

Saturday Sessions Starting at 8:00

8:00 – 8:50

Hyatt Buckeye A

General

So Let's Talk Mathematics

This session will focus on how students perceive what is said and done in the mathematics classroom. Areas of discussion will include: confusing terminology, misconceptions and what you can do for your students to maximize understanding and learning.

Speakers: Marilyn Link, Coldwater, OH
Jack Albers, Lehman Catholic High School, Celina, OH

8:00 – 8:50

Hyatt Buckeye B

General

Build Your Network: Let OCTM be your Bridge to Collaboration

Would you like to join a group of OCTM members from around Ohio who are interested in exploring a question about mathematics teaching and/or learning together? If so, come to this session to find out how these groups will be organized and how they will collaborate on an ongoing basis throughout the year.

Speaker: Kimberly Yoak, President, Ohio Council of Teachers of Mathematics

8:00 – 8:50

Convention Center Room 252

Grades K-5

Family Math at Home

The family math game program will help connect home, school and math all year long. This interactive, manageable program for students and families uses games to reinforce concepts and help families interact mathematically. Participants make and take samples of programs.

Speaker: Mandy E. Robek, Tyler Run Elementary, Olentangy Local Schools, Powell, OH

8:00 – 8:50

Convention Center Room 250

Grades 3-12

Using Practice Tests to Improve Performance

This session will focus on the benefits of collecting student data from practice tests to help improve OAT/OGT scores as well as student understanding and performance in the classroom. By collecting and interpreting data, new strategies can be implemented.

Speaker: Angela Recker, Treca Digital Academy, Franklin, TN

8:00 – 8:50

Convention Center Room 251

Grades 9-12

History in the Contemporary Classroom

The history of mathematics can bring the classroom alive, providing a human touch to the subject and an unending source of rich problems. In this session, participants will explore several historical problems and their use in the contemporary mathematics classroom.

Speaker: Ted Hodgson, Northern Kentucky University, Highland Heights, KY

Saturday Sessions Starting at 8:30

8:30 – 9:20

Hyatt Regency B

Grades K-8

Exploring Computational Fluency in the Middle Grades

We describe how we are bridging a computational fluency gap existing between a K-5 curriculum that encourages the use of informal strategies and a 6-8 curriculum that assumes proficiency. By exploring alternative strategies, we'll give ideas for improving computational skills.

Speakers: Jane M. Keiser, Miami University, Oxford, OH
Don Gloeckner and Karen Fitch, Talawanda School District, Oxford, OH

8:30 – 10:00

Hyatt Regency C

Grades K-2

Using Stations for Math Motivation

Math stations provide practice through hands-on learning, while encouraging communication and collaboration between students. Participants will leave this make and take session with ready to go games and activities for the classroom.

Speaker: Trisha Harris, Chesapeake Elementary, Chesapeake, OH

8:30 – 10:00

Hyatt Regency E

Grades 3-8

Fun and Games in Math

Fun ways for students to practice math concepts using games and other interesting activities. What do you do when you have 5, 10, 15 minutes at the end of your math class? Come participate in some fun ways to fill those last few minutes that are fun and educational.

Speaker: Debra Gallagher, Ohio Northern University, Ada, OH

8:30 – 10:00

Hyatt Bluegrass A & B

Grades 9-12, College

A Tribute to George Polya, Continued

We will employ Polya's strategies to explore solutions to some very neat RICH PROBLEMS. Bring your own problems (math type please) and we will try Polya's strategies on them!

Speaker: Richard A. Little, Baldwin-Wallace College, Berea, OH

8:30 – 10:00

Convention Center Room 263

Grades K-5

Do Your Students Really Understand Fractions?

Participants will experience hands-on investigations delivered through an inquiry-based model derived from research about how children learn. Participants, working in collaborative groups, will experience actual lessons, using a variety of manipulatives that help students increase their conceptual understanding of fractions.

Speaker: Donna Gunderson, Clemson University, Clemson, SC

8:30 – 10:00

Hyatt Regency F

Grades 6-8

Thinking Mathematically

Participants will experience a variety of activities that implement the mathematical process standards (problem solving, reasoning and proof, communication, connections, and representation) and learn how to incorporate them into math lessons. This session calls for participants' active engagement.

