies on problem solving in order to promote proficiency among middle school students. Lawrence Nussio	Middle
US-5	Data-Driven Interactive Instruction using TI-technology Integrate research-proven technologies into a productive instructional model. Align standards with interactive resources. Utilize formative assessment and personalized instruction – within an ongoing lesson. Ron DeChristoforo	Middle, High
US-7	Transform & Enhance Your Classroom with Standards-based Assessment This session will offer insight into an alternate assessment and reporting system where students’ grades truly show their level of understanding. <i>(Part 1 of back-to-back double session)</i> Ashley P. Walther, Jordan Eades, and Jake Gulledge	Middle, High, College
US-26	FOILED Again!? Rev Up Your Teaching of Quadratics From factoring by grouping to making the connections between standard form, intercept form, vertex form, and the graphs, we’ll have you actively engaged and inspired to teach quadratics and demonstrate their applications. <i>(Part 1 of a back-to-back double session)</i> Deni Migun and Andrea Lawyer	High
US-20	Hands-On Conics: Connecting 2-D and 3-D Representations Come investigate conics with wax paper, Wikki Stix, cheese, thumbtacks, flashlights, and string. Hands-on activities make conic sections come to life. Jeneva Moseley, Jeremy Newton, and Jonathan Clark	High

US-24	Geometric Proof: Getting to that Aha! Moment Do your students hate proofs? Come get some ideas for setting the stage, fostering a detective mindset, and rewarding logical presentation. <p style="text-align: right;">Ann Indingaro</p>	High
US-25	The Mathematics of Angry Birds The game “Angry Birds” motivates explorations of projectile motion, focusing on parametric models and how the angle and velocity affect the motion and the game. <p style="text-align: right;">John Diehl and Ismael Zamora</p>	High, College
US-22	Linear Regression: Embrace Its Uses, Avoid Its Abuses Linear Regression is a powerful tool for investigation and an important theme in statistics. However, application and interpretation from its use should be conducted wisely. <p style="text-align: right;">Kenn Pendleton</p>	High, College
US-23	Building a Musical Scale . . . By Any “Means” Necessary An author of “Fostering Mathematics Through Music” will demonstrate how various mathematical means can be used to construct all the pitches on a piano keyboard. <p style="text-align: right;">Mike Reiners</p>	High, College, Pre-Service
US-27	Activities and Handouts for Trigonometry The speaker will share activities and handouts she has developed for a Trigonometry course. Topics include graphing, word problems, and trigonometric identities. <p style="text-align: right;">Vicki Borlaug</p>	High, College
US-16	Pre-Service Teacher Roundtable Pre-service and in-service teachers host a panel discussion about the ups and downs of edTPA and Residence I and II. <p style="text-align: right;">Jackie Vogel, Lea Keith, and John Garwood</p>	College, Pre-Service
US-21	Ahead Through the Past: Reviewing Math Education for the Past 50 Years It has been nearly 50 years since I walked into my first teaching assignment. Students, topics, legal status, and teaching strategies have varied. A look back may give us some perspective for facing the challenges of the future. <p style="text-align: right;">Leslie Howe</p>	General
US-17	The What, Why and How of Mathematical Vocabulary The session will provide strategies that can be implemented immediately into the classroom to help students understand critical mathematical vocabulary. <p style="text-align: right;">Kimberly Williams and Joyce Swan</p>	Middle, High
US-9	Old Reliable Takes on a New Mission with CCSS TI Mini-Camp Training Session Exploring CCSS through Technology (TI-84/ TI-Nspire/ iPad app). Come for training or just to explore and discover new tricks. Leave with Teacher Software! <i>(1st hour of a two-hour session)</i>	General

SESSION E
10:30-11:20 a.m.

