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**Teachers Teaching with Technology™**

Professional Development from Texas Instruments

# International Conference

March 2-4, 2012

Chicago, IL





## Learn. Energize. Connect.

The 2012 T<sup>3</sup>™ International Conference combines professional development, networking and the opportunity to experience new TI products and resources for math and science education. Energize your instruction. Connect with other educators to gain new ideas and lead your students to success. You'll find it all here at TI's largest annual professional development event.

Statistics Symposium .....	2
CAS Conference-in-a-Conference .....	3
Power Sessions .....	4
Conference Schedule .....	5
My Conference Planner .....	6
Friday Sessions .....	7
Saturday Sessions .....	17
Friday Session Details .....	29
Saturday Session Details .....	65
Presenter Index .....	113
Exhibitors .....	129

# Statistics Symposium

## Statistics Symposium

Friday, March 2

10:15 a.m. – 8:00 p.m.

West Tower/Gold Level/Regency Ballroom A\*

Join us for this day-long event focused on statistics and enjoy the different sessions throughout the day and into the evening. A diverse group of presenters will give their different perspectives and insights into the various aspects of Statistics.



<b>10:15 – 10:20 a.m.</b>	Gail Burrill: Welcoming and Opening Remarks
<b>10:20 – 11:15 a.m.</b>	Katherine Stern: Biostatistics in the Pharmaceutical Industry
<b>11:30 a.m. – 1:00 p.m.</b>	Milo Shield and Katherine Halvorsen: The Changing Face of Statistics: Implications for our Classrooms
<b>1:15 – 2:15 p.m.</b>	George Cobb: Experimental Design and Why We Should Care
<b>2:30 – 4:00 p.m.</b>	Josh Tabor, Tim Erickson, Ruth Carver: My Best Idea for Teaching a Tough Concept
<b>4:15 – 5:15 p.m.</b>	Floyd Bullard: Things It Took Me A Long Time to Understand
<b>6:00 – 8:00 p.m.</b>	Statistics Community Connections Columbus CD

**There are additional statistics sessions on both Friday and Saturday. Please check your program for session descriptions.**

\*6:00 – 8:00 p.m. event will not be in Regency Ballroom A. The event will be in Columbus CD.

# CAS Conference-in-a-Conference



## CAS Conference-in-a-Conference



**This conference is a USACAS 7 event and is co-hosted by Mathematics Educators Exploring Computer Algebra Systems (MEECAS)**

### Why should you attend?

- » The conference is designed to deepen your knowledge of CAS education while giving you the opportunity to share your own CAS expertise with other educators.
- » You'll walk away with ideas, tools and best practices on teaching with CAS technology.
- » With events running from Friday evening through Sunday morning, you'll have several opportunities to network and socialize with an international group of CAS educators.

### Sessions include:

#### CAS Community Connection

*Friday, March 2*

*6:00 – 8:00 p.m.*

*Columbus EF*

Enjoy two hours of socializing with educators and invited leaders who share your interest in CAS education.

#### CAS Conference-in-a-Conference

*Saturday, March 3*

*8:30 a.m. – 5:30 p.m.*

*Various locations*

*(For session titles and details, see sessions marked "CAS" in the program.)*



Day-long event focused on the use of Computer Algebra Systems (CAS) as a learning tool. Co-hosted by the MEECAS organization of Chicago, this event will include presentations, sessions and discussions on the variety and depth of opportunities to leverage CAS in all mathematical subjects. There will be many opportunities for networking and socializing with CAS educators from around the world.

Presenters include Al Cuoco, Zalman Usiskin, Kathy Heid, Steve Arnold, Mike Thomas and others with a wide variety of perspectives on using CAS.

#### International Perspectives on Using CAS Technology

*Sunday Power Session, March 4*

*8:30 – 10:30 a.m.*

*Columbus AB*

Three CAS experts will share their perspectives on the powerful benefits of CAS and its use in Scotland, U.S. and New Zealand. Presenters include Kathy Heid, Mike Thomas and Nevil Hopley.

# Power Sessions

## Power Sessions

Sunday, March 4

8:30 – 10:30 a.m.

East Tower/Gold Level/Various Locations

Make a point of attending these exciting and informative sessions.

### **Appreciating and Applying the Common Core State Standards of Mathematical Practice**

Al Cuoco, Rose Zbiek, Beth Chance

*Grand Ballroom AB*

How should the mathematical practices change the culture of our classes? How are they different from past practices? And what is the role of technology in making such practices a reality? Come hear discussions on these questions and others that have risen since the release of the Common Core Standards.

### **International Perspectives on Using CAS Technology**

Kathy Heid, Mike Thomas, Nevil Hopley

*Columbus AB*

Computer Algebra Systems (CAS) have been used around the world in varying degrees and time spans, and with different student populations. Three expert researchers will share their perspectives of the powerful benefits of CAS and its use in Scotland, the U.S. and New Zealand.

### **Calculus: Affecting the Lives of Millions**

Deborah Hughes Hallet

*Columbus IJ*

Many people study mathematics for its beauty; others study mathematics because it opens doors to the professions. In this talk, we will look at the ways mathematics is used in fields that impact the lives of millions. Examples will include the use of calculus to predict “peak oil” and to curb the spread of an infectious disease, such as SARS. We will see what statistical models can tell us about the impact of climate change on civil war.

### **Nine Keys to Writing a Winning Grant Proposal**

Clara Tolbert

*Columbus G*

Learn how to apply grant-writing keys to success, including vision, research, project design, etc. Participants will have the opportunity to prepare, discuss and review sections of proposals.

### **Nspired Learning in Science – Experiences from Classroom Usage**

Ian Galloway

*Columbus CD*

Science educators from around the world will show best examples on the use of the TI-Nspire™ Science solution in classes with specific attention to Chemistry, Physics and Biology.

### **Using Project-Based Learning to Increase Student Engagement and Understanding**

Joe Ferrara, Bill Church, Jackie Bonneau

*Columbus EF*

Three experts will share their insights on the utilization of Project-based Learning (PBL) in Math, Science and STEM classrooms. The discussion will focus on how to create PBL units that will engage students in inquiry-based learning while incorporating STEM skills necessary for 21st century success.

# Conference Schedule



Thursday	Time	Room
<b>Registration</b> Pick up your conference materials.	5:00 – 9:00 p.m.	East Tower/Gold Level/Grand Ballroom Foyer

Friday	Time	Room
<b>Registration</b> Pick up your conference materials.	7:00 a.m. – 4:30 p.m.	East Tower/Gold Level/Grand Ballroom
<b>Exhibit Hall</b> Visit exhibitors, check email and more!	10:00 a.m. – 6:00 p.m.	East Tower/Purple Level/Riverside Center
<b>Opening Session</b>	8:30 – 9:45 a.m.	East Tower/Gold Level/Grand Ballroom
<b>Conference Sessions</b>	10:15 a.m. – 5:15 p.m.	Various
<b>Welcome Reception</b> All are welcome.	5:30 – 7:00 p.m.	East Tower/Gold Level/Grand Ballroom
<b>Community Connections</b>	6:00 – 8:00 p.m.	Various

Saturday	Time	Room
<b>Registration</b> Pick up your conference materials.	7:30 a.m. – Noon	East Tower/Gold Level/Grand Ballroom
<b>Exhibit Hall Hours</b> Visit exhibitors, check email and more!	9:00 a.m. – 5:00 p.m.	East Tower/Purple Level/Riverside Center
<b>Conference Sessions</b>	8:15 a.m. – 5:30 p.m.	Various

Sunday	Time	Room
<b>Power Sessions</b>	8:30 – 10:30 a.m.	Various
<b>Closing Session</b>	10:45 – 11:30 a.m.	East Tower/Gold Level/Grand Ballroom

# My Conference Planner

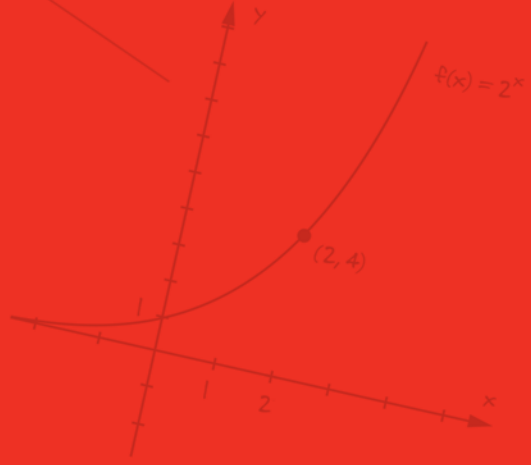
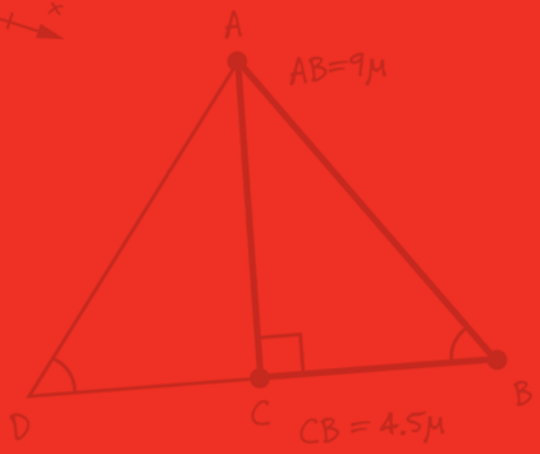
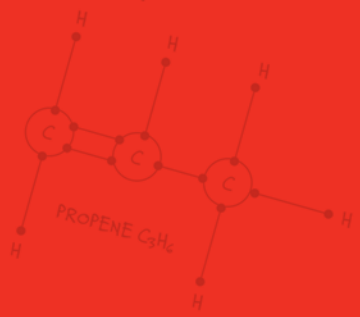
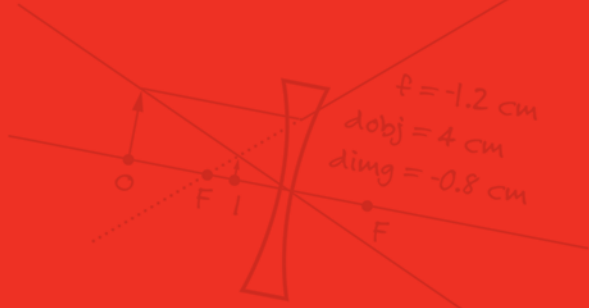
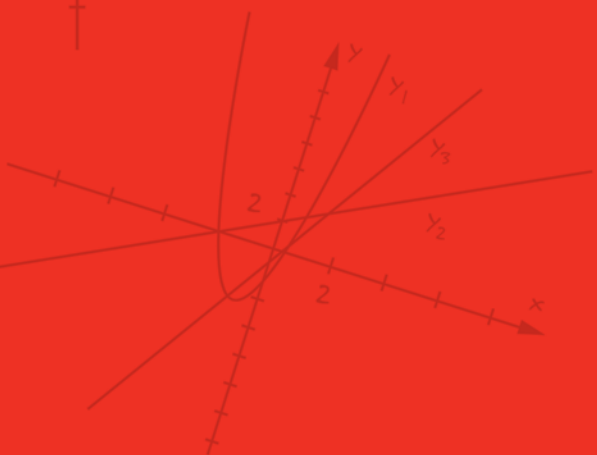
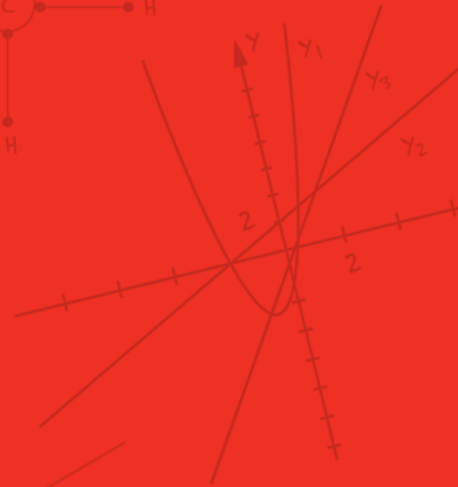
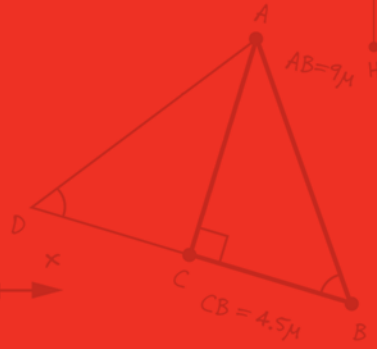
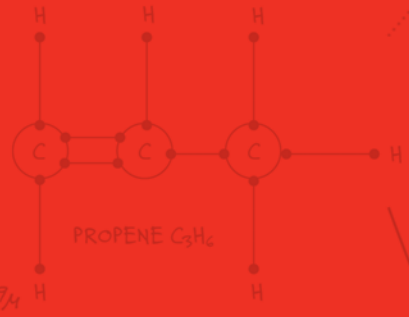
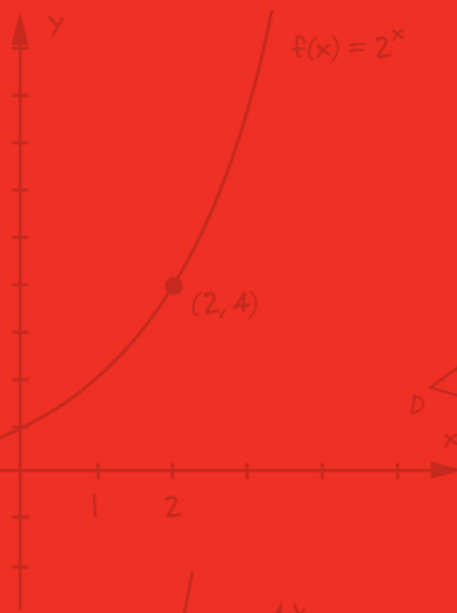
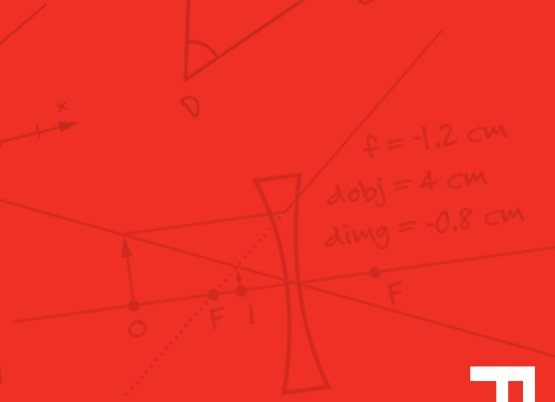
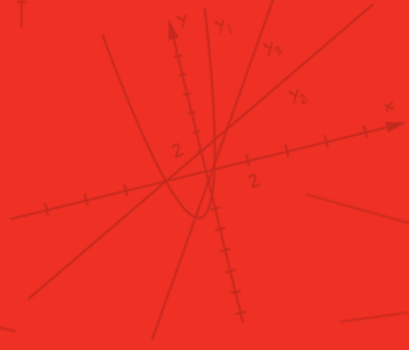
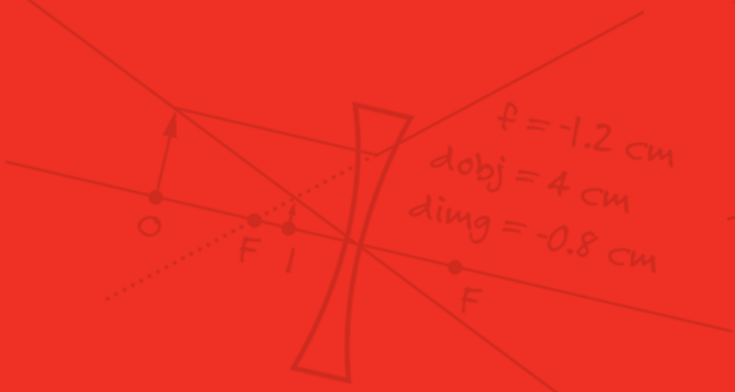
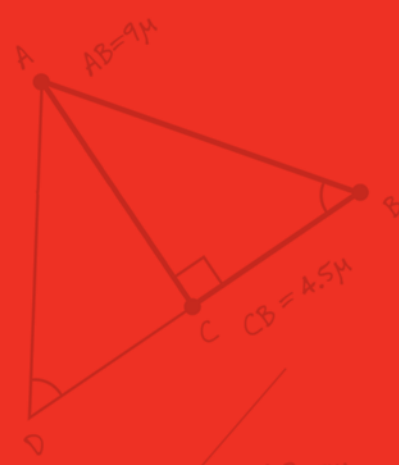
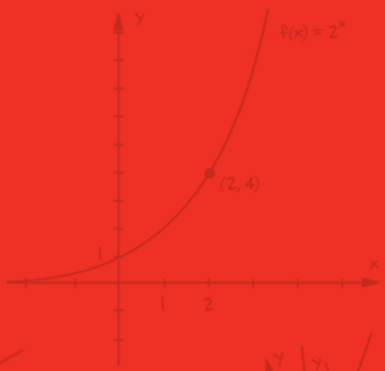
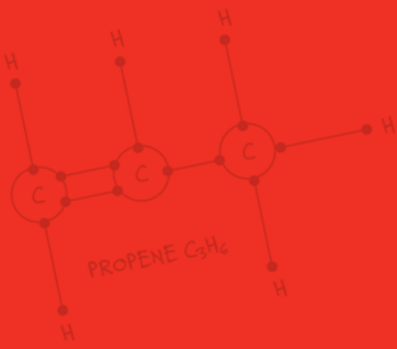


Use this to plan your conference session schedule.

TIME	FRIDAY
8:30 – 9:45 a.m.	<b>Opening Session</b> East Tower/Gold Level/Grand Ballroom Dr. David A. Sousa
10:15 – 11:15 a.m.	
11:30 a.m. – 1:00 p.m.	
1:15 – 2:15 p.m.	
2:30 – 4:00 p.m.	
4:15 – 5:15 p.m.	
5:30 – 7:30 p.m.	<b>Welcome Reception</b> East Tower/Gold Level/Grand Ballroom
6:00 – 8:00 p.m.	<b>Community Connections</b>

TIME	SATURDAY
8:15 – 9:45 a.m.	
10:00 – 11:00 a.m.	
11:15 a.m. – 12:45 p.m.	
1:00 – 2:00 p.m.	
2:15 – 3:45 p.m.	
4:00 – 5:30 p.m.	

TIME	SUNDAY
8:30 – 10:30 a.m.	<b>Power Sessions</b>
10:45 – 11:45 a.m.	<b>Closing Session</b> East Tower/Gold Level/Grand Ballroom Ms. Mikayla Diesch and Ms. Shannon Diesch <b>Grand Prize Drawing</b>



Friday Sessions

10:15–11:15 am

**Administrator**

**27—Mathematical Modeling is Effective in Education and Will Engage Educational Leaders in the Technology Purchase Decision/Process (Using the TI-Nspire™ CX Handheld Family)**

Edward Chaves  
Room: Wright

**Algebra I**

**12—Let's Meet Up!: Google Maps™ Mapping Service + TI Nspire™ CX Handhelds = Triangle Center Application**

Sheryl Edwards  
Room: Columbus Hall CD

**Algebra I**

**13—Modeling Quadratic Functions**

Jerry Scherer  
Room: Columbus Hall IJ

**Algebra I**

**18—TI-Navigator™ Activity Center is More than Graphing**

Eva Airhart  
Room: Columbus Hall EF

**Algebra I**

**25—Integrated Projects for Algebra 1 and Biology**

Corina Srygley  
Room: Columbus Hall H

**Algebra I**

**31—Inspiring Algebra 1 Students with the TI-Nspire™ Navigator™ System: A Comprehensive Study in Powhatan High School**

Gail Warren  
Room: Columbus Hall KL

**Algebra 1**

**413—TI-Nspire™ CX Handheld to Increase Student Engagement**

Jerry Cummins  
Room: Columbus G

**Algebra II**

**1—To the Pip Point and Beyond: Exploring New Functions with TI-Nspire™ CAS Technology**

Roger Wander  
Room: Regency C

**Algebra II**

**6—Activity-based Regression Analysis Using the TI-84 Plus Graphing Calculator**

Cory Cloud  
Room: Hong Kong

**Algebra II**

**8—My Favorite High School Mathematics Activities with the TI-Nspire™ CX CAS Handheld**

Don Karlgaard  
Room: Acapulco

**Algebra II**

**21—Using Dynamically-Connected Representations to Integrate Quadratic Concepts**

Doug Lapp  
Room: Toronto

**Assessment**

**28—The Art of Questioning**

Jill Gough  
Room: McCormick

**Calculus**

**22—Interpreting Tables and Graphs in Calculus**

Vicki Carter  
Room: Atlanta

**CAS**

**32—Polynomial and Rational Functions and CAS: Comparing Honors and Non-Honors Precalculus Courses**

Scott Galson  
Room: Burnham

**Chemistry**

**7—Examples for Lessons with Chemistry Experiments and Tasks about the Experiments**

Frank Liebner  
Room: Crystal Ballroom B

**Chemistry**

**26—Demonstration with Sensors**

Jim Ealy  
Room: Buckingham

**Elementary Math**

**30—Encouraging Critical Thinking Skills in the K-5 Classroom**

Kevin Simms  
Room: Addams

**General Interest**

**11—Using Math Nspired as a Classroom Resource**

Alicia Page  
Room: Crystal Ballroom A

**General Math**

**4—Analyze NASA Data Using the TI-Nspire™ Family of Handhelds for AP® Statistics**

Sharon Cichocki  
Room: Regency B

**General Science**

**9—Circular Motion Using TI-Nspire™ Technology**

Allen Daniel  
Room: Wrigley

**General Science**

**16—Virtual Field Experience with Digital Data**

Tom Cauffield  
Room: Columbian

**Geometry**

**20—Points of Concurrency: Making Geometry Relevant (Using TI-Nspire™ CX Handhelds)**

Margaret 'Peggy' Lovenbury  
Room: Dusable

**Geometry**

**34—Proof by Counterexample for Geometry Students Using the TI-Nspire™ CX Handheld**

Lisa Phillips  
Room: Field

## Sessions

11:30 am–1:00 pm

**Middle Grades Math****17—Math in the Middle Grades Nspired!**

Miguel Garcia  
Room: Haymarket

**Middle Grades Math****19—TI-Nspire™ Family of Handhelds for Beginners – Middle School Topics**

Pam Harris  
Room: Water Tower

**Physics****5—How Impulsive Are You?**

Sanja Herrström  
Room: Picasso

**Precalculus****24—TI-84 Plus Graphing Calculator and TI-Navigator™ Classroom Learning System in the Precalculus Classroom**

Janice Mitchener  
Room: Regency D

**Statistics****10—Statistics 101 Using Sports and TI-Nspire™ Technology**

Kyle Atkin  
Room: Soldier Field

**Technology Integration****3—The Evolution of Teaching and Learning Mathematics**

Marshall Lassak  
Room: Horner

**Technology Integration****14—You've Got Nspired Questions? I'll Nspire you with Answers!**

Rhoda McNerney  
Room: San Francisco

**Technology Integration****23—How to Transition Teachers from the TI-83 Plus and TI-84 Plus Families of Graphing Calculators to TI-Nspire™ Technology**

Roger Fuller  
Room: Columbus Hall AB

**Technology Integration****29—Using TI-Nspire™ Navigator™ NC Teacher Software to Ease the Hurry Syndrome**

Jennifer Wilson  
Room: Ogden

**Technology Integration****35—Use the TI-Nspire™ CX CAS Handheld to Find Points of Concurrency and Other Geometry Constructions**

Ninamarie Sapuppo  
Room: New Orleans

**Trigonometry****2—A Stunning Approximation to the Sine Function**

Ron Lancaster  
Room: Crystal Ballroom C

**Algebra I****51—Equations & Inequalities with TI-Nspire™ Technology**

Micheal Bevelacqua  
Room: Columbus Hall IJ

**Algebra I****54—Algebra I: Statistical Concepts Using the TI-Nspire™ CX Handheld and TI-Nspire™ CX Navigator™ System**

Angela Hoopes  
Room: Columbus Hall CD

**Algebra I****56—Get Inspired with the TI-Nspire™ Family of Handhelds**

Claudia Heinrich  
Room: Columbus Hall KL

**Algebra I****60—Use Interactive Math Boxes in the Notes Application to Help Students Develop Problem Solving Skills**

Allan Bellman  
Room: Columbus Hall EF

**Algebra I****65—Why Can't We Be Friends? Data Analysis Project Using Facebook® and TI Technology**

Saki Milton  
Room: Columbus Hall G

**Algebra II****37—Simulations for Pre-algebra through Precalculus Using the TI-84 Plus Graphing Calculator**

Sister Alice Hess  
Room: Hong Kong

**Algebra II****50—Cool Quadratics**

Mary Bourassa  
Room: Acapulco

**Algebra II****58—Fostering Flexible Thinking: Making Sense of Solutions through Multiple Representations**

Jeremy Zelkowski  
Room: Toronto

11:30 am–1:00 pm

**Assessment****40—TI-Nspire™ Navigator™ System: Quizzes and Tests – Go Paperless!**Mary A. Brese  
Room: McCormick**Assessment****42—TI-Nspire™ Navigator™ System Test Drive**Corey Bobby  
Room: Horner**Biology****68—Human Physiology Using the TI-Nspire™ Family of Handhelds**Judy Day  
Room: Buckingham**Calculus****69—Learning TI-Nspire™ CX CAS Technology for AP\* Calculus Activities**Patricia Casey  
Room: Atlanta**CAS****43—CAS – Six Ways to Monday**Fred Ferneyhough  
Room: Regency B**CAS****62—Discovering The Remainder Theorem with CAS**Anna Panova  
Room: Burnham**Chemistry****67—NASA Nspired Activities for Chemistry**Todd Morstein  
Room: Wrigley**Elementary Math****53—The TI-10 Calculator and the TI-15 Explorer™ Calculator: Tools of Investigation for the Beginning Mathematician**Tammy Jones  
Room: Addams**Elementary Science****59—Integrating Math, Literacy and Science in the Elementary Classroom**Tami Plein  
Room: Columbian**General Interest****44—Technology Without Neuroscience is Like Food Without Nutrition**Edward Laughbaum  
Room: Crystal Ballroom B**General Interest****55—Hands On, Thumbs On, Minds On**Jean McKenny  
Room: Crystal Ballroom A**General Interest****63—Learn How Teachers Create Interactive Gifts (Worksheets) and Students Create Reports (Labs) Using the PublishView™ Feature. Hands-On!**Tom Reardon  
Room: Ogden**General Math****36—TI MathForward™ – Come See What the Excitement is All About!**Gina Allred  
Room: Regency D**General Math****52—TI-Nspire™ CX CAS Handheld: A Beginner's Tour**Leah Nillas  
Room: Regency C**General Science****61—Making Science Fun Again with TI-Nspire™ CX Handhelds and Vernier Software and Technology™ Probes**Claudia Gutierrez  
Room: Picasso**Geometry****41—Constructing and Transforming Your Geometry Nspired Classroom**Joshua Underdonk  
Room: Field**Geometry****46—Who Am I? An Nspired Geometry Activity**Fred Decovsky  
Room: Dusable**Middle Grades Math****38—Math Nspired for Middle Grades: Common Core-based Investigations with Geometry**Christine Browning  
Room: Water Tower**Middle Grades Math****48—Using the TI-Nspire™ CX Handheld and TI-Nspire™ CX Navigator™ System in an Historical Context with Middle School Grades**Peter Ransom  
Room: Gold Coast**Middle Grades Math****64—Transforming Middle Level Math with TI-73 Explorer™ Graphing Calculator**Stacey Caruso-Sharpe  
Room: Haymarket**Precalculus****45—Real-world Data Collection Applications Using Vernier DataQuest™ App for TI-Nspire Handhelds**JoAnn Miltenberg  
Room: Columbus Hall H**Programming****49—An Introduction to Creating Nspire Simulations Using the Lua Scripting Language**Fred Fotsch  
Room: Crystal Ballroom C**Statistics****47—Statistics Nspiration Using the TI-Nspire™ CX Handheld and the TI-Nspire™ Handheld With Touchpad**Robin Levine-Wissing  
Room: Soldier Field

## Sessions

1:15–2:15 pm

**Technology Integration****39—Data Collection and the TI-73 Explorer™ Graphing Calculator: The Basics**David Young  
Room: San Francisco**Technology Integration****57—TI-Nspire™ Technology to Foster Standards for Mathematical Practice**Katie England  
Room: New Orleans**Technology Integration****66—Using the TI-Nspire™ Navigator™ System to Improve Student Achievement in a Community College Classroom**Dave Usinski  
Room: Columbus Hall AB**Administrator****91—Successful Systemic and Sustained Implementation through T<sup>3</sup>™ Coaching**Patsy Fagan  
Room: Wright**Algebra I****81—Calculus in the Algebra Classroom**Dennis Wilson  
Room: Columbus Hall H**Algebra I****92—Teaching Algebra to Low-achieving Math Students in the High School Setting**Lana Golembeski  
Room: Columbus Hall CD**Algebra I****97—Navigating through Algebra 1 and 2 Using TI Tools**Bill Stiggers  
Room: Columbus Hall IJ**Algebra I****99—Teaching Linear and Quadratic Functions Using TI Technologies**Miriam Santana  
Room: Columbus Hall EF**Algebra I****102—Modeling with Images on the TI-Nspire™ CX Handheld**Lynda Ferneyhough  
Room: Columbus Hall G**Algebra II****87—Exploring Linear Programming with TI-Nspire™ Technology**Rob Rinas  
Room: Acapulco**Algebra II****89—Using the TI-84 Plus Graphing Calculator to Integrate AP® Calculus in Algebra I to Precalculus**Fan Disher  
Room: Hong Kong**Algebra II****95—So, You Have a TI-Nspire™ CX Handheld. What Are You Going to Do With It?**Andrew Amstutz  
Room: Toronto**Assessment****74—Ratchet Up the Formative Assessment in Your Classroom with TI-Nspire™ Navigator™ System**Jeff VanArnhem  
Room: McCormick**Assessment****78—Windows into Student Thinking**Tom Steinke  
Room: Crystal Ballroom C**Biology****77—Launch Your Biology Class With NASA!**Jeff Lukens  
Room: Wrigley**Calculus****79—Bubble Boy Maximizes His New Home Using the TI-Nspire™ CX CAS Handheld**Scott Gaddis  
Room: Atlanta**Calculus****270—Calculus Explorations Using the TI-Nspire™ Family of Handhelds**Ken Collins  
Room: Crystal Ballroom A**CAS****72—CAS – Algebra – CAS**Michael Keyton  
Room: Regency C**CAS****83—Is There a Simpler Way to Introduce Algebra for the TI-Nspire™ CX CAS Handheld?**Ray Williams  
Room: Burnham

## 1:15–2:15 pm

**Elementary Math**

**96—That is a “Good Question”: Using the TI-15 Explorer™ Calculator to Help Answer Questions in the Elementary Classroom**

Marsha Burkholder  
Room: Addams

**General Interest**

**80—Using Technology to Reduce Math Anxiety**

Christine Kasitz  
Room: Crystal Ballroom B

**General Interest**

**94—Does Surfing the Web Give You the Blues, Brothers? Let us help!**

Judy Hicks  
Room: Ogden

**General Math**

**70—How TI-Nspire™ Technology Changes Teacher Questioning**

Dan Ilaria  
Room: Regency B

**General Math**

**71—TI-Nspire™ Family of Handhelds for Beginners**

Kim Thomas  
Room: Regency D

**General Math**

**73—Teaching Without a Full Set (of TI-Nspire™ Family of Handhelds)**

Jennifer Chirles  
Room: Horner

**Geometry**

**82—Exploring a Rich Problem in Geometry Using the TI-Nspire™ CX CAS Handheld**

Pat Mara  
Room: Dusable

**Geometry**

**84—Representations of Surfaces Within the TI-Nspire™ Environment**

Jean-Jacques Dahan  
Room: Field

**Middle Grades Math**

**75—Motivating Students to Practice**

Bob Garvey  
Room: Haymarket

**Middle Grades Math**

**100—Using the TI-Nspire™ CX Navigator™ System to Increase Student Engagement in a Math Nspired Classroom**

Ruth Casey  
Room: Water Tower

**Middle Grades Science**

**85—TI-84 Plus Family of Graphing Calculators and Probes in a Science Classroom**

Charlie Smith  
Room: Buckingham

**Middle Grades Science**

**103—Using the Vernier DataQuest™ App for TI-Nspire on the TI-Nspire™ CX Handheld in a Middle School Science Classroom**

Mike Cimino  
Room: Columbian

**Physics**

**104—Phun with Physics Using the TI-Nspire™ CX Handheld**

Cassie Whitecotton  
Room: Picasso

**Statistics**

**86—Nspiring Your Statistics Students to Think!**

Kristen Perry  
Room: Soldier Field

**Technology Integration**

**88—SMART™ Board Interactive Whiteboards and TI Technology in Middle School and High School Mathematics**

Mary Ann Connors  
Room: San Francisco

**Technology Integration**

**98—Real-world Data Collection and Modeling Using LEGO® MINDSTORMS® Education with TI-Nspire™ Technology**

Kevin Lavigne  
Room: New Orleans

**Technology Integration**

**101—Creating Videos Using Camtasia Studio® and TI-SmartView™ Emulator Software**

Mary Hall  
Room: Columbus Hall AB

## Sessions

2:30–4:00 pm

**Administrator**

**109—TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System, TI-84 Plus Graphing Calculator, TI-73 Explorer™ Graphing Calculator – What Worked for Our Students in**

**Grades 5-12**

Linda Apicella

Room: Wright

**Algebra I**

**106—Data Aggregation Activities with the TI-Nspire™ Navigator™ System**

Tracy Watson

Room: Columbus Hall CD

**Algebra I**

**114—Connecting Algebra and Geometry on TI-Nspire™ CX and TI-Nspire™ CX CAS Handhelds**

Chuck Vonder Embse

Room: Columbus Hall KL

**Algebra I**

**122—*Angry Birds* and Other Games to Motivate Student Learning**

Lauren Jensen

Room: Columbus Hall H

**Algebra I**

**123—Who's the Best Age Guesser?**

Prudie Cain

Room: Columbus Hall IJ

**Algebra I**

**130—Navigate the Nspiring Super Hero Universe: Algebra ALL!**

Elizabeth Pugliese

Room: Columbus Hall G

**Algebra I**

**136—Achooo...Oh My – I Lost My Memory!**

Andrew Benzing

Room: Columbus Hall EF

**Algebra II**

**111—Quadratic or Exponential?**

Beverly Farahani

Room: Hong Kong

**Algebra II**

**120—Creating Interactive Algebra 2 Lessons with TI-Nspire™ Technology**

Howard Stern

Room: Acapulco

**Algebra II**

**135—When Conics Come Alive**

Tony Timms

Room: Toronto

**Assessment**

**126—Use the TI-Nspire™ Family of Handhelds and TI-Nspire™ CX Navigator System to Provide Differentiation in Algebra Based on Constant Classroom-level Assessment**

Allan Bellman

Room: McCormick

**Authoring**

**117—Taking Your Documents to the Next Level with Lua!**

Andy Kemp

Room: Columbus Hall AB

**Calculus**

**133—Integrating the TI-Nspire™ CX Handheld CAS in Your AP\* Calculus Curriculum**

Kim Schjelderup

Room: Atlanta

**CAS**

**128—An Introduction to CAS and How I Use CAS in the Classroom: Algebra 1 – Calculus**

Tom Reardon

Room: Burnham

**Chemistry**

**125—Mixing Math and Science: Proportional Reasoning and Heat Transfer**

Tami Plein

Room: Columbian

**Elementary Math**

**115—"What's So Mean About It?" Data Analysis for Middle School Grades Using the TI-73 Explorer™ Graphing Calculator**

Jane Martain

Room: Addams

**General Interest**

**124—Constraints and Contingencies: Designing Instruction that Targets Standards and Boosts Creativity**

Joe Ferrara

Room: Crystal Ballroom B

**General Interest**

**129—TI-Nspire™ Activities and TI-Nspire™ CAS Activities for Aspiring Secondary Mathematics Teachers**

Denny St. John

Room: Crystal Ballroom A

**General Interest**

**405—Interactive Real-time Online Learning – (6-12)**

Marilyn Parker

Room: Horner

**General Math**

**108—Graphing Calculator Activities to Support Instruction for At-risk Learners**

Kathy Hale

Room: Regency C

**General Math**

**112—Navigating Nspired Irrigation: A Compelling Use for the TI-Nspire™ CX CAS Handheld**

Larry Ottman

Room: Regency B

**General Science**

**119—There's An App For That. Data Collection in the Science Classroom**

Ed Roberts

Room: Buckingham

**Geometry**

**110—99 Points of Intersection**

Steve Phelps

Room: Field

**Geometry**

**137—Rarely Visited Geometry Discoveries Enabled Through the Use of TI-Nspire™ Technology**

Dan Spradley

Room: Dusable

## 2:30–4:00 pm

**Middle Grades Math****107—Math Nspired for Middle Grades: Common Core-based Investigations with Fractions and Percents**

Wallace Brewer  
Room: Water Tower

**Middle Grades Math****127—M&M'S® and More – Data Analysis for Middle School Grades Using TI-Nspire™ Technology**

Beth Smith  
Room: Gold Coast

**Middle Grades Math****132—The Good, the Bad and the Ugly: Fractions? Teaching/Learning with TI-34 MultiView™ Scientific Calculator & SMART™ Board Interactive Whiteboards**

Chris Ruda  
Room: Haymarket

**Physics****116—Experiments with Electricity – Powerful and Easy with the TI-Nspire™ Lab Station**

Mirco Tewes  
Room: Picasso

**Physics****121—Using the TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System and Data Collection in a Science Classroom**

Michael Smith  
Room: Wrigley

**Precalculus****131—Obtain and Experience Engaging TI-Nspire™ CX Handheld Activities in Geometry, Precalculus and Calculus. Ready for Your Classroom.**

Carlo Trafficante  
Room: Crystal Ballroom C

**Precalculus****401—Data Collection with the TI-84 Plus Graphing Calculator**

Michelle Merriweather  
Room: Regency D

**Statistics****105—Teaching Statistics and Probability with the TI-84 Plus Graphing Calculator**

Solomon Willis  
Room: Soldier Field

**Technology Integration****113—Inquiry-based Learning Using Student Laptops: TI-Nspire™ Navigator™ NC System**

Wade Ellis  
Room: Ogden

**Technology Integration****118—Taking Full Advantage of the Power of the TI-84 Plus Graphing Calculator Family**

John LaMaster  
Room: San Francisco

**Technology Integration****134—Using the TI-Nspire™ CX Handheld During Inquiry Lessons**

Kevin Miller  
Room: New Orleans

## 4:15–5:15 pm

**Administrator****156—Looking Forward with TI MathForward™**

Donna Harris  
Room: Wright

**Algebra I****138—Interactive Math Boxes**

Allister Wadden  
Room: Columbus Hall CD

**Algebra I****141—"Let's Play Golf!" Using the TI-Nspire™ Navigator™ System**

Marco Gonzalez  
Room: Columbus Hall G

**Algebra I****158—Inclusion and TI MathForward™ Using the TI-Navigator™ Classroom Learning System and the TI-84 Plus Graphing Calculator Family**

Cole Mills  
Room: Columbus Hall EF

**Algebra I****163—So What Is This PublishView™ Feature in TI-Nspire™ Teacher Software?**

Aurelia Weil  
Room: Columbus Hall KL

**Algebra I****164—Standard, Factored or Vertex Form: What's the Difference? Understanding Quadratics with the TI-73 Explorer™ and TI-84 Plus Graphing Calculators**

Stuart Moskowitz  
Room: Columbus Hall IJ

**Algebra I****170—TI-Nspire™ Technology For Total Beginners**

David Sword  
Room: Columbus Hall H

**Algebra II****140—LinReg Exposed**

John Hanna  
Room: Hong Kong

## Sessions

**Algebra II**

**165—When Can a Circle Be a Star! Explore How Sampling Points on a Circle Will Change Your Impressions**

Murney Bell  
Room: Acapulco

**Assessment**

**153—Increasing Test Scores Using the TI-Nspire™ Handhelds and the TI-Nspire™ Navigator™ System**

Audrey Cucci  
Room: McCormick

**Biology**

**171—Pond pH with the TI-84 Plus Graphing Calculator**

Judy Day  
Room: Wrigley

**Calculus**

**148—Where the @#%\$ is That Command on the TI-89 Titanium Graphing Calculator?**

Eric Sever  
Room: Atlanta

**CAS**

**169—Exploring Mathematics with TI-Nspire™ CX CAS Handheld**

Joyce Lee  
Room: Crystal Ballroom C

**General Interest**

**150—STEM Project Which Grew Beyond Expectations**

Jacklyn Bonneau  
Room: Crystal Ballroom A

**General Interest**

**154—Administrators and Teachers Partnering to Optimize Student Learning: Comparing and Contrasting the TI-Nspire™ Family of Handhelds and the TI-84 Plus Family of Graphing Calculators**

Becky Byer  
Room: Crystal Ballroom B

**General Interest**

**411—Rise to the Core Challenge: Exciting Uses for TI-Nspire™ Technology, Pencasts and Other Technologies**

Katie England  
Room: Addams

**General Math**

**149—Getting Started with the TI-Nspire™ Navigator™ System in the Math Classroom – Rethinking Teaching Approaches and Task Designs**

Alison Clark-Wilson  
Room: Regency B

**General Math**

**151—There's a Crab in My Calculator**

Susan Howe  
Room: Regency C

**General Math**

**155—Work Smarter, Not Harder: Discovering, Editing and Creating Lessons and Assessments Using TI-Nspire™ Teacher Software**