Speaker: Al Cote, South East Center for Excellence in Mathematics and Science, Athens, OH

8:30 – 10:00

Hyatt Regency G

Grades 6-8

Co-teaching with Venier Probeware

The presentation will be an explanation of how we have used our co-teaching opportunity to make the most of using Probeware with middle schoolers. We will also allow some lab time with the lesson that we will present.

Speakers: Kathy Kallmyer and Jessica Schlueter, Nagel Middle School, Cincinnati, OH

8:30 – 10:00

Convention Center Room 264

Grades 6-8

Pi Day!

Come and experience the fun of Pi Day! We will read a book, discuss the history of Pi, determine Pi through a hands-on activity, read poems and jokes, make a Pi chain, and participate in many more fun activities.

Speakers: Brenda Bays, Northwest Middle School, McDermott, OH
Ginny Hamilton, Shawnee State University, Portsmouth, OH

8:30 – 10:00

Convention Center Room 262

Grades 9-12, College

Intermediate Algebra and Geometry (IAG): A Pre-Algebra 2 Course that has been Very Successful at Our High School

Discover how we have increased our scores and passing rate in Algebra 2 with IAG: a course designed to improve skills necessary for success in Algebra 2 and improve skills needed for the OGT. Works with the 83/84 and Nspire. Free CD.

Speaker: Tom Reardon, Fitch High School, Poland, OH

Saturday Sessions Starting at 9:00

9:00 – 9:50

Convention Center Room 251

Grades K-5

Writing for Understanding in a Mathematics Classroom

Join us for a rich math experience and learn how to use writing as a tool for learning. Participants will learn effective instructional strategies for teaching students to write, refine, and capture their thinking in pictures, numbers, and words.

Speaker: Joan Smith, Teaching and Learning Collaborative, Columbus, OH

9:00 – 9:50

Convention Center Room 252

Grades K-5

PANEL: Curious about Inquiry Methods?

Come listen to panelists sharing experiences regarding inquiry methods of instruction and learn some ideas about how to shift the thinking for students and teachers to effectively teach and learn through a reform-based curriculum. Bring your questions!

Speakers: Susan Van Scyoc, Reading School District, Cincinnati, OH
Rachel Huber, Reading School District, Cincinnati, OH
Christy Wanstrath, Madeira City Schools, Cincinnati, OH
Jen Zale, Reading School District, Cincinnati, OH

9:00 – 9:50

Hyatt Buckeye B

Grades 6-8

Using Graphing Calculators to Teach Middle School Math

Graphing calculators are a powerful tool to help teach middle school mathematics. Come see what's available and learn how you can incorporate all of it into your teaching.

Speaker: Lisa Suarez, Luis Munoz Marin, Cleveland, OH

9:00 – 9:50

Convention Center Room 250

Grades 9-12

Is the St. Louis Arch a Parabola?

A lesson using Pascal's theorem will be presented. Participants will work with images of structures like the St. Louis Arch and San Francisco Bridge to determine if the object is a conic section. Geometer Sketchpad will also be used as a tool in the lesson.

Speaker: Michele Heron, Kent State University, Kent, OH

Saturday Sessions Starting at 9:30

9:30 – 11:00

Hyatt Regency B

Grades 6-12

Ohio Mathematics Standards Revision: Grades 6-12

After an overview of the purposes of standards revision, the revision process and timeline, and the draft documents, participants will work in grade-band teams, with ODE staff and members of the standards working groups, to provide feedback on the draft.

Speakers: Yelena Palayeva, Ohio Department of Education, Columbus, OH
Brad Findell, Ohio Department of Education, Columbus, OH

Saturday Sessions Starting at 10:00

10:00 - 10:50

Convention Center Room 251

General

The 5 E Learning Cycle: A Framework for Math Lessons

See what it means to Engage, Explore, Explain, Extend, and Evaluate as a framework for structuring your math lessons. Watch teachers implementing this framework for teaching and learning.