Room	Session	Grade Band
US-3	Now I See It Singapore Math is the top scoring in the world. Complex but simple. Impressive problem solving. <p style="text-align: right;">Nelle Church</p>	3-5, Middle, Pre-Service
US-4	Using Your Classroom to Map Ecliptic Constellations Use an iPad app to locate a constellation, create a dot-to-dot figure sketch, and map the object in the room using its azimuth and altitude. <p style="text-align: right;">Leslie Suters</p>	5, Middle
US-6	All Things Pi Activities for circumference, area, and volume <p style="text-align: right;">Cindy Bateman Shepard and Christi Hinton</p>	Middle
US-5	Data-Driven Interactive Instruction using TI-Technology Integrate research-proven technologies into a productive instructional model. Align standards with interactive resources. Utilize formative assessment and personalized instruction – within an ongoing lesson. <p style="text-align: right;">Ron DeChristoforo</p>	Middle, High
US-23	Using Archimedean Solids to Teach Geometric Concepts This presentation will give an overview of Platonic and Archimedean solids and offer practical ways to use the solids to teach geometric concepts. <p style="text-align: right;">Amy Wells, Caitlin Almazan, and Laura Singletary, Ph.D.</p>	Middle, High
US-1	How Do I Know Before They Go? Explore formative assessment strategies that allow for understanding what students know and making sound instructional decisions. A variety of tasks and ideas will be presented. <p style="text-align: right;">Melinda Pierce and Ellen Matheny</p>	Middle, High
US-8	Discovery Math Tasks for Every Season Discover with holiday-themed tasks! Participants will investigate systems of inequalities by creating pumpkin carving transfers, predict magic tricks with inverses, and use linear functions on Black Friday. <i>(Part 1 of a back-to-back double session.)</i> <p style="text-align: right;">Melissa Haun</p>	Middle, High
US-10	Best Practices in 6-12 Math: Rigorous Teaching and Learning for Students Teachers will view a classroom video lesson in order to discuss best practices for teaching mathematics. Topics will include strategies, procedures and questioning for student learning. <p style="text-align: right;">Carla Richards and Jacqueline Montileone</p>	Middle, High

US-7	<p>Transform & Enhance Your Classroom with Standards-Based Assessment</p> <p>This session will offer insight into an alternate assessment and reporting system where students' grades truly show their level of understanding.</p> <p><i>(Part 2 of back-to-back double session)</i></p> <p>Ashley P. Walther, Jordan Eades, and Jake Gullledge</p>	Middle, High, College
US-16	<p>Effective Strategies for Teaching Math to ESL Students</p> <p>Learn practical strategies for teaching the "beauty" of mathematics to a diverse group, and participate in an active discussion on linguistic, cultural and academic challenges.</p> <p>Donna Bassett, Betty Thomason, and Qintong Hu</p>	Middle, High, College, Pre-Service
US-26	<p>FOILED Again!? Rev Up Your Teaching of Quadratics</p> <p>From factoring by grouping to making the connections between standard form, intercept form, vertex form, and the graphs, we'll have you actively engaged and inspired to teach quadratics and demonstrate their applications.</p> <p><i>(Part 2 of a back-to-back double session.)</i></p> <p>Deni Migun and Andrea Lawyer</p>	High
US-20	<p>Creepy Crawly Critters: Modeling with Live Insects</p> <p>Play with live bugs, model their paths, and take home ideas for your classes (algebra, geometry, or trigonometry).</p> <p>Kristen Ellyson, Jonathan Matthew Clark, and Jeneva Moseley</p>	High
US-27	<p>Activities and Handouts for Calculus</p> <p>The speaker will share activities and handouts she has developed for a Calculus course. Topics include derivatives, antiderivatives, and word problems.</p> <p>Vicki Borlaug</p>	High, College
US-25	<p>What's My Distribution?</p> <p>We'll explore probability distributions with computation, graphs and simulation. Examples will include geometric, binomial, hypergeometric, and normal distributions, and connections and differences between them.</p> <p>John Diehl</p>	High, College
US-22	<p>Technology: A Portal to Exploration and Discovery</p> <p>Participants will experience technology, providing an alternative means of exploring mathematical concepts and discovering relationships by investigating fractional exponents and their natural counterpart logarithms.</p> <p>Kenn Pendleton</p>	High, College
US-24	<p>Using Mathematical Processes to Investigate Misconceptions with Visualizations</p> <p>Experience the mathematical process, investigating a non-standard application of triangle congruence. We will explore the visual misconceptions that were discovered through student work.</p> <p>Kristin Hartland and Alyson Lischke</p>	High, College, Pre-Service

