

# MCTM Conference Sessions

## July 26-27, 2017

Session	Session Number	Day	Time	Room	First Name	Last Name	Email	Presentation Title	Description
1	1001	Wednesday	10:00 - 11:20	A101	Julie	Bazinou	jbazinou@eupschools.org	Making "Number Sense" of the Common Core	What is "Number Sense"? This session will help define "Number Sense" in grades K-2nd and the standards that address the development. How to strategically use manipulative to promote number sense will be demonstrated and instructional math progressions will be shared.
1	1002	Wednesday	10:00 - 11:20	A102/103	Caitlin	Jones	caijones@nmu.edu	Using Babylonian and Egyptian Mathematics to Teach Fractions	Did you know that fractions date back to the Babylonians and Egyptians? Come learn about the cultural influence of Egyptian and Babylonian mathematics in representing fractions and do some activities that will help your students better understand fractions. The activities include the use of technology and manipulatives.
1	1003	Wednesday	10:00 - 11:20	A108/109	S. Asli	Ozgun-Koca	aokoca@wayne.edu	STEM to Develop Mathematical Understanding	What is the role of M in STEM? Join Wayne State Engineering and Mathematics Education Faculty and MDE in using engineering applications as relevant contexts for students to engage with science and mathematics standards. Better understand how STEM activities can actually move mathematical literacies forward.
1	1004	Wednesday	10:00 - 11:20	A110	Carrie	Carlson	carlsonc@reeths-puffer.org	Ones, Tens, Hundreds?	What is so hard about ones, tens and hundreds? This session will explore developing place value understanding using manipulatives and games that will support multiple levels of K-2 students. Teachers will leave with ideas on how to identify student understandings and track students progress.
1	1005	Wednesday	10:00 - 11:20	B101	Ruth Anne	Hodges	hodgesr3@michigan.gov	Engineering Math into a Science Storyline	Learn how to leverage the new science standards to teach important mathematics concepts. Lesson planning tips for building integrated lessons that support both math and science learning.
1	1006	Wednesday	10:00 - 11:20	B102/103	Tara	Maynard	tmaynard@zps.org	Setting Up a Collaborative Classroom	Getting students to collaborate and work together takes time, patience, modeling, and thought-out activities. Come explore different activities that have been used to set up a collaborative, student-centered classroom that is focused on relationships. From how the first day of school looks to maintaining the atmosphere all year long, we will discuss different ways to keep the classroom focused on students. There will be both tech and non-tech activities showcased.
1	1007	Wednesday	10:00 - 11:20	B104	Susan	Bennett	sbennett@eupschools.org	3D Printers: More Than Just a Toy.	3D printers are becoming more accessible every day. Learn about this new technology, its correlation to the METS-S and the CCSS, and educational uses in the classroom. Participants will design a simple item in Tinkercad, a free 3D CAD tool, and watch their creations print out on 3D printers.
1	1008	Wednesday	10:00 - 11:20	B108	Tom	Reardon	tom@tomreardon.com	Problem Solving: All-Time Mathematically Rich Precalculus Activities, Individualized with Solutions	The focus will be on mathematically rich problems that incorporate technologies into the solutions and utilize good problem solving techniques. I will tailor the problems that we do based upon the audience that attends, choosing from: The Great Applied Problem, Midpoint Polygon, Painted Cube, Maximize Rectangle Area Under Parabolas, Solve the Quadrilateral, Ferris Wheel Problem.

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1	1009	Wednesday	10:00 - 11:20	B109	Judith L.	Falk	jfalk80@gmail.com	Talk Like a Mathematician	Help your students justify their reasoning and that of others using math talk strategies. In this workshop, we will discuss the importance of increasing students' vocabulary and their discourse capabilities; explore current research and best practice for implementing discourse and vocabulary; and practice using these skills.
1	1010	Wednesday	10:00 - 11:20	B110	Derek	Imboden	exrod@att.net	FOIL is Dead! Use generic rectangles to unify many skills from Algebra I and Algebra II	Using a generic rectangle to multiply polynomials is just the beginning. I will show you how I tie together the following algebraic skills: double distribution, triple distribution, factoring with any coefficient, difference of two squares, polynomial long division, and polynomial synthetic division I find that students at all levels of ability can quickly comprehend and perform difficult manipulations using these methods.
1	1011	Wednesday	10:00 - 11:20	C101/102	Kathy	Berry	infiniteberry@charter.net	Identifying quality online resources when the field is full of weeds.	A bumper crop of mathemaitcs online tools and courses have appeared in the field in recent years. In this session, participants will learn strategies and tools to separate the wheat from the chaff so that those remaining are tightly aligned with high quality mathematics teaching and learning practice, and so are a true benefit to our students.
1	1012	Wednesday	10:00 - 11:20	C103	Lauren	Stott	lstott@larsontexts.com	Increasing Engagement through Collaboration & Rich Problem-Solving with the Practices	Are you looking for ways to increase student engagement and collaboration in your math classroom? Are you frustrated with students not participating, while the same students are always coming up with the solutions? While problem solving, teachers will acquire a bank of tools and strategies (requiring minimal preparation time) to increase engagement through collaboration in the mathematics classroom. Teachers will also engage in an activity of transforming traditional problems into rich, accessible tasks.
1	1013	Wednesday	10:00 - 11:20	C108	Ismael	Zamora	ishmath@aol.com	STEM Activities for All Ages	STEM is all about students answering their own questions. See how simple science experiments can lead to great math lessons and real problem solving. We will be working with Hover disks, straw rockets, spark timers, and other student-safe, math teacher friendly equipment to integrate STEM into math classrooms.
1	1014	Wednesday	10:00 - 11:20	C109	Jen	Kahler	jjskahler@gmail.com	Interactive Math Workshop from Start to Finish	In this session, we will introduce and explore strategies for creating an elementary math workshop rich in problem solving and critical thinking tasks. We will give methods for engaging all students and will show ways in which we can create students that understand the "WHY" and not just the "HOW" behind mathematics. We will also explore ways in which we can create collaborative, creative mathematicians.
1	1015	Wednesday	10:00 - 11:20	C110	Lewis	Robinson	lrobinson@oacsd.com	Think outside the box with Breakout EDU	Experience a breakout game and learn how to bring engaging, challenging and fun learning to your students of all ages. Breakout EDU focuses on games that teach teamwork, problem solving, critical thinking, and troubleshooting. This interactive session will bring a new outlook to problem solving in your classroom setting.