David Reeves  
Room: Horner

**General Math**

**159—Fibonacci Sequence with the Graphs & Geometry Application**

Scott Washburn  
Room: Toronto

**General Math**

**162—Exploring Nspired Circles and Polygons**

Lisa Suarez  
Room: Regency D

**General Math**

**167—The TI-Nspire™ Navigator™ System in the Singapore Laptop School**

Sarah Davis  
Room: Ogden

**General Science**

**143—Bouncing Along: Using the Force Plate with the TI-Nspire™ CX Handheld**

Paul Williams  
Room: Buckingham

**Geometry**

**145—Discovering the Definition of a Parabola as Seen Through a Common Core Classroom**

Stan Pappo  
Room: Dusable

**Geometry**

**146—Old School Geometry on a New School Device**

Johnny Ashurst  
Room: Field

**Middle Grades Math**

**144—Using Color and Templates to Make Connections in the Middle School Classroom**

Scott Powell  
Room: Water Tower

**Middle Grades Math**

**160—Making Connections in Middle School Mathematics Using the TI-Nspire™ CX Handheld**

Gloria Beswick  
Room: Gold Coast

**Middle Grades Math**

**161—Statistics for the Middle School Grades Using the TI-84 Plus Silver Edition Graphing Calculator**

Gail Gallitano  
Room: Haymarket

**Middle Grades Science**

**166—Explorative Quest Middle School Science Project Using the TI-Nspire™ CX Handheld**

Neil Anderson  
Room: Columbian

**Physics**

**147—Trigger and the Short Time Interval: High School Data Collection Using the TI-Nspire™ Lab Station**

Ian Galloway  
Room: Picasso

**4:15–5:15 pm****Statistics****139—Data Analysis Using the TI-Nspire™ Family of Handhelds, TI-Navigator™ System™ & SMART™ Board Interactive Whiteboards**

Kenneth Ray Fox  
Room: Soldier Field

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**Technology Integration****152—Integrating the TI-Nspire™ Navigator™ NC System Into Your High School Classroom**

Kevin Rodgers  
Room: San Francisco

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**Technology Integration****157—Using TI-Nspire™ Technology to Integrate Science and Math in an Interactive Classroom**

Lisa Tindall  
Room: New Orleans

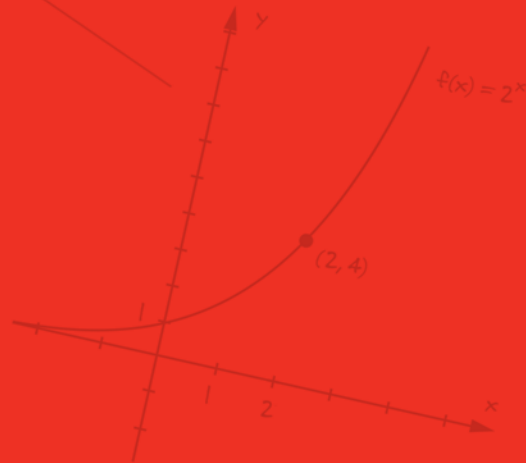
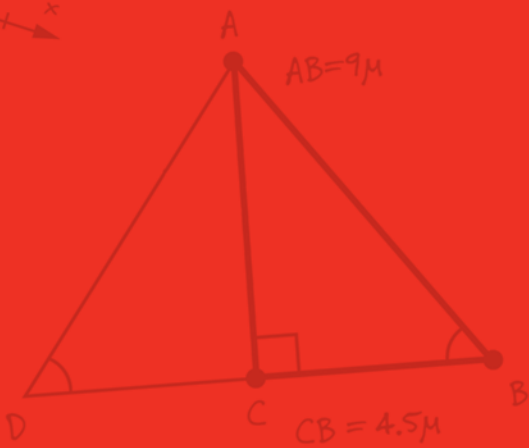
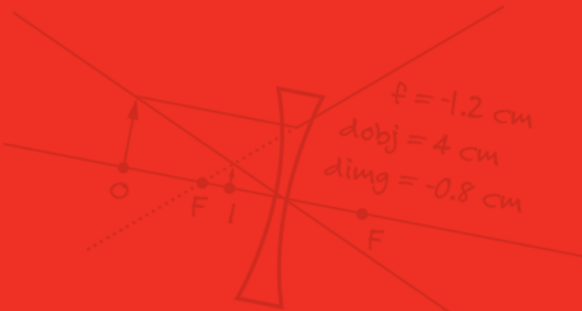
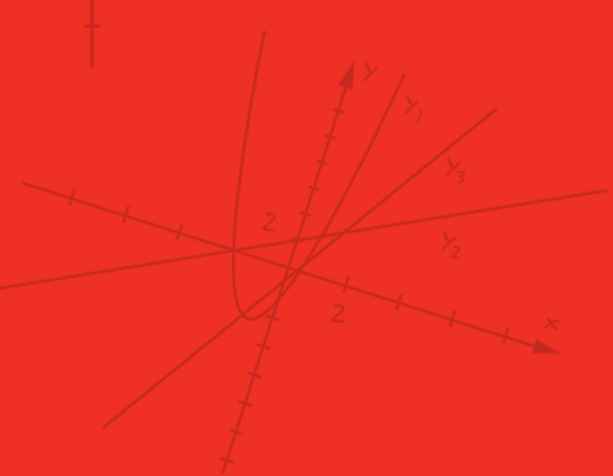
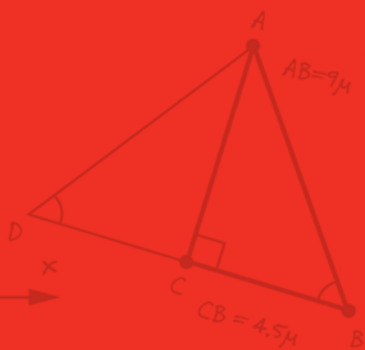
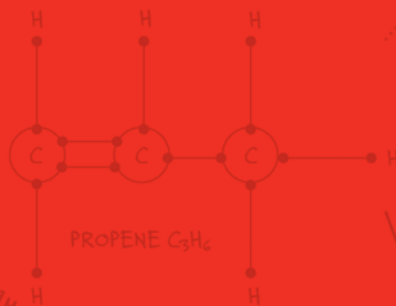
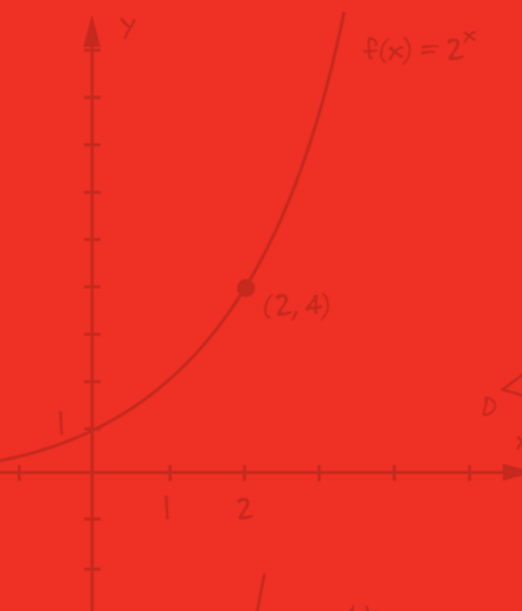
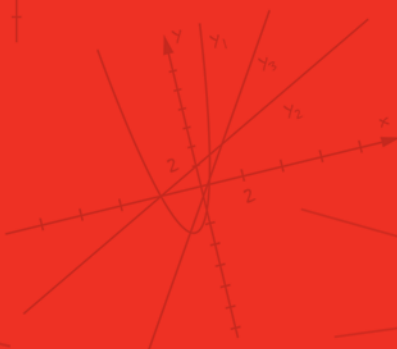
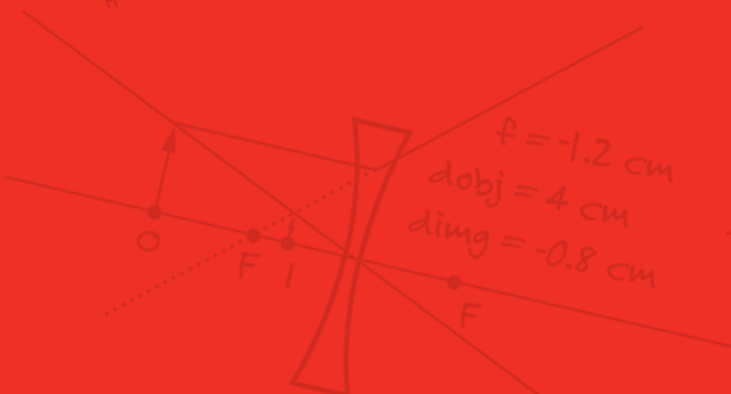
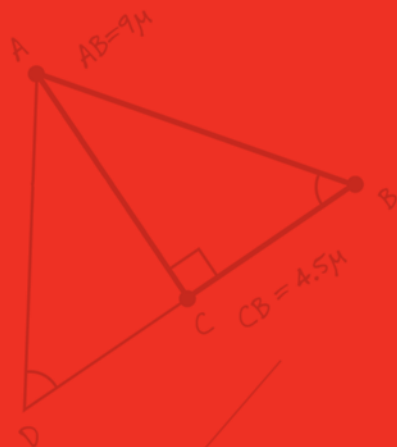
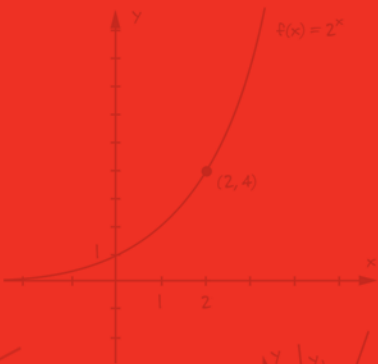
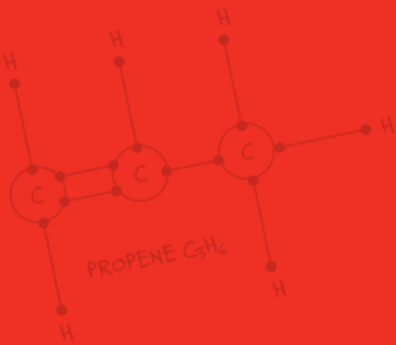
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**Technology Integration****168—Using the Calculator-based Ranger 2™ Data Collection Device to Derive the Position Function and Motivate Discussion of Function Transformations**

Daniel Russow  
Room: Columbus Hall AB

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# Saturday Sessions



8:15–9:45 am

**Administrator**

**205—Using the TI-Nspire™ Navigator™ System and Probe Ware to Increase Student Interest: A Summer STEM Experience**

Margaret Bambrick  
Room: Wright

**Algebra I**

**184—An Introductory Hands-on Tour of the TI-Nspire™ CX CAS Handheld**

Conrad Wayne  
Room: Columbus Hall H

**Algebra I**

**185—Energize Your Algebra Classes Using the TI-Nspire™ CX Handheld**

Karen Cockburn  
Room: Columbus Hall CD

**Algebra I**

**195—LIGHTS, CAMERA, SOUND, ACTION! – Data Collection with the TI-Nspire™ CX Handheld and TI-Nspire™ Lab Station**

Delbra Robinson  
Room: Columbus Hall G

**Algebra I**

**198—“Nspiring” the Algebra 1 Classroom**

Veronica Carlson  
Room: Columbus Hall IJ

**Algebra I**

**202—Getting to Know the TI-84 Plus Graphing Calculator’s New Operating System. More IS Better!**

Pam Littleton  
Room: Columbus Hall KL

**Algebra I**

**208—Real-world Math with Science and the TI-Nspire™ Family of Handhelds**

Linda Antinone  
Room: Columbus Hall EF

**Algebra II**

**174—Make and Defend Consumer Decisions Through Investigative Learning with TI-Nspire™ Technology and Vernier Software & Technology™ Data Probes**

Brenda Peterman  
Room: Toronto

**Algebra II**

**179—Getting Students to Connect, Understand and Remember Concepts Using TI-Nspire™ Technology**

Deb Nutt  
Room: Acapulco

**Algebra II**

**204—Multiple Representations of Functions Using the TI-84 Plus Graphing Calculator**

Lynn Adsit  
Room: Hong Kong

**Algebra II**

**207—No Handhelds – No Problem! Create Demonstration Activities with the TI-Nspire™ Teacher Software**

Julie Riggins  
Room: Ogden

**Calculus**

**203—Calculus Labs – Making Calculus More Engaging**

Sam Gough  
Room: Atlanta

**CAS**

**177—The Ethics of Using CAS in School Mathematics**

Zalman Usiskin  
Room: McCormick

**CAS**

**178—CAS in the Algebra 1 Classroom**

Ray Klein  
Room: Dusable

**CAS**

**186—What Could/Should a CAS School Look Like in the Early Years?**

Steve Arnold  
Room: Field

**CAS**

**194—The Secretary Problem Solved with the TI-Nspire™ CX CAS Handheld**

Bjoern Felsager  
Room: Horner

**CAS**

**210—It’s Time for Geometry – Now Get Out Your TI-Nspire™ CX CAS Handheld!**

Paul Karafiol  
Room: Burnham

**Elementary Math**

**199—How My Fifth Graders Got Nspired with the TI-Nspire™ CX Handheld**

Marsha Burkholder  
Room: Addams

**General Interest**

**188—Technology Makes STEM Instruction Easy**

Greg Dodd  
Room: Columbus Hall AB

**General Math**

**182—TI-Nspire™ Handheld with Touchpad: A First-year Survival Guide!**

Jamie Liptock  
Room: Regency C

**General Math**

**190—Let’s Nspire Our Students in Algebra, Geometry and Trigonometry!**

Brittany Zweibel  
Room: Regency D

**General Math**

**200—What’s the Buzz with TI-Nspire™ CX Handheld?**

Paul Alves  
Room: Regency B

**General Science**

**175—Connecting Math and Science in the Science Classroom Using TI-Nspire™ Technology**

Rob Reniewicki  
Room: Columbian

**General Science**

**176—Forensic Science is Nspiring for All Science Students**

Jacklyn Bonneau  
Room: Picasso

## Sessions

10:00–11:00 am

**General Science**

**187—Climate Change with the TI-Nspire™ CX Handheld and Vernier DataQuest™ App for TI-Nspire**  
William Green  
Room: Buckingham

**General Science**

**193—Exploring Science Nspired Activities**  
C.W. Eaker  
Room: Wrigley

**Geometry**

**172—Using TI-Nspire™ Family of Handhelds in the High School Classroom from Geometry to Precalculus**  
Vincent Doty  
Room: Crystal Ballroom C

**Geometry**

**192—Nspiring the Struggling Geometry Student**  
Alissa DePue  
Room: Haymarket

**Middle Grades Math**

**189—Number Sense, Reasoning and TI-73 Explorer™ Graphing Calculator and the TI-83 Plus and TI-84 Plus Families of Graphing Calculators – A Natural Partnership!**  
Judy Wheeler  
Room: Crystal Ballroom B

**Middle Grades Math**

**196—Middle School Mathematics: A Dynamic Approach**  
Martin Sanchez  
Room: Crystal Ballroom A

**Precalculus**

**191—Exploring Precalculus/Trigonometry with TI-Nspire™ Technology**  
Scott Knapp  
Room: Grand Ballroom A

**Programming**

**197—Programming is the Best Set of LEGOs® for the TI-84 Plus Graphing Calculator**  
Christopher Langhorn  
Room: Grand Ballroom D

[education.ti.com/t3](http://education.ti.com/t3)

**Statistics**

**181—My First Year of AP® Stats: An Nspired Story**  
Leanne Hankins  
Room: Water Tower

**Statistics**

**183—Integrating Statistics & Probability Throughout the High School Curriculum**  
Pamela Rawson  
Room: Gold Coast

**Statistics**

**206—Using the TI-Nspire™ CX Navigator™ System in Introductory Statistics**  
Don Worcester  
Room: Soldier Field

**Technology Integration**

**173—Math Nspired for Middle Grades: Common Core-based Investigations with Functions**  
Ann Schlemper  
Room: Grand Ballroom F

**Technology Integration**

**201—My Favorite TI-Nspire™ Activities – Algebra and Calculus: How to Creatively Implement Them on the Handheld and Player**  
Tom Reardon  
Room: Grand Ballroom E

**Technology Integration**

**209—Using the TI-Nspire™ Navigator™ System for Formative Assessment**  
Jennifer Wilson  
Room: San Francisco

**Technology Integration**

**211—TI-Nspire™ CX Handheld for Beginners**  
Tracy Wingert  
Room: New Orleans

**Technology Integration**

**395—Putting It Together – TI-Nspire™ Technology**  
Natalie Robinson  
Room: Grand Ballroom B

**Algebra I**

**212—TI-Nspire™ Technology in the Algebra Classroom**  
Sandra Hocutt  
Room: Columbus Hall KL

**Algebra I**

**220—Grant-inspired Algebra Activities Using the TI-Nspire™ CX Handheld and the TI-Nspire™ CX Navigator™ System**  
Marsha Guntharp  
Room: Columbus Hall CD

**Algebra I**

**222—Connective Constructions: Problem Solving with the TI-Nspire™ Family of Handhelds – Linking Algebra, Geometry and Calculus**  
Tom Button  
Room: Columbus Hall H

**Algebra I**

**231—Solving Systems Using the TI-Nspire™ CX Handheld**  
Julie Speelman  
Room: Columbus Hall G

**Algebra I**

**234—Pinky Pig and Farmer Faye Use the TI-84 Plus Graphing Calculator to Explore Quadratic Functions**  
Becky Caison  
Room: Columbus Hall IJ

**Algebra II**

**232—Normal Distributions for High School Statistics Using the TI-Nspire™ Handheld**  
Lisa Conzemius  
Room: Toronto

**Algebra II**

**238—Analyzing A Card Trick: Uncover the Math Behind the Magic**  
Sheila Horstman  
Room: Hong Kong

**Algebra II**

**243—Is It Really That Easy to Use Probes for Data Collection?**  
Josh Mize  
Room: Atlanta

## 10:00–11:00 am

**Assessment**

**230—Inquiry-based Learning Using the TI-Navigator™ Classroom Learning System and TI-84 Plus Graphing Calculator**

Vicki Mixon

Room: Grand Ballroom A

**Biology**

**219—UV (You've) Got to be Cautious When it Comes to Your Health!!**

Rob Adams

Room: Buckingham

**Biology**

**242—Using the TI-Nspire™ CX Handheld in the Biology Classroom**

Sharon Cates

Room: Picasso

**Calculus**

**237—Using an TI-84 Plus Graphing Calculator with 2.55MP in an Applied Calculus Course**

Don Griffin

Room: San Francisco

**CAS**

**217—More Kilts and CAS**

Nevil Hopley

Room: Field

**CAS**

**229—Second-Year Algebra with CAS: Teaching, Learning and Assessment**

Michael Buescher

Room: McCormick

**CAS**

**245—Yes, Virginia, There Are Ways to Make Appropriate Use of CAS Calculators in Assessment**

Donald Porzio

Room: Dusable

**CAS**

**247—Reasoning and Sense Making with CAS Technology**

Al Cuoco

Room: Burnham

**CAS**

**300—Guided Discovery and TI-Nspire™ Computer Algebra Systems**

Tom Fox

Room: Wright

**Chemistry**

**215—Investigating Sound Waves from a Cork Pop Using the Vernier DataQuest™ App for TI-Nspire Technology**

Petra Ryrstedt

Room: Columbian

**Elementary Math**

**244—Learn Your Facts Using the TI-73 Explorer™ Graphing Calculator**

Dana Dodson

Room: Addams

**General Interest**

**226—Using a Flip Camera to Improve Instruction**

Diann Skelton

Room: Grand Ballroom D

**General Interest**

**235—The Digital Worksheet with the TI-Nspire™ Teacher Software's PublishView™ Feature**

Jim Nakamoto

Room: Ogden

**General Math**

**224—Creating a Community of Inquiry in the Mathematics Classroom with the TI-Nspire™ Navigator™ System**

David Wright

Room: Regency B

**General Math**

**246—Differentiating Instruction for Low-level Math Students Using the TI-Nspire™ Family of Handhelds**

Holly Terrill

Room: Regency C

**General Math**

**249—Dynamic Connections to Understand Calculus Concepts**

Omar Hernandez

Room: Regency D

**General Science**

**214—Hands-on Science – How to Integrate Technology into Every Science Classroom**

Louise Chapman

Room: Wrigley

**Geometry**

**227—Classical Geometric Constructions Using the TI-Nspire™ CX Handheld**

Stej Sanchez

Room: Crystal Ballroom C

**Geometry**

**240—TI-Nspire™ Navigator™ System for Reluctant Geometry Learners**

Jaime Burbano

Room: Haymarket

**Middle Grades Math**

**233—T<sup>2</sup> Meets M<sup>2</sup>: Using the TI-Navigator™ Classroom Learning System and the TI-73 Explorer™ Graphing Calculator to Explore Math in the Movies**

Melissa Jackson

Room: Crystal Ballroom B

**Middle Grades Math**

**241—Adapting Successful Lessons from the TI-Nspire™ Navigator™ System to Using the TI-Nspire™ CX Navigator™ System**

Cindy Hunt

Room: Crystal Ballroom A

**Programming**

**236—An Introduction to Easy Programming on TI-83 Plus and TI-84 Plus Graphing Calculators**

Jan Erik Woldmar

Room: Grand Ballroom B

**Programming**

**248—Programming Techniques in Lua Scripting**

Fred Fotsch

Room: Horner

## Sessions

11:15 am–12:45 pm

**Statistics****216—Teach AP<sup>®</sup> Statistics Next Year – with TI-Nspire™ Teacher Software**John Mahoney  
Room: Water Tower**Statistics****221—Statistical Simulations Using the TI-Nspire™ Family of Handhelds**Stella Dudzic  
Room: Gold Coast**Statistics****225—Using Math Nspired Statistics Activities in an AP<sup>®</sup> or CP Statistics Class**Lee Kucera  
Room: Soldier Field**Statistics****313—Nspired Statistics**Vicki Carter  
Room: Grand Ballroom E**Technology Integration****213—Get Nspired in Color with the TI-Nspire™ CX Handheld**Michelle Bonds  
Room: Grand Ballroom F**Technology Integration****239—Creating and Using a Blog to Enhance Math and Science Instruction**Bob Mathews  
Room: New Orleans**Algebra I****257—Beginning Graphing & Scatterplots on TI-Nspire™ CX Handheld**Katie Allard-Martinez  
Room: Columbus Hall EF**Algebra I****259—Yes, Functions, Equation Solving and Order of Operations in Week One of Algebra 1**Mike Lutz  
Room: Columbus Hall KL**Algebra I****264—Don't Leave Home Without Your Camera!...Be Nspired to Create Models Using the TI-Nspire™ CX Handheld**Sharon Dailey  
Room: Columbus Hall CD**Algebra I****274—Creating YOUR TI-84 Plus Graphing Calculator Classroom – Presentations and Assessment Using TI-SmartView™ Emulator Software, TI-Connect™ Software Application and the LearningCheck™ App!**Margo Mankus  
Room: Columbus Hall H**Algebra I****281—Using Interactive Stations to Get Your Algebra Students Up and Moving Using the TI-84 Plus Graphing Calculator**Marcelline Carr  
Room: Columbus Hall IJ**Algebra I****285—A Picture is Worth 1000 Words...**Jill Gough  
Room: Columbus Hall G**Algebra II****260—Data Capture for Beginners Using TI-Nspire™ Technology**Jeff Corn  
Room: Acapulco**Algebra II****279—Now You Know the Basics of TI-Nspire™ Technology – What's Next?**Sherry Everding  
Room: Toronto**Algebra II****283—Pit Crew Predictions (TI-Nspire™ Family of Handhelds): High-stakes STEM in NASCAR® and Your Classroom**Jeff Thompson  
Room: Hong Kong**Assessment****251—Nspired JEOPARDY!®**Deobra Solomon  
Room: New Orleans**Assessment****276—Using Technology to Assess Mathematical Understanding (Without Getting Lost in the Technology)**Craig Russell  
Room: Ogden**Authoring****180—Getting Started with Lua and TI-Nspire™ Technology**Steve Arnold  
Room: Regency B**Authoring****272—TI-Nspire™ Programming Demystified**Douglas Smeltz  
Room: Grand Ballroom B**Authoring****408—Create Assessments Using the LearningCheck™ app and the TI-Navigator™ Classroom Learning System**Noe Medrano  
Room: Wright**Biology****287—Basic Biology Labs Using TI-Nspire™ Technology for Data Collection**Judy Day  
Room: Columbian

11:15 am–12:45 pm

**Elementary Math****263—Using the TI-15 Explorer™ Calculator to Teach Elementary Mathematics Concepts**

Bill Whitmire  
Room: Addams

**General Interest****273—Putting a STEM Lesson in Technology**

Kathleen McKinley  
Room: Columbus Hall AB

**General Math****267—Making Students Mathematicians**

Marty Romero  
Room: Regency C

**General Math****268—Best Teaching Practices Using the TI-Nspire™ CX Navigator™ System**

Ellen Browne  
Room: Regency D

**Geometry****258—Visualizing Geometry in 3D**

Øystein Nordvik  
Room: Crystal Ballroom C

**Geometry****277—The Depth of the Real Number System and Number Line**

Jean McGehee  
Room: Haymarket

**Middle Grades Math****252—Math Nspired for Middle Grades: Common Core-based Investigations with Ratios and Proportions**

Irina Lyublinskaya  
Room: Grand Ballroom E

**Middle Grades Math****253—TI-Nspire™ Technology in the Middle Grades**

Julie Dansby  
Room: Crystal Ballroom A

**Middle Grades Math****278—Algebra for Middle School Grades Using the TI-84 Plus Graphing Calculator**

Kimberly Felton  
Room: Grand Ballroom A

**Physics****254—Simple Harmonic Motion: Data Collection and Analysis with Vernier™ Science and Technology Probes and the TI-84 Plus Graphing Calculator**

Family  
Greg Williams  
Room: Buckingham

**Physics****255—STEM Activities with the TI-Nspire™ CX Handheld**

Marian Prince  
Room: Picasso

**Physics****284—LEGO® MINDSTORM®, TI-Nspire™ Technology and NASA in the Physics and Math Classroom: A Great STEM Combination**

Sean Bird  
Room: Wrigley

**Precalculus****250—Exploring Sequences and Series with the TI-Nspire™ Family of Handhelds**

Richard Parr  
Room: Grand Ballroom D

**Statistics****262—Create the Central Limit Theorem on the TI-Nspire™ Family of Handhelds**

David Scott  
Room: Gold Coast

**Statistics****269—Nspired Statistics – Exploring Difficult-to-Teach Concepts**

Landy Godbold  
Room: Water Tower

**Statistics****280—Transformations to Straighten Curved Data Using the TI-84 Plus Graphing Calculator**

Gloria Barrett  
Room: Soldier Field

**Technology Integration****261—Intriguing Uses for Active Math Boxes**

Philip Magner  
Room: Horner

**Technology Integration****282—I'm Nspired! Now What...???**

Michelle Goetz  
Room: Grand Ballroom F

**Technology Integration****286—Discussion: Is ITE Educating Mathematics Student Teachers in the Use of Handheld Technology in the Classroom Sufficiently?**

Andrina Inglis  
Room: San Francisco

## Sessions

12:45–2:00 pm

**CAS****256—The Ontario CAS Story**

Tom Steinke  
Room: Dusable

**CAS****265—Teacher Deepening Mathematical Learning with CAS: Issues and Ideas**

Mike Thomas  
Room: McCormick

**CAS****275—Computer Algebra Systems in AP<sup>®</sup> Calculus: Challenges and Opportunities**

Thomas Dick  
Room: Field

**CAS****288—CAS: What's Worked for Us in an Algebra 2 Classroom**

Kathy Coskey  
Room: Burnham

1:00–2:00 pm

**Administrator****317—Our Admin is Behind Us...Yours Can Be Too**

Jennifer Mueller  
Room: Wright

**Algebra I****289—TI-Nspire™ Technology in the Algebra 1 and 2 Classroom – Best Practice Sharing**

Michael Houston  
Room: Columbus Hall KL

**Algebra I****290—Have Fun with Patterns, Shapes, Slopes, Transformations and the TI-Nspire™ CX Handheld**

Betty Gasque  
Room: Columbus Hall G

**Algebra I****297—Teaching Algebra with TI-84 Plus Graphing Calculator Apps**

Irina Lyublinskaya  
Room: Columbus Hall EF

**Algebra I****298—Fitting Quadratic Functions to Angry Birds Paths**

Cara Cates  
Room: Columbus Hall H

**Algebra I****303—Lessons Using PowerPoint® Presentation Software to Teach Algebra with the TI-Nspire™ CX CAS Handheld**

Brendan Kelly  
Room: Columbus Hall CD

**Algebra I****310—Collecting Data and Analyze in a Middle School Class**

Luong Ho  
Room: Columbus Hall IJ

**Algebra I****402—What's New with HMH and TI?**

Linda Antinone  
Room: Grand Ballroom A

**Algebra II****294—Activities, Apps and Assessments for Algebra with TI-84 Plus and TI-73 Explorer™ Graphing Calculators**

Linda Apicella  
Room: Grand Ballroom D

**Algebra II****304—Angry Birds...Adding Images to Math Functions**

Kathleen Sullivan  
Room: Toronto

**Algebra II****305—NASA's "Exploring Space Through Math" TI-Nspire™ Activities**

Tracy Watson  
Room: Hong Kong

**Algebra II****316—Essential Skills for Using the TI-Nspire™ Family of Handhelds in the Classroom**

Jeff McCalla  
Room: Acapulco

**Algebra II****320—Revisiting Zeller's Congruence and the Greatest Integer Function Using TI-Nspire™ CX Handhelds**

Juan Manuel Gonzalez  
Room: Atlanta

**Assessment****306—Turning At-risk Students on to Math Using TI-Nspire™ CX Navigator™ System**

Kim Zeydel  
Room: New Orleans

**Biology****295—Interactive Biology Lessons at Your Fingertips on the TI-Nspire™ CX Handheld**

Peggy Welch  
Room: Columbian

**Calculus****323—Integral Versus Area: They Are Not Always the Same**

Oscar Castrillon  
Room: San Francisco

## 1:00–2:00 pm

**Elementary Math**

**314—Algebra becomes Art! A Creative Way to Develop Algebraic Concepts with the TI-73 Explorer™ Graphing Calculator and the TI-84 Plus Graphing Calculator**

Stuart Moskowitz  
Room: Addams

**General Interest**

**292—Grant Writing**

Louise Chapman  
Room: Grand Ballroom E

**General Interest**

**311—Does Surfing the Web Give You the Blues, Brothers? Let Us Help!**

Jane Damaske  
Room: Horner

**General Interest**

**312—Introduction to PublishView™ Documents**

Patricia Brooks  
Room: Ogden

**General Interest**

**410—Creating and Interpreting Graphs Using TI-Nspire™ Technology**

Joy Brokes  
Room: Water Tower

**General Math**

**309—Transition to College Math Projects**

Jana Young  
Room: Regency B

**General Math**

**318—Secondary Mathematics in India: an Anecdotal Comparison with the United States**

Mike Cullen  
Room: Regency D

**General Math**

**322—Data Capture, Rockets and Sleepy Pupils!**

Jonathan Powell  
Room: Regency C

**General Science**

**299—"Sensor"ship in the Science and Math Classroom**

Jeff Lukens  
Room: Wrigley

**Geometry**

**296—Introduction to Constructing Geometric Shapes Using the TI-Nspire™ Handheld with Touchpad**

Melissa Churchill  
Room: Haymarket

**Geometry**

**315—Crime Scene Investigation: Exploring Similarity the Common Core Way with the TI-Nspire™ Family of Handhelds**

Max Ray  
Room: Crystal Ballroom C

**Middle Grades Math**

**291—Tips, Tricks and Helpful Hints for Users of the TI-Navigator™ Classroom Learning System in the Middle School Classroom**

Susan Riker  
Room: Crystal Ballroom B

**Middle Grades Math**

**321—Using Google Maps™ and TI-Nspire™ CX Handhelds to Nspire Your Students**

Chip Voshall  
Room: Crystal Ballroom A

**Physics**

**293—Physics at the Playground with TI-Nspire™ Technology**

Cathy Baars  
Room: Picasso

**Physics**

**301—Trajectories in an Artificial Gravity Environment**

Paul Williams  
Room: Buckingham

**Statistics**

**302—The NASA-integrated Medical Model; Monte Carlo Methods with the TI-Nspire™ Family of Handhelds**

Ray Barton  
Room: Soldier Field

**Statistics**

**308—Using Simulation to Introduce the Central Limit Theorem**

Chris True  
Room: Gold Coast

**Technology Integration**

**307—Using the Vernier DataQuest™ App for TI-Nspire in the Mathematics Classroom**

Neale Woods  
Room: Columbus Hall AB

**Technology Integration**

**319—Meaningful Learning with Technology**

Michel van Ast  
Room: Grand Ballroom F

**Technology Integration**

**406—Utilizing Technology to Increase Student Achievement**

Patrick Flynn  
Room: Grand Ballroom B

## Sessions

2:15–3:45 pm

**Administrator****333—What's an English Teacher Doing in a Math Classroom?**Ray Williams  
Room: Wright**Algebra I****328—Activities to Promote Algebraic Understanding for the At-risk Learner**Gail Standiford  
Room: Columbus Hall EF**Algebra I****338—Having Fun Teaching the New Common Core State Standards For Mathematics**Heather Riddle  
Room: Columbus Hall G**Algebra I****348—Expressions and Equations and Equivalence, Oh My! TI-Nspire™ CAS Handhelds as a Learning Tool in Algebra**Nicole Fonger  
Room: Columbus Hall CD**Algebra I****353—Exploring Sequences in Pre-Algebra and Algebra 1 with TI-Nspire™ Technology**Beth Smith  
Room: Columbus Hall H**Algebra I****357—Edible Mathematics Using the TI-84 Plus Graphing Handheld**Vanessa Cleaver  
Room: Columbus Hall IJ**Algebra I****360—Demystifying the Common Core State Standards with the TI-Nspire™ Family of Handhelds**Matt Rhodes  
Room: Columbus Hall KL**Algebra I****361—Using the PublishView™ Feature as a Tool for Interdisciplinary Lessons in Algebra 1**Eric Butterbaugh  
Room: Ogden**Algebra II****355—Algebra II in Motion Using the TI-Nspire™ Family of Handhelds and the Calculator-Based Ranger 2™ Data Collection Device**Sharon Bruce  
Room: Acapulco**Algebra II****404—Analyzing Function Behavior Using Graphical Displays**Lori Edwards  
Room: Hong Kong**Assessment****325—TI-Nspire™ Navigator™ System Test Drive**Randy Lobe  
Room: Horner**Authoring****345—Learning Lua and Loving It!**Marc Garneau  
Room: Grand Ballroom B**Calculus****326—Modeling Derivatives with Simple Harmonic Motion Using TI-Nspire™ Technology and Motion Sensors**B. Beatriz Pineda  
Room: Regency D**Calculus****341—Understanding the Concepts of Integration by Experimenting with Eggs and Using TI-Nspire™ Technology**Gertrud Aumayr  
Room: Atlanta**CAS****329—Rich Problems with Nspiring CAS Solutions**John Hanna  
Room: Dusable**CAS****337—Using CAS with Struggling Algebra Students**Derek Swierczek  
Room: Burnham**CAS****346—Understanding, Learning and Doing Mathematics in CAS-rich Environments**Kathy Heid  
Room: Field**CAS****362—Using CAS to Promote Discovery in Algebra 2**Jon Lepeska  
Room: McCormick**Chemistry****356—Boyle's Law with TI-Nspire™ Technology and Real Gases**Julie Ealy  
Room: Wrigley**Chemistry****363—Data Analysis for Chemistry Using the TI-Nspire™ CX CAS Handheld and the Vernier DataQuest™ App for TI-Nspire**Patti Smith  
Room: Buckingham**Chemistry****376—Indiana Python and the Temple of Density**Ray Lesniewski  
Room: Columbian**Elementary Math****330—Creative Ways to Use the TI-73 Explorer™ Graphing Calculator in Upper Elementary Classes**Kristy Mann  
Room: Addams**General Interest****324—The Common Core Comes to the TI-Nspire™ Classroom: Are We Ready?**David Young  
Room: Grand Ballroom E**General Interest****347—Introduction on TI-Nspire™ CX Handheld Technology**Rafael Canales-Pastrana  
Room: Columbus Hall AB

## 2:15–3:45 pm

**General Interest****364—Discovering Algebra Concepts Using TI-Nspire™ Technology**

Edward DePeau  
Room: Grand Ballroom A

**General Math****331—Creating Functions and Simple Programs Using TI-Nspire™ Technology**

Joshua Underdonk  
Room: Regency C

**General Math****344—TI-Nspire™ Games That Teach Math**

Marian Prince  
Room: Regency B

**General Science****332—The Time for Inquiry is Now!**

Greg Dodd  
Room: Picasso

**Geometry****343—Using the TI-Nspire™ CX Handheld for Geometry Proofs**

Matt Almon  
Room: Crystal Ballroom C

**Geometry****354—Capture the Geometry with the TI-Nspire™ Family of Handhelds**

Karen Campe  
Room: Haymarket

**Middle Grades Math****340—Fun and Games on the TI-73 Explorer™ Graphing Calculator**

Joe Fiedler  
Room: Crystal Ballroom A

**Middle Grades Math****342—Using the TI-84 Plus Graphing Calculator in Middle Grades**

Valerie Hudson  
Room: Crystal Ballroom B

**Precalculus****327—Conic Sections from Paper Folding to the TI-Nspire™ Family of Handhelds – a Hands-on Experience**

Art Mabbott  
Room: Grand Ballroom D

**Precalculus****334—Inspiring Formative Assessment with the TI-Nspire™ Navigator™ System**

Deborah Kula  
Room: New Orleans

**Precalculus****352—Who's the Man on the Moon? Exploring Lunar Data.**

Sherri Abel  
Room: San Francisco

**Statistics****339—The Common Core State Standards: Making Sense of Data with the TI-Nspire™ CX Handheld**

Gail Burrill  
Room: Water Tower

**Statistics****349—Data Rules the World: Activities for the Common Core Statistics and Probability Domain**

Pam O'Brien  
Room: Toronto

**Statistics****350—TI-Nspire™ Statistics**

Diane Broberg  
Room: Gold Coast

**Statistics****351—TI-Nspire™ Action-consequence Activities Promote a Deeper Understanding of Topics in Statistics**

Krista Cornehl  
Room: Soldier Field

**Technology Integration****358—Tips and Tricks to Using the TI-Nspire™ Navigator™ System**

Matt Alonzo  
Room: Grand Ballroom F

## 4:00–5:30 pm

**Administrator****378—Help Administrators Understand the Benefits of Investing in TI-Nspire™ Technology in These Economic Times**

Jessica Kachur  
Room: Wright

**Algebra I****366—An Nspired Approach to Illuminating the Common Core State Standards for Mathematics in Algebra**

Linda Griffith  
Room: Columbus Hall IJ

**Algebra I****372—Transforming the Algebras**

John Ashurst  
Room: Columbus Hall EF

**Algebra I****377—Quick Poll with the TI-Nspire™ Navigator™ System is not Just for Formative Assessment**

Doug Roberts  
Room: Columbus Hall KL

**Algebra I****384—PublishView™ Moves Teaching and Learning Beyond the Classroom**

Judith Olson  
Room: Horner

**Algebra I****387—Nspiring without Perspiring**

Kara Leaman  
Room: Columbus Hall G

**Algebra I****389—Create Dynamic Text on the TI-73 Explorer™ Graphing Calculator and the TI-84 Plus Graphing Calculator with an Activity on Quadratics**

Molly Rockstroh  
Room: Columbus Hall CD

**Algebra I****391—From Patterns to Functions: Developing Slope as a Rate of Change**

Sherri Abel  
Room: Grand Ballroom A

## Sessions

**Algebra II****374—Having Fun with Conics**

Elena Acciaro  
Room: Toronto

**Algebra II****383—Exponential vs. Logistic: Using TI-Nspire™ Technology to Develop Mathematical Reasoning**

Ron Armontrout  
Room: Acapulco

**Algebra II****392—Bridging the Gap – From Low Tech to High Tech Data Collection in Math & Science**

Mary Beth Murrell  
Room: Hong Kong

**Algebra II****397—Windows into Student Thinking Using TI-Nspire™ Navigator™ System**

Chris Atkinson  
Room: Atlanta

**Assessment****396—Windows into Student Thinking**

Maureen McNeil  
Room: New Orleans

**CAS****271—CAS: A Perspective from North of the Border**

Dwight Stead  
Room: Addams

**CAS****369—Probability, Polynomials and CAS**

Steve Phelps  
Room: McCormick

**CAS****370—All CAS, All the Time: How Three Schools Adopted the TI-Nspire™ CX CAS Handheld for All Math Courses**

Steven Viktora  
Room: Dusable

**CAS****373—Good Problems and Great Practices for CAS in Daily Lessons and High-Stakes Tests**

Rose Mary Zbiek  
Room: Burnham

**CAS****385—Integrating CAS**

Chris Harrow  
Room: Field

**Chemistry****398—Chemistry Activities with TI-Nspire™ Family of Handhelds Using the Vernier DataQuest™ App for TI-Nspire**

C.W. Eaker  
Room: Picasso

**Chemistry****403—Exploring Heating Curves and Phase Diagrams Using the TI-84 Plus and CBL2™ and/or Using the TI-Nspire™ with Data Collection**

Lisa McGaw  
Room: Regency D

**General Interest****393—Programming the TI-Nspire™ Handhelds with OS 3.0**

Tom Hanson  
Room: Columbus Hall AB

**General Math****368—Using the TI-Nspire™ Navigator™ System in the Math Classroom**

Michelle Bonds  
Room: Regency C

**General Math****380—Assessing Students' Understanding (Not Button Pushing) Using the TI-Nspire™ Navigator™ System**

Patsy Fagan  
Room: Regency B

**General Math****386—Decreasing Skill Gaps and Increasing Test Performance with the TI-Navigator™ Classroom Learning System**