US-15	Outstanding Math Guides – OMG Make a student reference containing graphic organizers with steps, examples and vocabulary for key concepts that put a year's curriculum at your students' fingertips! Leslie Hilderbrand and Darby Jochem	Middle, High
US-2	Lesson Design and Enactment: Preparing Future Math Teachers Built on an idea from FSU, the LDE project in VolsTeach preparation course incorporates design, assessment, enactment, and reflection of the "perfect" lesson. Theresa Hopkins, Jessica Chambers and Kaelin Toney	College, Pre-Service
US-21	The Joys of Excel and Notepad for the Math Teacher Teachers will be introduced to some little known teacher resources. In addition, all attendees will get an updated copy of Howe-Two Software's "Pick a Kid/Pick a Group." Leslie Howe	General
US-9	Old Reliable Takes on a New Mission with CCSS TI Mini-Camp Training Session Exploring CCSS through Technology (TI-84/ TI-Nspire/ iPad app). Come for training or just to explore and discover new tricks. Leave with Teacher Software! <i>(2nd hour of a two-hour session)</i>	General

11:30-12:30 BOX LUNCH WITH YOUR AFFILIATE

CAMTA – Room US-15
 MAC-O-TOM – Room US-16
 MT²-NW – Room US-27
 (MT)² – Room US-26

SM²EA – Room US-25
 TMatYC – Room US-24
 UETCTUM – Room US-23
 TAMTE – Room US-22

SESSION F
12:30-1:20 p.m.

Room	Session	Grade Band
US-21	<p>Ones, Tens and Hundreds, Oh My! Knowing a digit's position does not guarantee knowing the number's value. Students who do not understand place value lack strategies for number comparisons and computations. This session explores contextual experiences for modeling numbers with respect to place value; building confidence and competence with number and operations.</p> <p style="text-align: right;">Rhonda Burns and Tammy Wall</p>	K-2
US-2	<p>Best Practices for Teaching ELL students = Best Practices for All! This session will address the Common Core Standards for mathematical practice, highlighting best practices for all mathematics students. What works for the struggling ELL student works for all!</p> <p style="text-align: right;">Joseph Whinery</p>	K-2, 3-5
US-3	<p>Using Manipulatives to Teach Metric Measurement and Conversions We will use various objects, such as base ten blocks, to talk about metric units and conversions of length, area and volume.</p> <p style="text-align: right;">Audrey Bullock</p>	3-5, Middle
US-5	<p>Model with Mathematics: Three Key Decisions We will unpack and simplify the "Model with Mathematics" standard into three key decision-making processes as we explore our "Day at the Theme Park" task. <i>(Part 1 of a back-to-back double session.)</i></p> <p style="text-align: right;">D. Christopher Stephens, Wesley A. Baxter, and Sarah K. Bleiler</p>	3-5, Middle
US-16	<p>Modeling Mathematical Modeling A recipe for mathematical modeling includes facts, assumptions, clarifying assumptions, resulting questions, and investigation. Come on; let's cook!</p> <p style="text-align: right;">Johnny Ashurst</p>	3-5, Middle, High
US-4	<p>Using Your Classroom to Map Ecliptic Constellations Use an iPad app to locate a constellation, create a dot-to-dot figure sketch, and map the object in the room using its azimuth and altitude.</p> <p style="text-align: right;">Leslie Suters</p>	5, Middle
US-7	<p>That's Another Way to Look at It! Making connections between different representations of data through graphs, tables, equations, and word problems.</p> <p style="text-align: right;">Melinda Hopkins</p>	Middle