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2	2001	Wednesday	2:15 - 3:15	A101	Diane	Owen-Rogers	diane.owenrogers@kresa.org	Instructional Learning Cycle (ILC): What's it take?	Are you wondering how to make the Instructional Learning Cycle (ILC) process a success in your school? Are you looking for an effective coaching structure to catalyze school improvement? This session will explore the nitty gritty of what it takes to ensure impact on student learning through the ILC. We will share essential implementation strategies as well as instructional coaching supports that lead to growth in both effective teaching practices and student learning. You will leave with a ready to implement structure to ensure success with the ILC process in your school.
2	2002	Wednesday	2:15 - 3:15	A102/103	Betty	Sundling	bsundling@mattawanschools.org	Meeting the Needs of Students who Struggle in Math	We will share highlights from the 2016 NCTM Innov8 conference focused on meeting the needs of students who struggle in math. Strategies will be shared to help improve the mathematics education for each and every student.
2	2003	Wednesday	2:15 - 3:15	A108/109	Connie	Kennedy	kennedyc@bcschools.net	Engaging the Young Child in Math	Bedtime Math is a program with a mission to help young kids love numbers so they can handle the math in real life. Come and learn more about our pilot of using this app in the Preschool and the Early Elementary classroom! We will also discuss and complete many other engaging Math tasks for the Early Elementary student.
2	2004	Wednesday	2:15 - 3:15	A110	Jenna	Graeber	Jenna.Graeber@hnhco.com	Using OSMO™ in your classroom	Come see how Osmo can be used in your PK-4 math classroom! Osmo is a unique gaming accessory for iPad® (version 2 or higher) that comes with a variety of activities, including a newly released Numbers game. This game can be used in conjunction with two signature HMH® math programs—GO Math!® and Math Expressions—to provide students with engaging activities for additional practice and fluency building. This session is for all teachers, it is not only for users of Go Math! Or Expressions.
2	2005	Wednesday	2:15-3:15	B101	Jill	VerBurg	jlynmurphy@hotmail.com	Assessing Student Understanding Through Technology	This presentation would contain several different strategies that show how to use technology to guide instruction through formative assessments. This would show how teachers can gain valuable information on student understanding of mathematics. It would also focus on how these assessments can be used to empower students to drive their own learning by providing instant feedback.

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2	2006	Wednesday	2:15-3:15	B102/103	Kate	Fanelli		Building Thinking Classrooms for Coaches - Part 1 of 2	<p>Building Thinking Classrooms is the results of 10 years of research by Dr. Peter Liljedahl at Simon Fraser University that examined normative behaviors in the mathematics classroom and specific practices that promote problem solving and thinking. Are you implementing problem solving methods with fidelity (rich tasks, Standards for Mathematical Practice, discourse), but not getting the student thinking you want? Experience specific classroom practices you can use immediately to increase thinking and engagement. K-12 general and special education math educators are welcome, and encouraged to attend in teams.</p> <p>This extended session will demonstrate these practices using a combination of content, and focus on how to help teachers learn and use these practices.</p> <p>PLEASE NOTE: This is an extended two part session. Please plan to attend both sessions. You must attend the first session to attend second session.</p>
2	2007	Wednesday	2:15 - 3:15	B104	Asa	Kelly	kellya@benzieschools.net	STEM - Bristlebot Robotics	Do you want to find an inexpensive activity that will really engage your students? Would your students enjoy building their very own robot from scratch? Bristlebots are a cheap, easy, and fun-to-build robots that will buzz all around your table, and spark your student's creativity!
2	2008	Wednesday	2:15 - 3:15	B108	Tom	Reardon	tom@tomreardon.com	Transformational Geometry - Immediate Interactive Investigations – Grades 7-11 – Students Discover the Geometry in 15 Seconds!	Creatively integrate discovery, reasoning, technology, and pedagogy: Play Investigate Explore Discover reflections, translations, rotations, and dilations. Your students will become engaged quickly (15 seconds or less) and deeply by interacting with the geometry. Obtain all free materials. We will simulate what students would do in the classroom - very interactive and lots of discussion.
2	2009	Wednesday	2:15-:3:15	B109	Kelly	KuKull	kelly.kukull@pearson.com	How do you engage your reluctant learners” (Mathematical Modeling)	Dive into various unique modeling lessons that present engaging, high-interest situations. Unlike traditional real-world problems, reality-based Mathematical Modeling lessons present students with the modeling conceptual category. Our mathematics standards require that students address identifying essential variables in a situation, formulating a model from those variables, performing operations using the model, interpreting the results of those operations, and validating the conclusions of those results.
2	2010	Wednesday	2:15 - 3:15	B110	Sheila	Orr	sheilafrederixon@gmail.com	Using PBL to Bring Social Issues Alive in a Mathematics Classroom	Participants will engage with a mathematical task, which has a real world mathematical social justice focus. The presenter will share how she brought a social justice lens to a mathematics course. Then the participants will discuss how to structure PBL in a mathematics class, focusing on bring social issues into the classroom. Participants will also have the opportunity to look find opportunities to discuss social issues in their mathematics classroom

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2	2011	Wednesday	2:15 - 3:15	C101/102	Russ	Iuni	riuni@parchment.k12.mi.us	Three aspects of Dan Meyer's 3 ACTS	Do you want your students to learn to question, persevere, problem solve, make predictions and become less dependent on you? Have you heard about Dan Meyer's 3 Acts and are not sure how you can incorporate them into your lessons? In this session, I will show how I incorporated the 3 Act structure into my plans to help my students acquire these skills. I will share my lesson plans, my struggles and my adjustments made throughout the school year.
2	2012	Wednesday	2:15 - 3:15	C103	Kayla	Penkava	kpenkava@nmu.edu	Completing the Square Through the Centuries	Building upon the works of the Babylonians, Persian, and Hindu mathematicians we will explain how the completing the square method has evolved through the centuries. We will look at how ancient mathematicians visualized completing the square, and how to teach this concept using technologies, such as Geometer's Sketchpad and Desmos, also using manipulatives.
2	2013	Wednesday	2:15 - 3:15	C108	Pam	Lindemer	plindeme@ioniaschools.org	Number Talks: Facilitating Meaningful Mathematical Discourse	Stop complaining about your students' lack of numeracy skills and do something about it! Number Talks provide an effective way to support students who struggle in mathematics. Participants will experience a Number Talk and learn talk moves that promote meaningful mathematical discourse. Leave with a plan for implementing your first Number Talk tomorrow.
2	2014	Wednesday	2:15 - 3:15	C109	Samantha	du Preez	sdupreez@everfi.com	Innovation in Online Learning: Exploring EverFi's Free Resources	Striking a balance between technology integration and engagement can be challenging when teaching traditional STEM concepts to students. EverFi brings science, algebra, engineering and practical math concepts to life for 4-12 grade students through online, interactive modules. Hockey Scholar can engage remedial math students by exploring the sports-STEM connection while Radius provides practical application of math skills ranging from linear equations to cryptography. Participants will be given login credentials, standards-alignment documents, lesson plans and ongoing technical and curriculum support at no cost.
2	2015	Wednesday	2:15 - 3:15	C110	John	Gregg	johnregg@wlcsd.org	The Calculus Path	Taking AP Calculus in high school requires skipping a course or compacting content. Success in Calculus requires a deep understanding of concepts. Learn about one district's plan to navigate the pitfalls of early tracking and keep this opportunity open to the greatest number of students.
3	3001	Wednesday	3:30 - 4:30	A101	Olivia	Alkema	olivia.alkema@gmail.com	Differentiating for Diverse Learners Using a Math Workshop Model	The ZONES Math Workshop Model will transform your instruction using the best practices of math instruction including Guided Math, Math Workshop, Small Group work, one-on-one conferencing, and deliberate and meaningful rotations which incorporate all of the common core standards for mathematical practice. ZONES works at any grade level (K-8) and with any math curriculum. Get ready to make your math instruction data-driven, dynamic, and engaging.