Pareesa Shirazi  
Room: Ogden

**General Science****399—Data Analysis for Science Using the Vernier DataQuest™ App For TI-Nspire**

Rob Reniewicki  
Room: Buckingham

**Geometry****379—The Forgotten App – Cabri™ Jr. on the TI-84 Plus Graphing Calculator**

Bill Caroscio  
Room: Grand Ballroom D

**Geometry****409—The Cabri™ Jr. Geometry App is FREE on the TI-84 Plus Graphing Calculator – Why Aren't You Using it?**

Dona McSpadden  
Room: Columbus Hall H

**Geometry****412—Common Core State Standards and Math Nspired**

Ellen Johnston  
Room: Crystal Ballroom C

**Middle Grades Math****371—Wii™ Play, We Learn**

Nathan Fogg  
Room: Crystal Ballroom A

**Middle Grades Math****388—Explore Perimeter & Area Using the TI-73 Explorer™ Graphing Calculator's Geoboard App**

Bridget Coleman  
Room: Crystal Ballroom B

**Middle Grades Science****394—Data Collection for Middle School Using the TI-73 Explorer™ Graphing Calculator**

Tara Windle  
Room: Wrigley

**Physics****359—TI-Nspire™ Technology and Vernier DataQuest™ App for TI-Nspire: Physics Made Easy**

Karlheinz Haas  
Room: Columbian

4:00–5:30 pm

**Precalculus****390—Precalculus Nspired – Activities to Inspire Your Precalculus Classroom**

Bryson Perry  
Room: San Francisco

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**Precalculus****400—Precalculus and Algebra 2 Activities Using TI-Nspire™ CX and TI-Nspire™ CX CAS Handhelds**

Ann Davidian  
Room: Grand Ballroom E

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**Programming****381—Introduction to “Writing Code” to Program the TI-Nspire™ Family of Handhelds**

Becky Underwood  
Room: Grand Ballroom B

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**Statistics****335—Type II Error and Power of a Test: Statistics with the TI-84 Plus Graphing Calculator**

Mike Koehler  
Room: Haymarket

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**Statistics****367—Data Collection and Analysis Using the TI-Nspire™ Navigator™ System**

Kenneth Ray Fox  
Room: Soldier Field

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**Statistics****382—Chi-Square and the TI-Nspire™ Family of Handhelds for AP\* Statistics**

Lisa Conzemius  
Room: Water Tower

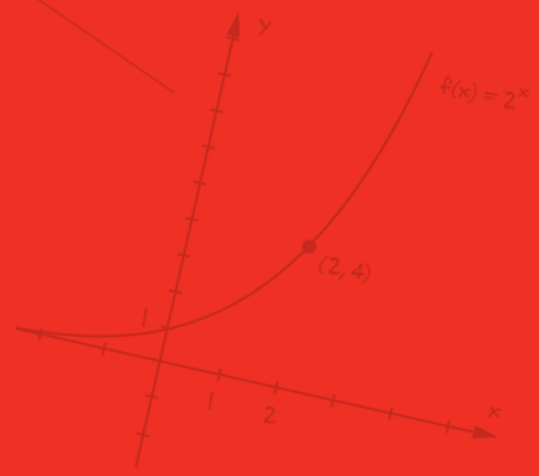
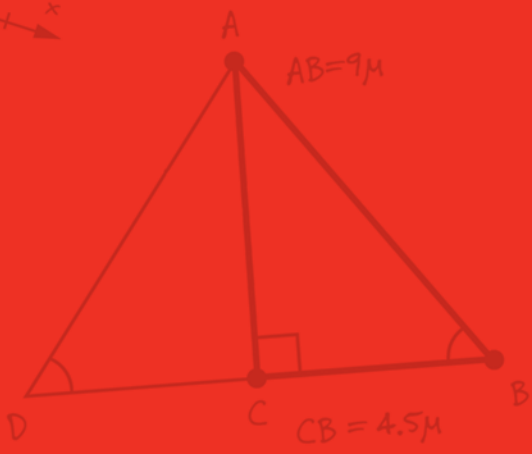
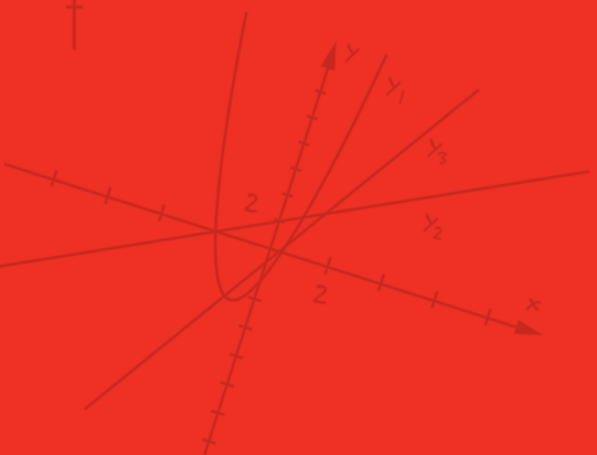
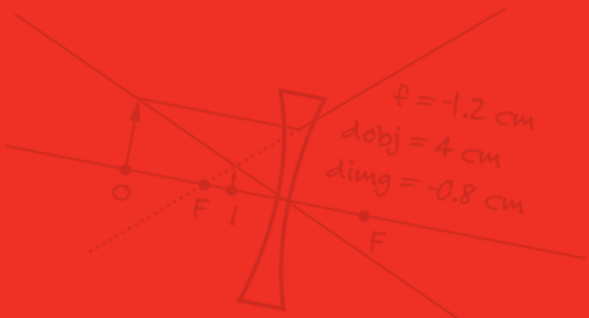
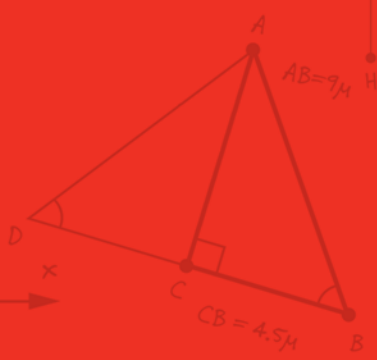
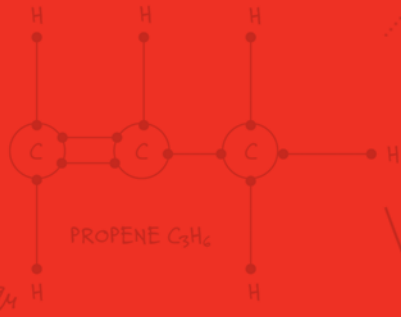
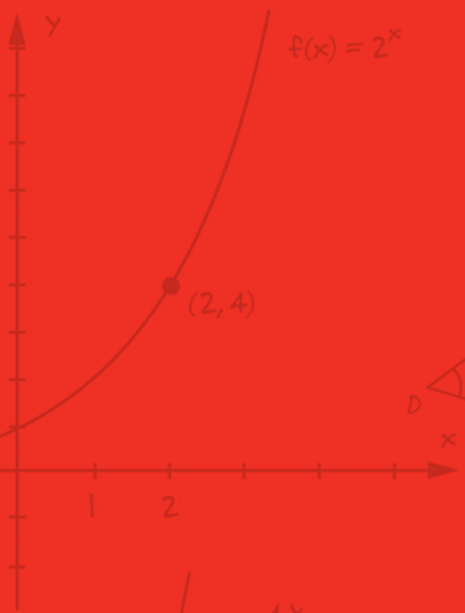
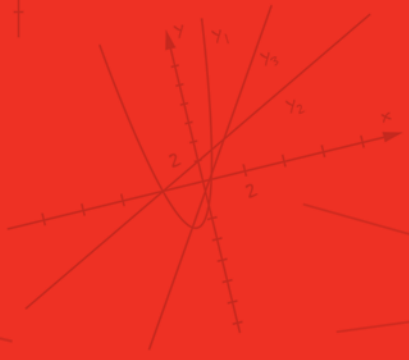
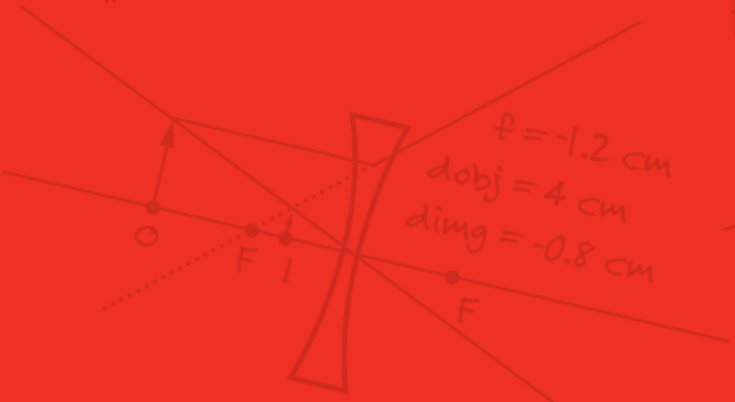
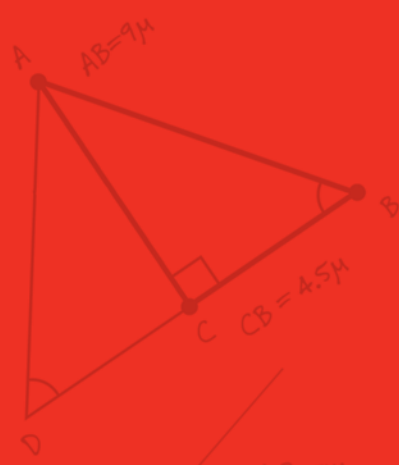
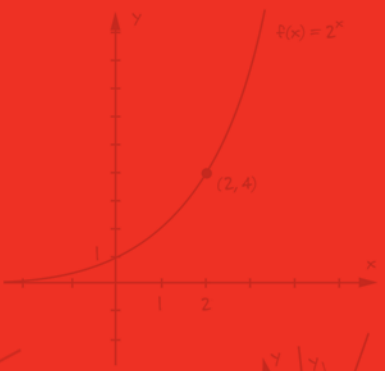
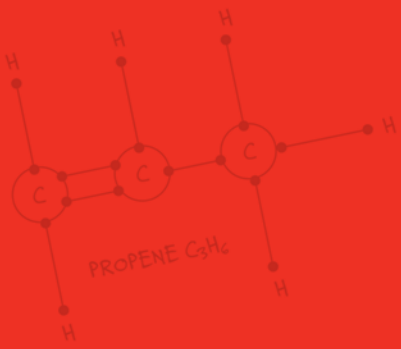
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**Technology Integration****407—Integrating Math Nspired Lessons and Technology Using Common Core Mathematical Practices**

Pamela Baker  
Room: Grand Ballroom F

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# Friday Session Details



**10:15 am - 11:15 am****Room: Regency C**

Seats: 100

ALGEBRA II

**1 To the Pip Point and Beyond: Exploring New Functions with TI-Nspire™ CAS Technology***60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CAS Teacher Software**Roger Wander, University of Melbourne, Northcote, Australia*

A question posed by a Year 12 student Philippa in the 1980s led the presenter to a better way to teach graphs of rational functions. Nearly thirty years on the availability of CAS technology offers students a chance to create new, off-the-syllabus functions which answer the “How do you know...?” queries which arise in mathematics classrooms. The presenter and participants will use TI-Nspire™ CAS handhelds to explore features of some standard graphs, and will share a lesson plan, technology file and task based in research written for Mathematical Methods CAS classes in Victoria, Australia.

**10:15 am - 11:15 am****Room: Crystal Ballroom C**

Seats: 100

TRIGONOMETRY

**2 A Stunning Approximation to the Sine Function***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™**Ron Lancaster, Ontario Institute for Studies in Education; University of Toronto, Hamilton, ON, Canada*

We will examine a little-known function that is a ratio of two quadratic functions that provides an exceptionally close approximation to the sine function. The approximation is so close that it is almost beyond belief. We will use the TI-84 Plus graphing calculator and TI-Nspire™ family of handhelds to analyze the function but it is worth noting that the function predates these devices by about 2,000 years.

**10:15 am - 11:15 am****Room: Horner**

Seats: 25

TECHNOLOGY  
INTEGRATION**3 The Evolution of Teaching and Learning Mathematics***60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS Teacher Software, TI-89 Titanium Graphing Calculator**Marshall Lassak, Eastern Illinois University, Charleston, IL, USA*

The evolving capabilities of graphing calculators, dynamic geometry systems, spreadsheets and computer algebra systems (CAS) should make the teaching and learning of mathematics both active and dynamic. I will share mathematical investigations I have used with students that maintain mathematical fidelity while engaging students in fundamental situations that necessitate investigation. Ranging from learning about procedures to dealing with complex algebraic ideas, the results of the investigations are often surprising and usually better than can be imagined.

**10:15 am - 11:15 am****Room: Regency B**

Seats: 100

GENERAL MATH

**4 Analyze NASA Data Using the TI-Nspire™ Family of Handhelds for AP\* Statistics***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System**Sharon Cichocki, Hamburg High School, Hamburg, NY, USA*

Explore a real-world data problem (NASA data) using the power of the TI-Nspire™ family of handhelds to enhance your statistic lesson. The problem is geared toward the AP\* Statistics student, but all teachers are welcome to attend.

**10:15 am - 11:15 am****Room: Picasso**

Seats: 30

PHYSICS

**5 How Impulsive Are You?***60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes**Sanja Herrström, Allvar Gullstrandgymnasiet, Landskrona, Sweden**Co-Presenter(s): Petra Ryrstedt*

We are going to push a small vehicle against a force sensor and then investigate how the force and speed change over time. We will calculate the momentum before and after the change in direction. Then we will compare the difference between them with the impulse that we calculate from the force-time graph. Hopefully we will make the law of impulse trustworthy. You will get the opportunity to try this experiment yourself and will be guided through the set up and evaluation of the measurements.

# Session Details

<p><b>10:15 am - 11:15 am</b>  <b>Room: Hong Kong</b>  <i>Seats: 30</i>            ALGEBRA II</p>	<p><b>6 Activity-based Regression Analysis Using the TI-84 Plus Graphing Calculator</b>  <i>60-Minute Hands-On • TI-84 Plus Graphing Calculator Family</i>  <i>Cory Cloud, Florida High School, Tallahassee, FL, USA</i></p> <p>This session is designed to give hands-on activities that allow students to explore the ideas of regression. These activities will allow students to connect the ideas of data collection, experimental design, extrapolation, linear and quadratic modeling, and slope and y-intercept interpretation. These activities also allow for discussion on regression modeling by hand versus using technology.</p>
<p><b>10:15 am - 11:15 am</b>  <b>Room: Crystal Ballroom B</b>  <i>Seats: 100</i>            CHEMISTRY</p>	<p><b>7 Examples for Lessons with Chemistry Experiments and Tasks about the Experiments</b>  <i>60-Minute Lecture/Demonstration</i>  <i>Frank Liebner, Geschwister-Scholl-Gymnasium High School, Herrnhut, Germany</i></p> <p>Learn about the results of a study involving 350 students using TI technology. This project dealt with analyzing the function and use of advanced technology for supporting the students in their learning.</p>
<p><b>10:15 am - 11:15 am</b>  <b>Room: Acapulco</b>  <i>Seats: 80</i>            ALGEBRA II</p>	<p><b>8 My Favorite High School Mathematics Activities with the TI-Nspire™ CX CAS Handheld</b>  <i>60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software</i>  <i>Don Karlgaard, Brainerd High School, East Gull Lake, MN, USA</i></p> <p>This is a hands-on session using the TI-Nspire™ CX CAS handheld to visualize and solve a variety of high school mathematics problems including algebra, geometry and precalculus.</p>
<p><b>10:15 am - 11:15 am</b>  <b>Room: Wrigley</b>  <i>Seats: 80</i>            GENERAL SCIENCE</p>	<p><b>9 Circular Motion Using TI-Nspire™ Technology</b>  <i>60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle</i>  <i>Allen Daniel, Parkway North High School, Saint Louis, MO, USA</i></p> <p>This hands-on session is designed for teachers using the modeling approach in the Physics First classroom. Participants will use TI-Nspire™ technology with the TI-Nspire™ Lab Cradle to collect data. We'll use Vernier™ Software &amp; Technology low-g accelerometer, photogate and force sensors. Linearizing data and data aggregation using the TI-Nspire™ CX CAS handheld in the physics classroom will also be discussed.</p>
<p><b>10:15 am - 11:15 am</b>  <b>Room: Soldier Field</b>  <i>Seats: 30</i>            STATISTICS</p>	<p><b>10 Statistics 101 Using Sports and TI-Nspire™ Technology</b>  <i>60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System</i>  <i>Kyle Atkin, Arvin High School, Bakersfield, CA, USA</i>  <i>Co-Presenter(s): David Reeves</i></p> <p>Statistics is a part of the new Common Core State Standards. Come and see how basic statistical concepts like inference and bivariate data analysis can be taught using sports and the TI-Nspire™ family of handhelds.</p>

**10:15 am - 11:15 am****Room: Crystal Ballroom A**

Seats: 100

GENERAL INTEREST

**11 Using Math Nspired as a Classroom Resource**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System

Alicia Page, TI MathForward™, Crossville, TN, USA

Participants will explore a variety of resources from [mathnspired.com](http://mathnspired.com). These lessons include teacher notes, student handouts and pre-made Nspire files. Educators can choose to use these activities “as is” or observe how they can be modified to meet the needs of their students. The site offers units in Middle Grades Math, Algebra 1, Geometry, Algebra 2, Precalculus, Calculus and Statistics.

**10:15 am - 11:15 am****Room: Columbus Hall CD**

Seats: 120

ALGEBRA I

**12 Let's Meet Up!: Google Maps™ Mapping Service + TI Nspire™ CX Handhelds = Triangle Center Application**

60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System

Sheryl Edwards, Cleveland School of Science and Medicine, Cleveland, OH, USA

Co-Presenter(s): Bill Stiggers, Lisa Suarez

Participants will see how TI-Nspire™ CX handhelds and Google Maps™ mapping service can be used to teach an application of triangle centers, specifically the circumcenter and the incenter. Maps have been snipped from Google™ Maps mapping service and loaded into a TI-Nspire™ CX handheld. We will then use the incenter and the circumcenter to find equidistant points for three highways or three cities. An overview of how the maps were converted to picture files and inserted into TI-Nspire™ software then to the handheld will be included.

**10:15 am - 11:15 am****Room: Columbus Hall IJ**

Seats: 140

ALGEBRA I

**13 Modeling Quadratic Functions**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software

Jerry Scherer, Thornhill, ON, Canada

Participants will be provided with a number of action/consequence activities that investigate the parameters of a quadratic function. The participants will investigate through images and animation. The flights of a basketball and a golf ball are two examples of modeling the quadratic functions that we will demonstrate. Bring your own TI-Nspire™ handheld (all models) and take home these documents for your class.

**10:15 am - 11:15 am****Room: San Francisco**

Seats: 25

TECHNOLOGY  
INTEGRATION**14 You've Got Nspired Questions? I'll Nspire you with Answers!**

60-Minute Hands-On • TI-Nspire™ with Touchpad Handheld, TI-Nspire™ Teacher Software, TI-SmartView™ Emulator for TI-Nspire™

Rhoda McInerney, Glenbrook North High School, Northbrook, IL, USA

This session is intended for the newer TI-Nspire™ user. We will explore some behind-the-scenes features such as Press to Test: What is it?, What does it do? Graphing features: How do I graph a piecewise function? How do I find zero? and more.

**10:15 am - 11:15 am****Room: Columbian**

Seats: 30

GENERAL SCIENCE

**16 Virtual Field Experience with Digital Data**

60-Minute Lecture/Demonstration • TI-Nspire™ CX Handheld, TI-84 Plus Graphing Calculator Family, TI-Nspire™ Lab Cradle, Calculator-Based Laboratory 2™ Data Collection Device, Other Data Collection Probes

Tom Cauffield, H.L. Watkins Middle School, Jupiter, FL, USA

Co-Presenter(s): Tom Green

Participants will explore virtual field experience development as used by the Paleontological Society. This process will incorporate pH data collected with Vernier™ Technology and Software pH sensors, GPS data from eTrex® units coupled with Vernier™ Technology and Software apps, the TI-84 Plus graphing calculator, the Calculator-Based Laboratory™ data collection device, and/or the TI-Nspire™ CX handhelds and the TI-Nspire™ Lab Cradle. Discussions and demonstrations will include the TI-84 graphing calculator family and the TI-Nspire™ CX handheld. We will look at ways in which field experience may be enhanced with online tools such as wikis, secure photo storage, discussion pages and Google resources.

# Session Details

**10:15 am - 11:15 am**

**Room: Haymarket**

Seats: 24

MIDDLE GRADES MATH

**17 Math in the Middle Grades Nspired!**

60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS Teacher Software

Miguel Garcia, Granite School District, Salt Lake City, UT, USA

Co-Presenter(s): Heater Riddle

Incorporate games, activities and literature to jazz up your Middle Grades math. Use real-life data to add meaning to mathematics.

**10:15 am - 11:15 am**

**Room: Columbus Hall EF**

Seats: 120

ALGEBRA I

**18 TI-Navigator™ Activity Center is More than Graphing**

60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System

Eva Airhart, TI MathForward™, North Canton, OH, USA

Learn some new ways to integrate the TI-Navigator™ Activity Center into your lessons. This session contains various activities beyond the basic graphing concepts. You will receive a packet full of ideas and learn how you can create and run these activities with ease in your classroom.

**10:15 am - 11:15 am**

**Room: Water Tower**

Seats: 50

MIDDLE GRADES MATH

**19 TI-Nspire™ Family of Handhelds for Beginners – Middle School Topics**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds

Pam Harris, Pam Harris Consulting, LLC, Kyle, TX, USA

This session is for beginners. Come and learn the basics of the TI-Nspire™ family of handhelds. We will explore pre-made documents as an entry point for students and teachers.

**10:15 am - 11:15 am**

**Room: Dusable**

Seats: 35

GEOMETRY

**20 Points of Concurrency: Making Geometry Relevant (Using TI-Nspire™ CX Handhelds)**

60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software

Margaret 'Peggy' Lovenbury, Sandpoint Charter School, Sandpoint, ID, USA

Using the TI-Nspire™ CX handheld and the TI-Nspire™ CX Navigator™, we will construct the incenter and circumcenter of a triangle and relate it to a series of problems from real-world examples. This can be easily adapted to your state and school situation. It includes pencil and paper activities to follow the activity.

**10:15 am - 11:15 am**

**Room: Toronto**

Seats: 80

ALGEBRA II

**21 Using Dynamically-Connected Representations to Integrate Quadratic Concepts**

60-Minute Hands-On • TI-Nspire™ CX CAS Handheld

Doug Lapp, Central Michigan University, Mount Pleasant, MI, USA

This session explores activities used to develop concepts of roots and transformations of quadratic functions via dynamically-connected representations. The power of dynamic note pages will be exploited to build manipulatable documents where students can explore concepts. Student work from classroom observations will be shared.

**10:15 am - 11:15 am**

**Room: Atlanta**

Seats: 30

CALCULUS

**22 Interpreting Tables and Graphs in Calculus**

60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System

Vicki Carter, West Florence High School, Florence, SC, USA

In this session we will examine several calculus problems which contain tabular or graphical data. Students often struggle to make the correct interpretations and connections from tables and graphs. Strategies for using the TI-Nspire™ CX CAS handheld and TI-Nspire™ CX Navigator™ System to support student learning for these types of problems will be discussed.

**10:15 am - 11:15 am****Room: Columbus Hall AB**

Seats: 120

TECHNOLOGY  
INTEGRATION**23 How to Transition Teachers from the TI-83 Plus and TI-84 Plus Families of Graphing Calculators to TI-Nspire™ Technology***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-84 Plus Graphing Calculator Family**Roger Fuller, Grand Prairie High School, Grand Prairie, TX, USA*

Getting teachers to move from their comfort zones can be hard to do, but this session's presenter has found a way that can make the job easier. The idea is to use three apps (Transformation Graphing, Inequality Graphing, and Cabri™ Jr.) and the MathPrint™ feature. Instead of math teachers avoiding a big scary jump from tried-and-true techniques to the unknown, they just walk right there in four easy steps. This not only prepares them for using the new system, they get to benefit from some of the technology's power along the way. The presenter will demonstrate how to do this "secret" step-by-step process.

**10:15 am - 11:15 am****Room: Regency D**

Seats: 100

PRECALCULUS

**24 TI-84 Plus Graphing Calculator and TI-Navigator™ in the Precalculus Classroom***60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System**Janice Mitchener, Carmel High School, Carmel, IN, USA*

My favorite TI-84 Plus graphing calculator precalculus activities will be shared: polar graphing, using the TI-Navigator™ classroom learning system to review sine and cosine graphs, paper folding parabolas with paper and technology, and more!

**10:15 am - 11:15 am****Room: Columbus Hall H**

Seats: 40

ALGEBRA I

**25 Integrated Projects for Algebra 1 and Biology***60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ Navigator™ System, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes**Corina Srygley, Amarillo Area Center for Advanced Learning (AACAL), Amarillo, TX, USA*

Need to integrate math and science? Come experience some integrated projects for Algebra 1 and Biology. We will be using TI-Nspire™ CX handhelds, the Calculator-Based Ranger 2™ data collection devices and Vernier Software & Technology™ temperature probes, as well as the TI-Nspire™ Navigator™ System. Leave with projects ready to use in your classroom.

**10:15 am - 11:15 am****Room: Buckingham**

Seats: 30

CHEMISTRY

**26 Demonstration with Sensors***60-Minute Lecture/Demonstration • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ Lab Cradle**Jim Ealy, Penn State University, Center Valley, PA, USA**Co-Presenter(s): Julie Ealy*

Many teachers use demonstrations in chemistry class, but not necessarily with data collection. This presentation will show how demonstrations can be enhanced with appropriate sensors. This will go beyond the "WOW" factor!

**10:15 am - 11:15 am****Room: Wright**

Seats: 25

ADMINISTRATOR

**27 Mathematical Modeling is Effective in Education and Will Engage Educational Leaders in the Technology Purchase Decision/Process***60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software**Edward Chaves, Miami-Dade County Public Schools, Doral, FL, USA*

Participants will apply mathematical modeling to solve real-world problems (at district/regional/school level(s) using the TI-Nspire™ CX handheld family.) Educational leaders are focused on instructional content and advanced technological tools to support the teaching and learning in the core subject areas of reading, mathematics, science and other foundational skills in the curriculum to enhance learning, and improve the quality of education. Accomplishing this is possible with reduced financial resources! This session is designed to engage educational/instructional leaders in the technology purchase/decision process.

# Session Details

**10:15 am - 11:15 am**

**Room: McCormick**

Seats: 35

ASSESSMENT

## **28 The Art of Questioning**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System

Jill Gough, The Westminster Schools, Atlanta, GA, USA

Co-Presenter(s): Sam Gough

“Questions are the way points on the path of wisdom.” ~ Grant Lichtman. This session will focus on the art of questioning and using the TI-Nspire™ Navigator™ System as a formative assessment tool. Work on becoming a falconer...leading your learners through questions rather than lectures.

**10:15 am - 11:15 am**

**Room: Ogden**

Seats: 25

TECHNOLOGY  
INTEGRATION

## **29 Using TI-Nspire™ Navigator™ NC Teacher Software to Ease the Hurry Syndrome**

60-Minute Hands-On • TI-Nspire™ Navigator™ NC System

Jennifer Wilson, Northwest Rankin High School, Flowood, MS, USA

Are you a 1-1 laptop school? Or headed in that direction? Come and explore how the Common Core State Standards, the Common Core Mathematical Practices, formative assessment and TI-Nspire™ Navigator™ NC System work together to make an interactive classroom where students are making sense of mathematics.

**10:15 am - 11:15 am**

**Room: Addams**

Seats: 25

ELEMENTARY  
MATH

## **30 Encouraging Critical Thinking Skills in the K-5 Classroom**

60-Minute Hands-On • TI-15 Explorer™ Calculator

Kevin Simms, Salem City Schools, Salem, VA, USA

The perception that calculators give students all the answers can easily be dispelled when we alter the questions we ask children to answer. Participants will look at activities that encourage students to explore and discover basic concepts through calculator use. These activities can be adapted for most elementary grade levels and will motivate group discussions and teacher-student communication.

**10:15 am - 11:15 am**

**Room: Columbus Hall KL**

Seats: 140

ALGEBRA I

## **31 Inspiring Algebra 1 Students with the TI-Nspire™ Navigator™ System: A Comprehensive Study in Powhatan High School**

60-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle

Gail Warren, Virginia Department of Education, Richmond, VA, USA

Co-Presenter(s): Lois Paris, Lisa Simonick

Come take an investigative look at how the Virginia Department of Education and Powhatan High School Algebra 1 teachers successfully incorporated using the TI-Nspire™ Navigator™ System into their classrooms and curriculum. Discover through discussion how the implementation evolved, morphed and plans for the future.

**10:15 am - 11:15 am**

**Room: Burnham**

Seats: 35

CAS

## **32 Polynomial and Rational Functions and CAS: Comparing Honors and Non-Honors Precalculus Courses**

60-Minute Hands-On • TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ Navigator™ System, TI-Nspire™ CAS Teacher Software

Scott Galson, Walter Payton College Prep High School, Chicago, IL, USA

Co-Presenter(s): Michael Caines

Zeros and factors, end behavior, maxima/minima, asymptotes and limits. These properties of polynomial and rational functions don't have to take a long time to teach when we use CAS functions on the TI-Nspire™ CAS handheld with Touchpad. Learn and take part in activities that avoid the pitfalls of student inaccuracies that keep students from getting the most of the learning goals of our precalculus lessons. We will also look at how our Honors and non-Honors courses' activities differ.

**10:15 am - 11:15 am****Room: Field**

Seats: 35

GEOMETRY

**34 Proof by Counterexample for Geometry Students Using the TI-Nspire™ CX Handheld***60-Minute Hands-On • TI-Nspire™ CX Handheld**Lisa Phillips, Florida State University School, Tallahassee, FL, USA*

Participants will use the TI-Nspire™ CX handheld to disprove SSA and AAA cases through the use of counterexamples. Participants will receive student worksheets that will guide them through the process. This session is geared towards beginning and intermediate TI-Nspire™ CX handheld users.

**10:15 am - 11:15 am****Room: New Orleans**

Seats: 45

TECHNOLOGY  
INTEGRATION**35 Use the TI-Nspire™ CX CAS Handheld to Find Points of Concurrency and Other Geometry Constructions***60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS Teacher Software**Ninamarie Sapuppo, Florida State University Schools, Tallahassee, FL, USA*

This session is for those new to using the TI-Nspire™ CX CAS handheld to explore geometry in the classroom. You will see how easily the TI-Nspire™ CX CAS handheld constructs angle bisectors, altitudes, perpendicular bisectors and medians so the points of concurrency can be identified. The circumcircle, incircle and the Euler Line are also constructed and extensions given.

**11:30 am - 1:00 pm****Room: Regency D**

Seats: 100

GENERAL MATH

**36 TI MathForward™ – Come See What the Excitement is All About!***90-Minute Lecture/Demonstration • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System, TI-SmartView™ Emulator for TI-Nspire™**Gina Allred, TI MathForward™, Franklinville, NC, USA*

The TI MathForward™ program is the total package! Come see how it uses TI-84 Plus graphing calculators and the TI-Navigator™ classroom learning system to engage students and go beyond! Hands-on activities and more!

**11:30 am - 1:00 pm****Room: Hong Kong**

Seats: 30

ALGEBRA II

**37 Simulations for Pre-algebra through Precalculus Using the TI-84 Plus Graphing Calculator***90-Minute Hands-On • TI-84 Plus Graphing Calculator Family**Sister Alice Hess, Archbishop Ryan High School, Philadelphia, PA, USA*

This session focuses on the use of simulation as a tool to lead students to higher order thinking. Participants will experience several hands-on activities, including geometric, binomial and conditional probability. Pre-algebra through precalculus students have used these activities successfully.

**11:30 am - 1:00 pm****Room: Water Tower**

Seats: 50

MIDDLE GRADES MATH

**38 Math Nspired for Middle Grades: Common Core-based Investigations with Geometry***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System**Christine Browning, Western Michigan University, Gobles, MI, USA**Co-Presenter(s): Ann Schlemper*

In this session, participants will explore several Nspire activities designed for middle grades students that allow them to investigate Common Core State Standards for Mathematics related to geometry. These investigations are part of the Math Nspired resources on [education.ti.com](http://education.ti.com).

**11:30 am - 1:00 pm****Room: San Francisco**

Seats: 25

TECHNOLOGY  
INTEGRATION**39 Data Collection and the TI-73 Explorer™ Graphing Calculator: The Basics***90-Minute Hands-On • TI-73 Explorer™ Graphing Calculator, Calculator-Based Laboratory 2™ Data Collection Device, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes**David Young, Fayetteville Public Schools, Fayetteville, AR, USA*

In this session we will experience how to collect data using the TI-73 Explorer™ graphing calculator and explore how this data will enhance the learning experiences of your students. Leave this session with many resources to support your data collection needs in the classroom.

# Session Details

**11:30 am - 1:00 pm**

**Room: McCormick**

Seats: 35

ASSESSMENT

**40 TI-Nspire™ Navigator™ System: Quizzes and Tests – Go Paperless!**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software

Mary A. Brese, Brink Junior High, Harrah, OK, USA

Using the TI-Nspire™ Navigator™ System, we will create and use files in this session. Participants will learn how to create question files for class activities and create interactive tests using the Quick Poll feature. Take part in this session and experience the ease of using the program from both the teacher and student perspective. You will see how these ideas can extend into a method for grading homework in just a few short minutes, giving the students an engaging tool to investigate and learn while you complete ongoing assessment strategies.

**11:30 am - 1:00 pm**

**Room: Field**

Seats: 35

GEOMETRY

**41 Constructing and Transforming Your Geometry Nspired Classroom**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds

Joshua Underdonk, Monongalia County Schools, Glen Dale, WV, USA

Participants will create dynamic constructions and transformations to use in their geometry classrooms. Participants should be familiar with the Graphs & Geometry application.

**11:30 am - 1:00 pm**

**Room: Horner**

Seats: 25

ASSESSMENT

**42 TI-Nspire™ Navigator™ System Test Drive**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System

Corey Bobby, Lakeside High School, Hot Springs, AR, USA

Co-Presenter(s): Randy Lobe

You've seen the TI-Nspire™ Navigator™ System in other sessions – now come take it for a test drive. This session will allow you to get on a computer and experience the steps you need to do to teach with the TI-Nspire™ Navigator™ System in the classroom. Lift up the hood, kick the tires and see if it's right for you. By the end of the session you will be exposed to managing classes, assessment techniques and classroom activities.

**11:30 am - 1:00 pm**

**Room: Regency B**

Seats: 100

CAS

**43 CAS – Six Ways to Monday**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software

Fred Ferneyhough, Caledon Village, ON, Canada

Over the past twenty years, six different ways to use Computer Algebra Systems (CAS) in the classroom have become apparent. In this session, we will go over these uses, with examples and comments on effective use of CAS and the dangers that some new users need to be aware of.

**11:30 am - 1:00 pm**

**Room: Crystal Ballroom B**

Seats: 100

GENERAL INTEREST

**44 Technology Without Neuroscience is Like Food Without Nutrition**

90-Minute Lecture/Demonstration • TI-84 Plus Graphing Calculator Family

Edward Laughbaum, Ohio State University, Marysville, OH, USA

Yes, everything new in mathematics education is old, except the application of neuroscience to develop student understanding and long-term memory of the mathematics taught. Neuroscience outcomes work best with handheld technology to create external actions that evoke the desired neural responses which develop understanding and long-term memory. The technology of choice is the graphing calculator.

**11:30 am - 1:00 pm****Room: Columbus Hall H**

Seats: 40

PRECALCULUS

**45 Real-world Data Collection Applications Using Vernier DataQuest™ App for TI-Nspire™ Handhelds***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes**JoAnn Miltenberg, Farmingdale High School, Farmingdale, NY, USA*

Use the Vernier DataQuest™ app for TI-Nspire and Vernier™ Software and Technology temperature, voltage and light probes for data collection that models real-life situations involving linear, exponential, quadratic and step functions, trigonometric graphs and more. Use the TI-Nspire™ CX Navigator™ System's Live Presenter to help students discover the connections.

**11:30 am - 1:00 pm****Room: Dusable**

Seats: 35

GEOMETRY

**46 Who Am I? An Nspired Geometry Activity***90-Minute Hands-On • TI-Nspire™ CX Handheld**Fred Decovsky, Millburn, NJ, USA*

Participants will explore the transformation tools on the TI-Nspire™ CX handheld. Then, they will be given certain transformational "clues" and will have to identify the resulting figure formed. See how this standards-based lesson can be used to make discoveries and conclusions that support effective learning and problem solving, engage students and improve students' understanding.

**11:30 am - 1:00 pm****Room: Soldier Field**

Seats: 30

STATISTICS

**47 Statistics Nspiration Using the TI-Nspire™ CX Handheld and the TI-Nspire™ Handheld With Touchpad***90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ with Touchpad Handheld**Robin Levine-Wissing, Glenbrook North High School, Northbrook, IL, USA*

This session is for introductory or AP\* statistics teachers who are beginning users of the TI-Nspire™ CX handheld and/or the TI-Nspire™ handheld with Touchpad. We will explore the dynamic nature of TI-Nspire™ technology with data collection, regression and some inference with activities from my classroom.

**11:30 am - 1:00 pm****Room: Gold Coast**

Seats: 50

MIDDLE GRADES MATH

**48 Using the TI-Nspire™ CX Handheld and TI-Nspire™ CX Navigator™ System in an Historical Context with Middle School Grades***90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System**Peter Ransom, Bath Spa University, UK, Southampton, United Kingdom*

An able-seaman of the British navy will explain how Viscount Horatio Nelson used elementary mathematics at the Battle of Trafalgar in 1805. The TI-Nspire™ CX handheld and TI-Nspire™ CX Navigator™ System will be used to illustrate the mathematics covered within the classroom (mainly basic algebra, geometry and statistics). Participants will have the opportunity to engage with some of the novel ways of empowering students and see the destructive effect of a cannonball. There will be a free CD-ROM of all the materials used (plus much extra). All the senses (except smell) will be exploited in this cross-curricular extravaganza.

**11:30 am - 1:00 pm****Room: Crystal Ballroom C**

Seats: 100

PROGRAMMING

**49 An Introduction to Creating Nspire Simulations Using the Lua Scripting Language***90-Minute Lecture/Demonstration • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ Teacher Software**Fred Fotsch, Glendale High School, Springfield, MO, USA*

TI-Nspire™ simulations in the math and science classrooms are an alternative to data collection for generating numerical data for analysis. Simulations offer a quick alternative for student investigations into physical phenomena that may require difficult and time-consuming laboratory setups. The new Lua scripting language provides an avenue for creating these simulations which may contain visuals, interactive controls, graphical data and much more. This session will be an overview of this new capability for TI-Nspire™ CX and TI-Nspire™ CX CAS handhelds.

# Session Details

<p><b>11:30 am - 1:00 pm</b>  <b>Room: Acapulco</b>  <i>Seats: 80</i>            ALGEBRA II</p>	<p><b>50 Cool Quadratics</b>  <i>90-Minute Hands-On • TI-Nspire™ Family of Handhelds</i>  <i>Mary Bourassa, West Carleton Secondary School, Dunrobin, ON, Canada</i></p> <p>This hands-on session will start with the iPad® and work its way through a variety of ways of investigating quadratic functions. Step-by-step instructions will lead participants through the creation of activities including the use of variables, data collection, creating scatter plots, performing regression, adding sliders and using interactive math boxes. Come see how quadratics can be engaging and fun! Some familiarity with TI-Nspire™ technology would be helpful.</p>
<p><b>11:30 am - 1:00 pm</b>  <b>Room: Columbus Hall IJ</b>  <i>Seats: 140</i>            ALGEBRA I</p>	<p><b>51 Equations &amp; Inequalities with TI-Nspire™ Technology</b>  <i>90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System</i>  <i>Micheal Bevelacqua, City High School, Iowa City, IA, USA</i></p> <p>The Common Core State Standards Initiative identifies “Reasoning with Equations and Inequalities” as essential for all high school students. This hands-on session will explore this domain through lessons that take advantage of the dynamically linked representational capabilities of the TI-Nspire™ CX handheld. This session is appropriate for both beginners and intermediate users of TI-Nspire™ technology.</p>
<p><b>11:30 am - 1:00 pm</b>  <b>Room: Regency C</b>  <i>Seats: 100</i>            GENERAL MATH</p>	<p><b>52 TI-Nspire™ CX CAS Handheld: A Beginner’s Tour</b>  <i>90-Minute Hands-On • TI-Nspire™ CAS with Touchpad Handheld; TI-Nspire™ CAS Teacher Software</i>  <i>Leah Nillas, Illinois Wesleyan University, Bloomington, IL, USA</i></p> <p>This hands-on session is for teachers and pre-service teachers who have no experience with TI-Nspire™ CX CAS handhelds. Participants will engage in a beginner’s tour using TI-Nspire™ CX CAS handhelds to explore mathematical concepts. Topics that will be covered include number operations, basic geometric constructions, multiple representations, families of functions and data analysis. The goal of this session is to orient teachers how to use the TI-Nspire™ CX CAS handheld and share teaching and learning resources for classroom applications.</p>
<p><b>11:30 am - 1:00 pm</b>  <b>Room: Addams</b>  <i>Seats: 25</i>            ELEMENTARY MATH</p>	<p><b>53 The TI-10 Calculator and the TI-15 Explorer™ Calculator: Tools of Investigation for the Beginning Mathematician</b>  <i>90-Minute Hands-On • TI-10 Calculator, TI-15 Explorer™ Calculator</i>  <i>Tammy Jones, TLJ Consulting Group, Lebanon, TN, USA</i></p> <p>The fifth Standard for Mathematical Practice from the Common Core School Standards (CCSS) for Mathematics is “Use appropriate tools strategically.” The CCSM says, “Mathematically proficient students consider the available tools when solving a mathematical problem.” Come and see how the TI-10 calculator and the TI-15 Explorer™ calculator can aid the beginning mathematician to explore and deepen their understanding of mathematical concepts. Participants will engage in an overview of the features of both calculators as well as an activity with each that incorporates a trade book.</p>
<p><b>11:30 am - 1:00 pm</b>  <b>Room: Columbus Hall CD</b>  <i>Seats: 120</i>            ALGEBRA I</p>	<p><b>54 Algebra I: Statistical Concepts Using the TI-Nspire™ CX Handheld and TI-Nspire™ CX Navigator™ System</b>  <i>90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software</i>  <i>Angela Hoopes, Spotsylvania High School, Spotsylvania, VA, USA</i></p> <p>This session will help participants to use the TI-Nspire™ CX handheld and TI-Nspire™ CX Navigator™ System to incorporate the statistics concepts in their Algebra I classroom. Activities will be provided.</p>

**11:30 am - 1:00 pm****Room: Crystal Ballroom A**

Seats: 100

GENERAL INTEREST

**55 Hands On, Thumbs On, Minds On**

90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CAS Teacher Software, TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator, TI-SmartView™ Emulator for TI-Nspire™

Jean McKenny, Derby, VT, USA

Summer Math Camp can provide an opportunity for teachers to expose students to rich math activities that a “test-oriented” curriculum may not allow time for. Participants will learn about a summer math camp designed to enrich student learning. Users of the TI-73 Explorer™ graphing calculator, the TI-83 Plus and TI-84 Plus families of graphing calculators and/or TI-Nspire™ technology are all welcome.