Speaker: Gina Post, Wittenberg University, Springfield, OH

10:00 – 10:50 Hyatt Buckeye A Grades K-2

No Nonsense Numeracy Development

Participants will reflect on early numeracy development, consider strategies for diagnosing student need, and hear about resources and activities for advancing student thinking and skills.

Speaker: Alice Gabbard, Kentucky Center for Mathematics, Highland Heights, KY

10:00 – 10:50 Hyatt Buckeye B Grades K-5

Creating a Family Math Night

Teachers will learn to create a school Family Math Night so parents can reinforce important math concepts at home through hands-on activities. A packet of directions for activities will be provided to implement your own fun-filled Math Night.

Speaker: Beth Pohlman, Madeira Elementary, Cincinnati, OH

10:00 – 10:50 Convention Center Room 250 Grades 6-8

Questioning in Your Math Classroom

Learn how to use questioning with confidence to allow for discussion and exchange of ideas. This workshop demonstrates to teachers how to encourage students to use thinking and reasoning to answer the “what if’s” in the mathematics classroom.

Speaker: Denise McDowell, Big Ideas Learning, LLC, Erie, PA

10:00 – 10:50 Convention Center Room 252 Grades 9-12

180 Days of Fun!

Lasagna Solution, BB problem, The Triangle Addition Theorem and 177 more problems my kids have taught me. Come on in and have some fun. Handouts included.

Speaker: Bob Stover, Calvert High School, Tiffin, OH

Saturday Sessions Starting at 10:30

10:30 – 11:20

Convention Center Room 262

General

Got iPod?

Is there anything that says that iPods and other mp3 players have to play music and movies only? Why not play some math? I will show you how to make your own iPod videos and podcasts using both a SMART Board and audio/video cameras.

Speaker: Renea Collopy, Liberty Union High School, Baltimore, OH

10:30 – 12:00

Convention Center Room 264

General

Using Ohio's Success Website to Enhance Instruction

Educators will have the opportunity to navigate through Ohio's Success Website and learn how to utilize it to enhance their classroom instruction and assessment. The Success Website serves as a tool to help in understanding the statewide assessments for the OAT and OGT.

Speaker: Jenny Moeller, Hamilton County Educational Service Center, Cincinnati, OH

10:30 – 12:00

Hyatt Bluegrass A & B

General

Mathematical Quilts Workshop

Create a Mathematical Placemat for Use in Your Classroom

This hands-on workshop is for ALL levels of teachers! We will look at hands-on activities in a new way that students will enjoy! Participants will create their level-appropriate mathematical placemat to take back for use in their classroom.

Speaker: Elaine Ellison, Consultant, Sarasota, FL



Elaine Ellison's talk is sponsored by the Xavier Center for Excellence in Education (XCEED). Since 1998, the center has offered courses in math and science methods, and instructional technology. XCEED offers outstanding professional development programs for in-service educators.

10:30 – 12:00

Hyatt Regency G

Grades 3-12

Math on the Move!

Come prepared to move! Participants will try out lessons that use kinesthetic and visual learning modalities that help students be successful on many topics in geometry, algebra and number sense and operation. Many of the topics discussed in this session begin in upper elementary school and continue into high school.

Speaker: Julie Nurnberger-Haag, Michigan State University, East Lansing, MI

10:30 – 12:00

Hyatt Regency C

Grades 6-8

Real World Statistics for Middle Childhood Students

Participants will compare data to determine which product performs better using central measures of tendency along with box-and-whisker plots. Other simulations will be presented so that teachers can engage their students in real world statistical research.

Speaker: Debora Kuchey, Xavier University, Cincinnati, OH

10:30 – 12:00

Hyatt Regency E

Grades K-5

Elementary Math can be Fun when Integrated with Technology, Literature, Math Lab Activities and Journaling

Integrating literature, hands-on learning, technology and journaling makes concepts such as fractions, graphs, the Pythagorean Theorem, surface area, volume, and problem solving fun! Lesson ideas include modifications for ELL and special needs students. Participants will receive lesson outlines and a CD.