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3	3002	Wednesday	3:30 - 4:30	A102/103	Kevin	Dykema	kdykema@mattawanschools.org	Fractions Don't have to be Frustrating!	How can I help students understand fractions? Come see how using manipulatives can help students understand fraction concepts. Discover why they are a powerful tool; ideas will be shared for equivalence, ordering, and operations with fractions!
3	3003	Wednesday	3:30 - 4:30	A108/109	Michael	Klavon	mklavon@oaisd.org	Tier 2 Mathematics Intervention for Multiplying and Dividing Whole Numbers	The Delta Math RtI program, with the support of Michigan's Integrated Mathematics Initiative (MI)2, has developed Tier 2 intervention lessons informed by evidence-based recommendations provided by the Institute of Educational Sciences. This session will demonstrate how each IES recommendation is integrated into the intervention resources available at <a href="http://www.deltamath.org">www.deltamath.org</a> . We also will go deeper in the visual representations and mathematical vocabulary explicitly used to support the conceptual understanding of multiplying and dividing whole numbers for students who struggle.
3	3004	Wednesday	3:30 - 4:30	A110	Jenna	Graeber	Jenna.Graeber@hnhco.com	Math Expressions 2018- Come check out what's new with Math Expressions 2018!	Math Expressions is a research-proven curriculum that encourages students to get hands-on with math—exploring, discussing, and demonstrating an understanding of key math concepts. Now for 2018, new digital components and professional support provide teachers with a truly balanced classroom math solution.
3	3005	Wednesday	3:30 - 4:30	B101	Kerri	deBest	debestmath@yahoo.com	Passion Project - Get your students excited and invested in math!	3M started it. Google embraced it. By using the SCRUM method, engage your students in learning by giving them an opportunity to create a math project they design that will positively impact themselves, and possibly others. It incorporates technology, creativeness, CCSSM, and personal inventiveness into one project. Learn how a 20 year veteran math teacher has inspired students to find their passion and how you can do the same in your classroom!

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3	3006	Wednesday	3:30 - 4:30	B102/103	Kate	Fanelli		Building Thinking Classrooms for Coaches - Part 2 of 2	<p>Building Thinking Classrooms is the results of 10 years of research by Dr. Peter Liljedahl at Simon Fraser University that examined normative behaviors in the mathematics classroom and specific practices that promote problem solving and thinking. Are you implementing problem solving methods with fidelity (rich tasks, Standards for Mathematical Practice, discourse), but not getting the student thinking you want? Experience specific classroom practices you can use immediately to increase thinking and engagement. K-12 general and special education math educators are welcome, and encouraged to attend in teams.</p> <p>This extended session will demonstrate these practices using a combination of content, and focus on how to help teachers learn and use these practices.</p> <p>PLEASE NOTE: This is an extended two part session. Please plan to attend both sessions. You must attend the first session to attend second session.</p>
3	3007	Wednesday	3:30 - 4:30	B108	Tom	Reardon	tom@tomreardon.com	10 Minutes of Coding at a Time – A Great Way to Introduce ALL Students to Programming Grades 7-12 on the TI-83/84	<p>Get hands-on coding experience doing activities that show students – and teachers – how to program on a TI-83/84 graphing calculator and no prior programming experience necessary! These short activities contain topics that include: Using Variables, Input &amp; Output, Conditional Statements, Loops, Graphics. We will do some simple programs together - hands on - using TI-84's and you will obtain a list of 25 programs to assign. We will also learn to program the TI-Innovator Hub – the brand-new device that enables students to learn basic coding and design and to apply these skills to connect STEM concepts</p>
3	3008	Wednesday	3:30 - 4:30	B109	Gianna	Helling	gianna.helling@Ontario.ca	Using Technology to Empower Student Voice in the Mathematics Curriculum	<p>Explore how technology can enhance attitudes towards the understanding of mathematics. Learn strategies to inspire students, staff and parents to think about mathematics creatively and see math as a broad, interesting and visual subject that involves deep thinking. Discover how student voice can empower students to be agents of change and how students can use technology and math to reconfigure society to be more ethical and just.</p>
3	3009	Wednesday	3:30 - 4:30	B110	Ellen	Kamischke	ejkamisc@mtu.edu	Function Transformations: Theme and Applications	<p>The study of function transformations and their application across the curriculum from Algebra I through Calculus will be discussed. These ideas also form the basis for a method of fitting a function to data, quickly and efficiently. Activities based on this theme from various levels will be shared.</p>

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3	3010	Wednesday	3:30 - 4:30	C101/102	Kayleigh	Edgecombe	Kayleigh@AlgebraNation.com	Get Started with Algebra Nation: A free online, mobile resource made for Michigan Students and Teachers	Algebra Nation, available online and on mobile devices to ALL Michigan students and teachers (at no cost), is a one-stop digital hub of standards-aligned supplemental tools and resources to support all Algebra 1 middle and high school students in Michigan. Aligned by professors from Michigan universities and rebuilt completely for Michigan, resources include dynamic videos, an online practice tool, and a statewide Algebra Wall where students can get and give algebra homework support. Teachers also receive free professional development, are able to pull usage reports, and have access to additional resources and an online professional learning community. Resources can be used both inside and outside the classroom. Come to the session to learn how to access Algebra Nation and how it can be used to accommodate all types of learners!
3	3011	Wednesday	3:30 - 4:30	C103	Jennifer	Curtis	jennifercurtis@wlcsd.org	Clarifying the Role of Coach	Instructional Coach is a role that is often ill-defined. This session is intended as a conversation on ways to clarify the many roles of a coach. A model will be presented, but bring your ideas to share and questions to pursue together in this round table session.
3	3012	Wednesday	3:30 - 4:30	C108	Evelynne	Pyne	evelynne.pyne@elps.us	Gauging formative assessment by attending to productive and powerful classroom discourse	For the past four years, we have collaborated to do action research on mathematics classroom discourse. In this work, we use particular teacher discourse moves to open up the classroom discourse. These moves have allowed us to engage in formative assessment through encouraging, for example, risk-taking and mistake-sharing. In this session, we share these moves, how they help us build students' mathematical thinking, and how we use the information we learn to inform our instruction within a class period and beyond.
3	3013	Wednesday	3:30 - 4:30	C109	Derek	Imboden	exrod@att.net	Start Calculus with Calculus	Starting your class with an understanding of both derivatives and definite integrals engages your students in the wonder and beauty of calculus. We will use approximation methods to build this foundation. In addition, I will highlight a variety of problem sets that can be used to review essential algebraic skills.
3	3014	Wednesday	3:30 - 4:30	C110	Eric	Kamischke	elkamisc@mtu.edu	Enhancing Algebra Class with Desmos online calculator	Desmos is a powerful tool with a simple interface. Weak students can use pre-made tools to explore ideas with an interface that won't frustrate or confuse them. While advanced students "look behind the curtain" and have fun at the same time. We will look at several lessons where Desmos can enhance your classroom.