US-6	All Things Pi Activities for circumference, area and volume. Cindy Bateman Shepard and Christi Hinton	Middle
US-20	Sports Analytics for Students From Moneyball to Advanced Metrics, see how the burgeoning field of sports analytics can be used in higher math to engage any student who is a sports fan. Joel Bezaire	Middle, High
US-8	Discovery Math Tasks for Every Season Discover with holiday-themed tasks! Participants will investigate systems of inequalities by creating pumpkin carving transfers, predict magic tricks with inverses, and use linear functions on Black Friday <i>(Part 2 of a back-to-back double session.)</i> Melissa Haun	Middle, High
US-1	Using Technology to Enhance Group and Individualized Learning Experience a variety of student response systems used to actively engage your students, promote cooperative learning, and providing ongoing assessments. (BYOD) Bring your own device. Donna Bassett and Ashley Walther	Middle, High
US-10	Best Practices in 6-12 Math: Rigorous Teaching and Learning for Students Teachers will view a classroom video lesson in order to discuss best practices for teaching mathematics. Topics will include strategies, procedures and questioning for student learning. Carla Richards and Jacqueline Montileone	Middle, High
US-15	Mathematics and the Professional Learning Community Middle and high school PLCs strengthen teaching, instruction and student success. Cyndy Howes	Middle, High, Pre-Service
US-27	Engaging Tasks Implementing 8 Standards for Mathematical Practice Participants will use visual clues of the 8 Standards for Mathematical Practice; then explore tasks and formative assessment lessons that help to implement these standards. Erin Murphy Schneider	High
US-26	Factoring Trinomials the Cut and Dried Method A combination of current factoring methods is used in an organized manner, building on previous student knowledge to make factoring trinomials more cut and dried. Jessica H. Chambers, Ph.D.	High
US-24	A “Cool Problem” Approach to Composition of Functions Composition of functions will be examined by modeling “cool problems.” The graphing calculator promotes algebraic thinking and a deeper understanding of functions for all students. Tom Beatini	High

US-23	Creating Visual Metaphors or Dialogic Interactions about Calculus Because many students learn visually, teacher-created cartoons or illustrations through the LessonSketch tool can help students' conceptual understanding by bringing common metaphors to life. Jeneva Moseley and Woong Lim	High, College
US-25	What's My Distribution? We'll explore probability distributions with computation, graphs and simulation. Examples will include geometric, binomial, hypergeometric, and normal distributions and connections, and differences between them. John Diehl	High, College
US-17	Math and Mindset: The Power of "I Think I Can" We will discuss scientific research in how having a growth v. fixed mindset influences how students succeed in math, and how teachers can foster growth mindsets in students. Sarah Robinson	All
US-22	Fraction Fun with Singapore Math Bar diagrams and other problem solving methods taken from a Singapore Math textbook for pre-service teachers will be highlighted in this interactive presentation. Malissa Trent	General
US-9	Model the Math and Master Formative Assessment (includes hands-on iPad app!) TI Mini-Camp Training Session Exploring CCSS through Technology (TI-84/ TI-Nspire/ iPad app). Come for training or just to explore and discover new tricks. Leave with Teacher Software! <i>(1st hour of a two-hour session.)</i>	General

SESSION G
1:30-2:20 p.m.

Room	Session	Grade Band
US-21	Ones, Tens and Hundreds, Oh My! Knowing a digit's position does not guarantee knowing the number's value. Students who do not understand place value lack strategies for number comparisons and computations. This session explores contextual experiences for modeling numbers with respect to place value; building confidence and competence with number and operations. Rhonda Burns and Tammy Wall	K-2
US-3	The What and How of Number Talks Number Talks are purposeful, daily routines that develop deep conceptual understanding of and efficiency with numbers, operations and mathematics. Tammy Roberts and Melanie Kosko	K-2

US-2	Best Practices for Teaching ELL students = Best Practices for All! This session will address the Common Core Standards for mathematical practice, highlighting best practices for all mathematics students. What works for the struggling ELL student works for all! Joseph Whinery	K-2, 3-5
US-4	Math and Movement: Teaching Math through Movement Come learn how to teach and practice math concepts through movement. Learn practical and specific ways to incorporate movement into your daily math lessons! Marcia Wade	K-2, 3-5
US-8	Techy Tasks with a Side of Rigor In this session, participants will use iPad apps and websites to build rigorous real-world tasks that will engage any classroom. Melissa Haun and Patrick Bethel	3-5, Middle
US-6	Models for Multiplying and Dividing Fractions and Mixed Numbers Can you see it now? Learn how to use visual models for multiplying and dividing fractions and mixed numbers. Susan Baumann and Leslie Taylor	3-5, Middle
US-5	Model with Mathematics: Three Key Decisions We will unpack and simplify the “Model with Mathematics” standard into three key decision-making processes as we explore our “Day at the Theme Park” task. <i>(Part 2 of a back-to-back double session.)</i> D. Christopher Stephens, Wesley A. Baxter & Sarah K. Bleiler	3-5, Middle
US-16	Prove It! . . . With Rigid Motion Transformations Participants view pairs of geometric figures and use rigid motion transformations to verify congruency. Strategies include paper folding, compass and straightedge, and the TI-Nspire handheld. Johnny Ashurst	High
US-7	That’s Another Way to Look at It! Making connections between different representations of data through graphs, tables, equations, and word problems. Melinda Hopkins	Middle
US-20	Squares, Square Roots and the Pythagorean Theorem Participants will learn strategies to effectively present concepts and real-world applications of square roots and the Pythagorean Theorem Emily McDonald	Middle
US-10	Multiple Representation: Develop Reasoning for Constructed Responses Examples (grades 6-12) of student opportunities to make connections in mathematics through linking numerical and algebraic procedures with graphical analysis and mathematical language. Lois Coles and Pat Tyree	Middle, High