Speaker: Laura Skjold, Neufeld Learning Systems Inc. London, Ontario, Canada

10:30 – 12:00

Hyatt Regency F

Grades 6-8

Fraction Sense for the OAT

Students (and teachers!) often believe that understanding fractions is synonymous with completing computational exercises. This session illustrates what students REALLY need to know – for the test, and beyond!

Speaker: Bob M. Drake, University of Cincinnati, Cincinnati, OH

10:30 – 12:00

Convention Center Room 263

Grades 6-8

PANEL: Curious about Inquiry Methods?

Participants will hear from teachers who have experience transitioning students from a traditional classroom to an inquiry-based classroom. They will have an opportunity to ask questions of the panelists to help meet their individual needs.

Panelists: Angela Murphy, Edgewood Middle School, Hamilton, OH
Lauren Green, Edgewood Middle School, Hamilton, OH

Saturday Sessions Starting at 11:00

11:00 – 11:50

Hyatt Regency B

Grades K-2

Math Ideas for the ESL Classroom

Based on my teaching experience and graduate studies, this seminar offers teachers a better understanding of English as a Second Language (ESL) learners. These research-based methods and ideas for teaching math provide practical ideas for teachers of ESL students.

Speaker: Elizabeth M. Bird, Bethany School, Cincinnati, OH

11:00 – 11:50

Convention Center Room 250

Grades 3-5

It's Time to Change How we Teach Time and Money!

This session will explore research and its practical implications for teaching time and money including making change and elapsed time. Visual models will be explored. Handouts will be given to participants.

Speaker: Trish Koontz, Kent State University, Kent, OH

11:00 – 12:00

Convention Center Room 252

General

Number Sense and Number Nonsense: The Cognition and Brain Science of Math Learning

Based on our book *Number Sense and Number Nonsense*, the first-ever comprehensive review of the cognitive and neuroscience research on math learning and math disability, the talk provides psychological insights into some reasons why students struggle to learn mathematics.

Speaker: Nancy Krasa, Columbus, OH

11:00 – 11:50 Hyatt Buckeye A Grades 6-8, General

Illuminating Rational Numbers and Proportional Reasoning

We will elaborate on Susan Lamon's "Rational Numbers and Proportional Reasoning" (NCTM, 2007), reevaluate the research, identify persistent unresolved issues, and add to the research agenda. Attendees will be invited to engage in purposeful and relevant assessment activities.

Speakers: Sister Mary Theresa Sharp, SND, Kent State University, Chardon, OH
 Nicole Casacchia, Austintown Middle School, Youngstown, OH

11:00 – 11:50 Hyatt Buckeye B Grades 9-12

Promoting Higher Level Thinking in a Geometry Classroom through Constructions, Projects and Writing Assignments

Learn new ways to challenge your geometry students and improve their level of understanding. This session features classroom tested projects and writing assignments. We will discuss geometric constructions that develop cognitive thinking skills used in proof writing and problem solving.

Speakers: Jennifer Nickell, Lakota West Freshman School, West Chester, OH
 Kevin Carlin, Lakota East Freshman School, Liberty Township, OH

11:00 – 11:50 Convention Center Room 251 Grades 9-12, General

Applications Using the Chain Rule in Calculus

We will investigate several examples of applications that illustrate the chain rule, both graphically and algebraically, with emphasis on student discovery and interpretation.

Speaker: Mary Koshar, Bowling Green State University, Bowling Green, OH

12:30 Convention Center Grand Ballroom B (Level 3)

Gather for the closing session, a special presentation and door prizes!

1:00 – 2:00 Convention Center Grand Ballroom B (Level 3)

Calculus: The Musical!

Calculus: The Musical! is a comic review of the concepts and history of calculus. It's a blend of sketch comedy, musical theatre and classroom lecture. Using musical parodies that span genres from light opera to hip hop, concepts such as limits, integration and differentiation are introduced and illuminated. From Archimedes to Riemann, the quest for the instantaneous rate of change and the area under the curve comes to life through song. The Beatles, Gilbert & Sullivan, Petula Clark and even Eminem are just a few of the artists who inspired this engaging and educational lesson. *Calculus: The Musical!* has entertained arithmophobes and math teachers alike at venues across the country.