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4	4001	Thursday	8:30 - 9:30	A101	Michael	Klavon	mklavon@oaisd.org	Tier 2 Mathematics Intervention for Adding and Subtracting Whole Numbers	The Delta Math RtI program, with the support of Michigan's Integrated Mathematics Initiative (MI)2, has developed Tier 2 intervention lessons informed by evidence-based recommendations provided by the Institute of Educational Sciences. This session will demonstrate how each IES recommendation is integrated into the intervention resources available at <a href="http://www.deltamath.org">www.deltamath.org</a> . We also will go deeper in the visual representations and mathematical vocabulary explicitly used to support the conceptual understanding of adding and subtracting whole numbers for students who struggle.
4	4002	Thursday	8:30 - 9:30	A102/103	Kyle	Ward	WardK2@michigan.gov	MDE Mathematics Assessment Update	This presentation will focus on the Early Literacy and Mathematics K-2 interims and M-STEP assessments. Item types and the life cycle
4	4003	Thursday	8:30 - 9:30	A108/109	Kevin	Dykema	kdykema@mattawanschools.org	Helping Students Succeed with Algebraic Concepts through the use of Manipulatives	Do your students struggle with algebraic concepts? See how your students benefit from a visual approach to algebra and learn how hands-on activities can help promote their understanding of algebraic concepts. Topics include integer operations, solving equations, polynomial expressions, graphing, and more!
4	4004	Thursday	8:30 - 9:30	A110	Monica	Cialek	mcialek@wccnet.edu	Using a deck of cards to master fundamental concepts	Engage social intelligence as students have fun while reviewing fractions and integers. This is a great activity to have in your back pocket that involves peer learning in a very relaxed and friendly way. In this session, you will assume the role of your student and I will model how to facilitate it. We'll occasionally pause so I can give classroom management tips and you can share out the experiences you anticipate your students will have.
4	4005	Thursday	8:30 - 9:30	B101	Stephanie	Butman	sbutman@oaklandflextech.org	Google Classroom for Math Teachers	Online classroom resources continue to grow and improve on what seems like an almost daily basis. Google Classroom is one such resource that could be used as a tool in the math classroom. Learn how to affectively utilize this resource in order to help students develop digital fluency, problem solving, and more ownership of and interest in their learning. It also gives teachers a chance to provide timely and meaningful feedback and pushes students to persist and make revisions on their work.
4	4006	Thursday	8:30 - 9:30	B102/103	Sarah	Furman	sfurman@inlandlakes.org	The Desmos start guide for using Desmos to deepen students' understanding of Algebra 1 concepts	This session is designed for teachers who are looking to use Desmos in an Algebra 1 classroom. This session is an introduction to Desmos - both the graphing side and the teacher designed activities for use in the Algebra 1 classroom. In this session, we will discuss how the use of Desmos deepens students' understanding of Algebra concepts, sparks math discussions, and can model real world situations.

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4	4007	Thursday	8:30 - 9:30	B108	Deb	Nutt	koalanut@bright.net	Lessons for Middle Grades Using the TI-84	See and use classroom ready materials for Middle Grade Mathematics. The lessons will utilize the TI-84 graphing calculator to help your students make mathematical connections while helping them understand and remember difficult concepts. Also learn where to find many more lessons for the TI-84 and learn how to better use the technology.
4	4008	Thursday	8:30 - 9:30	B109	Nikki	Knowles	nholmes04@yahoo.com	Math Made Easier-- There's only 3 things we can do with NUMBERS!!!	Problem Solving help for struggling students will be the FOCUS. Specific strategies that help our struggling kids to bridge the conceptual, procedural & computational gaps associated with problem solving. * 3 Things to do with numbers: Which are you going to do?(in this story problem) * Subtraction Regrouping--- QUANTITIES VS. VALUES * Strip Boxes-- Labels tell us what to do with the numbers. * T-Bars for multiplication facts * T-Bars for measurement conversion
4	4009	Thursday	8:30 - 9:30	B110	Murney	Bell	murneybell@sbcgloal.net	The spirit of Innovation	Introduce your students to the invention process using the new TI-Innovator Hub(TM) with TI LaunchPad(TM) Board development tool. This easy-to-use device is fun and rewarding. No experience is necessary; bring your curiosity and prepare to be inspire.
4	4010	Thursday	8:30 - 9:30	C101/102	Ismael	Zamora	ishmath@aol.com	Embracing and overcoming the struggle	If you never made a mistake you never learned anything new. Embrace the struggle with us in this session about struggling learners. We will be exploring the really hard questions and coming up with new ways to tackle struggle. We will be building grit and confidence.
4	4011	Thursday	8:30 - 9:30	C103	Micole	Dyson	dysonmd@kalamazoopublicschools.net	Instructional Learning Cycle (ILC): What's worked?	Are you and your colleagues wondering what to do to help ALL students achieve? Has your school been identified as a priority or focus school? Do your students struggle to gain fluency with their basic facts? This session will tell the story of how the ILC helped a school focus instruction and learning on key content which ultimately led to marked school improvement. We will discuss important features of the ILC process including instructional routines to teach basic fact fluency including accuracy, efficiency, and flexibility. You will leave with ready to implement strategies to help make the ILC process a success in your building.
4	4012	Thursday	8:30 - 9:30	C108	Keith	Barnes	kbarnes@sjcisd.org	Common Core Mathematics Assessments  This session has been cancelled.	The C2MATH (Common Core Mathematics Assessments Tested and Housed) session is designed to introduce work completed by math teachers within St. Joseph County, Michigan. Teachers created Common Core Mathematics assessments for grades Kindergarten through 8th grade, Algebra I, Geometry, and Algebra II for every content standard. These flexible-use assessments can be used as a formative, as a summative, as pre- and post-assessments, as practice, and as homework. Once given data can be compiled and used in PLCs.