US-15	Mathematics and the Professional Learning Community Middle and high school PLCs strengthen teaching, instruction and student success. Cyndy Howes	Middle, High, Pre- service
US-27	Interesting Ideas, Manipulatives and Activities for Teaching Geometry Topics Highlighting the CCSSM Practices Participants will use hinged mirrors, rubber bands, patty paper, paper plates, and other manipulatives, as well as investigations, to develop geometry concepts such as similarity and triangle congruence, transformations, central angles, polygons, area, and more. Chris Mikles	Middle, High
US-26	Factoring Trinomials the Cut and Dried Method A combination of current factoring methods is used in an organized manner, building on previous student knowledge to make factoring trinomials more cut and dried. Jessica H. Chambers, Ph.D.	High
US-24	A “Cool Problem” Approach to Composition of Functions Composition of functions will be examined by modeling “cool problems.” The graphing calculator promotes algebraic thinking and a deeper understanding of functions for all students. Tom Beatini	High
US-23	Creating Visual Metaphors or Dialogic Interactions about Calculus Because many students learn visually, teacher-created cartoons or illustrations through the LessonSketch tool can help students’ conceptual understanding by bringing common metaphors to life. Jeneva Moseley and Woong Lim	High, College
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US-22	Fraction Fun with Singapore Math Bar diagrams and other problem solving methods taken from a Singapore Math textbook for pre-service teachers will be highlighted in this interactive presentation. Malissa Trent	General
US-25	Stat Crunch Using Stat Crunch to teach elementary statistics. Ebenezer Emos	College
US-9	Model the Math and Master Formative Assessment (includes hands-on iPad app!) TI Mini-Camp Training Session Exploring CCSS through Technology (TI-84/ TI-Nspire/ iPad app). Come for training or just to explore and discover new tricks. Leave with Teacher Software! <i>(2nd hour of a two-hour session.)</i>	General