**11:30 am - 1:00 pm****Room: Columbus Hall KL**

Seats: 140

ALGEBRA I

**56 Get Inspired with the TI-Nspire™ Family of Handhelds**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software

Claudia Heinrich, Stevenson High School, Livonia, MI, USA

Co-Presenter(s): Kathleen Sullivan

This session will consist of two parts. First I will share a workshop I designed to use with students showing them how to get the most out of their handheld. I show how to create documents to save homework, make study guides with tips on test preparation, and how to access online resources. I will also share documents that I have created and used with my Algebra classes; exploring function families, applications of functions, characteristics of polynomial functions and tips on what works best in the classroom.

**11:30 am - 1:00 pm****Room: New Orleans**

Seats: 45

TECHNOLOGY  
INTEGRATION**57 TI-Nspire™ Technology to Foster Standards for Mathematical Practice**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System

Katie England, Montgomery County Public Schools, Westminster, MD, USA

Creating a classroom climate that fosters the Common Core State Standards for Mathematics practice requires thoughtful planning. TI-Nspire™ technology provides a tool in which students can explore mathematics, form reasoning abilities and problem solve through rich activities. This session will dig into some of these activities with a focus on strengthening students' mathematical practices.

**11:30 am - 1:00 pm****Room: Toronto**

Seats: 80

ALGEBRA II

**58 Fostering Flexible Thinking: Making Sense of Solutions through Multiple Representations**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software

Jeremy Zerkowski, The University of Alabama, Tuscaloosa, AL, USA

The NCTM's 2012 Mathematics Teacher journal focus issue is titled “Fostering Flexible Mathematical Thinking”. This session will focus on how participants can use TI-Nspire™ technology to make sense of equation solutions through multiple representations of functions that fosters flexible mathematical thinking. Participants will work through a lesson created using the TI-Nspire™ Teacher Software. This session will focus more on the mathematics than the mechanics of developing the lesson, but open discussion of the lesson will be welcomed. Participants will receive an electronic copy of the TI-Nspire™ lesson file, student worksheets and teacher notes. CAS will be used.

**11:30 am - 1:00 pm****Room: Columbian**

Seats: 30

ELEMENTARY SCIENCE

**59 Integrating Math, Literacy and Science in the Elementary Classroom**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family

Tami Plein, Great Prairie AEA, Burlington, IA, USA

Co-Presenter(s): MaryBeth Murrell

When teachers integrate content areas, students get double the learning! Science provides concrete examples of mathematical ideas and opportunities for writing and reading in context. In this session, participants will experience an inquiry lesson from a science unit over conservation of mass that uses writing frames and journaling. Basic data collection using the TI-83 Plus graphing calculator and force sensor will be demonstrated.

# Session Details

**11:30 am - 1:00 pm**

**Room: Columbus Hall EF**

Seats: 120

ALGEBRA I

**60 Use Interactive Math Boxes in the Notes Application to Help Students Develop Problem Solving Skills**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CAS Teacher Software

Allan Bellman, University of California, Davis, CA, USA

Come learn about and practice with the Interactive Math Box available in the Notes Application. See how when students create problem solutions using Interactive Math Boxes they can easily update their work and investigate changes to their problem solutions. See how asking “what if” questions about the set-up of a problem, when students have created an interactive worksheet to solve that problem, can help algebra students develop their problem solving skills and work at a deeper and more sustained level with the mathematics they study.

**11:30 am - 1:00 pm**

**Room: Picasso**

Seats: 30

GENERAL SCIENCE

**61 Making Science Fun Again with TI-Nspire™ CX Handhelds and Vernier Software and Technology™ Probes**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, Other Data Collection Probes

Claudia Gutierrez, TX Region One Education Service Center, Edinburg, TX, USA

Co-Presenter(s): Gustavo Perez

Engaging students in the learning of complex concepts is half the battle! This session will provide teachers with creative hands-on science applications through a series of instructional activities that “N-spire” authentic engagement.

**11:30 am - 1:00 pm**

**Room: Burnham**

Seats: 35

CAS

**62 Discovering The Remainder Theorem with CAS**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld

Anna Panova, Montgomery High School, Franklin Park, NJ, USA

How can computer algebra systems (CAS) help students make sense of the remainder theorem? During this workshop you will use the TI-Nspire™ CX CAS handheld to investigate the remainders and quotients when a polynomial function is divided by a linear factor. Through your investigation you will re-discover the remainder theorem and see how CAS can be a powerful tool that will help your students make sense of a confusing topic.

**11:30 am - 1:00 pm**

**Room: Ogden**

Seats: 25

GENERAL INTEREST

**63 Learn How Teachers Create Interactive Gifts (Worksheets) and Students Create Reports (Labs) Using the PublishView™ Feature. Hands-On!**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software

Tom Reardon, Youngstown State University, Poland, OH, USA

Learn how to effectively use the PublishView™ feature that is available on TI-Nspire™ Teacher Software and TI-Nspire™ Student Software. The PublishView™ feature allows the teacher to create interactive computer documents that the student can learn from on his/her own computer. We will create PublishView™ documents that utilize all the features of the TI-Nspire™ family of handhelds plus the power of integrating web links, videos and pictures for a computer screen. Obtain several PublishView™ documents including an interactive textbook chapter I am writing. See how students can easily create lab reports for math and science. And PEZ®!

**11:30 am - 1:00 pm**

**Room: Haymarket**

Seats: 24

MIDDLE GRADES MATH

**64 Transforming Middle Level Math with TI-73 Explorer™ Graphing Calculator**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator, TI-SmartView™ Emulator for TI-Nspire™, TI-SmartView™ Emulator Software

Stacey Caruso-Sharpe, Lynch Literacy Academy, Hagaman, NY, USA

Come and participate in this hands-on session that teaches students how to use the TI-73 Explorer™ graphing calculator or the TI-84 Plus graphing calculator family to explore the use and evaluation of statistical data. Statistical concepts in the Common Core State Standards such as data collection, display using histograms, box plots, scatterplots and interpretation of data are some of the concepts we'll have fun with.

**11:30 am - 1:00 pm****Room: Columbus Hall G**

Seats: 40

ALGEBRA I

**65 Why Can't We Be Friends? Data Analysis Project Using Facebook® and TI Technology**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software  
Saki Milton, TI MathForward™, Charlotte, NC, USA

Want to reach your students? Enter their world of social media using the TI-Nspire™ CX Navigator™ System! Participants will learn how to engage students using relevant statistical data about Facebook® to help grasp math in the real world. (Project can be modified for TI-84 Plus graphing calculator users.)

**11:30 am - 1:00 pm****Room: Columbus Hall AB**

Seats: 120

TECHNOLOGY  
INTEGRATION**66 Using the TI-Nspire™ Navigator™ System to Improve Student Achievement in a Community College Classroom**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, Calculator-Based Ranger 2™ Data Collection Device

Dave Usinski, SUNY Erie Community College, Depew, NY, USA

In this hands-on workshop, participants will work with selected lessons from TI's Math Nspired resource center ([mathnspired.com](http://mathnspired.com)). The presenter will offer tips on how to effectively implement the use of the TI-Nspire™ CAS handheld within Algebra and Precalculus courses, including modifications to classroom instruction and how examinations have evolved.

**11:30 am - 1:00 pm****Room: Wrigley**

Seats: 80

CHEMISTRY

**67 NASA Nspired Activities for Chemistry**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle, Other Data Collection Probes

Todd Morstein, Glacier High School, Kalispell, MT, USA

Explore how students can do activities in the classroom that relate to how we keep astronauts alive. We will be exploring the process of electrolysis of water and new ways to look at the production of oxygen in the classroom.

**11:30 am - 1:00 pm****Room: Buckingham**

Seats: 30

BIOLOGY

**68 Human Physiology Using the TI-Nspire™ Family of Handhelds**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Lab Cradle, Other Data Collection Probes

Judy Day, North Carolina State University, Raleigh, NC, USA

Co-Presenter(s): Louise Chapman, Patti Smith

Explore the use of Vernier Software and Technology™ physiology sensors with TI-Nspire™ handhelds and the TI-Nspire™ Lab Cradle. Activities with the hand-grip heart rate monitor, EKG sensor, blood pressure sensor, hand dynamometer, and O2 sensor will be done. Learn how to analyze the graphs and make conclusions from your data!

**11:30 am - 1:00 pm****Room: Atlanta**

Seats: 30

CALCULUS

**69 Learning the TI-Nspire™ CX CAS Technology for AP\* Calculus Activities**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CAS Teacher Software

Patricia Casey, Florida State University School, Tallahassee, FL, USA

This workshop is for AP\* Calculus teachers new to the TI-Nspire™ CX CAS technology. Come see how tangents, derivatives, integrals, area under curves, slope fields and differential equations can be quickly demonstrated, solved or developed using the CAS technology.

# Session Details

**1:15 pm - 2:15 pm**

**Room: Regency B**

Seats: 100

GENERAL MATH

**70 How TI-Nspire™ Technology Changes Teacher Questioning**

*60-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System*

*Dan Ilaria, West Chester University, West Chester, PA, USA*

TI-Nspire™ technology allows students to explore mathematical concepts by examining actions on the screen and observing consequences. As a result, teacher questions must aim to elicit student thinking and promote conversation among students. Questioning techniques and sample lessons from algebra through calculus will be shared.

**1:15 pm - 2:15 pm**

**Room: Regency D**

Seats: 100

GENERAL MATH

**71 TI-Nspire™ Family of Handhelds for Beginners**

*60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software*

*Kim Thomas, Moon Valley High School, Peoria, AZ, USA*

This session is for those who are new to the TI-Nspire™ family of handhelds. Learn the basics of the TI-Nspire™ handheld with a focus on manipulating graphs using the Graphs and Geometry Application.

**1:15 pm - 2:15 pm**

**Room: Regency C**

Seats: 100

CAS

**72 CAS – Algebra – CAS**

*60-Minute Lecture/Demonstration • TI-89 Titanium Graphing Calculator*

*Michael Keyton, IMSA, Aurora, IL, USA*

Learn how Computer Algebra Systems (CAS) can be used to motivate the development of algebra and in turn, used to motivate the use of CAS.

**1:15 pm - 2:15 pm**

**Room: Horner**

Seats: 25

GENERAL MATH

**73 Teaching Without a Full Set (of TI-Nspire™ Family of Handhelds)**

*60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software*

*Jennifer Chirles, Darien High School, Trumbull, CT, USA*

*Co-Presenter(s): Brittany Zweibel*

What do you do when you only have one TI-Nspire™ handheld and one CD with TI-Nspire™ Teacher Software? How do you utilize this technology to teach a whole classroom of students? Learn strategies and techniques when using your first handheld to reach your classes. Using free materials from TI, we will explore how to use this handheld to help your students reach their potential.

**1:15 pm - 2:15 pm**

**Room: McCormick**

Seats: 35

ASSESSMENT

**74 Ratchet Up the Formative Assessment in Your Classroom with TI-Nspire™ Navigator™ System**

*60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software*

*Jeff VanArnhem, Olmsted Falls High School, Olmsted Township, OH, USA*

Use the TI-Nspire™ Navigator™ System as a GPS for student learning in your classroom. As teachers, we can see and share with our students the learning target (the final destination). The true challenge is gauging our students' progress along the way and providing the appropriate, timely interventions (choosing our route). With the TI-Nspire™ Navigator™ System, we can determine where students are in the learning process and, if necessary, make adjustments to keep them on course. I will model and share strategies that have been effective in my classroom.

**1:15 pm - 2:15 pm****Room: Haymarket**

Seats: 24

MIDDLE GRADES MATH

**75 Motivating Students to Practice**

60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator, TI-SmartView™ Emulator for TI-Nspire™, TI-SmartView™ Emulator Software

Bob Garvey, Louisville, KY, USA

Without practice we cannot develop skills. Getting students to practice has become a major challenge in a generation where kids avoid what is boring and frequently have little parental push at home. At the same time students can't seem to keep their hands off handheld devices. Do our graphing calculators hold the secret to getting kids to want to spend time doing math? Time to share our trade secrets.

**1:15 pm - 2:15 pm****Room: Wrigley**

Seats: 80

BIOLOGY

**77 Launch Your Biology Class With NASA!**

60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS Teacher Software

Jeff Lukens, Roosevelt High School, Sioux Falls, SD, USA

Texas Instruments has partnered with NASA to produce classroom activities that will help your students soar! DNA analysis is the focus of this session. Through simulation and discussion, you will be ready to launch your students to greater understandings of DNA!

**1:15 pm - 2:15 pm****Room: Crystal Ballroom C**

Seats: 100

ASSESSMENT

**78 Windows into Student Thinking**

60-Minute Lecture/Demonstration • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes

Tom Steinke, Mother Teresa High School, Ottawa, ON, Canada

Co-Presenter(s): Chris Atkinson, Maureen McNeil

This session will explore the journey of a school math department over the past several years culminating in a formative assessment professional learning project this past year, which focused on the TI-Nspire™ Navigator™ System and SMART™ Board interactive whiteboards. Classroom video episodes will be shared and analyzed. Are we more connected to student thinking? Are students more engaged? Are our students more successful?

**1:15 pm - 2:15 pm****Room: Atlanta**

Seats: 30

CALCULUS

**79 Bubble Boy Maximizes His New Home Using the TI-Nspire™ CX CAS Handheld**

60-Minute Lecture/Demonstration • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software

Scott Gaddis, Grove City High School, Grove City, OH, USA

Living in a sphere is a challenge for Bubble Boy. Help him build a house in his bubble with a maximum volume (which could be featured on Extreme Homes). Bubble Boy's house provides a challenging calculus optimization problem, which can be solved using the TI-Nspire™ CX CAS handheld. This problem can also be adapted for Algebra 2 courses.

**1:15 pm - 2:15 pm****Room: Crystal Ballroom B**

Seats: 100

GENERAL INTEREST

**80 Using Technology to Reduce Math Anxiety**

60-Minute Hands-On • TI-SmartView™ Emulator Software, TI-30XS MultiView™ Scientific Calculator

Christine Kasitz, Opportunities for Learning PCS, Burbank, CA, USA

Math anxiety sometimes prevents even the best students from performing well and can potentially lead to poor test results from all students. Come learn some more about math anxiety and some technological tools including the TI-30XS MultiView™ scientific calculator, which can reduce math anxiety in students thus increasing performance and retention.

# Session Details

**1:15 pm - 2:15 pm**

**Room: Columbus Hall H**

Seats: 40

ALGEBRA I

**81 Calculus in the Algebra Classroom**

*60-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software*

*Dennis Wilson, Landmark Christian School, Fairburn, GA, USA*

Using TI-Nspire™ Teacher Software, participants will learn how to make the fundamental concepts of calculus understandable to a classroom of algebra students. Linear and quadratic functions will be developed from the concept of graphical area and connected to the definite integral. A graphical approach to the slope of a function at a point will build insight into the derivative and help students differentiate polynomials. Coupled together, these graphical approaches will link the integral and derivative so students can be introduced to the Fundamental Theorem of Calculus.

**1:15 pm - 2:15 pm**

**Room: Dusable**

Seats: 35

GEOMETRY

**82 Exploring a Rich Problem in Geometry Using the TI-Nspire™ CX CAS Handheld**

*60-Minute Lecture/Demonstration • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CAS Teacher Software*

*Pat Mara, South High School, Pueblo, CO, USA*

Connect the vertices of a triangle to the midpoints of the opposite side and you get the centroid. But what if you connect to the “1/3 points” or to points in another ratio? Come and see the surprising results.

**1:15 pm - 2:15 pm**

**Room: Burnham**

Seats: 35

CAS

**83 Is There a Simpler Way to Introduce Algebra for the TI-Nspire™ CX CAS Handheld?**

*60-Minute Lecture/Demonstration • TI-Nspire™ CX CAS Handheld*

*Ray Williams, St. Mark's Anglican Community School, Perth, Australia*

This session looks at the impact of the CAS facility on how students both learn and understand algebraic concepts. The focus is to provide a possible alternative method that might better align with student thinking and assist them to understand the way the CAS interprets algebra.

**1:15 pm - 2:15 pm**

**Room: Field**

Seats: 35

GEOMETRY

**84 Representations of Surfaces Within the TI-Nspire™ Environment**

*60-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software*

*Jean-Jacques Dahan, IREM of Toulouse, Montrabe, FRANCE*

In the first part, we will show how to represent 3D objects in different perspectives (cavalier and military) in the Graphs & Geometry application in TI-Nspire™ technology. We will use the power of the “store variable” and “slider” tools to reach a more realistic visualization. In the second part, we will show how to use the new “3D graphing” tool to represent surfaces  $z = f(x,y)$ . Some simple tricks will be given to display with different colors the positive and the negative parts of such surfaces.

**1:15 pm - 2:15 pm**

**Room: Buckingham**

Seats: 30

MIDDLE GRADES SCIENCE

**85 TI-84 Plus Family of Graphing Calculators and Probes in a Science Classroom**

*60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System, Other Data Collection Probes*

*Charlie Smith, Horizon Science Academy, Sunbury, OH, USA*

*Co-Presenter(s): Luong Ho*

I will be showing how different labs ran during a physical science and earth science classroom. This will be done using the TI-84 Plus graphing calculator family and motion detector and temperature probes. These labs can also be done using the TI-Nspire™ family of handhelds, but session labs will be shown on the TI-84 Plus graphing calculator.

**1:15 pm - 2:15 pm****Room: Soldier Field**

Seats: 30

STATISTICS

**86 Inspiring Your Statistics Students to Think!***60-Minute Hands-On • TI-Nspire™ Family of Handhelds**Kristen Perry, Franklin High School, Franklin, TN, USA*

Inspire your students to think using the TI-Nspire™ family of handhelds and type 1 type 2 error and power of a test. Understanding of p-value and significance level will be addressed. Experience a hands-on activity that you can immediately take and implement in your classroom.

**1:15 pm - 2:15 pm****Room: Acapulco**

Seats: 80

ALGEBRA II

**87 Exploring Linear Programming with TI-Nspire™ Technology***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ CAS Teacher Software**Rob Rinas, Lashburn High School, Lashburn, SK, Canada*

Use TI-Nspire™ CX CAS handheld features to explore linear programming and optimization problems. Come see an example of how the TI-Nspire™ Navigator™ System can be integrated into a math lesson. Teaching and assessment strategies will be discussed. Participants will also get a chance to create their own lessons.

**1:15 pm - 2:15 pm****Room: San Francisco**

Seats: 25

TECHNOLOGY  
INTEGRATION**88 SMART™ Board Interactive Whiteboard and TI Technology in Middle School and High School Mathematics***60-Minute Lecture/Demonstration • TI-Nspire™ CAS Teacher Software, TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™**Mary Ann Connors, Westfield State University, Westfield, MA, USA*

This session will focus on integrating the SMART™ Board interactive whiteboard, TI-84 Plus graphing calculator, TI-Nspire™ handhelds and other TI technology in teacher preparation courses. Appropriate activities for Middle School and High School mathematics will be included.

**1:15 pm - 2:15 pm****Room: Hong Kong**

Seats: 30

ALGEBRA II

**89 Using the TI-84 Plus Graphing Calculator to Integrate AP\* Calculus in Algebra I to Precalculus***60-Minute Lecture/Demonstration • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™**Fan Disher, Mandeville High School, Mandeville, LA, USA*

Calculus Readiness: Algebra slope = calculus derivative. Geometry area = calculus integral. Learn and practice some of the pre-AP\* concepts and TI-84 Plus graphing calculator skills that students should master in lower grades math classes to prepare them for success in calculus.

**1:15 pm - 2:15 pm****Room: Wright**

Seats: 25

ADMINISTRATOR

**91 Successful Systemic and Sustained Implementation through T<sup>3</sup>™ Coaching***60-Minute Lecture/Demonstration**Patsy Fagan, Des Moines, IA, USA**Co-Presenter(s): Fred Ferneyhough, Tony Timms*

Teachers who come to a three-day workshop learn how to use the TI-Nspire™ technology and leave excited to use it in their classrooms. Learn how T<sup>3</sup>™ coaching/collaboration can assist in fostering a successful systemic and sustained implementation of the technology.

**1:15 pm - 2:15 pm****Room: Columbus Hall CD**

Seats: 120

ALGEBRA I

**92 Teaching Algebra to Low-achieving Math Students in the High School Setting***60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software, Calculator-Based Laboratory 2™ Data Collection Device**Lana Golembeski, Minnetonka High School, Minnetonka, MN, USA*

In this session, participants will have a hands-on session doing activities that I use in my first-year algebra class, using the TI-Nspire™ CX CAS handheld. This class is mostly special education students and other students who struggle with math concepts and who are not all that interested in studying mathematics. Participants will get lessons already written that help students to learn algebra in an innovative way.

# Session Details

**1:15 pm - 2:15 pm**

**Room: Ogden**

Seats: 25

GENERAL INTEREST

**94 Does Surfing the Web Give You the Blues, Brothers? Let us help!**

60-Minute Hands-On

*Judy Hicks, Arvada, CO, USA*

Co-Presenter(s): *Jane Damaske*

Have you ever asked yourself, "Where can I find activities for my math class?" or "Where can I find updates for my TI technology?" or "Who should I contact for more training?" You've heard about [education.ti.com](http://education.ti.com), [mathspired.com](http://mathspired.com) and [timath.com](http://timath.com), but haven't found your way around in them. This session will give some tips and tricks to navigating the various TI websites and will show you the wealth of information available to you.

**1:15 pm - 2:15 pm**

**Room: Toronto**

Seats: 80

ALGEBRA II

**95 So, You Have a TI-Nspire™ CX Handheld. What Are You Going to Do With It?**

60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software

*Andrew Amstutz, Franklin Heights High School, Columbus, OH, USA*

Co-Presenter(s): *Steve McQuade*

Now that you have a TI-Nspire™ CX handheld, learn how to use it. In this presentation we will go over the basic features and learn how to create activities that you can use in your classroom.

**1:15 pm - 2:15 pm**

**Room: Addams**

Seats: 25

ELEMENTARY MATH

**96 That is a "Good Question". Using the TI-15 Explorer™ Calculator to Help Answer Questions in the Elementary Classroom**

60-Minute Hands-On • TI-15 Explorer™ Calculator

*Marsha Burkholder, West Broad Elementary, Columbus, OH, USA*

In this hands-on session, participants will look at questions and how technology helps students understand the mathematics.

**1:15 pm - 2:15 pm**

**Room: Columbus Hall IJ**

Seats: 140

ALGEBRA I

**97 Navigating through Algebra 1 and 2 Using TI Tools**

60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-84 Plus Graphing Calculator

*Bill Stiggers, Shaker Heights, OH, USA*

Co-Presenter(s): *Sheryl Edwards, Lisa Suarez-Caraballo*

Learn how to use and incorporate new and exciting TI tools into your current algebra classes. You will learn how to use Algebra 1, Inequalities, Transformation, Finance, and Polynomial Root Finder Applications to motivate students and teach algebra more effectively.

**1:15 pm - 2:15 pm**

**Room: New Orleans**

Seats: 45

TECHNOLOGY  
INTEGRATION

**98 Real-world Data Collection and Modeling Using LEGO® MINDSTORMS® Education with TI-Nspire™ Technology**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Lab Cradle

*Kevin Lavigne, Hanover High School, Hanover, NH, USA*

Co-Presenter(s): *William Church*

In this hands-on session you'll experience how to use the LEGO® MINDSTORMS® Education robotics platform together with Vernier Software & Technology™'s sensors, TI-Nspire™ Lab Cradle and TI-Nspire™ handhelds for data logging and analysis in entirely new ways. You will learn how to enable your students to conduct controlled experiments that mimic the process scientists and engineers use to solve real-world challenges. You'll leave the session with a fully-prepared lab created by the innovative teachers facilitating the session. Be prepared to dig in and build, program and learn!

**1:15 pm - 2:15 pm****Room: Columbus Hall EF**

Seats: 120

ALGEBRA I

**99 Teaching Linear and Quadratic Functions Using TI Technologies***60-Minute Hands-On • TI-84 Plus Graphing Calculator Family**Miriam Santana, National Technical Institute for the Deaf/RIT, Rochester, NY, USA*

Learn how technologies such as PowerPoint® presentation software, SMART™ Board interactive whiteboards and TI technologies facilitate the teaching and learning of linear and quadratic functions.

**1:15 pm - 2:15 pm****Room: Water Tower**

Seats: 50

MIDDLE GRADES MATH

**100 Using the TI-Nspire™ CX Navigator™ System to Increase Student Engagement in a Math Nspired Classroom***60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Navigator™ Classroom Learning System**Ruth Casey, Frankfort, KY, USA*

Come be a part of a Math Nspired classroom. You will have hands-on experience with some of the activities and lessons that can enhance your curriculum as we use TI technology (TI-Nspire™ CX Navigator™ System, TI-Nspire™ family of handhelds) to foster an engaging, interactive learning environment. You will also learn about the research-based components that contribute to students' long-term success in mathematics. (We will explore topics from sixth, seventh and eighth grades and Algebra 1.)

**1:15 pm - 2:15 pm****Room: Columbus Hall AB**

Seats: 120

TECHNOLOGY  
INTEGRATION**101 Creating Videos Using Camtasia Studio® and TI-SmartView™ Emulator Software***60-Minute Lecture/Demonstration • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™**Mary Hall, Georgia Perimeter College, Marietta, GA, USA*

As we are turning more and more to online resources and courses, we must find ways to teach our students how to use technology. One form of technology that all math teachers use is the calculator. While we might have offered in-class demonstrations in the past, how might we do the same thing for our online students? This demonstration offers one way to do this.

**1:15 pm - 2:15 pm****Room: Columbus Hall G**

Seats: 40

ALGEBRA I

**102 Modeling with Images on the TI-Nspire™ CX Handheld***60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System**Lynda Ferneyhough, Caledon, ON, Canada*

In order to model an image, we will either place points on an image, perform a regression to find the function, transform a function or use information from the image to determine the function. Attendees should bring copies of their own photos or images they want to model. We will use the TI-Nspire™ Teacher Software to import the images.

**1:15 pm - 2:15 pm****Room: Columbian**

Seats: 30

MIDDLE GRADES SCIENCE

**103 Using the Vernier DataQuest™ App for the TI-Nspire on the TI-Nspire™ CX Handheld in a Middle School Science Classroom***60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software, Other Data Collection Probes**Mike Cimino, Heritage Middle School, Deltona, FL, USA**Co-Presenter(s): Margaret Bambrick*

Don't feel overwhelmed by the large amount of buttons on the TI-Nspire™ CX handheld! In this session we will simplify the data collection process! Attendees will be engaged in a hands-on session using the TI-Nspire™ CX handheld along with an assortment of Vernier Software & Technology™ probes including temperature, pH and conductivity. You will take part in high inquiry lab activities that can be completed by your students in a 40-minute class period. These labs will be both teacher friendly (easy to set up) and student driven.

# Session Details

**1:15 pm - 2:15 pm**

**Room: Picasso**

Seats: 30

PHYSICS

**104 Phun with Physics Using the TI-Nspire™ CX Handheld**

60-Minute Hands-On • TI-Nspire™ CX Handheld

Cassie Whitecotton, R.L. Paschal High School, Fort Worth, TX, USA

Participants will receive hands-on experience and exploration of Archimedes Principle using the Vernier Software & Technology™ force sensor and TI-Nspire™ CX handheld with the TI-Nspire™ CX Navigator™ System.

**2:30 pm - 4:00 pm**

**Room: Soldier Field**

Seats: 30

STATISTICS

**105 Teaching Statistics and Probability with the TI-84 Plus Graphing Calculator**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™

Solomon Willis, Cleveland Community College, Shelby, NC, USA

During this session, participants will learn and engage in various activities for teaching statistics and probability using the TI-84 Plus graphing calculator. These activities are ready to use in any statistics course and include: one variable statistics, linear regression, basic probability, probability distributions, confidence intervals and hypothesis testing.

**2:30 pm - 4:00 pm**

**Room: Columbus Hall CD**

Seats: 120

ALGEBRA I

**106 Data Aggregation Activities with the TI-Nspire™ Navigator™ System**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System

Tracy Watson, University of Arkansas at Little Rock, Little Rock, AR, USA

Aggregating data contributed by students is a powerful tool to engage students in their learning. Students will feel ownership of the information they are investigating if they “see” their contribution in the data. As a result, they are more likely to be engaged in the activity and learn the math concepts underlying the investigation. We will look at a variety of data aggregation activities.

**2:30 pm - 4:00 pm**

**Room: Water Tower**

Seats: 50

MIDDLE GRADES MATH

**107 Math Nspired for Middle Grades: Common Core-based Investigations with Fractions and Percents**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ with Touchpad Handheld,

TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software

Wallece Brewer, ASU Rural STEM Education Center, Jonesboro, AR, USA

In this session participants will explore several Nspire-based investigations dealing with the middle grades Common Core State Standards for Mathematics related to fractions and percents in the Ratio and Proportion and the Number System standard. These investigations are part of the Math Nspired resources on [education.ti.com](http://education.ti.com).

**2:30 pm - 4:00 pm**

**Room: Regency C**

Seats: 100

GENERAL MATH

**108 Graphing Calculator Activities to Support Instruction for At-risk Learners**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, Calculator-Based Ranger 2™ Data Collection Device

Kathy Hale, Independent Consultant, Abilene, TX, USA

This session is designed to provide math activities, hands-on training and instruction for educators working with students in a variety of Special Education programs. Lessons and activities will feature the TI-84 Plus graphing calculator. Participants will also receive an overview of information on other resources available at various Texas Instruments websites including practice lessons and assessment items.

**2:30 pm - 4:00 pm****Room: Wright**

Seats: 25

ADMINISTRATOR

**109 TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System, TI-84 Plus Graphing Calculator, TI-73 Explorer™ Graphing Calculator – What Worked for Our Students in Grades 5-12**

90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator, TI-Navigator™ Classroom Learning System, TI-SmartView™ Emulator for TI-Nspire™, TI-SmartView™ Emulator Software

Linda Apicella, Waterbury Public Schools, Orange, CT, USA

Come and see how one school district incorporated all of these TI products into grades 5-12 mathematics classrooms. See how TI technology impacted scores, students, teachers and administrators.

**2:30 pm - 4:00 pm****Room: Field**

Seats: 35

GEOMETRY

**110 99 Points of Intersection**

90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software

Steve Phelps, Madeira High School, Cincinnati, OH, USA

This is the first of two sessions exploring Hans Walser's book, *99 Points of Intersection*. Participants will see some of the preliminary points of intersection introduced in polar graphs, followed by the first 44 points of concurrency found in the book. Concurrency points formed by intersecting lines in polygons, overlapping triangles and intersecting circles will be presented in this session.

**2:30 pm - 4:00 pm****Room: Hong Kong**

Seats: 30

ALGEBRA II

**111 Quadratic or Exponential?**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™

Beverly Farahani, Kingston Collegiate and Vocational Institute, Kingston, ON, Canada

Participants will work through two activities that have been used in the classroom. During the session data will be collected and analyzed using your TI-83 Plus or TI-84 Plus graphing calculator.

**2:30 pm - 4:00 pm****Room: Regency B**

Seats: 100

GENERAL MATH

**112 Navigating Nspired Irrigation: A Compelling Use for the TI-Nspire™ CX CAS Handheld**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System

Larry Ottman, Haddon Heights High School, Laurel Springs, NJ, USA

Using Google Earth, students can find fascinating examples of how farmers have tried to maximize land coverage using center-pivot irrigation circles. See how to use the TI-Nspire™ CX Navigator™ System and the TI-Nspire™ CX CAS handheld to make this outstanding example of using mathematics to solve real-world problems come alive for you and your students.

# Session Details

**2:30 pm - 4:00 pm**

**Room: Ogden**

Seats: 25

TECHNOLOGY  
INTEGRATION

**113 Inquiry-based Learning Using Student Laptops: TI-Nspire™ Navigator™ NC System**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, Other Data Collection Probes

Wade Ellis, West Valley College, San Jose, CA, USA

With the TI-Nspire™ Navigator™ NC System, teachers can interact with students running TI-Nspire™ Student Software on their laptops. Teachers can display (individual, selected or all) student screens, or download and upload TI-Nspire™ documents, or collect student-generated data. Teachers can use these interactive features to greatly enhance inquiry-based activities. The workshop will provide hands-on experience with the TI-Nspire™ Navigator™ NC System using precalculus and calculus documents whose questions encourage student sense-making and reasoning about mathematical concepts and skills. In addition, participants will use Vernier Software and Technology™ temperature and voltage probes in demonstrating the instructional use of student-generated data.

**2:30 pm - 4:00 pm**

**Room: Columbus Hall KL**

Seats: 140

ALGEBRA I

**114 Connecting Algebra and Geometry on TI-Nspire™ CX and TI-Nspire™ CX CAS Handhelds**

90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software

Chuck Vonder Embse, Central Michigan University, Mt. Pleasant, MI, USA

The confluence of algebraic and geometric concepts in the coordinate plane helps make difficult concepts come alive in ways not before possible without technology. TI-Nspire™ CX and TI-Nspire™ CX CAS handhelds provide ideal environments to explore these connections for both teachers and students. This hands-on session will investigate several episodes for the Algebra 1 and Algebra 2 classroom.

**2:30 pm - 4:00 pm**

**Room: Addams**

Seats: 25

ELEMENTARY MATH

**115 “What’s So Mean About It?” Data Analysis for Middle School Grades Using the TI-73 Explorer™ Graphing Calculator**

90-Minute Hands-On • TI-73 Explorer™ Graphing Calculator, TI-SmartView™ Emulator Software

Jane Martain, Jordan School District, Brighton, UT, USA

Participants will experience activities for immediate use in their classrooms to engage students in the process of data collection and analysis, and rich discussion for middle school grades using the TI-73 Explorer™ graphing calculator.

**2:30 pm - 4:00 pm**

**Room: Picasso**

Seats: 30

PHYSICS

**116 Experiments with Electricity – Powerful and Easy with the TI-Nspire™ Lab Station**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle

Mirco Tewes, Primo-Levi-School Berlin, Bernau Bei Berlin, Germany

Co-Presenter(s): Michael Roser

Different laws of the electricity will be demonstrated in experiments with TI-Nspire™ Lab Station (includes TI-Nspire™ family of handhelds and TI-Nspire™ Lab Cradle) very easily. Participants will have the opportunity to perform various experiments themselves. All necessary materials – instructions for teachers, worksheets for students and solutions – will be provided. Topics will include: voltage-current graphs of different conductors, charge and discharge of a capacitor, magnetic field in coils/determination of magnetic field constant, Faraday’s law (electromagnetic induction) and resonant circuits.

**2:30 pm - 4:00 pm****Room: Columbus Hall AB**

Seats: 120

AUTHORING

**117 Taking Your Documents to the Next Level with Lua!***90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Andy Kemp, Taunton School, Taunton, United Kingdom*

In this session Andy Kemp will walk you through the process of creating an advanced interactive document using the powerful new Lua scripting features of the TI-Nspire™ CX and TI-Nspire™ CX CAS handhelds. Lua opens up a whole new world of options and possibilities for those interested in content authoring. Some previous programming experience would be beneficial but not essential!

**2:30 pm - 4:00 pm****Room: San Francisco**

Seats: 25

TECHNOLOGY  
INTEGRATION**118 Taking Full Advantage of the Power of the TI-84 Plus Graphing Calculator Family***90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™**John LaMaster, IPFW, Fort Wayne, IN, USA*

Empower your students and invigorate your teaching with technology-intensive activities that meet Common Core State Standards for mathematics and spark classroom discussions in algebra and precalculus.

**2:30 pm - 4:00 pm****Room: Buckingham**

Seats: 30

GENERAL SCIENCE

**119 There's An App For That. Data Collection in the Science Classroom***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes**Ed Roberts, Franklin Heights High School, Columbus, OH, USA*

This session emphasizes data collection in the high school science classroom using various sensors and TI-Nspire™ family of handhelds. Participants will work hands on with the Vernier DataQuest™ app for TI-Nspire and different data collection devices such as temperature, light, force, and gas pressure sensors. TI's Calculator-Based Ranger 2™ data collection device will also be used in a wide range of science activities.

**2:30 pm - 4:00 pm****Room: Acapulco**

Seats: 80

ALGEBRA II

**120 Creating Interactive Algebra 2 Lessons with TI-Nspire™ Technology***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Howard Stern, DeWitt Clinton High School, Bronx, NY, USA*

Explore and learn a variety of activities which leverage the interactive capabilities of the TI-Nspire™ platform to teach differentiated lessons in Algebra 2 and trigonometry curriculum.

**2:30 pm - 4:00 pm****Room: Wrigley**

Seats: 80

PHYSICS

**121 Using the TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System and Data Collection in a Science Classroom***90-Minute Hands-On • TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle**Michael Smith, Big Walnut High School, Sunbury, OH, USA*

As a teacher who prefers open inquiry compared to the "cookbook" teacher approach, I will demonstrate how the TI-Nspire™ CX Navigator™ System combined with the improved capability of the TI-Nspire™ CX handheld can transform classroom management. In this session you will experience several actual classroom activities that I have used in my chemistry and physics classes over the past two years.

# Session Details

**2:30 pm - 4:00 pm**

**Room: Columbus Hall H**

Seats: 40

ALGEBRA I

**122 Angry Birds and Other Games to Motivate Student Learning**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System

Lauren Jensen, Wisconsin Heights High School, Mazomanie, WI, USA

Come play Angry Birds, Mini Golf, Pool, Croquet and other games using TI-Nspire™ technology to motivate student learning of linear and quadratic functions.

**2:30 pm - 4:00 pm**

**Room: Columbus Hall IJ**

Seats: 140

ALGEBRA I

**123 Who's the Best Age Guesser?**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family

Prudie Cain, The University of Texas at Austin-UTeach, Austin, TX, USA

Participants will use data collected from guessing the age of celebrities from PowerPoint® photos. This data will be used to determine methods for choosing a "best guesser". The TI-84 Plus graphing calculator will be used to create a scatterplot of their own data. The participant will then compare the "line of best fit" for their data to that of a person who guesses perfectly.

**2:30 pm - 4:00 pm**

**Room: Crystal Ballroom B**

Seats: 100

GENERAL INTEREST

**124 Constraints and Contingencies: Designing Instruction that Targets Standards and Boosts Creativity**

90-Minute Hands-On

Joe Ferrara, The 2121 Collective, Fort Worth, TX, USA

In this session, participants will experience how designing constrained learning experiences for students can deepen problem solving opportunities and increase creativity.

**2:30 pm - 4:00 pm**

**Room: Columbian**

Seats: 30

CHEMISTRY

**125 Mixing Math and Science: Proportional Reasoning and Heat Transfer**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, Other Data Collection Probes

Tami Plein, Great Prairie AEA, Burlington, IA, USA

Co-Presenter(s): MaryBeth Murrell

When teachers integrate content areas, students get double the learning! Science provides concrete examples of mathematical ideas and can enhance mathematics learning. In this session participants will examine situations requiring proportional reasoning in mathematics in the science context of heat transfer. Basic data collection using the TI-Nspire™ family of handhelds and temperature probe will be demonstrated.

**2:30 pm - 4:00 pm**

**Room: McCormick**

Seats: 35

ASSESSMENT

**126 Use the TI-Nspire™ Family of Handhelds and TI-Nspire™ CX Navigator™ System to Provide Differentiation in Algebra Based on Constant Classroom-level Assessment**

90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, Calculator-Based Ranger 2™ Data Collection Device

Allan Bellman, University of California, Davis, Davis, CA, USA

By participating in a sample class, see how the TI-Nspire™ family of handhelds and the TI-Nspire™ CX Navigator™ System provide classroom-level assessment that drives various forms of differentiated instruction. As a tool, the TI-Nspire™ CX Navigator™ System can constantly assess data that allows you to determine individual success and need throughout all facets of instruction. Once needs are assessed, TI-Nspire™ documents can be provided to individuals, groups or the class as a whole that support differentiated materials and learning environments. Come discuss monitoring lessons, discovery learning and differentiated worksheets all based on your student's needs and the TI-Nspire™ CX Navigator™ System's ability to communicate with all students as individuals.

**2:30 pm - 4:00 pm****Room: Gold Coast**

Seats: 50

MIDDLE GRADES MATH

**127 M&M'S® and More – Data Analysis for Middle School Grades Using TI-Nspire™ Technology**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software  
Beth Smith, Episcopal School of Jacksonville, Jacksonville, FL, USA

We will use the TI-Nspire™ family of handhelds, TI-Nspire™ Teacher Software and the TI-Nspire™ CX Navigator™ System to collect and analyze data. Numerical and Categorical data will be explored. Connections between ratios, decimals, percents and degrees in a circle will be made. Learn the basics of the list and spreadsheets page and how to create a pie chart and a bar chart using the data and statistics page. Leave with a big-picture activity ready to be used in your classroom that addresses the Common Core State Standards.