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4	4013	Thursday	8:30 - 9:30	C109	Christine	Browning	christine.browning@wmich.edu	Virtual Classes: What are their potential for mathematics teachers?	With the available technologies today that allow synchronous communication between several people, i.e. Skype, Google hangouts, Facetime, etc., having virtual class sessions is becoming a reasonable option to blend in with face-to-face classes, without fearing the loss of student engagement in learning mathematics. This session will share findings from a K-8 preservice teacher (PST) mathematics course regarding the PSTs' thoughts on having several virtual classes blended in with their face-to-face sessions. A description of the virtual sessions will be provided along with data from two semesters where the virtual classes were piloted. A potential for further classes is to have in-service teachers who need refresher content to participate virtually with the preservice teachers as they all participate in the same mathematics content course. Participants of the session will engage in reacting to this design for professional development.
4	4014	Thursday	8:30 - 9:30	C110	Carol	Bell	cbell@nmu.edu	Proof and Justification of the Pythagorean Theorem at the Elementary, Middle, and High School Levels	What constitutes proof and justification at the K-12 level? This question was explored in a college geometry course designed for future elementary school, middle school, and high school teachers. Students developed activities to help elementary, middle, or high school students further their understanding and justification of geometric concepts. In this session, participants will use technology and hands-on activities to explore the Pythagorean Theorem and its converse at all K-12 levels.
5	5001	Thursday	9:45 - 10:45	A101	Marcilyn	Poppema	mpoppema@madonna.edu	Using Dynamic Notebook Pages for a blended learning environment in a Mathematics Classroom	Using dynamic notebook software to help students learn mathematics concepts helps teachers to set up a blended learning environment in their classrooms. Setting up the pages to mirror virtual manipulatives, or to save classroom notes from day to day, or allow students to present and show their own work up at the board (or through the mirroring of a iPad) allow students to use the software in their learning. Tips for setting up a dynamic notebook, resources for finding pre-made notebooks, and what the research says about the benefits of a blended learning environment for mathematics will be shared
5	5002	Thursday	9:45 - 10:45	A102/103	Nancy	Mack	mackn@gvsu.edu	Viewing Fractions Flexibly to Develop Strategies for Operating on Fractions	Explore ways to help students view fractions as quantities themselves, as iterations of unit fractions, and in other equivalent ways and how using these representations and word problems aids students in developing strategies for adding and subtracting fractions. Research results that have been put into practice with struggling and advanced students will guide our explorations.

# MCTM Conference Sessions

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Session	Session Number	Day	Time	Room	First Name	Last Name	Email	Presentation Title	Description
5	5003	Thursday	9:45 - 10:45	A108/109	Laura	Chambless	chambless.laura@sccresa.org	Improve Your Classroom Engagement by Using Talk Moves	How do you get students engaged in a lesson and doing all the heavy lifting? Join me to learning about Talk Moves. Talk Moves will improve your classroom culture, student engagement and student learning. They can be used with a whole class discussion, small groups and even pair work. Talk Moves teach students how to listen to others, be respectful and use evidence during argumentation.
5	5004	Thursday	9:45 - 10:45	A110	Alden	Edson	edsona@msu.edu	Modeling as a Context for Learning About Linear Relationships	Modeling problems provide students with engaging and mathematically relevant STEM contexts to think about and develop meaning of quantities and variables. The session will focus on how modeling can be used as a context to develop students' understandings of linear relationships in middle grades classrooms. Activities will be drawn from Connected Mathematics.
5	5005	Thursday	9:45 - 10:45	B101	Pam	Lindemer	plindeme@ioniaschools.org	Formative Assessment Strategies for the Mathematics Classroom	Participants will experience formative assessment strategies that particularly deal with discourse, work on math problems using these strategies, see how NCTM's Principles to Actions are tied into and highlighted by these strategies, and be actively engaged in using strategies that they can take back and use in their classrooms. Discussion will include issues of status and differentiated instruction as well as when and why to use different strategies.
5	5006	Thursday	9:45 - 10:45	B102/103	Laurie	Busby	laurie.busby@elps.us	Norm setting to support high quality math learning	One basis for engaging students in high quality conceptual learning of mathematics is setting classroom norms that support productive and powerful classroom discourse. In our action research collaboration across the last four years, we have developed specific strategies for introducing and negotiating classroom norms that support such learning. In this session, we engage participants in some of these activities and share information we have learned about sustaining classroom norms.
5	5007	Thursday	9:45 - 10:45	B108	Deb	Nutt	koalanut@bright.net	Classroom Lessons for Algebra with the TI-84	See and use classroom ready materials for Algebra 1 and 2. The lessons will utilize the TI-84 graphing calculator to help your students make mathematical connections while helping them understand and remember difficult concepts. Activities will be easy to implement. Also learn where to find many more lessons for the TI-84 and learn how to better use the technology/
5	5008	Thursday	9:45 - 10:45	B109	Abigail	Kerr	kerra@dearbornschools.org	Engaging Students With The Use Of The TI-Navigator System CX	In this session, we will explore the use of Quick Poll questions to actively engage your students. With the use of the TI-Navigator System you will gain valuable data to drive your instruction. We will learn to use the different formats of questions, insert pictures, and use the split screen options, so you can make the most out of all your formative assessments. Not only will you walk away with techniques to captivate your students, but you also will receive ready-to-go formative assessment documents for your Algebra I and Algebra II classes.

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Session	Session Number	Day	Time	Room	First Name	Last Name	Email	Presentation Title	Description
5	5009	Thursday	9:45 - 10:45	B110	Cliff	Petrak	cpetrak1@hotmail.com	Don't Slow Me Down with that Calculator (Multiplication Mental Math Methods)	Our country consistently finishes in the bottom third of countries participating in the annual mental math competition. Many of the mental math methods used involve multiplication and squaring of 2-digit integers. We'll study as many methods as time will allow along with their complete derivations or algebraic proofs. Therefore, we'll study not only the "how," but also the "why?" with the bonus of participants being taught how to determine answers orally whenever they desire.
5	5010	Thursday	9:45 - 10:45	C101/102	Denise	Brady	brady@sresd.org	Supporting Coaches at All Levels: NCSM's Coaching Corner	Calling all coaches, specialists, and teacher leaders! This session will explore the multitude of resources assembled in the National Council of Supervisors of Mathematics' (NCSM) Coaching Corner. This session will walk you through navigation of the site as we explore and use resources by experts in the field such as Steve Leinwand, Skip Fennell, and teachers who are leading successful coaching programs.
5	5011	Thursday	9:45 - 10:45	C103	Michael	Morissette	morisse3@msu.edu	Breaking out of the rut	This session is for mathematics teachers that are tired of teaching in a traditional matter, want to change, but do not know how. I will discuss and model some changes one can make to turn one's classroom into more of a student-centered one.
5	5012	Thursday	9:45 - 10:45	C108	Julie	Freeman	julierfreeman@gmail.com	Crossing boundaries between mathematics and social studies classrooms	Participants will hear and discuss ways in which social studies and mathematics curriculum can be used to support students' learning in both classrooms. Participants will hear and discuss ways to teach "social studies" topics into their mathematics curriculum, leading to more robust and rigorous learning. Participants will also explore projects that could be used in collaborative efforts across mathematics and social studies classrooms, as well as ways to scaffold these collaborative efforts to support struggling and advanced learners. Lastly, participants will receive helpful tips for collaborating across classrooms and departments.
5	5013	Thursday	9:45 - 10:45	C109	Jason	Gauthier	jgauthier@alleganaesa.org	Mathematical Modeling in Middle School and High School: Getting at the SMPs for All Students	Come discuss and experience how mathematical modeling, beginning with open problems, can help students engage with and master the Standards for Mathematical Practice, better preparing them for college and careers. We will discuss what mathematical modeling is, what it looks like at the secondary level, and engage in a modeling task.
5	5014	Thursday	9:45 - 10:45	C110	Chris	Brown	cjb2145@msn.com	Financial Literacy: How to teach a Common Core aligned curriculum at any level!	"My students need exposure to financial literacy!", exclaimed a teacher I was working with. As a math coach with the ISD, it was my job to find support her with this need. I will share what we discovered about FREE financial literacy resources that are available, how we implemented the curriculum, and the results of teaching this unit to a group of 3rd grade students from an inner-city school in Jackson, MI.