2:30-3:30 BUSINESS MEETING, DOOR PRIZES Bishop Center

SPEAKERS AND EMAIL ADDRESSES

Caitlin Almazan	cgeren00@leeu.edu	Geri A. Landry	glandry@utk.edu
Brenda Ammons	bammons@pstcc.edu	Andrea Lawyer	Andrea.lawyer@knoxschools.org
Karim Ani	karim@mathalicious.com	Woong Lim	Wlim2@kennesaw.edu
Sister Cecelia Ann	srcanne@stcecilia.edu	Alyson Lischka	Alyson.Lischka@mtsu.edu
Holly Anthony	hanthony@ntech.edu	Caroline Maher-Boulis	cmaherboulis@leeuniversity.edu
Johnny Ashurst	johnny.ashurst@gmail.com	Ellen Matheny	ebmatheny@pstcc.edu
Donna Bassett	Dbasset4@vols.utk.edu	Dr. Deborah A. McAllister	Deborah-McAllister@utc.edu
Susan Baumann	susan.baumann@knoxschools.org	Emily McDonald	eamcdonald42@students.tntech.edu
Wesley A. Baxter	wab2n@mtmail.mtsu.edu	Shirley A. McDonald	smcdonald.RMS@catoosa.k12.ga.us
Tom Beatini	tmpeasant@mindspring.com	Jennifer Meadows	jrmeadows@ntech.edu
Joel Bezaire	jbezaire@usn.org	Deni Migun	deni.migun@knoxschools.org
Sarah Bleiler	Sarah.bleiler@mtsu.edu	Chris Mikles	cmikles@gmail.com
Ashley Boone	abboone@pstcc.edu	Jacqueline Montileone	jacqueline.montileone@wcs.edu
Vicki Borlaug	Victoria.Borlaug@ws.edu	Jeneva Moseley	lmoseley@leeuniversity.edu
Connie Boyd	Connie.boyd@knoxschools.org	Susan Mosteller	scmosteller@pstcc.edu
Audrey Bullock	bullocka@apsu.edu	Erin Murphy Schneider	erin.schneider@jefferson.kyschools.us
Rhonda Burns	allenrhonda@bellsouth.net	Dr. Sam Narimetla	snarimetla@ntech.edu
Jo Ann Cady	jcady@utk.edu	Jeremy Newton	jnewto02@leeu.org
Deborah T. Cantrell	debbie-cantrell@utc.edu	Lawrence Nussio	lawrence.nussio@hck12.net
Jessica H. Chambers, Ph.D.	jhkchambers@gmail.com	Stephanie Ogden	stephanie.ogden@knoxschools.org
Nelle Church	cchurch@northeaststate.edu	Melinda Pierce	mpierce19@utk.edu
Jonathan Clark	jclark10@leeu.edu	Kenn Pendleton	Kennmg@aol.com
Jonathan Matthew Clark	jonathanmclark@charter.net	Mike Reiners	mreiners@chof.net
Lois Coles	loisc@wes.edu	Carla Richards	carlar@wcs.edu
Ron DeChristoforo	ronde@ti.com	Tammy Roberts	tamara.roberts@knoxschools.org
John Diehl	john3500i@att.net	Sarah Robinson	robinsons@stcecilia.edu
Jordan Eades	jordanreades@gmail.com	Cindy Shepard	cindy.shepard@knoxschools.org
Kristen Ellyson	Kellys00@leeu.edu	Laura Singletary Ph.D.	lsingletary@leeuniversity.edu
Ebenezer Emos	Ebenzer.emos@chattanooga.state.edu	D. Christopher Stephens	Chris.Stephens@mtsu.edu
Martin Esterman	.esterman@fluency-games.com	Dr. Art Stoner	agstoner@att.net
Judy Fethe	jfethe@pstcc.edu	Melissa Stugart	Melissa.stugart@tn.gov
John Garwood	JGARWOOD1@MY.APSU.EDU	Leslie Suters	lsuters@ntech.edu
Jake Gullede	Jakob.gullede@gmail.com	Joyce Swan	jswan@utm.edu
Sharon Harper	Sharon.Harper@tn.gov	Leslie Taylor	leslie.taylor@knoxschools.org
Kristin Hartland	Kristin.hartland@mtsu.edu	Tammi Terry	tsterry@gmail.com
Melissa Haun	haunm@loudoncounty.org	Betty Thomason	betty.thomason@maryville-schools.org
Leslie Hilderbrand	Leslie.hilderbrand@douglas.k12.ga.us	Malissa Trent	mbtrent@northeaststate.edu
Christi Hinton	christi.hinton@knoxschools.org	Pat Tyree	pat_tyree@brentwoodacademy.com
Doy O. Hollman	doy.hollman@lipscomb.edu	Dr. Elaine Vaughan	mvaughan@ortn.edu
Melinda Hopkins	melinda.hopkins@knoxschools.org	Jackie Vogel	vogelj@apsu.edu
Theresa Hopkins	Thopkins@utk.edu	Marcia Wade	marciawade12@gmail.com
Leslie Howe	mail@howe-two.com	Tammy Wall	tlwall@roadrunner.com
Cyndy Howes	cyndyh@wcs.edu	Ashley P. Walter	Ashley.walther@knoxschools.org
Qintong Hu	qhu@utk.edu	Dr. Jacquelyn Walton	Jacquelyn.walton@pearson.com
Ann Indingaro	aindingaro@gmail.com	Amy Wells	awells01@leeu.edu
Dr. April Irvin	akabler@battelleforkids.org	Joseph Whinery	josephw@wcs.edu
Darby Jochum	Darby.jochum@douglas.k12.ga.us	Kimberly Williams	kwill126@utm.edu
Jennifer J. Jordan	Jjorda15@utk.edu	Ruth Woodall	Ruth.woodall@tnchamber.org
Lea Keith	Lea.keith@rcstn.net	Ismael Zamora	Ishmath314e@aol.com
Melanie Kosko	melanie.kosko@knoxschools.org		



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