**2:30 pm - 4:00 pm****Room: Burnham**

Seats: 35

CAS

**128 An Introduction to CAS and How I Use CAS in the Classroom: Algebra 1 – Calculus**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CAS Teacher Software

Tom Reardon, Youngstown State University, Poland, OH, USA

Obtain hands-on experience learning about what CAS (Computer Algebra System) is and how it can be used in a high school mathematics classroom to help students learn key mathematical concepts. Hear and see how I use CAS in very basic algebra courses to discover, learn and understand the mathematics. Also see how CAS can be the “teacher by each student’s side.” Plus see how to use CAS to discover patterns in mathematics and to assist in deriving formulas – especially ones that may be too difficult to do by hand. We will be using the TI-Nspire™ CAS CX handheld. And PEZ®!

**2:30 pm - 4:00 pm****Room: Crystal Ballroom A**

Seats: 100

GENERAL INTEREST

**129 TI-Nspire™ Activities and TI-Nspire™ CAS Activities for Aspiring Secondary Mathematics Teachers**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System

Denny St. John, Central Michigan University, Mount Pleasant, MI, USA

This session will address some of the ways you can integrate TI-Nspire™ handheld technology into your courses for aspiring secondary mathematics teachers. Also included are elements of the Common Core State Standards For Mathematics and blended use of the handhelds with other technologies.

**2:30 pm - 4:00 pm****Room: Columbus Hall G**

Seats: 40

ALGEBRA I

**130 Navigate the Nspiring Super Hero Universe: Algebra ALL!**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software

Elizabeth Pugliese, Frank W. Cox High School, Virginia Beach, VA, USA

Welcome to the Nspiring Super Hero Universe where algebra appeals to students of all academic levels. Weave Spidey’s web to explore functions, investigate curves of best fit for super hero heights and weights, take super brain breaks and more. Witness how using the TI-Nspire™ CX handheld and TI-Nspire™ CX Navigator™ is a colorful and engaging way to study math. Leave with TI-Nspire™ activities that can be used immediately!

# Session Details

**2:30 pm - 4:00 pm**

**Room: Crystal Ballroom C**

Seats: 100

PRECALCULUS

**131 Obtain and Experience Engaging TI-Nspire™ CX Handheld Activities in Geometry, Precalculus and Calculus. Ready for Your Classroom.**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System

Carlo Trafficante, Austintown Fitch High School, Austintown, OH, USA

Obtain hands-on experience with several interactive TI-Nspire™ CX handheld documents. See how these activities can foster great mathematical discussions as your students manipulate and interact with the mathematics on the handheld. Experience activities that can help your students understand very difficult topics more easily with the power of color on the TI-Nspire™ CX handheld. Engage in activities that effectively incorporate real-world photos into TI-Nspire™ documents. Activities shared during the session have been classroom-tested and will be given to all participants, ready for immediate use in their classroom. I will also show how you could integrate SMART™ Board interactive whiteboards and the TI-Nspire™ CX Navigator™ System with these activities.

**2:30 pm - 4:00 pm**

**Room: Haymarket**

Seats: 24

MIDDLE GRADES MATH

**132 The Good, the Bad and the Ugly: Fractions? Teaching/Learning with TI-34 MultiView™ Scientific Calculator & SMART™ Board Interactive Whiteboards**

90-Minute Hands-On • TI-73 Explorer™ Graphing Calculator, TI-SmartView™ Emulator for TI-Nspire™, TI-SmartView™ Emulator Software, TI-15 Explorer™ Calculator, TI-30XS MultiView™ Scientific Calculator, TI-34 MultiView™ Scientific Calculator

Chris Ruda, Miami, FL, USA

Fractions could be bad news – or even downright ugly – for some students. Discover how good use of the TI-34 MultiView™ and TI-30XS MultiView™ scientific calculators, the TI-15 Explorer™ calculator, SMART™ Board interactive whiteboards, manipulatives and literature can build conceptual understanding and make fractions meaningful and fun! Hands-on activities will integrate unique features of TI technology and the SMART™ Board, appropriate for all learners. NCTM and Common Core State Standards for Mathematics will be addressed in ready-to-use lessons.

**2:30 pm - 4:00 pm**

**Room: Atlanta**

Seats: 30

CALCULUS

**133 Integrating the TI-Nspire™ CX Handheld CAS in Your AP\* Calculus Curriculum**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS Teacher Software

Kim Schjelderup, Mercer Island High School, Mercer Island, WA, USA

Co-Presenter(s): Lynn Adsit

Integrating new technology can be a challenge in any curriculum. Add to that the expectation you cover all required curriculum and your students perform well on the AP\* Exam. Looking for increased scores and improved student understanding? Then this is your session. During this 90-minute hands-on training you will learn how to successfully integrate the new TI-Nspire™ CX CAS handheld into your AP\* Calculus classroom. You will leave the session with new knowledge and activities that will enhance your program and increase student performance.

**2:30 pm - 4:00 pm**

**Room: New Orleans**

Seats: 45

TECHNOLOGY  
INTEGRATION

**134 Using the TI-Nspire™ CX Handheld During Inquiry Lessons**

60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle, Other Data Collection Probes

Kevin Miller, Reservoir High School, Fulton, MD, USA

Co-Presenter(s): Joshua Mize

Science is about inquiry and the TI-Nspire™ CX handheld is a perfect tool to help students to construct their knowledge of the world. During this hands-on workshop, you will participate in an activity used in a science classroom that promotes student inquiry. The TI-Nspire™ CX handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Lab Cradles and Vernier Software & Technology™ sensors will be used. At the end of the workshop you will receive handouts that you can use in your classroom.

**2:30 pm - 4:00 pm****Room: Toronto**

Seats: 80

ALGEBRA II

**135 When Conics Come Alive***90-Minute Hands-On • TI-Nspire™ Family of Handhelds**Tony Timms, Searcy, AR, USA**Co-Presenter(s): Aimee Evans*

When conics come alive the disengaged student will become engaged. Curiosity is built into all of us, but many mathematics experiences leave us lacking. Come and take a look at some interesting problems with me. I promise you will take away something you can use.

**2:30 pm - 4:00 pm****Room: Columbus Hall EF**

Seats: 120

ALGEBRA I

**136 Achooo...Oh My – I Lost My Memory!***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™**Andrew Benzing, Strath Haven High School, Wallingford, PA, USA*

Come and experience two data collection activities that will have you lose your memory and acquire the Suluc-Lacerp disease. Tissues for sneezes will be provided for these TI-84 Plus graphing calculator-based gems that will push your students understanding of a box plot and the logistics growth curve. As a treat, not a sales pitch, the dramatic conclusion will include enhancements of the activities that incorporate the TI-Nspire™ platform. All experience levels of TI-84 Plus graphing calculators and TI-Nspire™ handhelds are welcome. Come away with a “memorable experience” you will be sure to tell your friends about at lunch.

**2:30 pm - 4:00 pm****Room: Dusable**

Seats: 35

GEOMETRY

**137 Rarely Visited Geometry Discoveries Enabled Through the Use of TI-Nspire™ Technology***90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ Teacher Software**Dan Spradley, Joliet West High School, Joliet, IL, USA**Co-Presenter(s): Kelli Chvoy*

Geometry teachers are anxious to find theorems with an element of surprise for their students. Come and be impressed by several geometric relationships, such as the equilateral triangle random point theorem, that are rarely introduced in high school classes. These “gems” will be investigated using TI-Nspire™ handhelds. Documentation and TI-Nspire™ files will be made available to all participants.

**4:15 pm - 5:15 pm****Room: Columbus Hall CD**

Seats: 120

ALGEBRA I

**138 Interactive Math Boxes***60-Minute Hands-On • TI-Nspire™ CX CAS Handheld**Allister Wadden, Annapolis West Education Centre, Annapolis Royal, NS, Canada*

This session will cover how the interactive Math Box can help students make sense of core concepts as well as enhance their ability to reason about variables, equations and the concept of equivalence.

**4:15 pm - 5:15 pm****Room: Soldier Field**

Seats: 30

STATISTICS

**139 Data Analysis Using the TI-Nspire™ Family of Handhelds, TI-Navigator™ System™ & SMART™ Board Interactive Whiteboards***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Kenneth Ray Fox, John Overton High School, Nashville, TN, USA*

Explore quantitative data using the TI-Nspire™ functionality to discover, analyze and predict. The TI-Nspire™ Navigator™ System will be used to transfer files, verify learners understanding and troubleshoot problems as they arise. We will create box plots to reveal the “Five Number Summary” plus outliers and compare the mean with the medium.

# Session Details

**4:15 pm - 5:15 pm**

**Room: Hong Kong**

Seats: 30

ALGEBRA II

**140 LinReg Exposed**

*60-Minute Hands-On • TI-Nspire™ Family of Handhelds*

*John Hanna, Hopatcong, NJ, USA*

Most of us have the big idea of linear regression and some of us use it without having a clue! Let's take a look at the mathematics behind the least squares line in terms that any Algebra 2 student can and should grasp.

**4:15 pm - 5:15 pm**

**Room: Columbus Hall G**

Seats: 40

ALGEBRA I

**141 "Let's Play Golf!" Using the TI-Nspire™ Navigator™ System**

*60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software*

*Marco Gonzalez, TI MathForward™, Brownsville, TX, USA*

In this session, participants will be engaged in a game of golf. Algebra 1 skills being used in this activity are (but not limited to): equations of lines, slope, y-intercept, x-intercept, quadrants and coordinate points.

**4:15 pm - 5:15 pm**

**Room: Buckingham**

Seats: 30

GENERAL SCIENCE

**143 Bouncing Along: Using the Force Plate with the TI-Nspire™ CX Handheld**

*60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, Other Data Collection Probes*

*Paul Williams, Red Deer College, Red Deer, AB, Canada*

Participants will take part in a number of experiments to see how to pull rich insights from data collected from a force plate on a TI-Nspire™ CX handheld. Experiment set up and limitations will be demonstrated, and advanced analysis features will be used. Bounce and jump analysis are only two of the activities participants will consider.

**4:15 pm - 5:15 pm**

**Room: Water Tower**

Seats: 50

MIDDLE GRADES MATH

**144 Using Color and Templates to Make Connections in the Middle School Classroom**

*60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software*

*Scott Powell, King David Kalakaua Middle School, Honolulu, HI, USA*

This will be a hands-on session where you can come away with the different possibilities with the TI-Nspire™ CX handheld and different layouts that can be used over again as a template to create great connections for students.

**4:15 pm - 5:15 pm**

**Room: Dusable**

Seats: 35

GEOMETRY

**145 Discovering the Definition of a Parabola as Seen Through a Common Core Classroom**

*60-Minute Hands-On • TI-Nspire™ CX Handheld*

*Stan Pappo, Dix Hills, NY, USA*

In the setting of a Common Core State Standards for Mathematics classroom, we will discover the definition of the parabola in four ways – construction, geometrically, algebraically and data capture – using the TI-Nspire™ CX handheld.

**4:15 pm - 5:15 pm****Room: Field**

Seats: 35

GEOMETRY

**146 Old School Geometry on a New School Device***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System**Johnny Ashurst, Harlan County Schools, Baxter, KY, USA*

No static geometry here! This is the amazing world of dynamic geometry. Geometric constructions, transformations, nets and theorem development are driven by old-school geometry dialogue while using new-school TI-Nspire™ technology.

**4:15 pm - 5:15 pm****Room: Picasso**

Seats: 30

PHYSICS

**147 Trigger and the Short Time Interval: High School Data Collection Using the TI-Nspire™ Lab Station***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ Lab Cradle, Other Data Collection Probes**Ian Galloway, Copernican Revolutions, Southampton, United Kingdom*

The new TI-Nspire™ Lab Station permits short time interval events to be studied with the use of triggering. You will explore the triggering function and then use it to investigate what happens at the moment a bulb is switched on or off. You will use light and voltage probes and as spin off you will also learn how to use the voltage probe as a current probe. Filament bulbs may soon be an archaic curiosity so it is worth carrying out this activity before they disappear! Ohm's Law and the non-Ohmic resistor will be explored.

**4:15 pm - 5:15 pm****Room: Atlanta**

Seats: 30

CALCULUS

**148 Where the @#%\$ is That Command on the TI-89 Titanium Graphing Calculator?***60-Minute Hands-On • TI-89 Titanium Graphing Calculator**Eric Sever, Mill Creek High School/Georgia Perimeter College, Hoschton, GA, USA*

Don't panic if a student brings a TI-89 Titanium graphing calculator into your classroom. It can be a powerful tool for upper-level math. This session will show where common commands can be found on the TI-89 Titanium graphing calculator. Some calculus explorations such as slope fields, implicit differentiation and Reimann sums will also be investigated.

**4:15 pm - 5:15 pm****Room: Regency B**

Seats: 100

GENERAL MATH

**149 Getting Started with the TI-Nspire™ Navigator™ System in the Math Classroom – Rethinking Teaching Approaches and Task Designs***60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software**Alison Clark-Wilson, University of Chichester, Bognor Regis, United Kingdom**Co-Presenter(s): Cindy Hunt*

In this hands-on workshop you will find out about one teacher's classroom experiences as she begun to use the TI-Nspire™ Navigator™ System and adapted previous math tasks for her students. You will learn a number of key ideas that are useful when adapting and designing activities and some useful strategies for engaging other colleagues in your school.

**4:15 pm - 5:15 pm****Room: Crystal Ballroom A**

Seats: 100

GENERAL INTEREST

**150 STEM Project Which Grew Beyond Expectations***60-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-84 Plus Graphing Calculator Family, TI-Nspire™ Lab Cradle, Calculator-Based Laboratory 2™ Data Collection Device, Other Data Collection Probes**Jacklyn Bonneau, Massachusetts Academy of Math and Science, North Grosvenordale, CT, USA*

Our students created an initial STEM project around wind energy that became a true interdisciplinary project and grew beyond initial expectations. Come and see how to do this can happen to your students as well. Wind power, math models, bats, engineering and economics – it has it all!

# Session Details

**4:15 pm - 5:15 pm**

**Room: Regency C**

Seats: 100

GENERAL MATH

**151 There's a Crab in My Calculator**

*60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™*

*Susan Howe, Long Reach High School, Columbia, MD, USA*

Participants will create and transform a figure in the coordinate plane using operations on lists. We will extend our investigation using matrices.

**4:15 pm - 5:15 pm**

**Room: San Francisco**

Seats: 25

TECHNOLOGY  
INTEGRATION

**152 Integrating the TI-Nspire™ Navigator™ NC System Into Your High School Classroom**

*60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software*

*Kevin Rodgers, Gwinnett County Public Schools, Hoschton, GA, USA*

The purpose of this presentation is to provide an introduction to the TI-Nspire™ Navigator™ NC System. Participants will learn how to create a class or multiple classes, use the screen capture tool and Quick Poll feature, and work with documents and assessments. Participants will be exposed to the TI-Nspire™ CX handheld, TI-Nspire™ handheld with Touchpad and TI-Nspire™ computer software by creating activities for his or her classroom. We will also learn how to create documents and assessments using TI-Nspire™ computer software. At the same time, participants will be exposed to the TI-Nspire™ websites and activity exchanges that have been provided by Texas Instruments.

**4:15 pm - 5:15 pm**

**Room: McCormick**

Seats: 35

ASSESSMENT

**153 Increasing Test Scores Using the TI-Nspire™ Handhelds and the TI-Nspire™ Navigator™ System**

*60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software*

*Audrey Cucci, Frankfort-Schuyler High School, Poland, NY, USA*

Are you looking for ways to increase student success on state mandated exams? Are you looking for techniques to increase student achievement and retention from course to course? Come and learn strategies that can be used in your classroom on a daily basis using TI-Nspire™ handhelds that have been proven to be effective in increasing student success. See how the TI-Nspire™ Navigator™ System can give you instant item analysis and increase students on task time by leaps and bounds. Get back to having fun in your classroom while increasing your students' scores!

**4:15 pm - 5:15 pm**

**Room: Crystal Ballroom B**

Seats: 100

GENERAL INTEREST

**154 Administrators and Teachers Partnering to Optimize Student Learning: Comparing and Contrasting the TI-Nspire™ Family of Handhelds and the TI-84 Plus Family of Graphing Calculators**

*60-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-84 Plus Graphing Calculator Family*

*Becky Byer, Kelly Walsh High School, Casper, WY, USA*

*Co-Presenter(s): Becky Underwood*

What are the differences between TI-Nspire™ handhelds and TI-84 Plus graphing calculators? In these economic times, do the benefits of TI-Nspire™ technology outweigh the financial costs? In this session we will compare and contrast the two calculators and their functions, present scientific data illustrating student gains and discuss our first-hand experience in obtaining funding for our school's update.

**4:15 pm - 5:15 pm****Room: Horner**

Seats: 25

GENERAL MATH

**155 Work Smarter, Not Harder: Discovering, Editing and Creating Lessons and Assessments Using TI-Nspire™ Teacher Software***60-Minute Hands-On • TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**David Reeves, Andrew Carnegie Middle School, Roseville, CA, USA**Co-Presenter(s): Kyle Atkin*

It is easy to find ready-to-use TI-Nspire™ lessons and assessments for your mathematics classroom using TI-Nspire™ Teacher Software and the web. Or, if the lesson isn't exactly what you wanted, it is not difficult to edit the document to make it fit your needs. On the outside chance you can't find the pre-created document you need, you can create one from scratch and then post it for others to use. This session will show you how to do all of the above, and if you ask nicely, even more!

**4:15 pm - 5:15 pm****Room: Wright**

Seats: 25

ADMINISTRATOR

**156 Looking Forward with TI MathForward™***60-Minute Hands-On • TI-73 Explorer™ Graphing Calculator, TI-Navigator™ Classroom Learning System, TI-SmartView™ Emulator Software**Donna Harris, Saginaw, TX, USA*

Are your mathematics classes engaging your students with handheld technology? Are your students able to analyze their work at a high cognitive level? Are they performing successfully on state assessments? If you cannot answer affirmatively to these questions, come to this session to experience a TI MathForward™ lesson and learn about results from a Texas school district.

**4:15 pm - 5:15 pm****Room: New Orleans**

Seats: 45

TECHNOLOGY  
INTEGRATION**157 Using TI-Nspire™ Technology to Integrate Science and Math in an Interactive Classroom***60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Lab Cradle, Other Data Collection Probes**Lisa Tindall, Harmony High School, Harmony, FL, USA*

As an attendee you will experience hands on the integration of science in a mathematics classroom using the TI-Nspire™ CX handheld, TI-Nspire™ CX Navigator™ System and collection probes. You will leave this session with activities to use with your students that will enhance their understanding of science while focusing on mathematics content.

**4:15 pm - 5:15 pm****Room: Columbus Hall EF**

Seats: 120

ALGEBRA I

**158 Inclusion and TI MathForward™ Using the TI-Navigator™ Classroom Learning System and the TI-84 Plus Graphing Calculator Family***60-Minute Lecture/Demonstration • TI-84 Plus Graphing Calculator Family**Cole Mills, TI MathForward™, New Orleans, LA, USA*

Presentation will focus on strategies for using TI MathForward™ in an inclusion setting, including case studies where TI MathForward™ is being used. Discussion of different delivery models – whole class, parallel teaching and small group interventions will be discussed. Demonstrate how the TI-Navigator™ Classroom Learning System allows special education populations to explore mathematical concepts on a deeper, more rigorous level through hands-on explorations.

**4:15 pm - 5:15 pm****Room: Toronto**

Seats: 80

GENERAL MATH

**159 Fibonacci Sequence with the Graphs & Geometry Application***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ Teacher Software**Scott Washburn, Redlands East Valley High School, Redlands, CA, USA*

We will review Fibonacci's history and background. Afterwards I will be showing you where his golden spiral occurs in nature. After discussing the mathematics of his sequence, which is neither arithmetic or geometric, the participants will have the opportunity to actually construct one Fibonacci spiral on TI-Nspire™ handhelds using the arc tool.

# Session Details

**4:15 pm - 5:15 pm**

**Room: Gold Coast**

Seats: 50

MIDDLE GRADES MATH

**160 Making Connections in Middle School Mathematics Using the TI-Nspire™ CX Handheld**

60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software  
Gloria Beswick, Louisville, KY, USA

With the adoption of the Common Core State Standards For Mathematics, it becomes increasingly important that students use a variety of mathematical representations and understand the connections between them. Participants will compare tables, graphs, formulas, diagrams and verbal descriptions that represent proportional relationships and examine the correspondences among them. The goal is to develop a deeper understanding of proportional relationships and make connections to algebraic reasoning. The TI-Nspire™ CX handheld will be used in conjunction with the TI-Nspire™ CX Navigator™ System to explore these connections. The importance of 'math talk' and formative assessment strategies will also be emphasized throughout the session.

**4:15 pm - 5:15 pm**

**Room: Haymarket**

Seats: 24

MIDDLE GRADES MATH

**161 Statistics for the Middle School Grades Using the TI-84 Plus Silver Edition Graphing Calculator**

60-Minute Hands-On • TI-84 Plus Graphing Calculator Family  
Gail Gallitano, West Chester University, West Chester, PA, USA

This session will focus on general statistics for the middle grades using the TI-84 Plus Silver Edition graphing calculator. Topics covered will include graphs, descriptive statistics, scatter plots, the binomial distribution, the normal distribution and the central limit theorem.

**4:15 pm - 5:15 pm**

**Room: Regency D**

Seats: 100

GENERAL MATH

**162 Exploring Nspired Circles and Polygons**

60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ Teacher Software  
Lisa Suarez, Lincoln West High School, Columbia Station, OH, USA  
Co-Presenter(s): Bill Stiggers, Sheryl Edwards

Explore the power of the TI-Nspire™ CX handheld for middle and high school math in developing formulas for circles and polygons as well as effects of changing dimensions of rectangles.

**4:15 pm - 5:15 pm**

**Room: Columbus Hall KL**

Seats: 140

ALGEBRA I

**163 So What Is This PublishView™ Feature in TI-Nspire™ Teacher Software?**

60-Minute Lecture/Demonstration • TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software  
Aurelia Weil, Cor Jesu Academy, Fenton, MO, USA  
Co-Presenter(s): Sherry Everding

The PublishView™ feature is the newest digital math tool in TI-Nspire™ Teacher Software! It offers opportunities for you and your students to create documents which contain text, images, videos and INTERACTIVE TI-Nspire™ pages. Join us as we discuss how we have used this new type of document in our Algebra 1 and Precalculus classes to review and present material, as well as to assess student understanding and performance.

**4:15 pm - 5:15 pm**

**Room: Columbus Hall IJ**

Seats: 140

ALGEBRA I

**164 Standard, Factored or Vertex Form: What's the Difference? Understanding Quadratics with the TI-73 Explorer™ and TI-84 Plus Graphing Calculators**

60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator, TI-SmartView™ Emulator for TI-Nspire™, TI-SmartView™ Emulator Software  
Stuart Moskowitz, Humboldt State University, Bayside, CA, USA

We graph linear equations knowing only the slope and y-intercept, and we can get those straight from the equation. It's not so straightforward with quadratics. Much time is spent factoring quadratics and completing the square without telling students why. This activity uses TI-73 Explorer™ and TI-84 Plus graphing calculators to help students find zeros, vertice and y-intercepts while comparing standard, factored and/or vertex forms of quadratics. The Common Core State Standards For Mathematics says that students should be able to find zeros of quadratics and complete the square in quadratic expressions; this activity explores why.

**4:15 pm - 5:15 pm****Room: Acapulco**

Seats: 80

ALGEBRA II

**165 When Can a Circle Be a Star! Explore How Sampling Points on a Circle Will Change Your Impressions***60-Minute Hands-On • TI-Nspire™ CX Handheld**Murney Bell, Siena Heights University, Chesterfield, MI, USA*

With a parametric setup of a circle and you sample a few number of points what happens? How can you control what happens? Are there multiple way that we can represent these outcomes or predict the outcomes?

**4:15 pm - 5:15 pm****Room: Columbian**

Seats: 30

MIDDLE GRADES SCIENCE

**166 Explorative Quest Middle School Science Project Using the TI-Nspire™ CX Handheld***60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes**Neil Anderson, St. Michael's Catholic Secondary School, Truro, United Kingdom*

An interactive session looking at the ideas and experiences from an innovative science transition project (sponsored by the AstraZeneca® Science Teaching Trust and supported by T<sup>3</sup>™ UK) using the TI-Nspire™ CX handheld to engage and inspire student interest in explorative and practical science.

**4:15 pm - 5:15 pm****Room: Ogden**

Seats: 25

GENERAL MATH

**167 The TI-Nspire™ Navigator™ System in the Singapore Laptop School***60-Minute Hands-On • TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, Calculator-Based Ranger 2™ Data Collection Device**Sarah Davis, School of Science and Technology, Singapore**Co-Presenter(s): Nur Johari*

The School of Science and Technology (SST) is Singapore's newest future school. We are a laptop school and a TI-Nspire™ Navigator™ System for Networked Computers pilot site. As part of the Classroom-Networks Educational Collaboration Technology (CN-ECT) for math research project, we have integrated the TI-Nspire™ Navigator™ System for Networked Computers into our Secondary 1 and Secondary 2 (seventh and eighth grade) mathematics curriculum. In this session, we will take the participants through a series of activities used at SST covering introductory algebra and geometry topics.

**4:15 pm - 5:15 pm****Room: Columbus Hall AB**

Seats: 120

TECHNOLOGY  
INTEGRATION**168 Using the Calculator-based Ranger 2™ Data Collection Device to Derive the Position Function and Motivate Discussion of Function Transformations***60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, Calculator-Based Ranger 2™ Data Collection Device**Daniel Russow, Arizona Western College, Yuma, AZ, USA*

The presenter will demonstrate how to use the CBR 2™ to derive the quadratic position function. The derivation will include data gathering with the CBR 2™, regression analysis using the TI-84 Plus graphing calculator and the use of transformations to attempt to get the function to look like the standard quadratic position function students encounter in their textbooks.

**4:15 pm - 5:15 pm****Room: Crystal Ballroom C**

Seats: 100

CAS

**169 Exploring Mathematics with TI-Nspire™ CX CAS Handheld***60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software**Joyce Lee, George Washington Carver High School, Columbus, GA, USA*

Explore math topics using the TI-Nspire™ CX CAS handheld and investigate how to use this technology to promote student learning.

# Session Details

**4:15 pm - 5:15 pm**

**Room: Columbus Hall H**

Seats: 40

ALGEBRA I

**170 TI-Nspire™ Technology For Total Beginners**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software

David Sword, Wayne RESA, Highland Park, MI, USA

New to the TI-Nspire™ technology? Come to this session and get a basic introduction on how to get started.

**4:15 pm - 5:15 pm**

**Room: Wrigley**

Seats: 80

BIOLOGY

**171 Pond pH with the TI-84 Plus Graphing Calculator**

60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, Other Data Collection Probes

Judy Day, North Carolina State University, Raleigh, NC, USA

Co-Presenter(s): Louise Chapman

Lakes, rivers and ponds all provide a habitat for plants and animals. Life is sensitive to various conditions in the water such as temperature and pH. Explore how pH can be affected with the presence of plants and animals.

**1:15 - 2:15 pm**

**Room: Crystal Ballroom A**

Seats: 100

CALCULUS

**270 Calculus Explorations Using the TI-Nspire™ Family of Handhelds**

90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds

Ken Collins, Charlotte Latin School, Charlotte, NC, USA

The TI-Nspire™ family of handhelds allows us to examine a problem using multiple representations. We will use several examples to illustrate how this can be applied to calculus topics. Handouts will be provided. All levels are welcome.

**2:30 pm - 4:00 pm**

**Room: Regency D**

Seats: 100

PRECALCULUS

**401 Data Collection with the TI-84 Plus Graphing Calculator**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System, Calculator-Based Laboratory 2™ Data Collection Device, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes

Michelle Merriweather, The College of New Rochelle, New Rochelle, NY, USA

During this session you will collect data from a variety of probes including temperature, motion and pH. We will use the data to study functions that arise in high school mathematics such as linear, exponential and power functions.

**2:30 pm - 4:00 pm**

**Room: Horner**

Seats: 25

GENERAL INTEREST

**405 Interactive Real-time Online Learning – (6-12)**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator, TI-SmartView™ Emulator for TI-Nspire™

Marilyn Parker, Technical Resources Dept, Las Vegas, NV, USA

Co-Presenter(s): Robin Levine Wissing

How do you teach your online students to use TI handhelds, TI Connect, and resources from TI's website? Put on a headset and participate in a live, online class. Go beyond email and text chat. Use the latest Web-based voice over IP synchronous Centra technology to bring an exciting level of interactivity to online instruction. Share software and files, work in small groups, and browse the web. Regain that critical student-teacher relationship built on instant communication.

**4:15 pm - 5:15 pm****Room: Addams**

Seats: 25

GENERAL INTEREST

**411 Rise to the Core Challenge: Exciting Uses for TI-Nspire™ Technology, Pencasts and Other Technologies***60-Minute Lecture/Demonstration • TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Katie England, Montgomery County Public Schools, Rockville, MD, USA*

We're in the midst of a "perfect storm" for mathematics education. With Common Core State Standards and amazing technology, we're facing an exciting time, but also a great challenge. We must support teachers as they promote deep, conceptual understanding; a long awaited paradigm shift. Social networking has been instrumental in toppling governments and reshaping our economic landscape – imagine that power turned towards mathematics education! Join the Core Challenge and use the power of technology to be part of the renaissance!

**10:15 am - 11:15 am****Room: Columbus G**

Seats: 40

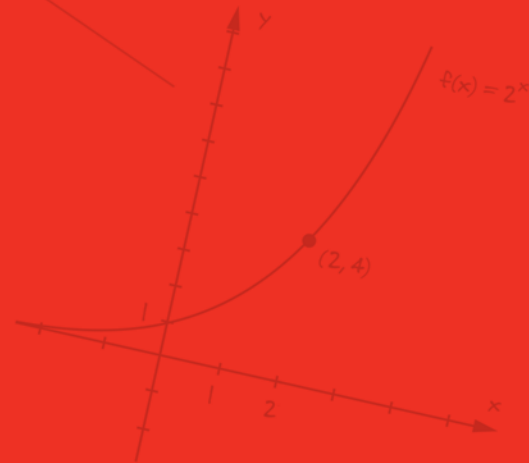
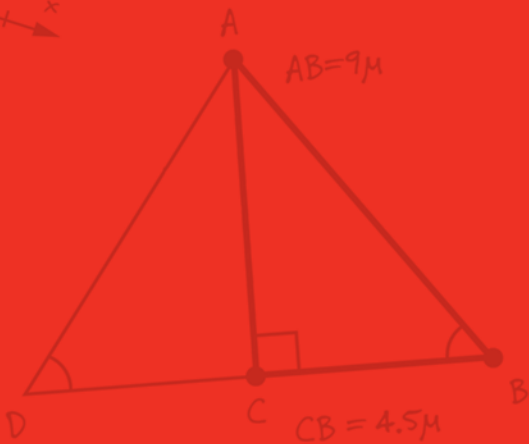
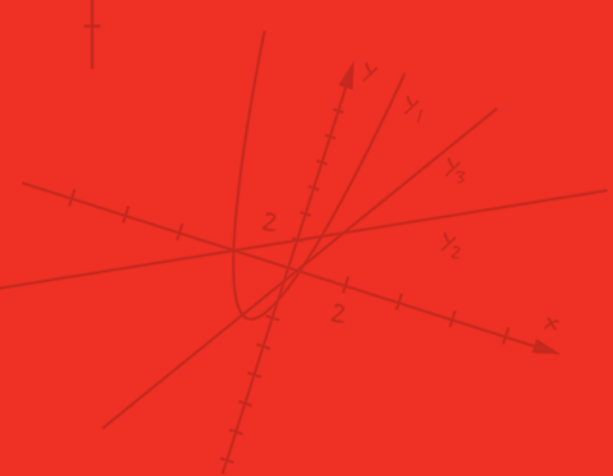
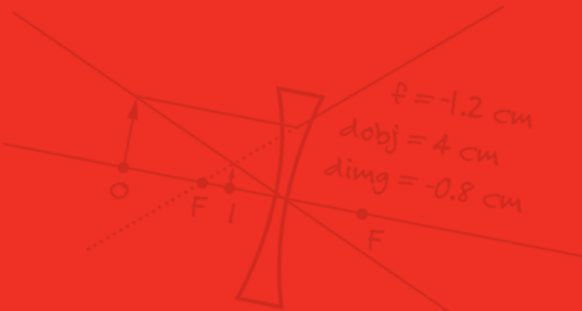
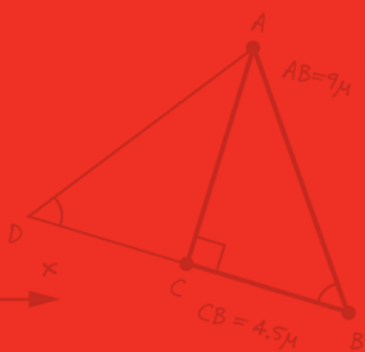
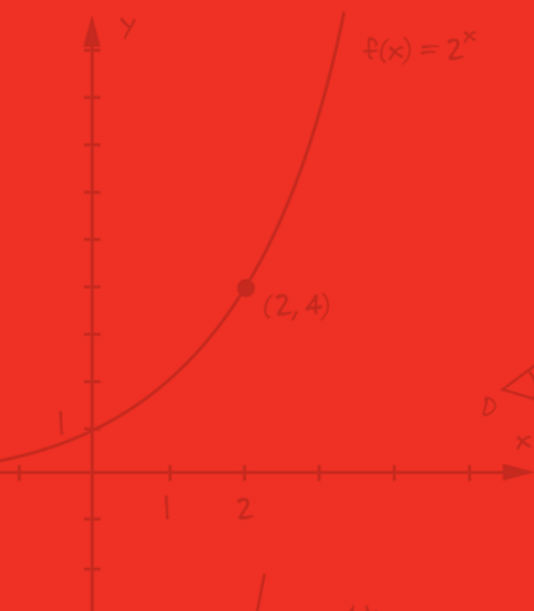
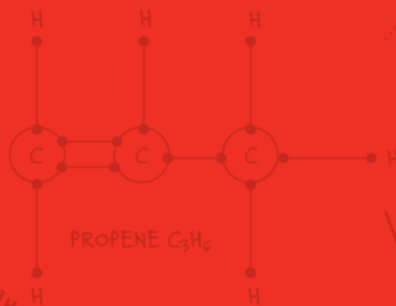
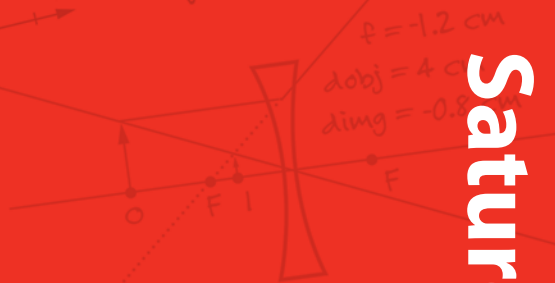
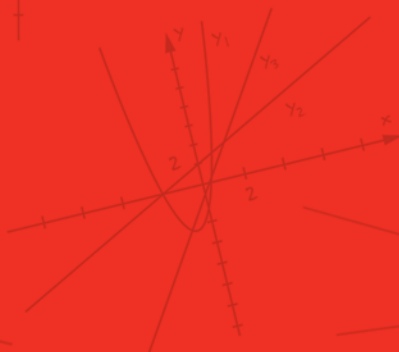
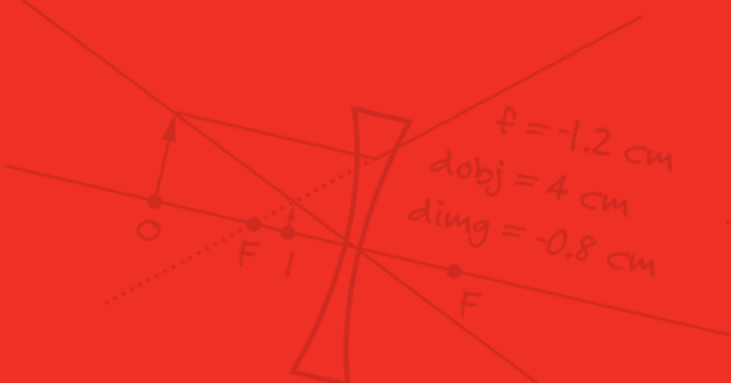
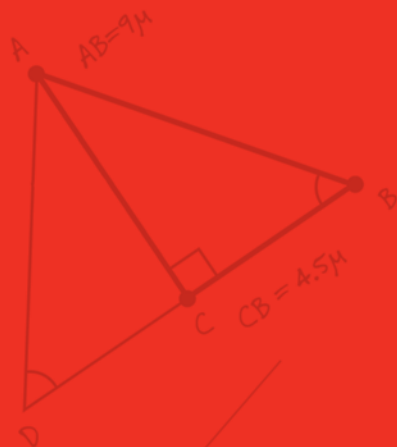
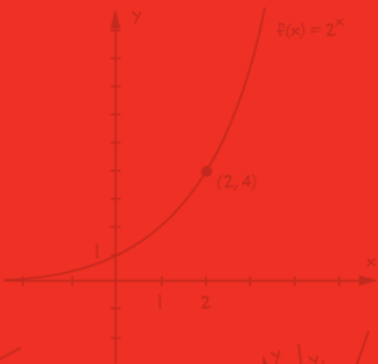
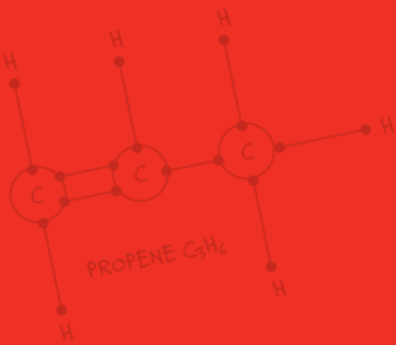
ALGEBRA 1

**413 TI-Nspire™ CX Handheld to Increase Student Engagement***60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld**Jerry Cummins, NCSM Former President, Hinsdale, IL, USA*

The new TI-Nspire™ CX handheld provides dynamic opportunities for students to engage in meaningful math problems in algebra and geometry. Participants will be able to have a hands-on experience for how to use the graphing calculator to create and teach for greater depth and understanding – an essential aspect of the vision of the CCSS of Mathematics Practice.

**NOTE: Sessions 406-410 and 412 are in the Saturday Session Details section.**

# Saturday Session Details



**8:15 am - 9:45 am****Room: Crystal Ballroom C**

Seats: 50

GEOMETRY

**172 Using TI-Nspire™ Family of Handhelds in the High School Classroom from Geometry to Precalculus***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software**Vincent Doty, Vincent Doty Inc., Canastota, NY, USA*

Participants will examine lessons on the nine point circle, similarity, introduction of polar coordinates, the law of sines and the ambiguous case. I have been using all of these lessons with students and teachers in a push-in format – fun guaranteed!

**8:15 am - 9:45 am****Room: Grand Ballroom F**

Seats: 120

TECHNOLOGY  
INTEGRATION**173 Math Nspired for Middle Grades: Common Core-based Investigations with Functions***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System**Ann Schlemper, Columbia College, Columbia, MO, USA**Co-Presenter(s): Christine Browning*

In this session, participants will engage in several TI-Nspire™ activities designed for middle grades students to explore the Common Core State Standards for Mathematics related to functions. The activities allow students to define, evaluate and compare functions and use functions to model relationships between quantities. These investigations are part of the Math Nspired resources on [education.ti.com](http://education.ti.com).

**8:15 am - 9:45 am****Room: Toronto**

Seats: 80

ALGEBRA II

**174 Make and Defend Consumer Decisions Through Investigative Learning with TI-Nspire™ Technology and Vernier Software & Technology™ Data Probes***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, Other Data Collection Probes**Brenda Peterman, Hot Springs County High School, Thermopolis, WY, USA**Co-Presenter(s): Donna Daniels*

Texas Instruments and Vernier Software & Technology™ bring math and science together to model and explore acid neutralization. In this session participants will perform a unit cost analysis prior to casting their vote for the antacid they predict will offer the fastest pain relief based on PH level. Through data collection and modeling, mathematical and scientific connections are highlighted as participants consider characteristics of functions. Participants will witness for themselves how engaging learning can be when math comes alive through science using technology to facilitate that animation.

**8:15 am - 9:45 am****Room: Columbian**

Seats: 30

GENERAL SCIENCE

**175 Connecting Math and Science in the Science Classroom Using TI-Nspire™ Technology***90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes**Rob Reniewicki, Arcadia High School, Phoenix, AZ, USA*

In this session, participants will learn how to engage their students by using TI technology to rapidly collect and analyze data. The collection and graphical presentation of the data will occur in real time. This technology allows for a greater flexibility in collecting information, as data collection and initial mathematical analysis is fast and offers an easy opportunity to be discarded and repeated until acceptable results are obtained. During this session, special attention will be given to the integration of science and mathematics and how this integration benefits the student. Participants in this session will learn how to use science lab activities at multiple levels in the science classroom.

# Session Details

**8:15 am - 9:45 am**

**Room: Picasso**

Seats: 30

GENERAL SCIENCE

**176 Forensic Science is Inspiring for All Science Students**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes

Jacklyn Bonneau, Massachusetts Academy of Math and Science, North Grosvenordale, CT, USA  
Co-Presenter(s): Louise Chapman

Participants will complete several science lab activities using TI-Nspire™ technology and Vernier Software and Technology™ probes. In earth science we will find the missing car by mapping the floor using the Calculator-Based Ranger™ data collection device; in chemistry we will discover the accelerant using temperature probes; in biology we will use the temperature probe to determine the time of death; and in physics we will use the CBR™ device to determine the perpetrator in a car accident, and more. Lots of science; lots of fun!