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Session	Session Number	Day	Time	Room	First Name	Last Name	Email	Presentation Title	Description
6	6001	Thursday	11:00 - 12:00	A101	Kaitlyn	Rickman	rickmanka@tcaps.net	Building Foundational Skills with Coding	Computer programming instruction (also known as coding) can have a positive impact on mathematical skills, problem-solving skills as well as other twenty-first century skills for early elementary students. This session aims to provide essential background knowledge to teachers and to give teachers practical suggestions to start coding in their classrooms. Participants will learn the basics of computer science, will be introduced to early computer programming software, and will walk away with fun and practical suggestions for coding with their young students.
6	6002	Thursday	11:00 - 12:00	A102/103	Lea	McAllister	lmcallister@misd.net	One District's PLC Journey	In this session, I will share how our district is engaging mathematics teachers in the work of a PLC. Our work centers around the four PLC questions described in the book Learning By Doing (Dufour, et al.). This session will focus on the first two questions which have been the focus of our work over the past two years: What do we want our students to learn? and How will we know if they have learned it?. Next steps will be shared as we move to Question #3: What will be our in time and collective response when student do not learn?
6	6003	Thursday	11:00 - 12:00	A108/109	Chelsea	Ridge	ridgec@gvsu.edu	Formative Assessment in the Secondary Classroom	Students need to take control of their learning rather than expect that learning happens to them. One way to reinforce this principle is through formative assessment. This session will cover research surrounding formative assessment, best practices, as well as a variety of unique types of formative assessment that can be utilized in the mathematics classroom.
6	6004	Thursday	11:00 - 12:00	A110	Danielle	Seabold	dseabold@gmail.com	Which one doesn't belong? Building academic vocabulary	Mathematically proficient students try to communicate precisely to others, using key academic vocabulary. Teachers can support students as they build their academic vocabulary through a daily Number Sense Routine / Warm-up during the first 10 minutes of instruction. Come to this session to learn about using the Which One Doesn't Belong? routine in an interactive way that makes learning and using vocabulary engaging and relevant for both students and teachers.
6	6005	Thursday	11:00 - 12:00	B101	Chloe	Roper	c.roper@americanintlacademy.com	Building a Math Environment Where Every Child Grows	After the implementation of Front Row in February, 100% of my students hit or surpassed their goals in May. Since then, I have been charged with replicating my students' success district-wide. Front Row provides adaptive, targeted, inquiry-based learning in Math, and this session will show instructors how they can use Front Row's free program to increase achievement for all of their students. You will leave this session understanding what Front Row offers and how to implement this tool, immediately.

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Session	Session Number	Day	Time	Room	First Name	Last Name	Email	Presentation Title	Description
6	6006	Thursday	11:00 - 12:00	B102/103	Mustafa	Demir	demirmf@udmercy.edu	Using Online Technologies to Improve Mathematical Reasoning	This study examined prospective teachers' use of online technologies (e.g., virtual manipulatives, online math games, interactive applets) to teach K-8 level mathematics concepts. As part of their course project, twenty-eight prospective teachers designed instructional tasks that will be used with the technology they choose in their teaching presentations. The analysis of their lesson plans and teaching presentations revealed that prospective teachers often have difficulties in developing cognitively demanding mathematical tasks that can enhance students' mathematical reasoning in online settings. The findings suggest that developing engaging instructional tasks along with online technologies entails simultaneous use of knowledge of technology, content and pedagogy, described as technological pedagogical content knowledge (Koehler & Mishra, 2009). Furthermore, a set of exemplary web-based instructional activities that can enhance students' mathematical reasoning will be presented.
6	6007	Thursday	11:00 - 12:00	B108	Marian	Prince	marian.prince50@gmail.com	After-School Programming: Animation on TI-84 CE	The lure of learning how to design video games is strong for 4th and 5th grade students. For one night a week for 10 weeks, these enthusiastic elementary students learned how to animate drawings on TI-84 CE calculators. You too can spark young students' interest in math and computer science. Note: This also can be done using TI-83/84 family of calculators.
6	6008	Thursday	11:00 - 12:00	B109	Murney	Bell	mbell@sienaheights.edu	Building Concepts: Statistics in middle school and algebra 1	Is the analysis of one- and two- variable data sets new to a course you teach? Some statistical concepts have shifted grades or course within Standards. How can we use research to build deep understanding to the statistics concepts? How will we provide a rich tasks that support student proficiency in these statistics. We'll also explore statistics standards in middle grades courses and algebra I with Building Concepts activities using TI-Inspire CX technology.
6	6009	Thursday	11:00 - 12:00	B110	Cassandra	Gustafson	cassandra.gustafson@clarenceschools.org	Formative Assessments: Creating Tasks and Providing Meaningful and Timely Feedback	This presentation will focus on how to create and use tasks in the classroom that will inform instruction. We will look specifically at how to provide students will effective and timely feedback as well as how to implement procedures that maximize instructional time.

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Session	Session Number	Day	Time	Room	First Name	Last Name	Email	Presentation Title	Description
6	6010	Thursday	11:00 - 12:00	C101/102	Tara	Becker-Utess	tbecker-utess@inghamisd.org	Project Practice: A Job Embedded and Research Based Coaching Model	Ingham ISD embarked on a new K-4 coaching model this past school year. We set out to teach opportunities to respond, feedback, formative assessment, and progress monitoring through a job embedded PD model grounded in research. (Desimone and Garet (2015), Joyce and Shower (2002) (Rosenfield et al. (2010)). Our goal was to train master teachers in each of the four skills who in turn coached a less experienced teacher. Our coaching included four stages including awareness, modeling, planning, and observation. This session will explain the details of the program, the outcomes of the coaching, and how we are scaling up to work with 22 buildings in our county next year.
6	6011	Thursday	11:00 - 12:00	C103	Denise	Young	dyoung@bluevalleyk12.org	STEM Activities for Algebra 1 and Algebra 2	Using experiments in Algebra 1 and Algebra 2 to gather data and make predictions helps students make connections with the math concepts we want them to learn. In this workshop, we'll gather linear and quadratic data by doing some group activities and experiments. It really is easy to incorporate hands-on activities in your classroom!
6	6012	Thursday	11:00 - 12:00	C108	Ismael	Zamora	ishmath@aol.com	Parametrics For Beginners	Parametric representations on the graphing calculator including functions and their inverse, projectile motion in three different "physics" applications, baseball, classic train problem, Lissajou figures, complex roots and powers, rose curves, and conics will be explored. The exploration handout will include step by step solutions and screen shots.
6	6013	Thursday	11:00 - 12:00	C109	Jason	Gauthier	jgauthier@alleganaesa.org	NCSM's Great Tasks in Mathematics 6-12	The types of tasks we use in the classroom have a great influence on student learning. Not only that, but the way in which we facilitate those tasks can either increase/maintain cognitive demand or let it slip away, leaving students learning less. Come discuss a mathematical task as a teacher and experience it as a learner.
6	6014	Thursday	11:00 - 12:00	C110	Jim	Licht	licht.jim@sccresa.org	Using coding to teach Algebra Concepts	Bootstrap is a coding curriculum designed by a math teacher to reinforce math concepts. Students apply math concepts to write the code for their own video game.
7	7001	Thursday	1:00 - 2:00	A101	Kathy	Berry	infiniteberry@charter.net	Advocacy: supporting mathematics education beyond your own classroom	Politicians, the media, and even local school boards often try to micro manage what happens in schools and classrooms - including yours. This session presents several current issues affecting mathematics educators and a variety of tools and strategies you can use to advocate for yourself, your colleagues and especially your students.
7	7002	Thursday	1:00 - 2:00	A102/103	Anne Marie	Nicoll-Turner	nicoll@aaps.k12.mi.us	Thinking Like an Artist in Core Curriculum Subjects	Thinking like an Artist includes the use of visual thinking strategies to pair math and art lessons. We will highlight art and math integration lessons that have been presented in grades K-8. Participants will work on a small art project as part of the presentation.



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Session		Day	Time	Room	First Name	Last Name	Email	Presentation Title	Description
Session	Number								
7	7003	Thursday	1:00 - 2:00	A108/109	Stephanie	Butman	sbutman@oaklandflextech.org	Project Based Mathematics	How do we lead our students in true PBL Math? How do we ensure students are interacting with mathematical concepts in a meaningful way? How do we engage students in relevant and interesting applications while also establishing mathematical fluency? Come learn about one teacher's process for implementing creative, engaging, and relevant math projects.
7	7004	Thursday	1:00 - 2:00	A110	Holly	Crowson	hcrowson@larsontexts.com	Mixing It Up: Moving Beyond Tradition	Discussion and collaboration on how to change teaching practice to a more student centered approach. Session includes collaborating with peers on reflection, sample activities, and idea share. As well as a demonstration in using Desmos to incorporate mathematical practices.
7	7005	Thursday	1:00 - 2:00	B101					
7	7006	Thursday	1:00 - 2:00	B102/103	Rusty	Anderson	rustyanderson@kentisd.org	Rich Task Facilitation = Understanding	Having a great task to work on is a small piece of a successful mathematics classroom as there are many other components to consider! This session will imitate a mathematics classroom centered on discourse. Participants will dialogue lesson structure, collaborative norms, and have the opportunity to interact as a student on a mathematics task (Visual Pattern).
7	7007	Thursday	1:00 - 2:00	B108	Marian	Prince	marian.prince50@gmail.com	After-school Programming: Calculator-controlled robots and TI-Innovator LaunchPad Hub	Middle school students with just two programming commands apply their knowledge of math and science to send the calculator-controlled robot to write their name or make a certain shape. Students also design a lava lamp that is controlled by a calculator program. TI-84 CE calculators are used in this session, but the programming can also be done on the TI-Nspire.
7	7008	Thursday	1:00 - 2:00	B109	Christine	Kincaid Dewey	kincaiddewey@yahoo.com	Welcome to Polar Land!	Help students learn about polar coordinates & polar graphs. Use a variety of high and low technology to make this topic come alive for students. Attendees will leave with a variety of activities and suggested projects for students. Appropriate for advanced algebra II and pre-calculus classes.
7	7009	Thursday	1:00 - 2:00	B110	Cynthia	Goff	cynthia.goff@elps.us	Gathering information about students' experiences and perceptions to better support their learning	As we have done action research to improve our classroom discourse, we have found that formatively assess students' experiences and perceptions is imperative to supporting them to learn mathematics. We have designed tools and activities to use with our students to learn about their perspectives on how they think of themselves as a math learner, their preferences for participation, and other classroom practices we are using. In this session, we share some of these tools and activities, engage participants in providing feedback on these tools and activities, brainstorm additional tools and activities, and share some of the findings from our action research projects.

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Session	Session Number	Day	Time	Room	First Name	Last Name	Email	Presentation Title	Description
7	7010	Thursday	1:00 - 2:00	C101/102	Tara	Becker-Utess	tbecker-utess@inghamisd.org	Standards Based Grading in the Math Classroom	You've probably heard the phrase standards based grading, but what does it look like in a secondary (6-12) math classroom? I will describe the philosophy behind standards based grading and then delve into specific ways to make it work in your classroom based on my experience using it in Algebra 1. We will focus on how standards based grading allows students to track their own learning through a chapter based on many formative assessments before the summative assessment.
7	7011	Thursday	1:00 - 2:00	C103	Mary	Burke	mary.burke@kresa.org	Coaching STEM: Tools to Support High Quality Instruction	In this session, participants will be introduced to and experience a STEM coaching model leveraging the Science and Engineering Practices and the Standards for Mathematical Practice. We will use classroom simulations and corresponding tools and strategies that model opportunities for integration across STEM instruction. For example, we will explore productive talk moves that can be implemented to foster the Practices. Participants will leave with coaching and instructional tools to use in the classroom to support STEM instruction.
7	7012	Thursday	1:00 - 2:00	C108	Jim	Licht	Licht.Jim@sccresa.org	AP Computer Science Principles- Access to Resources and Professional Learning at NO COST to Districts by The Michigan Mathematics and Science Centers Network and Code.org	The Michigan Mathematics and Science Centers Network, in partnership with Code.org, is able to provide schools in Michigan free access to the AP Computer Science Principles course and free professional learning to support success of this course. AP Computer Science Principles is a entry?level course for students who have successfully completed Algebra I. Mathematics teachers are eligible to teach the course. Come to this session to learn more!
7	7013	Thursday	1:00 - 2:00	C109	Missy	Butki	melissa.butki@lok12.org	Recognizing, Understanding and Supporting the Development of Mathematical Vocabulary	Do your students struggle with understanding mathematics due to the complexity of the language? The following session will incorporate easy and quick ways to engage your students with academic vocabulary. You will leave with many ideas to implement into your daily lessons.
7	7014	Thursday	1:00 - 2:00	C110	Christine	Schneider	cschneider.mel@gmail.com	LearningExpress Library: A Necessary Online Tool for Secondary Math Classrooms	Are you looking for an online resource to aid in test prep, help with intervention, and even challenge some advanced students? Then LearningExpress Library is the resource for you! In this session we will explore the 7 centers in LearningExpress with a focus on College Preparation and School Center. With free access in the state of Michigan, your students can use 4 full SAT practice tests that can be taken in 3 modes, math tutorials that are common core aligned starting in the 4th grade, and AP exam prep materials. Bring a device so you can explore and experience all it has to offer!