**8:15 am - 9:45 am**

**Room: McCormick**

Seats: 35

CAS

**177 The Ethics of Using CAS in School Mathematics**

90-Minute Lecture/Demonstration • TI-Nspire™ CAS with Touchpad Handheld

Zalman Usiskin, The University of Chicago, Chicago, IL, USA

Using computer algebra systems (CAS) and other advanced technologies raises ethical questions in classrooms. Is it equitable (fair) for some students to have CAS while others don't? Is it ethical to prepare students with these technologies if they are not allowed on high-stakes tests? These and related ethical questions will be discussed.

**8:15 am - 9:45 am**

**Room: Dusable**

Seats: 35

CAS

**178 CAS in the Algebra 1 Classroom**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ CAS Teacher Software

Ray Klein, Northern Illinois University, Glen Ellyn, IL, USA

Many people have a wrong impression about the use of Computer Algebra Systems (CAS) in Algebra 1 teaching. Some think that this powerful tool does too much and students will not learn basic algebra skills by using it. Others think that CAS belongs only in upper-level mathematics courses. Come and see how the experiences at my high school showed that these views were wrong. Actual lessons that were used will be reviewed and accompanying handouts will be provided. The TI-Nspire™ CX CAS handheld will be used in these activities.

**8:15 am - 9:45 am**

**Room: Acapulco**

Seats: 80

ALGEBRA II

**179 Getting Students to Connect, Understand and Remember Concepts Using TI-Nspire™ Technology**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software

Deb Nutt, Celina High School, Celina, OH, USA

Participants will get, use or make activities that are actually used in my classroom. These activities/lessons help connect key mathematical ideas so students make connections that allow them to remember and have a better understanding of what/why they are doing things. The TI-Nspire™ CX handheld, TI-Nspire™ CX CAS handheld and the TI-Nspire™ CX Navigator™ System will be used to keep students engaged and show how to make quick assessments. No previous TI-Nspire™ knowledge is necessary.

**11:15 am - 12:45 pm**

**Room: Regency B**

Seats: 100

AUTHORING

**180 Getting Started with Lua and TI-Nspire™ Technology**

90-Minute Hands-On • TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software

Steve Arnold, Compass Learning Technologies, Kiama, Australia

Co-Presenter(s): Mary Bourassa

One of the most exciting of the new features added to the TI-Nspire™ platform in the past 12 months has been the addition of Lua scripting capabilities. This opens the door to enormous possibilities, perhaps limited only by our own imaginations. In this session we see what all the fuss is about and share a beginner's guide to Lua on the TI-Nspire™ platform – no prior experience necessary.

**8:15 am - 9:45 am****Room: Water Tower**

Seats: 50

STATISTICS

**181 My First Year of AP\* Stats: An Nspired Story**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ Teacher Software  
 Leanne Hankins, Martinsville High School, Martinsville, VA, USA

Get to know the things that TI-Nspire™ technology can do for your AP\* Statistics students as you live through your first year teaching it. Which button where lets me what? How do I translate from the TI-84 Plus graphing calculator description in my book to the buttons on my TI-Nspire™ handheld? Which screen do I use to do that? How do I make it graph that? Find answers to these questions and a whole lot more.

**8:15 am - 9:45 am****Room: Regency C**

Seats: 100

GENERAL MATH

**182 TI-Nspire™ Handheld with Touchpad: A First-year Survival Guide!**

90-Minute Hands-On • TI-Nspire™ with Touchpad Handheld, TI-Nspire™ Teacher Software  
 Jamie Liptock, Annapolis High School, Annapolis, MD, USA

You've been given the TI-Nspire™ handheld with Touchpad to use in your classroom – how are you going to survive? Where is the on button? How do I navigate through the menus? Where do the batteries go? How do I get the students to use the calculator productively? This session will be helpful to you if you have these questions. Not only will survival techniques be shared, but there will be a chance to try some TI-Nspire™ basics. From classroom management, to grading, to uploading/receiving documents, your survival guide to the TI-Nspire™ handheld with Touchpad handheld awaits you!

**8:15 am - 9:45 am****Room: Gold Coast**

Seats: 50

STATISTICS

**183 Integrating Statistics & Probability Throughout the High School Curriculum**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System  
 Pamela Rawson, Poland Regional High School, Poland, ME, USA

The Common Core State Standards for Mathematics call for an increased emphasis on statistics and probability. How can high schools incorporate this additional content along with the algebra and geometry that we already teach? Participants will engage in activities using TI-Nspire™ technology that can be integrated into traditional high school math classes.

**8:15 am - 9:45 am****Room: Columbus Hall H**

Seats: 40

ALGEBRA I

**184 An Introductory Hands-on Tour of the TI-Nspire™ CX CAS Handheld**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld  
 Conrad Wayne, Chicago State University, Chicago, IL, USA

Participants will have the opportunity to try out the TI-Nspire™ CX CAS handheld. No prior experience required.

**8:15 am - 9:45 am****Room: Columbus Hall CD**

Seats: 120

ALGEBRA I

**185 Energize Your Algebra Classes Using the TI-Nspire™ CX Handheld**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software  
 Karen Cockburn, TI MathForward™, Spokane Valley, WA, USA

How can students improve their performance after they get immediate feedback on what they do and do not know? Using the TI-Nspire™ CX Navigator™ System and action/consequence documents, teachers and their students can see algebraic concepts come alive.

**8:15 am - 9:45 am****Room: Field**

Seats: 35

CAS

**186 What Could/Should a CAS School Look Like in the Early Years?**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System  
 Steve Arnold, Compass Learning Technologies, Kiama, Australia

With the TI-Nspire™ CX CAS handheld we have one of the most appropriate computer algebra tools yet for teaching and learning, but how does it rate for use in the early years? How might it be improved? In this hands-on session, explore some ideas about enhancing CAS for the learning of algebra, and be prepared to discuss some of the implications.

# Session Details

**8:15 am - 9:45 am**

**Room: Buckingham**

Seats: 30

GENERAL SCIENCE

**187 Climate Change with the TI-Nspire™ CX Handheld and Vernier DataQuest™ App for TI-Nspire™**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ Teacher Software, TI-Nspire™ Lab Cradle, Other Data Collection Probes

William Green, Knabusch Mathematics and Science Center, Monroe, MI, USA

Co-Presenter(s): Tom Cauffield, Russell Columbus

This session will explore climate change and illustrate human impact on the carbon cycle. We will do an activity focused on the carbon cycle and the burning of fossil fuels. The TI-Nspire™ Lab Cradle and DataQuest app will be used with the CO<sub>2</sub>, O<sub>2</sub>, temperature and relative humidity sensors. Other activities developed under a NASA climate change grant will be discussed. Remote sensing as it pertains to our grant will also be discussed.

**8:15 am - 9:45 am**

**Room: Columbus Hall AB**

Seats: 120

GENERAL INTEREST

**188 Technology Makes STEM Instruction Easy**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle

Greg Dodd, George Washington High School, Charleston, WV, USA

Join this hands-on workshop and learn how the appropriate use of technology in the science classroom can facilitate STEM instruction and provide a quick, easy and electronic means for formative and summative assessment of student learning. Teachers will take part in hands-on activities that integrate cross-curricular instruction. Participants will take part in formative and summative assessment activities as well. Handouts will be provided.

**8:15 am - 9:45 am**

**Room: Crystal Ballroom B**

Seats: 100

MIDDLE GRADES MATH

**189 Number Sense, Reasoning and TI-73 Explorer™ Graphing Calculator and the TI-83 Plus and TI-84 Plus Families of Graphing Calculators – A Natural Partnership!**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator, TI-Navigator™ Classroom Learning System, TI-SmartView™ Emulator for TI-Nspire™, TI-SmartView™ Emulator Software

Judy Wheeler, JMW MathEd Consulting, LLC, St. Joseph, MI, USA

(Grades 4-7) Let's go golfing, fishing and play football! The presenter will share several programs, games and activities that she has created for the TI-73 Explorer™ graphing calculator and the TI-83 Plus and TI-84 Plus families of graphing calculators. This TI technology encourages the development of number sense and logical reasoning. Some of the activities utilize the power of the TI-Nspire™ Navigator™ System; most do not. Participants will learn how easy it is to use the TI-Connect™ software application to install the programs onto handhelds to use in their classrooms.

**8:15 am - 9:45 am**

**Room: Regency D**

Seats: 100

GENERAL MATH

**190 Let's Nspire Our Students in Algebra, Geometry and Trigonometry!**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ Teacher Software

Brittany Zweibel, MacArthur High School, Levittown, NY, USA

Co-Presenter(s): Jennifer Chirles

In this session, participants will engage in hands on activities that will WOW their students. Algebra, geometry and trigonometry activities will be displayed in this session.

**8:15 am - 9:45 am**

**Room: Grand Ballroom A**

Seats: 120

PRECALCULUS

**191 Exploring Precalculus/Trigonometry with TI-Nspire™ Technology**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds

Scott Knapp, Glenbrook North High School, Northbrook, IL, USA

Become inspired with ideas for classroom activities and demonstrations using TI-Nspire™ technology in the precalculus classroom. Through hands-on learning, you will experience dynamic TI-Nspire™ features and how this technology engages students in mathematical investigation and discovery. Topics will include the unit circle, trig function graphs, polar graphing, law of sines and cosines, and conic sections. Come learn how to help students develop, connect and deepen their understanding of mathematics using the TI-Nspire™ family of handhelds.

**8:15 am - 9:45 am****Room: Haymarket**

Seats: 24

GEOMETRY

**192 Inspiring the Struggling Geometry Student***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ with Touchpad Handheld**Alissa DePue, Glenbrook North High School, Northbrook, IL, USA*

Come learn how to design and develop Nspire activities that are geared towards students who struggle in Geometry. The lessons will use research based literacy strategies to reinforce the skills learned via technology. You will leave with ready to go resources and ideas of how to better develop learning opportunities that promote student engagement, understanding and mastery of the content. You don't need to be a pro at the nspire to come to this workshop!

**8:15 am - 9:45 am****Room: Wrigley**

Seats: 80

GENERAL SCIENCE

**193 Exploring Science Nspired Activities***90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software, Other Data Collection Probes**C.W. Eaker, University of Dallas, Carrollton, TX, USA*

Using the TI-Nspire™ CX handheld, participants will have an opportunity to try selected science activities from the TI Science Nspired website.

**8:15 am - 9:45 am****Room: Horner**

Seats: 25

CAS

**194 The Secretary Problem Solved with TI-Nspire™ CX CAS***90-Minute Hands-On • TI-Nspire™ CAS Teacher Software**Bjoern Felsager, Midtsjællands Gymnasieskoler, Haslev, Denmark*

The secretary problem deals with selecting the best applicant, given that you review them one after one in a random order and have to make a decision after each interview. If the secretary is not hired you lose the chance to regret! In this workshop, I will present and discuss strategies for solving the secretary problem using the TI-Nspire™ CX CAS handheld including simulations, combinatorics, infinite series and elementary calculus. You do not have to be an expert in TI-Nspire™ CX CAS, but familiarity with CAS is helpful.

**8:15 am - 9:45 am****Room: Columbus Hall G**

Seats: 40

ALGEBRA I

**195 LIGHTS, CAMERA, SOUND, ACTION! – Data Collection with the TI-Nspire™ CX Handheld and TI-Nspire™ Lab Station***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes**Delbra Robinson, Office of Mathematics Education, Chesterfield Township, MI, USA*

Participants will collect data using the TI-Nspire™ CX handheld and TI-Nspire™ Lab Cradle with Vernier Software & Technology™ voltage, light and motion probes and microphones. Participants will learn the procedural steps to using the technology in order to address real-world situations and solve real-world problems, as well as focus on conceptual understanding in a format that will connect to the brain-friendly Common Core State Standards For Mathematics. Participants will also learn why the words "CAMERA" and "ACTION" are in the title of this session.

**8:15 am - 9:45 am****Room: Crystal Ballroom A**

Seats: 50

MIDDLE GRADES MATH

**196 Middle School Mathematics: A Dynamic Approach***90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Martin Sanchez, TI MathForward™, Pearland, TX, USA**Co-Presenter(s): Sandra Hocutt*

This session will explore the use of sliders to enhance the teaching and conceptualization of middle school mathematics topics. Participants will have the opportunity to work with the TI-Nspire™ CX handheld and the TI-Nspire™ handheld with Touchpad to manipulate and create mini-lessons using sliders. Examples to be studied include: parts of a whole, percents, rational numbers (number line) and the relationship between the radius, diameter and circumference of a circle. Join us and experience TI-Nspire™ technology as we explore how this tool can be used as an effective teaching tool to enhance students understanding of concepts.

# Session Details

**8:15 am - 9:45 am**

**Room: Grand Ballroom D**

Seats: 40

PROGRAMMING

**197 Programming is the Best Set of LEGOs® for the TI-84 Plus Graphing Calculator**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System, TI-SmartView™ Emulator for TI-Nspire™

Christopher Langhorn, TI MathForward™, Newport News, VA, USA

Participants will engage in an interactive classroom that will introduce teachers to limitless possibilities of the TI-84 Plus graphing calculator programming function integrated with the TI-Navigator™ classroom learning system. Come learn to create something from nothing.

**8:15 am - 9:45 am**

**Room: Columbus Hall IJ**

Seats: 140

ALGEBRA I

**198 “Nspiring” the Algebra 1 Classroom**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software

Veronica Carlson, Moon Valley High School, Glendale, AZ, USA

Co-Presenter(s): Kim Thomas

Participants will learn how to use the TI-Nspire™ CX handheld and TI-Nspire™ CX Navigator™ System along with Math Nspired Resource Center lessons to improve the understanding of algebra concepts. Participants will leave with ready-to-use and ready-to-access lessons to incorporate into the Algebra 1 classroom.

**8:15 am - 9:45 am**

**Room: Addams**

Seats: 25

ELEMENTARY MATH

**199 How My Fifth Graders Got Nspired with the TI-Nspire™ CX Handheld**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System

Marsha Burkholder, West Broad Elementary, Columbus, OH, USA

In this hands-on session you will experience some of the lessons that inner city fifth grade students have done on the TI-Nspire™ CX handheld. The lessons will focus on how students apply the process standards to gain understanding.

**8:15 am - 9:45 am**

**Room: Regency B**

Seats: 100

GENERAL MATH

**200 What’s the Buzz with TI-Nspire™ CX Handheld?**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System

Paul Alves, Fletcher’s Meadow Secondary School, Acton, ON, Canada

This session is designed for the new TI-Nspire™ CX handheld user. The goal of the session is to get you comfortable with the technology so that you can return to the classroom and try to integrate it in your teaching. We will look at the all of the applications, as well as some simple documents that can deeply impact student learning.

**8:15 am - 9:45 am**

**Room: Grand Ballroom E**

Seats: 120

TECHNOLOGY  
INTEGRATION

**201 My Favorite TI-Nspire™ Activities – Algebra and Calculus: How to Creatively Implement Them on the Handheld and Player**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software

Tom Reardon, Youngstown State University, Poland, OH, USA

Get hands-on experience with several interactive TI-Nspire™ documents. Learn how to incorporate these into your classroom. See how to actually increase valuable instruction time with your students using this technology. Find out how to effectively utilize color as a teaching tool and creatively use photos to assist learning graphing transformations of functions. Obtain over 200 classroom-ready and classroom-tested documents for the TI-Nspire™ family of handhelds and also for the FREE TI-Nspire™ document player available to students and teachers on the web! We will also show how to integrate these incredible activities with TI-Nspire™ Navigator™ Teacher Software and SMART™ Board interactive whiteboards. And PEZ®!

**8:15 am - 9:45 am****Room: Columbus Hall KL**

Seats: 140

ALGEBRA I

**202 Getting to Know the TI-84 Plus Graphing Calculator's New Operating System. More IS Better!***90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™**Pam Littleton, Tarleton State University, Stephenville, TX, USA*

The new OS for the TI-84 Plus graphing calculator is outstanding. Several features of TI-Nspire™ handhelds have been adapted for the TI-84 Plus graphing calculator, including pretty type and math templates. We will explore multiple representations and highlight the new attributes of this revised OS. Technology will be provided, but you are also welcome to bring your own.

**8:15 am - 9:45 am****Room: Atlanta**

Seats: 30

CALCULUS

**203 Calculus Labs – Making Calculus More Engaging***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System,**TI-Nspire™ CAS Teacher Software**Sam Gough, The Westminster Schools, Atlanta, GA, USA**Co-Presenter(s): Jill Gough*

Labs can make the calculus classroom more engaging. We will investigate major topics of differential and integral calculus through hands-on activities. Additionally, we will investigate ways to assess student's understanding of the concepts.

**8:15 am - 9:45 am****Room: Hong Kong**

Seats: 30

ALGEBRA II

**204 Multiple Representations of Functions Using the TI-84 Plus Graphing Calculator***90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™,**Calculator-Based Ranger 2™ Data Collection Device**Lynn Adsit, Mercer Island High School, Mercer Island, WA, USA**Co-Presenter(s): Kim Schjelderup*

It's all about Functions! Help your students deepen their understanding of functions using the TI-84 Plus graphing calculator. We will explore many families of functions through multiple representations. We'll look at function arithmetic, notation and compositions, and graphing options; and then see how built-in applications can support conceptual understanding such as transform, ineqals and using the Calculator-Based Ranger 2™ motion detection device.

**8:15 am - 9:45 am****Room: Wright**

Seats: 25

ADMINISTRATOR

**205 Using the TI-Nspire™ Navigator™ System and Probe Ware to Increase Student Interest: A Summer STEM Experience***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Lab Cradle,**Other Data Collection Probes**Margaret Bambrick, Volusia County Schools, Deland, FL, USA**Co-Presenter(s): Mike Cimino*

Come and see how a school district in Volusia County, Florida, used funding to engage students and teachers in using the TI-Nspire™ CX Navigator™ System and data collection tools to motivate and increase student interest in mathematics and science at low socioeconomic schools. Students and teachers who had never used TI technology before learned together then started a summer collaborative culture to support integrating lessons during the school year with a focus on forensics. This will be a hands-on session showcasing program logistics and highlighting one of the summer investigations!

**8:15 am - 9:45 am****Room: Soldier Field**

Seats: 30

STATISTICS

**206 Using the TI-Nspire™ CX Navigator™ System in Introductory Statistics***90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System,**TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Don Worcester, Winter Park High School, Winter Park, FL, USA*

Participants will learn how to seamlessly integrate the TI-Nspire™ CX Navigator™ System into their everyday instruction in statistics courses. Real-world data sets will be used to demonstrate various topics in statistics, such as graphical and numerical analysis, linear regression and statistical inference.

# Session Details

**8:15 am - 9:45 am**

**Room: Ogden**

Seats: 25

ALGEBRA II

**207 No Handhelds – No Problem! Create Demonstration Activities with the TI-Nspire™ Teacher Software**

90-Minute Hands-On • TI-Nspire™ Teacher Software

Julie Riggins, East Forsyth High School, Kernersville, NC, USA

Even without students having a handheld, you can use TI-Nspire™ Teacher Software technology to enrich difficult lessons. We will create dynamic TI-Nspire™ documents using sliders, animation, the calculate tool and measurement transfer that will enhance your lessons on function shifts and inverses, linear programming, the definition of a radian and how many radians are in a circle.

**8:15 am - 9:45 am**

**Room: Columbus Hall EF**

Seats: 120

ALGEBRA I

**208 Real-world Math with Science and the TI-Nspire™ Family of Handhelds**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes

Linda Antinone, Paschal High School, Fort Worth, TX, USA

Use the Vernier DataQuest™ app for TI-Nspire to collect and analyze data with the TI-Nspire™ handhelds. Have an answer to the question, “When will I ever use this?” as you make connections for your students across the science curriculum. Have fun collecting and analyzing real-world data!

**8:15 am - 9:45 am**

**Room: San Francisco**

Seats: 25

TECHNOLOGY  
INTEGRATION

**209 Using the TI-Nspire™ Navigator™ System for Formative Assessment**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System

Jennifer Wilson, Northwest Rankin High School, Flowood, MS, USA

Do your students often nod in agreement while you are teaching, encouraging you to move right along to the next objective...and then you give a test, only to be shocked to find out they didn't really understand? Come explore the question types that you can send through the TI-Nspire™ Navigator™ System...your students can “show work” when solving an equation for  $y$ , create an equation to model an object in an image and drop specified points on a grid. Aggregate data and return to your students to analyze. Come experience the questions as the student and learn to configure the questions as the teacher!

**8:15 am - 9:45 am**

**Room: Burnham**

Seats: 35

CAS

**210 It's Time for Geometry – Now Get Out Your TI-Nspire™ CX CAS Handheld!**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System

Paul Karafiol, Walter Payton College Prep High School, Chicago, IL, USA

Co-Presenter(s): McKendry Marano

Teaching geometry in an all-CAS high school, we discovered that students did more algebra – and more interesting algebra – not less. We'll work through some activities and talk about how having CAS influenced what and how we taught in an Honors Geometry course.

**8:15 am - 9:45 am**

**Room: New Orleans**

Seats: 45

TECHNOLOGY  
INTEGRATION

**211 TI-Nspire™ CX Handheld for Beginners**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld

Tracy Wingert, Le Mars Community High School, Le Mars, IA, USA

So you just opened your new TI-Nspire™ CX handheld and are feeling a bit overwhelmed. In this session explore your new learning tool as we help you navigate your way through the menus and learn how to make it work for you.

**10:00 am - 11:00 am****Room: Columbus Hall KL**

Seats: 140

ALGEBRA I

**212 TI-Nspire™ Technology in the Algebra Classroom***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System**Sandra Hocutt, Allen, TX, USA*

Using the TI-Nspire™ family of handhelds, participants will experience the applications of TI-Nspire™ technology. TI-Nspire™ documents will be sent and collected using the TI-Nspire™ Navigator™ System.

**10:00 am - 11:00 am****Room: Grand Ballroom F**

Seats: 120

TECHNOLOGY  
INTEGRATION**213 Get Nspired in Color with the TI-Nspire™ CX Handheld***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Michelle Bonds, Bald Knob High Schools, Bald Knob, AR, USA*

The TI-Nspire™ CX handheld, released in February of 2011, adds color to your teaching. You don't have to throw away the old activities, just spice them up. Come see how to motivate your students with hands-on, color activities for high school math.

**10:00 am - 11:00 am****Room: Wrigley**

Seats: 80

GENERAL SCIENCE

**214 Hands-on Science – How to Integrate Technology into Every Science Classroom***60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Lab Cradle**Louise Chapman, District Science Office - Volusia County Schools, Deland, FL, USA**Co-Presenter(s): Jackie Bonneau, Judy Day*

Attendees will learn to use sensors and TI-Nspire™ CX handhelds to help integrate technology into science including biology, environmental science and general science classes.

**10:00 am - 11:00 am****Room: Columbian**

Seats: 30

CHEMISTRY

**215 Investigating Sound Waves from a Cork Pop Using the Vernier DataQuest™ App for TI-Nspire Technology***60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle, Other Data Collection Probes**Petra Ryrstedt, Allvar Gullstrand High School, Landskrona, Sweden**Co-Presenter(s): Lars Jakobsson*

We are going to investigate how pressure changes and makes a particular sound; for example, when you open a champagne bottle by using a pressure sensor with a syringe. The syringe represents the bottle and the plunger represents the cork; the sensor measures how the pressure changes over time when you pull the plunger from the syringe. We are going to set up our own experiment and see how you can configure sensors and triggers so you will not miss the actual "pop".

**10:00 am - 11:00 am****Room: Water Tower**

Seats: 50

STATISTICS

**216 Teach AP\* Statistics Next Year – with TI-Nspire™ Teacher Software***60-Minute Lecture/Demonstration • TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**John Mahoney, Benjamin Banneker Academic High School, Bethesda, MD, USA*

Teaching or considering teaching AP\* Statistics? The co-chair of the College Board's AP\* Statistics Development Committee will show you how to improve your teaching of the course through the use of 30 TI-Nspire™ Teacher Software classroom demonstrations that he wrote. The purpose of this session is to help teachers improve their students' understanding of fundamental concepts in AP\* Statistics: an ideal high school capstone mathematics course.

# Session Details

**10:00 am - 11:00 am**

**Room: Field**

Seats: 35

CAS

**217 More Kilts and CAS**

*60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ CAS Teacher Software*  
*Nevil Hopley, George Watson's College, Edinburgh, United Kingdom*

In 2009 I started exploring how to use Computer Algebra Systems (CAS) handhelds to help teach mathematics in Scotland. My first 18 months' experiences were shared at the 2011 T<sup>3</sup>™ International Conference, in my session titled "Kilts and CAS". A video of that session and all its resources can be downloaded from [www.calculatorsoftware.co.uk/cas](http://www.calculatorsoftware.co.uk/cas). "More Kilts and CAS" gives an update from the last 12 months, more activities I've designed and more lessons both my students and I have learned. No students' algebraic skills were harmed in the development of this session – quite the opposite, in fact.

**10:00 am - 11:00 am**

**Room: Buckingham**

Seats: 30

BIOLOGY

**219 UV (You've) Got to be Cautious When it Comes to Your Health!!**

*60-Minute Hands-On • TI-Nspire™ with Touchpad Handheld, TI-Nspire™ Teacher Software, TI-Nspire™ Lab Cradle*  
*Rob Adams, Franklin Heights High School, Columbus, OH, USA*

Introductory Biology and Anatomy labs using Vernier Software & Technology™ UVA, UVB and EKG sensors with the TI-Nspire™ handheld with Touchpad and TI-Nspire™ Lab Cradle. We will test the amount of UVA and UVB penetration through various SPF sunscreens as well as clothing, windows and water. With the EKG sensor we will determine the electrical activity of the heart at rest and immediately following exercise. These hands-on demonstrations will require us to be inside and outside, so wear comfortable clothing!

**10:00 am - 11:00 am**

**Room: Columbus Hall CD**

Seats: 120

ALGEBRA I

**220 Grant-inspired Algebra Activities Using the TI-Nspire™ CX Handheld and the TI-Nspire™ CX Navigator™ System**

*60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System*  
*Marsha Guntharp, Palm Beach Atlantic University, West Palm Beach, FL, USA*  
*Co-Presenter(s): Melissa Lucas*

Using activities developed using Japanese Lesson Study under a collaborative grant with a college algebra class and a middle grades honors algebra class, we will explore algebra concepts. In this session, we will use the TI-Nspire™ CX handheld and the TI-Nspire™ CX Navigator™ System, which were also used in developing the activities. We will also share some comments written by students in their journals/discussions.

**10:00 am - 11:00 am**

**Room: Gold Coast**

Seats: 50

STATISTICS

**221 Statistical Simulations Using the TI-Nspire™ Family of Handhelds**

*60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software*  
*Stella Dudzic, Mathematics in Education and Industry, Skipton, United Kingdom*

Experiments can help students understand statistical concepts but throwing dice is boring and time consuming. Learn how programs and interactive notes pages on the TI-Nspire™ family of handhelds can help you set up simple simulations which will automatically collect data and help students see what happens and how much it can vary.

**10:00 am - 11:00 am**

**Room: Columbus Hall H**

Seats: 40

ALGEBRA I

**222 Connective Constructions: Problem Solving with the TI-Nspire™ Family of Handhelds – Linking Algebra, Geometry and Calculus**

*60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld*  
*Tom Button, Mathematics in Education and Industry, Trowbridge, United Kingdom*

Setting students' construction problems to solve using a combination of algebra and geometry can emphasize the connections between geometry and algebra, improve students' abilities to think mathematically in a way that is not constrained by a particular part of the curriculum, and improve their mathematical reasoning skills by constructing objects within certain constraints. A variety of these problems will be demonstrated, including some calculus-based ones. The session includes the opportunity to try some of the problems followed by a short discussion regarding classroom use.

**10:00 am - 11:00 am****Room: Regency B**

Seats: 100

GENERAL MATH

**224 Creating a Community of Inquiry in the Mathematics Classroom with the TI-Nspire™ Navigator™ System**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-Navigator™ Classroom Learning System

David Wright, Newcastle University UK, Newcastle Upon Tyne, United Kingdom

Co-Presenter(s): Jonathan Powell

How do you approach your learners' mathematical misconceptions? We believe they create great opportunities for learning through the creation of a community of inquiry in the mathematics classroom. The TI-Nspire™ Navigator™ System is a powerful tool for collecting whole class responses to questions, revealing the true extent of learners' understanding of mathematical concepts and acts as an amplifier in the assessment/feedback loop which is at the heart of teaching and learning. This session reports on a project which uses the TI-Nspire™ Navigator™ System to create a community of inquiry through opportunities for discussion and learning around common mathematical misconceptions.

**10:00 am - 11:00 am****Room: Soldier Field**

Seats: 30

STATISTICS

**225 Using Math Nspired Statistics Activities in an AP® or CP Statistics Class**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software

Lee Kucera, Laguna Beach, CA, USA

Use several of the new Math Nspired activities for statistics. We will look at three activities from the over 40 available online: Effective Blocking, Central Limit Theorem and Chi-Square Create. The session includes a brief look at using Math Nspired activities with the TI-Nspire™ CX Navigator™ System, the PublishView™ feature and document player.

**10:00 am - 11:00 am****Room: Grand Ballroom D**

Seats: 40

GENERAL INTEREST

**226 Using a Flip Camera to Improve Instruction**

60-Minute Hands-On

Diann Skelton, Paragould Junior High School, Paragould, AR, USA

By using a flip camera and recording your teaching, you can learn many things about your teaching style while assessing your strengths and weaknesses. You can learn if you have to ask open-ended questions, pause between questioning, or if you rely on front-row students. Learn where you position yourself as you are teaching as well as if the students are on task. This workshop is very beneficial to any teacher wanting to become National Board Certified.

**10:00 am - 11:00 am****Room: Crystal Ballroom C**

Seats: 50

GEOMETRY

**227 Classical Geometric Constructions Using the TI-Nspire™ CX Handheld**

60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System

Stej Sanchez, TI MathForward™, Garland, TX, USA

State end of course exams that assess geometric constructions are becoming more and more popular these days. Join us as participants use the TI-Nspire™ CX handheld to explore classical geometric constructions and problem applications.

**10:00 am - 11:00 am****Room: McCormick**

Seats: 35

CAS

**229 Second-year Algebra with CAS: Teaching, Learning and Assessment**

60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CAS Teacher Software, TI-89 Titanium Graphing Calculator

Michael Buescher, Hathaway Brown School, Shaker Heights, OH, USA

When your calculator can simplify expressions, factor polynomials and answer nearly any question in a traditional Algebra 2 class, what's left to teach? Plenty! And your course can be more rigorous, more interesting and more connected to the world outside the classroom. A glimpse into how mathematics teaching, learning and assessment will change, featuring the TI-89 Titanium graphing calculator, TI-Nspire™ CAS handhelds, and examples of student work compiled over a dozen years of teaching with Computer Algebra Systems.

# Session Details

<p><b>10:00 am - 11:00 am</b>  <b>Room: Grand Ballroom A</b>  <i>Seats: 120</i>            ASSESSMENT</p>	<p><b>230 Inquiry-based Learning Using the TI-Navigator™ Classroom Learning System and TI-84 Plus Graphing Calculator</b>  <i>60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System</i>  <i>Vicki Mixon, Georgia Department of Education, Ailey, GA, USA</i></p> <p>Students who do mathematics, rather than just see and hear instruction, have a significantly greater chance of understanding and applying the mathematics. Using Formative Assessment Lessons (FALs) and the TI-Navigator™ classroom learning system, students will be actively involved in their acquisition of knowledge, from bell to bell.</p>
<p><b>10:00 am - 11:00 am</b>  <b>Room: Columbus Hall G</b>  <i>Seats: 40</i>            ALGEBRA I</p>	<p><b>231 Solving Systems Using the TI-Nspire™ CX Handheld</b>  <i>60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System</i>  <i>Julie Speelman, Madeira High School, Cincinnati, OH, USA</i></p> <p>This session will examine the three ways of solving systems of equations – graphing, substitution and linear combinations – as well as solving systems of inequalities using the TI-Nspire™ CX handheld and the TI-Nspire™ CX Navigator™ System. The Quick Poll feature in the TI-Nspire™ CX Navigator™ System will be used to assess participant progress. Attendees will participate in the examples and classroom-ready tasks for each method of solving systems of equations as well as solving systems of inequalities. These examples and tasks will be provided to attendees.</p>
<p><b>10:00 am - 11:00 am</b>  <b>Room: Toronto</b>  <i>Seats: 80</i>            ALGEBRA II</p>	<p><b>232 Normal Distributions for High School Statistics Using the TI-Nspire™ Handheld</b>  <i>60-Minute Hands-On • TI-Nspire™ Family of Handhelds</i>  <i>Lisa Conzemius, Detroit Lakes High School, Detroit Lakes, MN, USA</i></p> <p>Participants will learn the features of a normal distribution using the TI-Nspire™ family of handhelds. Participants will learn where and how keys related to this distribution work on TI-Nspire™ handhelds compared to the TI-84 Plus graphing calculator. These ideas can be used in Algebra 2, any statistics class or in AP* Statistics. Participants at all TI-Nspire™ skill levels – including beginning and advanced users – are welcome to attend.</p>
<p><b>10:00 am - 11:00 am</b>  <b>Room: Crystal Ballroom B</b>  <i>Seats: 50</i>            MIDDLE GRADES MATH</p>	<p><b>233 T<sup>^</sup>2 Meets M<sup>^</sup>2: Using the TI-Navigator™ Classroom Learning System and the TI-73 Explorer™ Graphing Calculator to Explore Math in the Movies</b>  <i>60-Minute Hands-On • TI-73 Explorer™ Graphing Calculator, TI-Navigator™ Classroom Learning System, TI-SmartView™ Emulator Software</i>  <i>Melissa Jackson, Monongahela Middle School, Sewell, NJ, USA</i></p> <p>Come explore the use of the TI-Navigator™ classroom learning system and TI-73 Explorer™ graphing calculator as it relates to movies and TV shows that involve math. Linear equations and other math topics come alive with this educational technology and math-related movie clips. Participants will leave with an activity CD that can be readily used in the classroom.</p>
<p><b>10:00 am - 11:00 am</b>  <b>Room: Columbus Hall IJ</b>  <i>Seats: 140</i>            ALGEBRA I</p>	<p><b>234 Pinky Pig and Farmer Faye Use the TI-84 Plus Graphing Calculator to Explore Quadratic Functions</b>  <i>60-Minute Lecture/Demonstration • TI-84 Plus Graphing Calculator Family</i>  <i>Becky Caison, TI MathForward™, Mebane, NC, USA</i></p> <p>Farmer Faye will use the TI-84 Plus graphing calculator to assist in deciding on the best time to sell Pinky Pig while exploring quadratic functions using multiple representations.</p>

**10:00 am - 11:00 am****Room: Ogden**

Seats: 25

GENERAL INTEREST

**235 The Digital Worksheet with the TI-Nspire™ Teacher Software's PublishView™ Feature***60-Minute Hands-On • TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Jim Nakamoto, Richmond, BC, Canada*

Lights! Camera! Action!! The star is the digital worksheet, and it's here! Video links and interactive TI-Nspire™ pages – what more could you want? Secrets will be revealed in a short hands-on introductory session.

**10:00 am - 11:00 am****Room: Grand Ballroom B**

Seats: 40

PROGRAMMING

**236 An Introduction to Easy Programming on TI-83 Plus and TI-84 Plus Graphing Calculators***60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator**Jan Erik Woldmar, Lernia AB, Göteborg, Sweden*

We start for example with a program which can solve the equation  $x^2 + px + q = 0$ . Then we make a program, which is solving the equation.  $Ax^2 + Bx + C = 0$ , by using the first program. So we learn to use 'Input', 'Disp' and many other menus to understand the basics of the applications that are on calculators.

**10:00 am - 11:00 am****Room: San Francisco**

Seats: 25

CALCULUS

**237 Using an TI-84 Plus Graphing Calculator with 2.55MP in an Applied Calculus Course***60-Minute Hands-On • TI-84 Plus Graphing Calculator Family**Don Griffin, Greenville Technical College, Greenville, SC, USA*

In this session learn how the MathPrint™ feature (2.55mp osc) can be applied to do calculus problems. We will look at picking the best model and then model it on the calculator. In addition, we will use some programs to find differences, area under a curve and slopes of secant lines.

**10:00 am - 11:00 am****Room: Hong Kong**

Seats: 30

ALGEBRA II

**238 Analyzing A Card Trick: Uncover the Math Behind the Magic***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-84 Plus Graphing Calculator Family**Sheila Horstman, Clarksville High School, Clarksville, TN, USA**Co-Presenter(s): Liz Salinas*

Attendees will perform a card trick and analyze the functions that allow the magic to appear. Composite functions, step functions and performing iterations will be used to analyze the card trick. TI-Nspire™ handhelds (or any graphing calculator) will be used to visualize the math magic.

**10:00 am - 11:00 am****Room: New Orleans**

Seats: 45

TECHNOLOGY  
INTEGRATION**239 Creating and Using a Blog to Enhance Math and Science Instruction***60-Minute Lecture/Demonstration • TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Bob Mathews, Design Science, Inc., Buda, TX, USA*

Blogs are nothing more than easy-to-update websites, but they can be powerful teaching tools if used properly. We'll go through the steps of creating a free blog, and will see several ways to use it effectively for math and science teaching. Getting students involved not only in the design but also in writing regular posts is one way to get them excited about learning from each other. Bring your laptop and leave the session with a new blog and plenty of ideas. CD provided.

**10:00 am - 11:00 am****Room: Haymarket**

Seats: 24

GEOMETRY

**240 TI-Nspire™ Navigator™ System for Reluctant Geometry Learners***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Jaime Burbano, Oak Park and River Forest High School, Oak Park, IL, USA*

Do you have students who really do not want to learn geometry? By using the TI-Nspire™ family of handhelds and the TI-Nspire™ Navigator™ System, your classroom is transformed into a non-traditional hands-on learning environment. These students are becoming more engaged than ever before. Come take a look at how this change is taking place.

# Session Details

<p><b>10:00 am - 11:00 am</b>  <b>Room: Crystal Ballroom A</b>  <i>Seats: 50</i>            MIDDLE GRADES MATH</p>	<p><b>241 Adapting Successful Lessons from the TI-Nspire™ Navigator™ System to Using the TI-Nspire™ CX Navigator™ System</b>  <i>60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software</i>  <i>Cindy Hunt, Davison CE High School for Girls, Worthing, United Kingdom</i></p> <p>In this hands-on session you will find out how simple lesson ideas have been developed and evolved as you use the TI-Nspire™ Navigator™ System and then the TI-Nspire™ CX Navigator™ System. Explore how lessons can take completely different paths when students are working with technology.</p>
<p><b>10:00 am - 11:00 am</b>  <b>Room: Picasso</b>  <i>Seats: 30</i>            BIOLOGY</p>	<p><b>242 Using the TI-Nspire™ CX Handheld in the Biology Classroom</b>  <i>60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ Lab Cradle</i>  <i>Sharon Cates, Meridian Academy, Meridian, ID, USA</i></p> <p>Plants are an important part of the energy cycle and ecological systems. We will use Vernier Software and Technology™ probes and the TI-Nspire™ CX handheld to investigate CO<sub>2</sub> and O<sub>2</sub> levels in germinating seeds and compare these to growing plants. We will also use the same equipment to compare CO<sub>2</sub> and O<sub>2</sub> levels in your breath under different condition. This group of observations helps students understand the roles of CO<sub>2</sub> and O<sub>2</sub> in plants and animals.</p>
<p><b>10:00 am - 11:00 am</b>  <b>Room: Atlanta</b>  <i>Seats: 30</i>            ALGEBRA II</p>	<p><b>243 Is It Really That Easy to Use Probes for Data Collection?</b>  <i>60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes</i>  <i>Josh Mize, Glenelg High School, Columbia, MD, USA</i>  <i>Co-Presenter(s): Matt Rhodes</i></p> <p>Participants will experience the ease by which they can integrate probes with TI-Nspire™ handhelds to capture real-world data in their Algebra classrooms. This workshop will show examples that will follow linear, quadratic and exponential models (and more).</p>
<p><b>10:00 am - 11:00 am</b>  <b>Room: Addams</b>  <i>Seats: 25</i>            ELEMENTARY MATH</p>	<p><b>244 Learn Your Facts Using the TI-73 Explorer™ Graphing Calculator</b>  <i>60-Minute Hands-On • TI-73 Explorer™ Graphing Calculator, TI-SmartView™ Emulator Software</i>  <i>Dana Dodson, Indiana University Northwest, Gary, IN, USA</i></p> <p>You can open the doors to college for your elementary students when they practice math facts daily. In this session you will receive a program for your TI-73 Explorer™ graphing calculator and then learn how to modify the program to work on addition, subtraction, multiplication or division facts. Current research supports the importance of helping students learn their math facts early. With this program on the TI-73 Explorer™ graphing calculator, your students can practice their math facts daily while you take roll or return homework papers.</p>
<p><b>10:00 am - 11:00 am</b>  <b>Room: Dusable</b>  <i>Seats: 35</i>            CAS</p>	<p><b>245 Yes, Virginia, There Are Ways to Make Appropriate Use of CAS Calculators in Assessment</b>  <i>60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld</i>  <i>Donald Porzio, Illinois Mathematics And Science Academy, Aurora, IL, USA</i></p> <p>How many teachers let their students use calculators in class for exploration, then have them put the calculators away during assessments? In this session, participants will be provided with examples of ways that they can make calculators like the TI-Nspire™ CX CAS handheld an integral part of the assessment process and then work on designing their own such assessments. Key to this process is identifying what is to be assessed and determining the tools students will need to make such assessments possible.</p>

**10:00 am - 11:00 am****Room: Regency C**

Seats: 100

GENERAL MATH

**246 Differentiating Instruction for Low-level Math Students Using the TI-Nspire™ Family of Handhelds***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software**Holly Terrill, Vernon Township High School, Glenwood, NJ, USA*

Participants will have the opportunity to experience TI-Nspire™ handhelds for differentiating instruction. Special emphasis will be placed on low-level students and ways to meet all types of learning styles. Participants will participate in sample activities and will be offered sample lessons.