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Session	Session Number	Day	Time	Room	First Name	Last Name	Email	Presentation Title	Description
8	8001	Thursday	2:15 - 3:15	A101	Jason	Gauthier	jgauthier@alleganaesa.org	Ours IS the Reason Why! Stop Invert-and-Multiply!	We need to stop teaching students only to invert and multiply when dividing fractions. But what to teach in its place? Come discuss ways to develop understanding of fraction division in students using representations and an alternative algorithm for fraction division. Pedagogical next steps will also be discussed.
8	8002	Thursday	2:15 - 3:15	A102/103	Demetrius	Nelson	colife789@yahoo.com	Making Math R.E.A.L. (Relevant, Experiential, Applicable, Lively)	Participants will learn of highly engaging retention strategies to assist 3rd-6th graders understand math standards related to factorization, fractions, multiplication, and order of operations connecting to family, dining, sports, and music. Participants are encouraged to wear comfortable clothes to support the physical activities that will be involved.
8	8003	Thursday	2:15 - 3:15	A108/109	Jack	Smith	jsmith@msu.edu	Equal Groups and Repeated Addition Won't Do in Developing Students' Understanding of Multiplication	Most current mathematics curricular materials present multiplication as a specialized form of addition. This introduction is easy to teach and learn, but it does not support students' understanding of the full range of multiplicative quantities and situations necessary for longer-term in mathematics and science. This session will consider more effective ways to begin this development.
8	8004	Thursday	2:15 - 3:15	A110					
8	8005	Thursday	2:15 - 3:15	B101	Bradley	Stalder	bstalder@fgrhs.org	Bonanza: Assessing & Re- Assessing for Mastery	Five Time National Champion Football Coach Nick Saban tells his players, "You don't practice til you get it right, you practice until you can't get it wrong." As teachers, we shouldn't be satisfied if a student gets a problem correct once-- we should be satisfied when a student can't get the problem wrong. This assessment technique motivates students to attain mastery using a growth mindset approach.
8	8006	Thursday	2:15 - 3:15	B102/103	Pam	Lindemer	plindeme@ioniaschools.org	Using the Area Model for Multiplying, Factoring and Division of Polynomials	Manipulatives in a secondary math classroom? You'll see how successful it can be! Participants will be actively engaged in using algebra tiles and the area model to multiply polynomials. Then we will do factoring and completing the square. Finally we will use the area model to polynomials long division. The important part is transitioning from the concrete (manipulatives) to the abstract (pencil and paper).
8	8007	Thursday	2:15 - 3:15	B108	Deb	Nutt	koalanut@bright.net	Getting the Most from Your TI-84	You already use the TI-84 but do you know everything it will do for your students. Come learn some little known features and secrets while also working with some of the apps that will enhance your teaching and help your students. You may even say "Wow, I didn't know we could do that."

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Session	Number								
8	8008	Thursday	2:15 - 3:15	B109	Leslie Ann	Burleson	leslieannjacks@yahoo.com	Preditor- Prey chasing game	One goal of this activity is to have students understand how predator-prey interactions affect population size. Students will also analyze data to predict future population sizes. A third goal is for students to explore the major factors that influence the predator-prey relationship. The students will graph the data to view the inverse relationship between the predator and the prey
8	8009	Thursday	2:15 - 3:15	B110	Ellen	Kamischke	ejkamisc@mtu.edu	Competitions to challenge and inspire the advanced student	Math team competitions and club activities provide the opportunity for accelerated students to experience mathematics outside of the standard curriculum. Information will be shared about team competitions in Michigan. In addition, activities for math clubs involving mathematical concepts from number theory, cryptography, and other discrete topics will be shared.
8	8010	Thursday	2:15 - 3:15	C101/102	Denise	Young	dyoung@bluevalleyk12.org	Conics - Bringing the Topic Back into Focus	Do you have students who need to see relevance in mathematics or maybe they just need to be enriched by some beautiful mathematical topics but you need some fresh ideas or activities? Do you dread teaching conics to your Algebra 2 classes or do you skip them entirely because they don't seem that important? Come rediscover conics in this interactive workshop that uses paperfolding, simulations, and graphing calculator technology to engage even the most reluctant of learners.
8	8011	Thursday	2:15 - 3:15	C103	Ashley	Meyer	meyera@bcreek.org	Math Lab: Providing Help for Struggling Students	At Bullock Creek Middle School, a course called Math Lab was designed to help at-risk students with mathematics. This is currently my 4th year teaching this course. During this session, I will discuss how this class was created, how the program has evolved over the last few years, and I will discuss what I have done to make our program successful. I'll also share with you what the Math Lab courses look like and what I do in my classes (routines, activities, etc.). My hope is that this session will encourage you to bring this information back to your own school district and start a program of your own to help struggling math students.
8	8012	Thursday	2:15 - 3:15	C108	Gianna	Helling	gianna.helling@Ontario.ca	Using Technology to Empower Student Voice in the Mathematics Curriculum	Explore how technology can enhance attitudes towards the understanding of mathematics. Learn strategies to inspire students, staff and parents to think about mathematics creatively and see math as a broad, interesting and visual subject that involves deep thinking. Discover how student voice can empower students to be agents of change and how students can use technology and math to reconfigure society to be more ethical and just.
8	8013	Thursday	2:15 - 3:15	C109	Derek	Imboden	exrod@att.net	Innovation in Formative Assessment (really cool quiz ideas)	Quizzes sit there on the class schedule, intimidating students. "Do we have a quiz today?" I use a variety of quizzes as a teaching tool where my focus is often upon getting students to work together sharing information teaching and learning from one another. My students eventually realize that they can never be sure of what they are going to find when they show up on quiz day.

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Session									
Session	Number	Day	Time	Room	First Name	Last Name	Email	Presentation_Title	Description
8	8014	Thursday	2:15 - 3:15	C110	Barbara	Webber	bwebber@larsontexts.com	Designing a Student Centered Math Class: I Task, We Talk, You Connect!!!	Participants will engage in mathematical tasks/activities appropriate for middle or high school students, discuss the multiple strategies and processes that could be used and solutions that would be accepted. Learn strategies to encourage your students to wonder, to question, to think beyond the norm, to communicate! Development of Math Practices will be embedded in the tasks/lessons. Activities and tasks will include materials from the Big Ideas Math program.