**10:00 am - 11:00 am****Room: Burnham**

Seats: 35

CAS

**247 Reasoning and Sense Making with CAS Technology***60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS Teacher Software**Al Cuoco, EDC, Newton, MA, USA*

I'll demonstrate some of the examples from the National Council of Teachers of Mathematics' (NCTM) monograph "Reasoning and Sense Making in Algebra".

**10:00 am - 11:00 am****Room: Horner**

Seats: 25

PROGRAMMING

**248 Programming Techniques in Lua Scripting***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software**Fred Fotsch, Glendale High School, Springfield, MO, USA*

This session will quickly review the very basics of writing a LUA script and proceed to the following topics. Responding to handheld events, using graphics and creating custom controls.

**10:00 am - 11:00 am****Room: Regency D**

Seats: 100

GENERAL MATH

**249 Dynamic Connections to Understand Calculus Concepts***60-Minute Lecture/Demonstration • TI-Nspire™ CX Handheld**Omar Hernandez, University of Puerto Rico, San Juan, PR, USA*

Many professional organizations assert that connecting mathematics concepts to other subjects of the curriculum helps students to get a better understanding. However, to achieve this, it is necessary to first master the connections within the mathematics subjects. In this conference, TI-Nspire™ CX handheld capabilities are used to illustrate the connections between concepts of geometry and those of the rest of mathematics. Relations between the properties of triangles and calculus will be illustrated.

**11:15 am - 12:45 pm****Room: Grand Ballroom D**

Seats: 40

PRECALCULUS

**250 Exploring Sequences and Series with the TI-Nspire™ Family of Handhelds***90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds**Richard Parr, Rice University, Houston, TX, USA*

See how TI-Nspire™ handhelds help make the learning of sequences and series more engaging for students. Explore the power of visual representations for sequences and series. Discover how TI-Nspire™ technology can help students make connections with prior learning while laying the groundwork for the study of more advanced mathematics.

**11:15 am - 12:45 pm****Room: New Orleans**

Seats: 45

ASSESSMENT

**251 Nspired JEOPARDY!®***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System**Deobra Solomon, Sparks, NV, USA*

JEOPARDY!® with the TI-Nspire™ family of handhelds has participants working through questions on various topics via TI-Nspire™ technology.

# Session Details

**11:15 am - 12:45 pm**

**Room: Grand Ballroom E**

Seats: 120

MIDDLE GRADES MATH

**252 Math Nspired for Middle Grades: Common Core-based Investigations with Ratios and Proportions**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System

*Irina Lyublinskaya, CUNY College of Staten Island, Staten Island, NY, USA*

In this session, participants will explore several TI-Nspire™-based investigations dealing with the middle grades Common Core State Standards in Mathematics related to the Ratios and Proportions standard. These investigations are part of the Math Nspired resources on [education.ti.com](http://education.ti.com).

**11:15 am - 12:45 pm**

**Room: Crystal Ballroom A**

Seats: 50

MIDDLE GRADES MATH

**253 TI-Nspire™ Technology in the Middle Grades**

90-Minute Hands-On • TI-Nspire™ with Touchpad Handheld, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software

*Julie Dansby, Mann Middle School, Lakewood, WA, USA*

In this session, we will use the TI-Nspire™ handheld with Touchpad to immerse our students in concept development as we scaffold their learning from a middle school basic foundation toward high school algebra. By using the TI-Nspire™ handheld with Touchpad and the TI-Navigator™ classroom learning system, we'll discover some of the benefits of integrating technology into the math classroom in a way that is engaging and educational. Come join the fun and see how a few basic steps make integrating technology into the math classroom possible!

**11:15 am - 12:45 pm**

**Room: Buckingham**

Seats: 30

PHYSICS

**254 Simple Harmonic Motion: Data Collection and Analysis with Vernier Science and Technology™ Probes and the TI-84 Plus Graphing Calculator Family**

90-Minute Lecture/Demonstration • TI-84 Plus Graphing Calculator Family,

Calculator-Based Laboratory 2™ Data Collection Device,

Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes

*Greg Williams, Maury High School, Norfolk, VA, USA*

We will observe and measure quantities of simple harmonic motion: position, velocity, acceleration and force; we'll then determine relationships among them.

**11:15 am - 12:45 pm**

**Room: Picasso**

Seats: 30

PHYSICS

**255 STEM Activities with the TI-Nspire™ CX Handheld**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System

*Marian Prince, Andrews University, Sawyer, MI, USA*

Radio controlled cars operated with a handheld? Nuclear Physics? Two STEM activities show how the TI-Nspire™ CX handheld enhanced with TI-Nspire™ Navigator™ Software make teaching indirect observation and applying critical thinking skills a truly interdisciplinary experience. Beginners welcome!

**12:45 pm - 2:00 pm**

**Room: Dusable**

Seats: 35

CAS

**256 The Ontario CAS Story**

90-Minute Lecture/Demonstration • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld,

TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software

*Tom Steinke, Mother Teresa High School, Ottawa, ON, Canada*

Ontario has embraced Computer Algebra Systems (CAS) in its secondary math curriculum. This session will explore how CAS came to exist in our curriculum and how it is actually being used in Ontario math classes.

**11:15 am - 12:45 pm****Room: Columbus Hall EF**

Seats: 120

ALGEBRA I

**257 Beginning Graphing & Scatterplots on TI-Nspire™ CX Handheld***90-Minute Hands-On • TI-Nspire™ Family of Handhelds**Katie Allard-Martinez, Canyon Crest Academy, Encinitas, CA, USA*

Learn how to graph and manipulate functions on the TI-Nspire™ CX handheld and how to enter data and quickly create scatterplots. This workshop will cover the basics needed to make you comfortable with the graphing aspects of the TI-Nspire™ CX handheld. No prior knowledge of TI-Nspire™ CX handhelds is necessary.

**11:15 am - 12:45 pm****Room: Crystal Ballroom C**

Seats: 50

GEOMETRY

**258 Visualizing Geometry in 3D***90-Minute Lecture/Demonstration • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Øystein Nordvik, Stord/Haugesund University College, Haugesund, Norway*

This lecture will focus on how it is possible with the 2-dimensional TI-Nspire™ CX or TI-Nspire™ CX CAS geometry page to show geometric objects in 3-dimensions. We will construct elliptical sliders and an xy-plane that can be rotated horizontally and vertically by the sliders. The plane will then be used as a base for points, determined by coordinates, to be viewed in 3D. These points will be used to construct other objects, like vectors, lines, planes, pyramids etc. We will see how it is possible to zoom in or out, rotate and view the object from all sides.

**11:15 am - 12:45 pm****Room: Columbus Hall KL**

Seats: 140

ALGEBRA I

**259 Yes, Functions, Equation Solving and Order of Operations in Week One of Algebra 1***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software**Mike Lutz, California State University, Bakersfield, Bakersfield, CA, USA**Co-Presenter(s): Kyle Atkin*

We use "Number Trick" to teach order of operations, complex equation solving, and functions in the first week or two of Algebra 1. We use the TI-Nspire™ Navigator™ System, but any scientific calculator will work as we all magically wind up with the same number. Well, not all of the time.

**11:15 am - 12:45 pm****Room: Acapulco**

Seats: 80

ALGEBRA II

**260 Data Capture for Beginners Using TI-Nspire™ Technology***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System**Jeff Corn, Madeira High School, Cincinnati, OH, USA*

Using rectangles of fixed area or fixed perimeter, we will explore different aspects of these rectangles using the very powerful data capture feature on the TI-Nspire™ family of handhelds. Classroom tested activities and files will be shared.

**11:15 am - 12:45 pm****Room: Horner**

Seats: 25

TECHNOLOGY  
INTEGRATION**261 Intriguing Uses for Active Math Boxes***90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Philip Magner, Peter Johansen High School, Modesto, CA, USA*

Active math boxes can assist your students' understanding of pre-algebra, algebra and geometry. This session will explore the possible uses of sliders and active math boxes in a Notes page. Simple to create and the possibilities are endless.

# Session Details

**11:15 am - 12:45 pm**

**Room: Gold Coast**

Seats: 50

STATISTICS

**262 Create the Central Limit Theorem on the TI-Nspire™ Family of Handhelds**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds

David Scott, Glasgow High School, Newark, DE, USA

Teachers will learn to create a set of data that will make the central limit theorem appear right in front of students. The normal curve will rise out of normal, uniform and even skewed data sets. The teachers will also learn to analyze the relationship between sample size and standard deviation.

**11:15 am - 12:45 pm**

**Room: Addams**

Seats: 25

ELEMENTARY MATH

**263 Using the TI-15 Explorer™ Calculator to Teach Elementary Mathematics Concepts**

90-Minute Hands-On • TI-10 Calculator, TI-15 Explorer™ Calculator

Bill Whitmire, Francis Marion University, Florence, SC, USA

Participants will see how a calculator designed for elementary students will help them develop conceptual understanding of basic mathematics facts as well as overcome the fear of mathematics.

**11:15 am - 12:45 pm**

**Room: Columbus Hall CD**

Seats: 120

ALGEBRA I

**264 “Don’t Leave Home Without Your Camera!”...Be Nspired to Create Models Using the TI-Nspire™ CX Handheld**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software

Sharon Dailey, Park Rapids, MN, USA

This hands-on session will feature documents with inserted pictures used to enhance student interest, promote understanding of mathematics concepts and student engagement in creating mathematical models. TI-Nspire™ Teacher Software will demonstrate how to insert pictures when preparing PublishView™, documents for use in the classroom. The TI-Nspire™ CX Navigator™ System will also be utilized during this session. Feel free to bring a jump drive along to obtain a copy of pictures or documents used in this session.

**12:45 pm - 2:00 pm**

**Room: McCormick**

Seats: 35

CAS

**265 Teacher Deepening Mathematical Learning with CAS: Issues and Ideas**

90-Minute Lecture/Demonstration • TI-Nspire™ CAS Teacher Software, TI-89 Titanium Graphing Calculator

Mike Thomas, The University of Auckland, Auckland, New Zealand

In this session we will consider the crucial role of the teacher in student learning with CAS tools. Research will be used to describe different ways in which CAS has been used in the mathematics classroom and how this use is influenced by teacher pedagogical technology knowledge (PTK). A framework for supporting teacher PTK to promote learning with CAS through epistemic mediation will be presented, along with specific ideas on how CAS use might be employed to deepen students' learning of mathematical constructs.

**11:15 am - 12:45 pm**

**Room: Regency C**

Seats: 100

GENERAL MATH

**267 Making Students Mathematicians**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CAS Teacher Software, TI-84 Plus Graphing Calculator Family

Marty Romero, UCLA, West Covina, CA, USA

See how students become mathematicians by connecting them to mathematics through discovery-based learning, problem-solving/modeling based projects and hand-held technology. Walk away with classroom activities embedding mathematical patterns, linear functions, quadratic functions and other families of functions.

**11:15 am - 12:45 pm****Room: Regency D**

Seats: 100

GENERAL MATH

**268 Best Teaching Practices Using the TI-Nspire™ CX Navigator™ System***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System**Ellen Browne, Pomfret School, Pomfret, CT, USA*

Use the TI-Nspire™ CX Navigator™ System to help implement best practices in the classroom. Start the lesson where the students are, not where you think they are, using documents. Keep everyone engaged using the TI-Presenter™ video interface and Screen Capture feature. Use the aggregate data feature to facilitate understanding and group work. Adjust the lesson on the fly using the Quick Poll feature and know where the students are when they leave using an exit document. Scaffold the lesson using I/we/you and the Quick Poll feature. Increase understanding using action-consequence documents. Save the documents and polls; plan the next lesson around real data.

**11:15 am - 12:45 pm****Room: Water Tower**

Seats: 50

STATISTICS

**269 Nspired Statistics – Exploring Difficult-to-Teach Concepts***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Landy Godbold, The Westminster Schools, Atlanta, GA, USA**Co-Presenter(s): Ray Barton*

During this workshop participants will experience how integrating dynamic pre-made TI-Nspire™ documents and technology into AP\* Statistics classes can develop understanding of tough-to-teach concepts. Univariate and bivariate questions, such as the meaning of the coefficient of determination, what the “10% rule” is all about and why t-statistics are necessary, will be included.

**4:00 pm - 5:30 pm****Room: Addams**

Seats: 125

CAS

**271 CAS: A Perspective from North of the Border***90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ CAS Teacher Software**Dwight Stead, Dufferin-Peel Catholic District School Board Office, Brampton, ON, Canada**Co-Presenter(s): Paul Alves*

Computer Algebra Systems (CAS) have been a part of the Ontario curriculum since 2005. CAS use has evolved over that time and plays primarily three roles: as a tool for patterning; for investigating concepts in the general sense; and as a problem-solving tool. This session will look at how CAS has been integrated into the curriculum in Ontario and what it looks like in the classroom. Activities will be shared that highlight its various uses in a variety of topics. This session is recommended for the intermediate user of the TI-Nspire™ CX CAS handheld.

**11:15 am - 12:45 pm****Room: Grand Ballroom B**

Seats: 25

AUTHORING

**272 TI-Nspire™ Programming Demystified***90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System**Douglas Smeltz, Mathematics Consultant, Westerville, OH, USA*

The purpose of the hands-on workshop is to get an elementary grasp of programming on the TI-Nspire™ CX CAS handheld. We will start basic and build over the two hour period together.

**11:15 am - 12:45 pm****Room: Columbus Hall AB**

Seats: 120

GENERAL INTEREST

**273 Putting a STEM Lesson in Technology***90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, Calculator-Based Laboratory 2™ Data Collection Device, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes**Kathleen McKinley, Office of Teaching and Learning, Lancaster, PA, USA*

What does a STEM lesson look like? Use the TI-84 Plus, Calculator-Based Ranger 2™ data collection device, Calculator-Based Laboratory 2™ data collection device, and light and temperature probes to investigate essential questions which integrate science, technology, engineering and mathematics. Have fun learning activities to motivate and engage students. Activities will simulate real-world phenomenon and transition to analysis and abstraction of foundational concepts.

# Session Details

**11:15 am - 12:45 pm**

**Room: Columbus Hall H**

Seats: 40

ALGEBRA I

**274 Creating YOUR TI-84 Plus Graphing Calculator Classroom – Presentations and Assessment Using TI-SmartView™ Emulator Software, TI-Connect™ Software Application and the LearningCheck™ App!**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™

Margo Mankus, Beacon, NY, USA

Experience how to create your customized classroom using computer software from the TI-84 Plus graphing calculator solution! Use the TI-SmartView™ Emulator Software and the LearningCheck™ app to create assessment questions for the TI-84 Plus graphing calculator and the TI Connect™ Software Application to manage your calculator files!

**12:45 pm - 2:00 pm**

**Room: Field**

Seats: 35

CAS

**275 Computer Algebra Systems in AP<sup>®</sup> Calculus: Challenges and Opportunities**

90-Minute Lecture/Demonstration • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS Teacher Software

Thomas Dick, Oregon State University, Corvallis, OR, USA

Co-Presenter(s): Craig Wright, Vicki Carter

This panel presentation will discuss both the potential and the pitfalls associated with using computer algebra systems (CAS) in Advanced Placement<sup>®</sup> (AP) Calculus. The panelists include: Steve Kokoska, chief reader for AP Calculus; Craig Wright of Educational Testing Service (ETS); Vicki Carter, an AP<sup>®</sup> Calculus Teacher and a member of the AP<sup>®</sup> Calculus Test Development Committee; and Wade Ellis, an author of CAS-based calculus textbooks.

**11:15 am - 12:45 pm**

**Room: Ogden**

Seats: 25

ASSESSMENT

**276 Using Technology to Assess Mathematical Understanding (Without Getting Lost in the Technology)**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System

Craig Russell, University of Illinois Laboratory High School, Urbana, IL, USA

Co-Presenter(s): Max Ray

Students who learn in a technology-rich environment should have the opportunity to be assessed in a technology-rich environment. But managing assessment using TI-Nspire™ handhelds or TI-Nspire™ software can be challenging. We will address questions from “How do I collect work?” to “How do I design for assessment? Is it different than designing for instruction?” Presenters will share a classroom-ready statistics assessment using TI-Nspire™ technology and Microsoft Excel<sup>®</sup>. Technology can be a particularly effective assessment tool for higher-order thinking and problem solving, as you’ll see from these challenging, engaging assessments.

**11:15 am - 12:45 pm**

**Room: Haymarket**

Seats: 24

GEOMETRY

**277 The Depth of the Real Number System and Number Line**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software

Jean McGehee, University of Central Arkansas, Little Rock, AR, USA

Sixth through eighth grades’ treatment of the real number system can be superficial coverage with classifying and plotting activities. Algebra in ninth through twelfth grades calls for a richer treatment connecting geometry to algebra and examining the implications of being in a number subset. This session will start with a hands-on construction activity of a number line and move to the virtual construction on the TI-Nspire™ family of handhelds. Participants will see the value of creating a tns file with notes pages and Cabri<sup>®</sup> pages. By using an Egyptian unit – the palm – teachers will construct rational and irrational numbers as well as products and sums of these numbers.

**11:15 am - 12:45 pm****Room: Grand Ballroom A**

Seats: 120

MIDDLE GRADES MATH

**278 Algebra for Middle School Grades Using the TI-84 Plus Graphing Calculator***90-Minute Hands-On • TI-84 Plus Graphing Calculator Family**Kimberly Felton, Baltimore City Public Schools, Baltimore, MD, USA*

The focus of this session is for participants to study and understand patterns, relations and functions in the middle grades that relate to linear functions, which arise when there is a constant rate of change. Participants use the TI-84 Plus graphing calculator to explore problems in which they use tables and graphs to examine functions and patterns of change.

**11:15 am - 12:45 pm****Room: Toronto**

Seats: 80

ALGEBRA II

**279 Now You Know the Basics of TI-Nspire™ Technology – What's Next?***90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Sherry Everding, Cor Jesu Academy, St. Louis, MO, USA**Co-Presenter(s): Aurelia Weil*

Variables, data-capture, spreadsheets, sliders and animations. Investigate these features and learn how they help students develop a deeper understanding of the symbolic, graphical, numerical, verbal and geometric representations of a problem situation.

**11:15 am - 12:45 pm****Room: Soldier Field**

Seats: 30

STATISTICS

**280 Transformations to Straighten Curved Data Using the TI-84 Plus Graphing Calculator***90-Minute Hands-On • TI-84 Plus Graphing Calculator Family**Gloria Barrett, Virginia Advanced Study Strategies, South Boston, VA, USA*

The AP\* Statistics course description lists "Transformations to achieve linearity: logarithmic and power transformations" as a topic to be covered when exploring bivariate data. This topic can also be incorporated into Precalculus and Algebra 2 courses as students use non-linear functions to model data. In this session, we will look at the mathematics behind these transformations and work through several examples using the TI-84 Plus graphing calculator to make scatterplots, fit regression lines and make residual plots.

**11:15 am - 12:45 pm****Room: Columbus Hall IJ**

Seats: 140

ALGEBRA I

**281 Using Interactive Stations to Get Your Algebra Students Up and Moving Using the TI-84 Plus Graphing Calculator***90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System, TI-SmartView™ Emulator for TI-Nspire™, Calculator-Based Laboratory 2™ Data Collection Device, Calculator-Based Ranger 2™ Data Collection Device**Marcelline Carr, Little Rock School, Little Rock, AR, USA**Co-Presenter(s): Vanessa Cleaver*

This will be an interactive session using the TI-Nspire™ Navigator™ System and the TI-84 Plus graphing handheld that will keep your whole class engaged. We will share activities that are designed to help students be successful in Algebra I and review for the end-of-course test. Participants will rotate stations.

**11:15 am - 12:45 pm****Room: Grand Ballroom F**

Seats: 100

TECHNOLOGY  
INTEGRATION**282 I'm Nspired! Now What...???***90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System**Michelle Goetz, Parkway North High School, Creve Coeur, MO, USA**Co-Presenter(s): Ann Schlemper*

So you have (or want) TI-Nspire™ CX handhelds in your classroom. Now what? Learn from our students! Try some hands-on Math Nspired activities and see how our high school and college-level students responded to these activities in the classroom. Leave not only "Nspired", but also prepared to use these activities in your classroom immediately!

# Session Details

**11:15 am - 12:45 pm**

**Room: Hong Kong**

Seats: 30

ALGEBRA II

**283 Pit Crew Predictions (TI-Nspire™ Family of Handhelds): High-stakes STEM in NASCAR® and Your Classroom**

*90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System, Calculator-Based Ranger 2™ Data Collection Device*

*Jeff Thompson, Ten80 Education, Charlotte, NC, USA*

*Co-Presenter(s): Terri Stripling, Michelle Bonds*

(Model STEM activities for your classrooms) Become a crew chief and make high-stakes, data-driven decisions as part of the Ten80 Student Racing Challenge: NASCAR® STEM Initiative. NASCAR® kicked off its new season just days ago. Using TI-Nspire™ technology and radio control (RC) cars, Ten80's race engineers illustrate how Newton's and Boyle's laws, algebra and calculus drove team's strategies in the first 2012 race. Pay attention! You (as a team – no pressure) will experience the rush of facing a crucial decision that can only be made through real-time applied STEM. With a win, jobs and company's future on the line...what will you do?

**11:15 am - 12:45 pm**

**Room: Wrigley**

Seats: 80

PHYSICS

**284 LEGO® MINDSTORM®, TI-Nspire™ Technology and NASA in the Physics and Math Classroom: A Great STEM Combination**

*90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes*

*Sean Bird, Covenant Christian High School, Indianapolis, IN, USA*

Science, technology, engineering and mathematics come together in an accessible way with LEGO® Education robotic challenges, Vernier Software and Technology™ data-collection sensors and analysis with TI-Nspire™ technology. Learn about projects used in the classroom that help make connections between mathematics and science. Also experience TI-Nspire™ activities that use real-world NASA data designed to Nspire students pursue STEM careers.

**11:15 am - 12:45 pm**

**Room: Columbus Hall G**

Seats: 40

ALGEBRA I

**285 A Picture is Worth 1000 Words...**

*90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software*

*Jill Gough, The Westminster Schools, Atlanta, GA, USA*

*Co-Presenter(s): Sam Gough*

Can we use a photo to inspire learning and interdisciplinary studies? What if we start with photographs from our campus? Can we collaboratively design a lesson or series of lessons around something on our campus to implement together? Bring a digital photo or two, ideas and creativity. In this session, we will brainstorm and prototype together with photos to develop place-based learning lessons.

**11:15 am - 12:45 pm**

**Room: San Francisco**

Seats: 25

TECHNOLOGY  
INTEGRATION

**286 Discussion: Is ITE Educating Mathematics Student Teachers in the Use of Handheld Technology in the Classroom Sufficiently?**

*90-Minute Hands-On*

*Andrina Inglis, University College Plymouth - Marjon, Plymouth, United Kingdom*

Based on my own experiences leading the Professional Graduate Diploma in Education (PGDE) for Secondary Mathematics at the University of Edinburgh, Scotland, and now the Postgraduate Certificate in Education (PGCE) at UCP-Marjon, England, I plan to facilitate a discussion on how Initial Teacher Education (ITE) and mathematics departments in schools can work together to educate student teachers of mathematics and motivate them to use hand-held technology in their practice effectively. Please bring ideas, suggestions, what has worked, what hasn't and potential barriers at all levels so we can learn from each other.

**11:15 am - 12:45 pm****Room: Columbian**

Seats: 30

BIOLOGY

**287 Basic Biology Labs Using TI-Nspire™ Technology for Data Collection***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Lab Cradle, Other Data Collection Probes**Judy Day, North Carolina State University, Raleigh, NC, USA**Co-Presenter(s): Louise Chapman, Patti Smith*

Participants will learn how to use the TI-Nspire™ family of handhelds and TI-Nspire™ Lab Cradle to collect accurate and meaningful data in basic biology labs dealing with respiration, transpiration and enzyme reactions! Handouts of the labs and a discussion of how to change collection variable to increase student comprehension will be included.

**12:45 pm - 2:00 pm****Room: Burnham**

Seats: 35

CAS

**288 CAS: What's Worked for Us in an Algebra 2 Classroom***90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld**Kathy Coskey, Glenbrook South High School, Glenview, IL, USA**Co-Presenter(s): Marianne Kerr*

In our hands-on session, we will share some CAS activities from our years of teaching Algebra 2. This session is for beginners with CAS as well as those with some experience just looking for new classroom activities.

**1:00 pm - 2:00 pm****Room: Columbus Hall KL**

Seats: 140

ALGEBRA I

**289 TI-Nspire™ Technology in the Algebra 1 and 2 Classroom – Best Practice Sharing***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, Calculator-Based Ranger 2™ Data Collection Device**Michael Houston, Riverside High School, Ellwood City, PA, USA*

In this session, we will discuss and demonstrate the usefulness and effectiveness of the TI-Nspire™ family of handhelds and the TI-Nspire™ CX Navigator™ System in Algebra 1 and 2 classrooms. Teaching techniques as well as activities will be shared. Please come with ideas or activities in mind to share with the group!

**1:00 pm - 2:00 pm****Room: Columbus Hall G**

Seats: 40

ALGEBRA I

**290 Have Fun with Patterns, Shapes, Slopes, Transformations and the TI-Nspire™ CX Handheld***60-Minute Hands-On • TI-Nspire™ CX Handheld**Betty Gasque, Charleston, SC, USA*

Explore “real world” images and related activities that you can use to engage students and teach mathematical concepts. We'll explore patterns and shapes found in architecture and nature, slope in real contexts, and algebraic transformations. The TI-Nspire™ CX handheld will be used in the session but all activities are appropriate for the TI-Nspire™ handheld with Touchpad or the TI-Nspire™ handheld with Clickpad.

**1:00 pm - 2:00 pm****Room: Crystal Ballroom B**

Seats: 50

MIDDLE GRADES MATH

**291 Tips, Tricks and Helpful Hints for Users of the TI-Navigator™ Classroom Learning System in the Middle School Classroom***60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator, TI-Navigator™ Classroom Learning System**Susan Riker, TI MathForward™, Kalamazoo, MI, USA*

Have you been using the TI-Navigator™ classroom learning system and want more training? Stuck on how to do something? Need to use more formative assessment in your classroom? Want the system to do more for you? This session will allow participants to go through the process of sending, saving and collecting data from the LearningCheck™ app and the Quick Poll feature, along with helpful hints on managing your students and their information. Bring your questions and concerns! There will be time given for a question and answer period.

# Session Details

**1:00 pm - 2:00 pm**

**Room: Grand Ballroom E**

Seats: 120

GENERAL INTEREST

**292 Grant Writing**

60-Minute Hands-On

*Louise Chapman, District Science Office, Port Orange, FL, USA*

*Co-Presenter(s): Jackie Bonneau, David Young*

This session will focus on funding sources and introduction to grant writing in a changing economic world.

**1:00 pm - 2:00 pm**

**Room: Picasso**

Seats: 30

PHYSICS

**293 Physics at the Playground with TI-Nspire™ Technology**

60-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device

*Cathy Baars, Martinus College, Grootebroek, Netherlands*

This lecture shows one of the results of the European Science Pilot. For this project we did measurements in a playground near our school. With 45 students (ages 16-18) we measured forces, accelerations and speed on swings, slides and seesaws. I will present videos and pictures of the project and the reports of their measurements.

**1:00 pm - 2:00 pm**

**Room: Grand Ballroom D**

Seats: 40

ALGEBRA II

**294 Activities, Apps and Assessments for Algebra with TI-84 Plus and TI-73 Explorer™ Graphing Calculators**

60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator, TI-Navigator™ Classroom Learning System

*Linda Apicella, Waterbury Public Schools, Orange, CT, USA*

Several TI-84 Plus and TI-73 Explorer™ graphing calculator apps and activities for middle grades and high school Algebra will be presented. Handouts will be available. District assessments with the TI-Nspire™ Navigator™ System will be briefly discussed.

**1:00 pm - 2:00 pm**

**Room: Columbian**

Seats: 30

BIOLOGY

**295 Interactive Biology Lessons at Your Fingertips on the TI-Nspire™ CX Handheld**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds

*Peggy Welch, Jessamine Career & Technology Center, Nicholasville, KY, USA*

Two biology TI-Nspire™ CX handheld interactive lessons aligned with Mendelian genetics and enzyme core content standards. These lessons can be used as bell ringers, formative assessments tutorials and much more!

**1:00 pm - 2:00 pm**

**Room: Haymarket**

Seats: 24

GEOMETRY

**296 Introduction to Constructing Geometric Shapes Using the TI-Nspire™ Handheld with Touchpad**

60-Minute Hands-On • TI-Nspire™ with Touchpad Handheld, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ Lab Cradle, TI-SmartView™ Emulator for TI-Nspire™

*Melissa Churchill, Temple High School, Douglasville, GA, USA*

*Co-Presenter(s): Kerry Burross*

The main purpose of this class is to familiarize the user with the location and function of the menu options on the TI-Nspire™ handheld with Touchpad while on a geometry page. Participants will become familiarized with the different constructions needed for various geometric purposes such as midpoints, arcs, angles, bisectors, circles, polygons, lines, segments, transformations and congruencies. They will also explore various measurements such as length, area, slope and angle measurements. Participants will also receive an activating and/or introductory lesson designed to familiarize students to the handheld skills needed during a geometry lesson.

**1:00 pm - 2:00 pm****Room: Columbus Hall EF**

Seats: 120

ALGEBRA I

**297 Teaching Algebra with TI-84 Plus Graphing Calculator Apps***60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™**Irina Lyublinskaya, CUNY College of Staten Island, Staten Island, NY, USA*

Learn what is hidden under the apps button on TI-84 Plus graphing calculator. We will work with several really cool applications for teaching Algebra 1.

**1:00 pm - 2:00 pm****Room: Columbus Hall H**

Seats: 40

ALGEBRA I

**298 Fitting Quadratic Functions to Angry Birds Paths***60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS Teacher Software**Cara Cates, Conway Christian High School, Conway, AR, USA**Co-Presenter(s): Linda Griffith*

Using a free program called Jing®, images from the *Angry Birds* puzzle video game will be captured and imported into the TI-Nspire™ CX and TI-Nspire™ CX CAS handhelds. Quadratic functions will be fitted to the projectile paths using sliders and other methods. The lesson can be extended to precalculus by determining initial velocity and acceleration of the *Angry Bird* character.

**1:00 pm - 2:00 pm****Room: Wrigley**

Seats: 80

GENERAL SCIENCE

**299 "Sensor"ship in the Science and Math Classroom***60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ Lab Cradle, Other Data Collection Probes**Jeff Lukens, Roosevelt High School, Sioux Falls, SD, USA*

OK, what do you think kids like better: collecting their own data or playing with "canned" data? No brainer, right? Data collection has never been easier, cooler or more flexible. Hey, even MATH people can do it! Using data collection probes is a perfect way to integrate science and mathematics! It was meant to be! Come and experience the perfectly pleasurable plethora of probing possibilities!

**10:00 am - 11:00 am****Room: Wright**

Seats: 25

CAS

**300 Guided Discovery and TI-Nspire™ Computer Algebra Systems***60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-89 Titanium Graphing Calculator**Tom Fox, University of Houston Clear Lake, Seabrook, TX, USA*

We'll take a look at Computer Algebra Systems (CAS) on the TI-Nspire™ family of handhelds and how CAS can be used in guided discovery lessons to develop mathematics concepts and procedures in the high school mathematics curriculum. Hands-on experience with one of the lessons will be highlighted. Some issues related to CAS use in the classroom will also be discussed, including evaluation.

**1:00 pm - 2:00 pm****Room: Buckingham**

Seats: 30

PHYSICS

**301 Trajectories in an Artificial Gravity Environment***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CAS Teacher Software**Paul Williams, Red Deer College, Red Deer, AB, Canada*

Space travelers on a long journey in space can benefit greatly from an artificial gravity system. Many texts discuss how this gravity could feel almost the same as on earth. But there are some very interesting consequences to moving in this environment. Use a TI-Nspire™ simulation document to learn about and discover some very interesting trajectories in an artificial gravity environment.

# Session Details

**1:00 pm - 2:00 pm**

**Room: Soldier Field**

Seats: 30

STATISTICS

**302 The NASA-integrated Medical Model; Monte Carlo Methods with the TI-Nspire™ Family of Handhelds**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System

Ray Barton, Olympus High School, Salt Lake City, UT, USA

The Integrated Medical Model (IMM) is a tool for quantifying the probability and consequences of medical risks on the International Space Station. IMM uses Monte Carlo methods to forecast medical outcomes. These forecasts help the Flight Surgeon develop medical support for flight crews. In this session we will use some of these Monte Carlo methods on the TI-Nspire™ family of handhelds.

**1:00 pm - 2:00 pm**

**Room: Columbus Hall CD**

Seats: 120

ALGEBRA I

**303 Lessons Using PowerPoint® Presentation Software to Teach Algebra with the TI-Nspire™ CX CAS Handheld**

60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS Teacher Software

Brendan Kelly, Burlington, ON, Canada

Co-Presenter(s): Fred Ferneyhough

In this session, we will present some of the lessons we've produced using PowerPoint® presentation software to help teachers use the TI-Nspire™ CX CAS handheld to teach Algebra 1. These presentations are interactive lessons that enable teachers to teach the Common Core State Standards for Algebra 1 using TI-Nspire™ CAS technology. Students are taken step-by-step through the development of slope, linear functions, quadratic functions, linear systems, polynomials and other topics using highly motivational animation. Books and DVDs containing all 32 lessons will be given as prizes at this session.

**1:00 pm - 2:00 pm**

**Room: Toronto**

Seats: 80

ALGEBRA II

**304 Angry Birds...Adding Images to Math Functions**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software

Kathleen Sullivan, Robichaud High School, Dearborn Heights, MI, USA

Co-Presenter(s): Claudia Heinrich, Kate Fanelli

*Angry Birds* is the most popular application for cell phones, iPods® and more. Why not use that to engage your students while learning about function families? You can add images to any document and the students won't even know that they are doing math. I will show you several different documents I have created to aid in teaching different function families. This is so fun and easy that my fourth grader can do it and understand the math too. Bring your TI-Nspire™ handheld or a flash drive to start playing games today.

**1:00 pm - 2:00 pm**

**Room: Hong Kong**

Seats: 30

ALGEBRA II

**305 NASA's "Exploring Space Through Math" TI-Nspire™ Activities**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds

Tracy Watson, University of Arkansas at Little Rock, Malvern, AR, USA

Co-Presenter(s): Corey Bobby

Come and explore the activities that NASA offers through its "Exploring Space through Math" education series, which uses TI-Nspire™ technology. See how the activities can spark the interest of your students in mathematics by showing them the connections to exploring space.

**1:00 pm - 2:00 pm**

**Room: New Orleans**

Seats: 45

ASSESSMENT

**306 Turning At-risk Students on to Math Using TI-Nspire™ CX Navigator™ System**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System,

TI-Nspire™ Teacher Software

Kim Zeydel, Meridian Academy, Meridian, ID, USA

Using the TI-Nspire™ CX Navigator™ System is an efficient way to assess and keep students with ADHD, or those who are shy or disengaged, involved in learning algebra. The system's Quick Poll and Screen Capture features will assist you in asking your students questions and getting feedback from them, which in turn guides your instruction. In addition, watch a short video which includes students using the TI-Nspire™ CX Navigator™ System and explaining why they like it, as well as tips for grants.

**1:00 pm - 2:00 pm****Room: Columbus Hall AB**

Seats: 120

TECHNOLOGY  
INTEGRATION**307 Using the Vernier DataQuest™ App for TI-Nspire in the Mathematics Classroom**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle, Other Data Collection Probes  
Neale Woods, Distance Education Centre Victoria, Thornbury, Australia

The DataQuest™ app provides a wealth of opportunity to enrich the mathematics curriculum. In this session, participants will have the opportunity to try a range of Vernier Software & Technology™ probes and sensors with a specific emphasis on mathematics. This session will also include a series of lessons incorporating Camtasia Studio® videos that showcase the DataQuest™ app. Teachers and students can use these videos to experience data collection without relying on using the actual probes and sensors.

**1:00 pm - 2:00 pm****Room: Gold Coast**

Seats: 50

STATISTICS

**308 Using Simulation to Introduce the Central Limit Theorem**

60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-84 Plus Graphing Calculator Family  
Chris True, Southwest High School, Lincoln, NE, USA

In this session, participants will use the TI-84 Plus graphing calculator and the TI-Nspire™ CX CAS handheld to simulate a repeated sampling from a population and investigate the behavior of the sampling distribution of the sample mean.

**1:00 pm - 2:00 pm****Room: Regency B**

Seats: 100

GENERAL MATH

**309 Transition to College Math Projects**

60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System  
Jana Young, Lakeside High School, Hot Springs, AR, USA  
Co-Presenter(s): Corey Bobby

Do you teach a fourth-year math class for college-bound students who are not quite ready for precalculus? We do too! Come learn about some projects and activities we used to engage seniors to help them prepare for the transition to college and to prepare them for college algebra.

**1:00 pm - 2:00 pm****Room: Columbus Hall IJ**

Seats: 140

ALGEBRA I

**310 Collecting Data and Analyze in a Middle School Class**

60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System  
Luong Ho, Olentangy Hyatts Middle School, Powell, OH, USA

Collect data from students and use them to relate to algebra concepts and apply to real-world situations.

**1:00 pm - 2:00 pm****Room: Horner**

Seats: 25

GENERAL INTEREST

**311 Does Surfing the Web Give You the Blues, Brothers? Let Us Help!**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator, TI-Navigator™ Classroom Learning System

Jane Damaske, Saint Joseph, MI, USA  
Co-Presenter(s): Judy Hicks

Have you ever asked yourself, "Where can I find activities for my math class?" or "Where can I find updates for my TI technology?" or "Who should I contact for more training?" You've heard about [education.ti.com](http://education.ti.com), [mathnspired.com](http://mathnspired.com) and [timath.com](http://timath.com), but haven't found your way around in them. This session will give some tips and tricks to navigating the various TI websites and will show you the wealth of information available to you.

# Session Details

**1:00 pm - 2:00 pm**

**Room: Ogden**

Seats: 25

GENERAL INTEREST

**312 Introduction to PublishView™ Documents**

60-Minute Hands-On • TI-Nspire™ Teacher Software

Patricia Brooks, Del Norte High School, San Diego, CA, USA

This session is an introduction to using PublishView™ documents to build student understanding of mathematics. The PublishView™ feature is TI's newest platform which enables educators to create interactive documents that can be published on the web so students can explore math and science concepts. These documents can contain calculations, graphs, geometric figures, tables, notes, data, pictures, videos and hyperlinks. Teachers and students can use ready-made documents or create their own documents to fit their needs. Participants should bring laptops with TI-Nspire™ Teacher Software installed and updated to version 3.02.

**10:00 am - 11:00 am**

**Room: Grand Ballroom E**

Seats: 120

STATISTICS

**313 Nspired Statistics**

60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System

Vicki Carter, West Florence High School, Florence, SC, USA

How do you work with a class of reluctant learners in a high school basic statistics course? The presenter will share some activities that build conceptual understanding with TI-Nspire™ technology and keep the learners engaged in the learning process.

**1:00 pm - 2:00 pm**

**Room: Addams**

Seats: 25

ELEMENTARY MATH

**314 Algebra becomes Art! A Creative Way to Develop Algebraic Concepts with the TI-73 Explorer™ Graphing Calculator and the TI-84 Plus Graphing Calculator**

60-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator, TI-SmartView™ Emulator for TI-Nspire™, TI-SmartView™ Emulator Software

Stuart Moskowitz, Humboldt State University, Bayside, CA, USA

Co-Presenter(s): Calisa Holm

Beginning in sixth grade, the Common Core State Standards For Mathematics requires students to understand linear functions and their graphs. Instead of the graphs being the end result, this activity uses them as a means for creating simple artful designs, motivating students to want to learn and understand how to control parameters such as slope and the y-intercept. Our art can be created with either the TI-73 Explorer™ graphing calculator or the TI-84 Plus graphing calculator.

**1:00 pm - 2:00 pm**

**Room: Crystal Ballroom C**

Seats: 50

GEOMETRY

**315 Crime Scene Investigation: Exploring Similarity the Common Core Way with the TI-Nspire™ Family of Handhelds**

60-Minute Hands-On • TI-Nspire™ CX Handheld

Max Ray, The Math Forum at Drexel University, Philadelphia, PA, USA

Co-Presenter(s): Craig Russell

Most Geometry courses approach the concept of similarity through proof (as in, prove these figures are similar using the AA shortcut). The Common Core State Standards For Mathematics calls for building the concept of similarity through dilation, and then transition students to developing proofs using the traditional shortcuts (AA, SAS, SSS, etc.). This transition from dilation to proof requires new ways of thinking about proof and transformation. Explore how student exploration, supported by TI-Nspire™ technology, can facilitate this transition. We'll use crime scene photos to look deeply at the questions, "How do I know two figures are similar? How are measuring and constructing related?"

**1:00 pm - 2:00 pm**

**Room: Acapulco**

Seats: 80

ALGEBRA II

**316 Essential Skills for Using the TI-Nspire™ Family of Handhelds in the Classroom**

60-Minute Hands-On • TI-Nspire™ Family of Handhelds

Jeff McCalla, St. Mary's Episcopal School, Memphis, TN, USA

One of the authors of *TI-Nspire™ for Dummies* breaks down the essential skills that students use most in the classroom. Come and learn some practical tips and shortcuts that will help save you time and energy. Be more prepared to diagnose problems before they happen.

**1:00 pm - 2:00 pm****Room: Wright**

Seats: 25

ADMINISTRATOR

**317 Our Admin is Behind Us...Yours Can Be Too**

60-Minute Lecture/Demonstration

*Jennifer Mueller, North High School, St. Louis, MO, USA*

Once you are fired up for getting and using the technology you have one last hurdle to jump – budget and implementation! It can be an overwhelming task to finally getting the technology into the classroom. I will share how ONE person can make a difference and can affect a whole department and school.

**1:00 pm - 2:00 pm****Room: Regency D**

Seats: 100

GENERAL MATH

**318 Secondary Mathematics in India: an Anecdotal Comparison with the United States**

60-Minute Lecture/Demonstration

*Mike Cullen, Cedarburg High School, Cedarburg, WI, USA*

Indian mathematics education is highly regarded worldwide. After twenty years of teaching in U.S. urban and suburban schools, I participated in a Fulbright Teaching Exchange. This exchange allowed me to work for one semester as a high school mathematics teacher in India. There were many striking differences between the Indian curriculum, teaching methodologies, implementation of technology and classroom culture when compared to my U.S. experiences. Having now returned home, I have tried to apply the strengths I observed in India in my U.S. classroom. Come hear about my results and also learn how you can take part in similar exchanges.

**1:00 pm - 2:00 pm****Room: Grand Ballroom F**

Seats: 100

TECHNOLOGY  
INTEGRATION**319 Meaningful Learning with Technology**

60-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software

*Michel van Ast, APS, Utrecht, Netherlands*

In this session we're integrating different technologies to create "meaningful learning". We're going to combine TI technology, SMART™ Board interactive whiteboards, Jing® (to create screencasts) and SMART™ Ideas concept-mapping software. But it's not the technology that matters. It's you, the teacher, who can make the difference. So join this session to enlarge your pedagogical knowledge!

**1:00 pm - 2:00 pm****Room: Atlanta**

Seats: 30

ALGEBRA II

**320 Revisiting Zeller's Congruence and the Greatest Integer Function Using TI-Nspire™ CX Handhelds**

60-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CAS Teacher Software

*Juan Manuel Gonzalez, Early College High School @ TAMU, Laredo, TX, USA*

What day of the week were you born? How do you explicitly calculate any term in the Fibonacci Sequence? How do you find areas under the bell-shaped curve? We'll use the TI-Nspire™ CX handheld to explore Zeller's congruence, Binet's theorem and the normal probability density function among others.

**1:00 pm - 2:00 pm****Room: Crystal Ballroom A**

Seats: 50

MIDDLE GRADES MATH

**321 Using Google Maps™ and TI-Nspire™ CX Handhelds to Inspire Your Students**

60-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System

*Chip Voshall, Hartford Middle School, Canton, OH, USA*

This session will demonstrate how to use the TI-Nspire™ CX handhelds in tandem with free web 2.0 resources such as Google Maps™ mapping service to bring your algebra class alive. We will explore topics such as ratios and proportions, slope, y-intercept as well as other algebra topics.

# Session Details

**1:00 pm - 2:00 pm**

**Room: Regency C**

Seats: 100

GENERAL MATH

**322 Data Capture, Rockets and Sleepy Pupils!**

*60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System, TI-Nspire™ Lab Cradle  
Jonathan Powell, St. Thomas More RC High School, Newcastle-Upon-Tyne, United Kingdom*

Working in the “real world” is about solving problems. I will describe how I have been using data capture with a portable data-logging interface, the TI-Nspire™ Lab Station and various sensors to investigate real world scenarios. Examples: using an accelerometer to investigate the effectiveness of crumple zones on cars; using light gates to measure the speed of a rocket powered car; using a Co2 sensor to investigate whether pupils are justified in falling asleep in class!

**1:00 pm - 2:00 pm**

**Room: San Francisco**

Seats: 25

CALCULUS

**323 Integral Versus Area: They Are Not Always the Same**

*60-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software  
Oscar Castrillon, University of Puerto Rico, San Juan, PR, USA*

The intention of this activity is to present a didactic situation to confront the concept of definite integral and the area bounded by the x axis and the graphic of a function. These concepts, as shown in previous investigations, can generate confusion in the students. This activity will help students explore the difference that can exist between the value of the definite integral and the magnitude of the area bounded by this region.

**2:15 pm - 3:45 pm**

**Room: Grand Ballroom E**

Seats: 120

GENERAL INTEREST

**324 The Common Core Comes to the TI-Nspire™ Classroom: Are We Ready?**

*90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Lab Cradle, Other Data Collection Probes*

*David Young, Fayetteville Public Schools, Fayetteville, AR, USA*

In this session we will examine how the TI-Nspire™ family of handhelds supports our implementation of the Common Core State Standards for Mathematics and the coming standards for science. What will the power of TI-Nspire™ technology bring to the table as we start our quest? See, discuss and conjecture with your peers.

**2:15 pm - 3:45 pm**

**Room: Horner**

Seats: 25

ASSESSMENT

**325 TI-Nspire™ Navigator™ System Test Drive**

*90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software*

*Randy Lobe, Timberline High School, Lacey, WA, USA*

*Co-Presenter(s): Corey Boby*

You’ve seen the TI-Nspire™ Navigator™ System in action in other sessions. Now come and take the system for a “test drive”. This session will allow you to get behind the computer and learn the skills necessary to teach with the TI-Nspire™ Navigator™ System in your own classroom. We will explore managing classes, assessment techniques and classroom activities.

**2:15 pm - 3:45 pm**

**Room: Regency D**

Seats: 100

CALCULUS

**326 Modeling Derivatives with Simple Harmonic Motion Using TI-Nspire™ Technology and Motion Sensors**

*90-Minute Hands-On • TI-Nspire™ with Touchpad Handheld*

*B. Beatriz Pineda, Tec de Monterrey, Toluca, Edomex, Mexico*

Hands-on workshop where the participants will model simple harmonic motion using a spring-mass system and relate the derivative at different points with the position, velocity and acceleration vs. time graphs. In this way students learn to interpret the derivative at a point in a context of kinematics.

**2:15 pm - 3:45 pm****Room: Grand Ballroom D**

Seats: 40

PRECALCULUS

**327 Conic Sections from Paper Folding to the TI-Nspire™ Family of Handhelds – a Hands-on Experience***90-Minute Hands-On • TI-Nspire™ Family of Handhelds**Art Mabbott, Seattle Public Schools, Woodinville, WA, USA*

Come join us as we build each of the conic sections by paper folding and then mirroring the same moves on the TI-Nspire™ family of handhelds to see a beautiful connection between geometry and algebra.

**2:15 pm - 3:45 pm****Room: Columbus Hall EF**

Seats: 120

ALGEBRA I

**328 Activities to Promote Algebraic Understanding for the At-risk Learner**

*90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ Teacher Software, TI-84 Plus Graphing Calculator Family*

*Gail Standiford, Fairfield High School, Fairfield, CA, USA*

In this hands-on workshop, participants will use graphing technology to gather data to create mathematical models. They will use these models to make predictions. These activities are geared toward engaging the at-risk learner and address many of the new Common Core State Standards for Mathematics.

**2:15 pm - 3:45 pm****Room: Dusable**

Seats: 35

CAS

**329 Rich Problems with Nspiring CAS Solutions***90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld**John Hanna, Hopatcong, NJ, USA*

When used strategically, Computer Algebra Systems (CAS) contribute a unique opportunity to discuss solutions to some intriguing problems. We'll look at a few rich problems in the context of the TI-Nspire™ CX CAS handheld.

**2:15 pm - 3:45 pm****Room: Addams**

Seats: 25

ELEMENTARY MATH

**330 Creative Ways to Use the TI-73 Explorer™ Graphing Calculator in Upper Elementary Classes**

*90-Minute Hands-On • TI-73 Explorer™ Graphing Calculator, TI-SmartView™ Emulator Software, Calculator-Based Ranger 2™ Data Collection Device*

*Kristy Mann, AMSTI-AU, Auburn, AL, USA*

Upper elementary teachers will explore creative ways to teach the mathematical concepts of patterns, coordinate graphing, data collection, statistics and probability using the TI-73 Explorer™ graphing calculator. Participants will investigate topics such as daily data routines, literature connections, seasonal and holiday graphing, Black History Month and the science of trees and leaves. Take home lots of activities to implement in your classroom!

**2:15 pm - 3:45 pm****Room: Regency C**

Seats: 100

GENERAL MATH

**331 Creating Functions and Simple Programs Using TI-Nspire™ Technology**

*90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software*

*Joshua Underdonk, Glen Dale, WV, USA*

Participants will learn how to create dynamic functions and write simple programs using TI-Nspire™ technology to enhance their mathematics classroom. Session participants can use TI-Nspire™ handhelds or bring their laptops with TI-Nspire™ Teacher Software loaded.

# Session Details

**2:15 pm - 3:45 pm**

**Room: Picasso**

Seats: 30

GENERAL SCIENCE

**332 The Time for Inquiry is Now!**

*90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle*

*Greg Dodd, George Washington High School, Charleston, WV, USA*

Research shows that students learn best when they discover. Join me for a hands-on inquiry science activity. Participants will use probes to discover the properties of ingredients in common drinks. The inquiry teaching method will be modeled during this workshop and participants will learn how to implement inquiry into their science program.

**2:15 pm - 3:45 pm**

**Room: Wright**

Seats: 25

ADMINISTRATOR

**333 What's an English Teacher Doing in a Math Classroom?**

*90-Minute Lecture/Demonstration • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CAS Teacher Software*

*Ray Williams, St. Mark's Anglican Community School, Perth, Australia*

This session will outline the integration between Math and English as part of the ARC Discovery Project, "Sustainable Sustainability: Preparing Australia's Future Citizens for Informed Decision-making through Socially Responsible Science Education" (P. Taylor & E. Settlemaier). The key areas of the English curriculum of picture books and poetry analysis were explored in the mathematics classroom with some interesting and unexpected results.

**2:15 pm - 3:45 pm**

**Room: New Orleans**

Seats: 45

PRECALCULUS

**334 Inspiring Formative Assessment with the TI-Nspire™ Navigator™ System**

*90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software*

*Deborah Kula, Sacred Hearts Academy, Honolulu, HI, USA*

You delivered a great lesson. Your students were focused and engaged. But did they get it? How will you know? How will they know? Explore the possibilities for meaningful formative assessment in the precalculus class using the TI-Nspire™ family of handhelds and TI-Nspire™ Navigator™ System.

**4:00 pm - 5:30 pm**

**Room: Haymarket**

Seats: 24

STATISTICS

**335 Type II Error and Power of a Test: Statistics with the TI-84 Plus Graphing Calculator**

*90-Minute Hands-On • TI-84 Plus Graphing Calculator Family*

*Mike Koehler, Blue Valley North High School, Overland Park, KS, USA*

Simulation techniques that enhance the understanding of Type II error and the power of a test will be examined using the TI-84 Plus graphing calculator. Hands-on activities that model effective classroom use of technology will be presented.

**2:15 pm - 3:45 pm**

**Room: Burnham**

Seats: 35

CAS

**337 Using CAS with Struggling Algebra Students**

*90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld*

*Derek Swierczek, Wheeling High School, Wheeling, IL, USA*

*Co-Presenter(s): Ken Indeck*

See how we incorporate Computer Algebra System (CAS) calculators within our Algebra 1 curriculum when teaching struggling students. It IS possible for students to conceptualize algebraic concepts by discovering relationships that are traditionally taught to students. We will show how easy it is for teachers (and students) to begin using a CAS routine and demonstrate how we approach using CAS activities. These activities will be shared with participants, along with time to try them using a class set of TI-Nspire™ CX handhelds. Activities have been carefully planned to fully maximize the use of technology, yet allow students opportunities to be both successful and challenged without becoming CAS-dependent.

**2:15 pm - 3:45 pm****Room: Columbus Hall G**

Seats: 40

ALGEBRA I

**338 Having Fun Teaching the New Common Core State Standards For Mathematics***90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System**Heather Riddle, Granite School District, West Jordan, UT, USA**Co-Presenter(s): Miguel Garcia*

In this session we will present fun and engaging activities that can be done to teach the new Common Core State Standards For Mathematics. Our major focus will be on patterns, functions and statistics. We will also incorporate literature, graphic organizers and vocabulary into some of our activities. Teachers will receive a CD with all of the activities.

**2:15 pm - 3:45 pm****Room: Water Tower**

Seats: 50

STATISTICS

**339 The Common Core State Standards: Making Sense of Data with the TI-Nspire™ CX Handheld***90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System**Gail Burrill, Michigan State University, East Lansing, MI, USA*

Using the TI-Nspire™ CX handheld, students can generate data to investigate the significance of an observation. Is there a difference between men and women with respect to a belief? Were the scores really different? Such questions can engage students in interesting and motivating problems as well as meet one of the statistics standards in the Common Core State Standards For Mathematics. The investigation can enhance student understanding of statistical concepts used to make decisions about important and relevant situations, as well as make connections to other mathematical areas.

**2:15 pm - 3:45 pm****Room: Crystal Ballroom A**

Seats: 50

MIDDLE GRADES MATH

**340 Fun and Games on the TI-73 Explorer™ Graphing Calculator***90-Minute Hands-On • TI-73 Explorer™ Graphing Calculator**Joe Fiedler, CSU Bakersfield, Bakersfield, CA, USA*

Designed from the ground up as a pedagogical device and not a number cruncher, the TI-73 Explorer™ graphing calculator has an outstanding collection of game apps that teach fractions, hand computations and graphing. We will explore these and related apps in a middle grades setting.

**2:15 pm - 3:45 pm****Room: Atlanta**

Seats: 30

CALCULUS

**341 Understanding the Concepts of Integration by Experimenting with Eggs and Using TI-Nspire™ Technology***90-Minute Lecture/Demonstration • TI-Nspire™ CX CAS Handheld**Gertrud Aumayr, University College of Teacher Education Krems and BORG High School St. Poelten, St. Poelten, AUSTRIA*

Help your students gain a deeper understanding of Riemann sums and integration using different experimental methods to determine the volume of an egg. The TI-Nspire™ CX handheld is used for handling the experimental data, for modeling the egg and doing the calculations. Some ideas for additional projects for students are shared, such as: does the toy in a surprise egg fit in the choke test cylinder?

**2:15 pm - 3:45 pm****Room: Crystal Ballroom B**

Seats: 50

MIDDLE GRADES MATH

**342 Using the TI-84 Plus Graphing Calculator in Middle Grades***90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System**Valerie Hudson, TI MathForward™, Colleyville, TX, USA*

Discover engaging activities to use in your middle grades classroom with the TI-84 Plus graphing calculator and TI-Nspire™ Navigator™ System. Teachers will work through various activities and applications which utilize these powerful tools.

# Session Details

**2:15 pm - 3:45 pm**

**Room: Crystal Ballroom C**

Seats: 50

GEOMETRY

**343 Using the TI-Nspire™ CX Handheld for Geometry Proofs**

90-Minute Hands-On • TI-Nspire™ CX Handheld

Matt Almon, Joliet West High School, Joliet, IL, USA

We will take a look at some existing documents that I have used in my classroom to help students understand proofs. Participants will use the TI-Nspire™ CX handheld to prove some general theorems from a high school geometry class.

**2:15 pm - 3:45 pm**

**Room: Regency B**

Seats: 100

GENERAL MATH

**344 TI-Nspire™ Games That Teach Math**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System

Marian Prince, Andrews University, Sawyer, MI, USA

Functions and geometry topics are at the center of these activities that are fun for students to do. Whether you teach high school or middle grades mathematics, you will leave with math games using the TI-Nspire™ CX handheld. The TI-Nspire™ CX Navigator™ System will enhance the presentation. Beginners are welcome.

**2:15 pm - 3:45 pm**

**Room: Grand Ballroom B**

Seats: 40

AUTHORING

**345 Learning Lua and Loving It!**

90-Minute Lecture/Demonstration • TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software

Marc Garneau, District Education Centre, Surrey, BC, Canada

The Lua scripting features of the TI-Nspire™ Teacher Software and TI-Nspire™ CAS Teacher Software create amazingly powerful opportunities for authoring meaningful interactive documents, but with such power comes a new learning curve. Let's take some steepness out of that learning curve and learn how to get started!

**2:15 pm - 3:45 pm**

**Room: Field**

Seats: 35

CAS

**346 Understanding, Learning and Doing Mathematics in CAS-rich Environments**

90-Minute Lecture/Demonstration • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CAS Teacher Software

Kathy Heid, Pennsylvania State University, University Park, PA, USA

Computer Algebra Systems from early CAS handhelds to the TI-Nspire™ CX CAS handheld have provided opportunities for learning that have intrigued teachers and researchers for more than 25 years. Researchers have investigated student use of CAS from beginning algebra through calculus, and have studied what happens as students learn to capitalize on CAS-rich environments. This session will describe results from research and current understandings of how students learn that help us understand CAS technology in today's classrooms. Applications of research and theory to the use of CAS in today's classroom will also be included.

**2:15 pm - 3:45 pm**

**Room: Columbus Hall AB**

Seats: 120

GENERAL INTEREST

**347 Introduction on TI-Nspire™ CX Handheld Technology**

90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX CAS Handheld

Rafael Canales-Pastrana, Inter American University, Bayamon, PR, USA

A first-timer presentation will provide a rapid start up implementing the TI-Nspire™ CX handheld in the classroom. The discussion will be focused on the document-based approach and different operational modes, reinforcing the new capabilities of TI-Nspire™ CX handhelds.

**2:15 pm - 3:45 pm****Room: Columbus Hall CD**

Seats: 120

ALGEBRA I

**348 Expressions and Equations and Equivalence, Oh My! TI-Nspire™ CAS Handhelds as a Learning Tool in Algebra***90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS Teacher Software**Nicole Fonger, Western Michigan University, Kalamazoo, MI, USA**Co-Presenter(s): Mary Lou Rohwer*

Who knew the topics of equations and equivalence could be so fascinating? Join us to engage in some technology-rich activities that were tested in a classroom-based teaching experiment. We will use the latest TI computer algebra systems product, the TI-Nspire™ CAS CX handheld, and focus on two approaches to equivalence and linear equations: (1) developing fluency within and among numeric, graphic, verbal and symbolic representations, and (2) coordinating the symbolic features of CAS and paper-and-pencil techniques. Group discussions and an articulation of lesson design principles will be central to this work session. All are welcome – no prior CAS experience is required.

**2:15 pm - 3:45 pm****Room: Toronto**

Seats: 80

STATISTICS

**349 Data Rules the World: Activities for the Common Core Statistics and Probability Domain***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System,**TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software**Pam O'Brien, Ward Melville High School, East Setauket, NY, USA*

The Common Core State Standards for Mathematics is coming to a math classroom near you! Are you ready? The goal of this session is to provide participants with classroom-ready activities for each of the standards in the Statistics & Probability Domain. Come ready to play! TI-Nspire™ Navigator™ System technology with will be featured in this presentation. Activities may be adapted for the TI-84 Plus graphing calculator.

**2:15 pm - 3:45 pm****Room: Gold Coast**

Seats: 50

STATISTICS

**350 TI-Nspire™ Statistics***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software**Diane Broberg, Allendale Columbia School, Rochester, NY, USA*

Investigate statistics using the TI-Nspire™ family of handhelds. Leave with activities that allow students to understand and synthesize concepts from the AP\* Statistics curriculum.

**2:15 pm - 3:45 pm****Room: Soldier Field**

Seats: 30

STATISTICS

**351 TI-Nspire™ Action-consequence Activities Promote a Deeper Understanding of Topics in Statistics***90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld,**TI-Nspire™ CAS Teacher Software**Krista Cornehl, Academic Magnet High School, Charleston, SC, USA*

This session will explore the use of dynamic TI-Nspire™ Action-Consequence documents in the classroom to enhance student understanding of statistics concepts and reasoning. Topics include distributions and measures of spread.

**2:15 pm - 3:45 pm****Room: San Francisco**

Seats: 25

PRECALCULUS

**352 Who's the Man on the Moon? Exploring Lunar Data.***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-84 Plus Graphing Calculator Family**Sherri Abel, Greenville County Schools, Mauldin, SC, USA*

In this session, participants will be engaged in a hands-on activity: representation of lunar data. Once the data has been analyzed concretely, participants will use the data to determine a best-fit curve. The activity will be presented on the TI-Nspire™ CX handheld technology and the TI-84 Plus family of graphing calculators. Come prepared to learn a lot and have a great time.

# Session Details

**2:15 pm - 3:45 pm**

**Room: Columbus Hall H**

Seats: 40

ALGEBRA I

**353 Exploring Sequences in Pre-Algebra and Algebra 1 with TI-Nspire™ Technology**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software

Beth Smith, Episcopal School of Jacksonville, Jacksonville, FL, USA

So much of math involves patterns! The TI-Nspire™ family of handhelds provides a great opportunity to explore arithmetic, geometric and other types of sequences with our students. Learn how to use a list and spreadsheet page with a data and statistics page to help your students make discoveries. How about a web quest to help them investigate Fibonacci numbers and the golden ratio? Leave with a big picture activity ready to be used in your classroom that addresses the Common Core State Standards For Mathematics.

**2:15 pm - 3:45 pm**

**Room: Haymarket**

Seats: 24

GEOMETRY

**354 Capture the Geometry with the TI-Nspire™ Family of Handhelds**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds

Karen Campe, Yale University, New Canaan, CT, USA

Take your dynamic geometry constructions to the next level by learning to use the data capture feature of the TI-Nspire™ family of handhelds. Gather data sets that can be modeled by linear, quadratic and other common functions. Make connections between geometry and algebra for your students. Take home ready-made lessons and new powerful tools for your geometry class.

**2:15 pm - 3:45 pm**

**Room: Acapulco**

Seats: 80

ALGEBRA II

**355 Algebra II in Motion Using the TI-Nspire™ Family of Handhelds and the Calculator-Based Ranger 2™ Data Collection Device**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, Calculator-Based Ranger 2™ Data Collection Device

Sharon Bruce, Colorado Springs Christian School, Colorado Springs, CO, USA

Take your Algebra 2 and Precalculus students beyond a motion match by having them “walk” parent functions like absolute value, quadratic, exponential, cube root, sine and more. We’ll use the TI-Nspire™ family of handhelds and the Calculator-Based Ranger 2™ data collection device to record our walks. Given time, we’ll also explore the strip chart feature of the Vernier DataQuest™ app to easily collect data of a tossed ball and a swinging pendulum.

**2:15 pm - 3:45 pm**

**Room: Wrigley**

Seats: 80

CHEMISTRY

**356 Boyle’s Law with TI-Nspire™ Technology and Real Gases**

90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ Lab Cradle

Julie Ealy, Penn State University, Center Valley, PA, USA

Participants will use the TI-Nspire™ CX handheld and the TI-Nspire™ handheld with Touchpad with data acquisition involving Boyle’s Law, extensions of Boyle’s Law, and use TI-Nspire™ handhelds as a calculator to solve the equation,  $PV=nRT$ , for real gases.

**2:15 pm - 3:45 pm**

**Room: Columbus Hall IJ**

Seats: 140

ALGEBRA I

**357 Edible Mathematics Using the TI-84 Plus Graphing Handheld**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System, TI-SmartView™ Emulator for TI-Nspire™, Calculator-Based Ranger 2™ Data Collection Device

Vanessa Cleaver, Little Rock School, Little Rock, AR, USA

Co-Presenter(s): Marcelline Carr

Do your students seem bored with math? Are you looking for an engaging yet meaningful activity for them? If so this is the session for you! We will be using the TI-Navigator™ classroom learning system and the TI-84 Plus graphing calculator. This will be an interactive session using food items to deepen your students’ understanding of mathematical concepts. Some of the concepts to be covered include probability, fractions, linear and exponential functions, etc.

**2:15 pm - 3:45 pm****Room: Grand Ballroom F**

Seats: 120

TECHNOLOGY  
INTEGRATION**358 Tips and Tricks to Using the TI-Nspire™ Navigator™ System***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Matt Alonzo, Parkway North High School, Saint Louis, MO, USA*

After three years of using the TI-Navigator™ classroom learning system with the TI-84 Plus graphing calculator, I made the transition to the wireless TI-Nspire™ Navigator™ System. Come see how this technology, along with the TI-Nspire™ CAS Teacher Software, have changed instruction and assessment in my classroom and learn some tips and tricks of using the new system along the way.

**4:00 pm - 5:30 pm****Room: Columbian**

Seats: 30

PHYSICS

**359 TI-Nspire™ Technology and Vernier DataQuest™ App for TI-Nspire: Physics Made Easy***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes**Karlheinz Haas, Marine Oceanographic Academy at Westwood High School, Stuart, FL, USA*

The combination of TI-Nspire™ technology's new operating system with the Vernier DataQuest™ app for TI-Nspire can help maximize class time, providing more opportunities for engaging inquiry and discussion. The workshop will offer ideas to transform the typical teacher-centered classroom by encouraging an approach driven by problem-solving, discovery and exploratory learning. Participants will have an opportunity to experience how the Vernier DataQuest™ app for TI-Nspire allows users to quickly collect and analyze data anywhere. When used with the TI-Nspire™ Lab Cradle, you can use one sensor at a time or multiple sensors simultaneously for lab-based or in-the-field data collection. Several sensors such as force/motion sensors and accelerometers will be available to participants to explore this integrated solution.

**2:15 pm - 3:45 pm****Room: Columbus Hall KL**

Seats: 140

ALGEBRA I

**360 Demystifying the Common Core State Standards with the TI-Nspire™ Family of Handhelds***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ Lab Cradle, Other Data Collection Probes**Matt Rhodes, Saint Albans High School, Saint Albans, WV, USA**Co-Presenter(s): Josh Mize*

Experience how TI-Nspire™ handhelds allow students to gain a deeper understanding of the Common Core State Standards for Algebra 1 and Algebra 2. Participants will experience how TI-Nspire™ handhelds can help the teacher show the “bigger picture” and provide meaning to the students for those topics that have traditionally been difficult to learn (and sometimes teach).

**2:15 pm - 3:45 pm****Room: Ogden**

Seats: 25

ALGEBRA I

**361 Using the PublishView™ Feature as a Tool for Interdisciplinary Lessons in Algebra 1***90-Minute Hands-On • TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Eric Butterbaugh, Pittsburgh, PA, USA*

The TI-Nspire™ Teacher Software's PublishView™ feature offers an engaging and effective environment for interdisciplinary lessons. In this session, we'll use the PublishView™ feature to explore the declining size and frequency of ticker-tape parades in New York City. Using data from the NYC Department of Sanitation, we'll analyze the amount confetti thrown during various parades throughout the twentieth century. After performing a linear regression, students will learn how to interpret this mathematical model in the context of twentieth-century history. Interactive PublishView™ features such as spreadsheets, graphs, images and video will bring the data – and the history – to life!

# Session Details

**2:15 pm - 3:45 pm**

**Room: McCormick**

Seats: 35

CAS

**362 Using CAS to Promote Discovery in Algebra 2**

*90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld*

*Jon Lepeska, New Trier High School, Winnetka, IL, USA*

*Co-Presenter(s): Jenny Wexler*

Learn how we use the TI-Nspire™ CX CAS and TI-Nspire™ CAS with Touchpad handhelds to foster student independence, build questioning skills and facilitate intellectual risk-taking in our Algebra 2 classroom. Participants will work through student-tested examples and walk away with ready-to-use activities. Topics will include properties of exponents and logarithms, function notation, solving equations, simplifying radicals, imaginary numbers and applications.

**2:15 pm - 3:45 pm**

**Room: Buckingham**

Seats: 30

CHEMISTRY

**363 Data Analysis for Chemistry Using the TI-Nspire™ CX CAS Handheld and the Vernier DataQuest™ App for TI-Nspire**

*90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS Teacher Software, Other Data Collection Probes*

*Patti Smith, Leonard, MI, USA*

In this hands-on workshop you will learn how to collect and analyze data using the TI-Nspire™ CX CAS handheld, the Vernier DataQuest™ app and Vernier Software & Technology™ sensors. Experience how simple substances, like Alka-Seltzer®, can be used to explore concepts such as energy transfer, heat of reaction, limiting reagents and even gas laws. By participating, you will see how fundamental chemistry labs can be quickly preformed and analyzed offering more time for individual or group investigations that further explore these critical chemistry concepts.

**2:15 pm - 3:45 pm**

**Room: Grand Ballroom A**

Seats: 120

GENERAL INTEREST

**364 Discovering Algebra Concepts Using TI-Nspire™ Technology**

*90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ Teacher Software*

*Edward DePeau, Central Connecticut State University, Glastonbury, CT, USA*

This hands-on workshop is designed for beginning and intermediate TI-Nspire™ users. Participants will explore and create activities used to discover mathematical ideas in an Algebra 1 or Algebra 2 classroom. Some focus will be given to Mathematical Modeling.

**4:00 pm - 5:30 pm**

**Room: Columbus Hall IJ**

Seats: 140

ALGEBRA I

**366 An Nspired Approach to Illuminating the Common Core State Standards for Mathematics in Algebra**

*90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software*

*Linda Griffith, Department of Mathematics - University of Central Arkansas, Quitman, AR, USA*

*Co-Presenter(s): Jean McGehee*

The NCTM Illuminations website is a valuable resource for lessons that promote the implementation of the Common Core State Standards for Mathematics. Many of these lessons have applets for which parallel Nspire action-consequence documents could be developed. The Light-It-Up Illuminations lesson will be used as an example in the session.

**4:00 pm - 5:30 pm**

**Room: Soldier Field**

Seats: 30

STATISTICS

**367 Data Collection and Analysis Using the TI-Nspire™ Navigator™ System**

*90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software*

*Kenneth Ray Fox, John Overton High School, Nashville, TN, USA*

We will use the TI-Nspire™ CX Navigator™ System to collect data from students, aggregate and send to students for statistical analysis. This brings real-world data from the students into the lesson plan.

**4:00 pm - 5:30 pm****Room: Regency C**

Seats: 100

GENERAL MATH

**368 Using the TI-Nspire™ Navigator™ System in the Math Classroom**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software  
Michelle Bonds, Bald Knob High School, Bald Knob, AR, USA

Come take part in a beginner's session on utilizing the TI-Nspire™ Navigator™ System and how to do so effectively in the classroom. Explore the basic functions of the TI-Nspire™ Navigator™ System (software and hardware) including troubleshooting tips. No experience necessary.

**4:00 pm - 5:30 pm****Room: McCormick**

Seats: 35

CAS

**369 Probability, Polynomials and CAS**

90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CAS with Touchpad Handheld  
Steve Phelps, Madeira High School, Cincinnati, OH, USA

Participants will explore connections between polynomial multiplication, counting outcomes and binomial probabilities made explicit by the TI-Nspire™ CX CAS handheld.

**4:00 pm - 5:30 pm****Room: Dusable**

Seats: 35

CAS

**370 All CAS, All the Time: How Three Schools Adopted the TI-Nspire™ CX CAS Handheld for All Math Courses**

90-Minute Lecture/Demonstration • TI-Nspire™ CX CAS Handheld  
Steven Viktora, New Trier High School, Chicago, IL, USA

Co-Presenter(s): Philip Gartner, Steven Viktora

Three very different high schools made the decision to adopt the TI-Nspire™ CX CAS handheld across all math courses. Find out why and how we made the switch. We'll discuss issues of curriculum, teaching, finances, logistics and public relations; we'll tell you what worked, what surprised us and how we managed.

**4:00 pm - 5:30 pm****Room: Crystal Ballroom A**

Seats: 50

MIDDLE GRADES MATH

**371 Wii™ Play, We Learn**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family  
Nathan Fogg, Liberty Middle School, Elkmont, AL, USA

We have a generation of kids who value electronics and their experiences with them. Come learn how a gaming system, such as the Wii™, can create more interest in your mathematics classes. Through the use of the Wii™, many activities, such as shooting basketball, throwing darts and playing tennis, that once could only be talked about in class, can now be played. Participants will use the Wii™ to collect data and explore probability, finding measures of center, graphing (including box-and-whisker plots and circle graphs) and other areas of mathematics. Gaming experience is not required. TI-83 Plus and TI-84 Plus families of graphing calculators will be used.

**4:00 pm - 5:30 pm****Room: Columbus Hall EF**

Seats: 120

ALGEBRA I

**372 Transforming the Algebras**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System, TI-SmartView™ Emulator for TI-Nspire™

John Ashurst, Harlan County Schools, Baxter, KY, USA

Co-Presenter(s): Kathy Hale

That darn leading coefficient and its followers! Generalizing their power can lead to unexpected student success in the transition from first to second algebra. The TI-84 Plus graphing calculator will be used.

# Session Details

**4:00 pm - 5:30 pm**

**Room: Burnham**

Seats: 35

CAS

**373 Good Problems and Great Practices for CAS in Daily Lessons and High-stakes Tests**

*90-Minute Lecture/Demonstration • TI-Nspire™ CAS with Touchpad Handheld; TI-Nspire™ CAS Teacher Software  
Rose Mary Zbiek, Pennsylvania State University, University Park, PA, USA*

Using the TI-Nspire™ CX CAS handheld or the TI-89 Titanium graphing calculator offers great opportunities for mathematics that might seem to compete with the need to have students do well on high-stakes tests and meet particular standards. Research that involves both classroom practices and student achievement provides ideas about new tasks, variations on familiar tasks and suggestions for classroom practices that help students develop needed skills and insights to do well in all mathematical settings. Examples will be drawn from various topics across the secondary mathematics curriculum.

**4:00 pm - 5:30 pm**

**Room: Toronto**

Seats: 80

ALGEBRA II

**374 Having Fun with Conics**

*90-Minute Hands-On • TI-84 Plus Graphing Calculator Family*

*Elena Acciardo, Brecksville-Broadview Heights High School, Broadview Heights, OH, USA*

Unleash the creative side of your students by creating artwork using conic equations and your graphing calculator.

**2:15 pm - 3:45 pm**

**Room: Columbian**

Seats: 30

CHEMISTRY

**376 Indiana Python and the Temple of Density**

*90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software, Other Data Collection Probes*

*Ray Lesniewski, Jones College Prep, Chicago, IL, USA*

What do Indiana Jones, Monty Python, soda pop and U.S. pennies have in common? They're all used to teach density! Come learn how the TI-Nspire™ CX CAS handheld, TI-Nspire™ CX Navigator™ System and the dual-range force sensor can be used to teach your students about density concepts in a constructivist manner. Participants will engage in several hands-on activities and will also see how videos and simple demos can be used to teach this subject.

**4:00 pm - 5:30 pm**

**Room: Columbus Hall KL**

Seats: 140

ALGEBRA I

**377 Quick Poll with the TI-Nspire™ Navigator™ System is not Just for Formative Assessment**

*90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software*

*Doug Roberts, TI MathForward™, Hilliard, OH, USA*

We will see how you can use the TI-Nspire™ CX Navigator™ System's Quick Poll feature to do other things other than formative assessment questions. We will also show how the TI-Nspire™ Navigator™ System grades steps of student work.

**4:00 pm - 5:30 pm**

**Room: Wright**

Seats: 25

ADMINISTRATOR

**378 Help Administrators Understand the Benefits of Investing in TI-Nspire™ Technology in These Economic Times**

*90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ Lab Cradle, Calculator-Based Laboratory 2™ Data Collection Device, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes*

*Jessica Kachur, Whitnall High School, Milwaukee, WI, USA*

This session will report results of an administrator survey regarding necessary information needed to convince school board members to expend limited funds on technology in these tough economic times.

**4:00 pm - 5:30 pm****Room: Grand Ballroom D**

Seats: 40

GEOMETRY

**379 The Forgotten App – Cabri™ Jr. on the TI-84 Plus Graphing Calculator***90-Minute Hands-On • TI-84 Plus Graphing Calculator Family**Bill Caroscio, Elmira, NY, USA*

Cabri™ Jr. is a FREE interactive geometry environment available for the TI-84 Plus graphing calculator. This session will allow participants to explore its use and potential for their classroom.

**4:00 pm - 5:30 pm****Room: Regency B**

Seats: 100

GENERAL MATH

**380 Assessing Students' Understanding (Not Button Pushing) Using the TI-Nspire™ Navigator™ System***90-Minute Hands-On • TI-Nspire™ CX CAS Handheld, TI-Nspire™ Navigator™ System**Patsy Fagan, Des Moines, IA, USA*

Ways of assessing students' understanding of an intended concept have changed with interactive handheld technology and the TI-Nspire™ Navigator™ System. A big question is how to be sure that you are assessing students' understanding of the intended concept and not just how well they can push buttons? This is especially true when using multiple choice questions; how do you be sure that students are using the intended mathematics and not "guessing and checking" each option? Alternative questioning techniques and ways to assess interactively with the TI-Nspire™ Navigator™ System will be discussed.

**4:00 pm - 5:30 pm****Room: Grand Ballroom B**

Seats: 40

PROGRAMMING

**381 Introduction to "Writing Code" to Program the TI-Nspire™ Family of Handhelds***90-Minute Hands-On • TI-Nspire™ Family of Handhelds**Becky Underwood, Kelly Walsh High School, Casper, WY, USA**Co-Presenter(s): Becky Byer*

Have you thought, "I have new TI-Nspire™ handhelds in my classroom but I cannot run my TI-84 Plus graphing calculator programs – now what?" Or, "The TI-Nspire™ features are awesome but sometimes an old program would still work the best." In this session you will learn how to re-write your own programs for TI-Nspire™ handhelds and learn to implement TI-Nspire™ features into your programs. Past programming experience would be helpful but not required.

**4:00 pm - 5:30 pm****Room: Water Tower**

Seats: 50

STATISTICS

**382 Chi-Square and the TI-Nspire™ Family of Handhelds for AP\* Statistics***90-Minute Hands-On • TI-Nspire™ Family of Handhelds**Lisa Conzemius, Detroit Lakes High School, Detroit Lakes, MN, USA*

Participants will learn about the chi-square distribution and how to use the TI-Nspire™ family of handhelds to work with the chi-square distribution. This was one of my biggest challenges my first year I used TI-Nspire™ handhelds in AP\* Statistics. Come practice so you will have a good background. This session can be attended by participants of any level of experience with TI-Nspire™ handhelds. Beginners are welcome as well as advanced users.

**4:00 pm - 5:30 pm****Room: Acapulco**

Seats: 80

ALGEBRA II

**383 Exponential vs. Logistic: Using TI-Nspire™ Technology to Develop Mathematical Reasoning***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ CAS Teacher Software**Ron Armontrout, Hotchkiss School, Lakeville, CT, USA*

Modeling the spread of disease or the number of locations of Starbucks® stores requires an ability to reason mathematically. Participants will use actual data from Starbucks Corporation to build and defend their mathematical model. Using TI-Nspire™ technology, participants will model the spread of disease and determine the rate of change for the model.

# Session Details

**4:00 pm - 5:30 pm**

**Room: Horner**

Seats: 25

ALGEBRA I

**384 PublishView™ Moves Teaching and Learning Beyond the Classroom**

*90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software*

*Judith Olson, University of Hawaii, Honolulu, HI, USA*

*Co-Presenter(s): Melfried Olson, Fay Zenigami*

TI-Nspire™ Navigator™ Teacher Software's PublishView™ feature offers teachers and students opportunities for continuing the mathematics conversation in several unique ways both in and out of the classroom. Teachers can adapt or create interactive PublishView™ documents to use for whole class discussions or for students to use online with the TI-Nspire™ Document Player. Students can create interactive homework write-ups, work collaboratively or share online with classmates. In this presentation you will experience some of the options that exist for using this tool to engage students in creative ways. Examples of how teachers in a professional development project used PublishView™ documents for teaching algebra will be shared.

**4:00 pm - 5:30 pm**

**Room: Field**

Seats: 35

CAS

**385 Integrating CAS**

*90-Minute Hands-On • TI-Nspire™ Family of Handhelds*

*Chris Harrow, The Westminster Schools, Atlanta, GA, USA*

A TI Computer Algebra System (CAS) has been in the hands of every student in the presenter's classes for the past decade. This workshop explores how mathematics classes can be dramatically enhanced when CAS is an integral, omnipresent tool for learning. Examples from a wide range of Algebra II and Precalculus topics will include, among others, sources from textbooks that recently have incorporated CAS in central and ancillary roles.

**4:00 pm - 5:30 pm**

**Room: Ogden**

Seats: 25

GENERAL MATH

**386 Decreasing Skill Gaps and Increasing Test Performance with the TI-Navigator™ Classroom Learning System**

*90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System*

*Pareesa Shirazi, TI MathForward™, Albuquerque, NM, USA*

Do you want to learn how to quickly collect data? Do you want to use that data to individualize instruction to fill in students' skill gaps? Do you want to increase students' test performance? This presentation will explain how the TI-84 Plus graphing calculator and TI-Navigator™ classroom learning system can help you do all of the above. Teachers will learn how the Study Cards™ app and LearningCheck™ app can provide an effective and manageable way to differentiate, resulting in mastery and higher test performance. Come see how this technology can be used in any math class to meet the needs of all your students.

**4:00 pm - 5:30 pm**

**Room: Columbus Hall G**

Seats: 40

ALGEBRA I

**387 Nspiring without Perspiring**

*90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System*

*Kara Leaman, Glenwood High School, Chatham, IL, USA*

New to TI-Nspire™ technology? Heard about the TI-Nspire™ CX Navigator™ System? See how your classroom can be more cohesive and engaging with these powerful tools without the sweat! The Common Core State Standards For Mathematics makes it clear that teaching for understanding is a primary goal; how can these tools help you? Leave with confidence that getting started isn't going to be a workout!

**4:00 pm - 5:30 pm****Room: Crystal Ballroom B**

Seats: 50

MIDDLE GRADES MATH

**388 Explore Perimeter & Area Using the TI-73 Explorer™ Graphing Calculator's Geoboard App***90-Minute Hands-On • TI-73 Explorer™ Graphing Calculator, TI-SmartView™ Emulator Software**Bridget Coleman, University of South Carolina - Aiken, Aiken, SC, USA*

Use the TI-73 Explorer™ graphing calculator's Geoboard app to construct figures for analyzing perimeter and area. Learn ways to use this to engage your students in higher-level thinking questions involving the construction of different rectangles with a given area and perimeter or the construction of figures where the perimeter and area are the same value. Increase reasoning and creative thinking skills by asking students to design a figure with a specific number of sides that covers a certain fraction of the Geoboard app. Bring your own TI-73 Explorer™ graphing calculator or use one provided. Participants will receive access to problem-solving exercises to use with students.

**4:00 pm - 5:30 pm****Room: Columbus Hall CD**

Seats: 120

ALGEBRA I

**389 Create Dynamic Text on the TI-73 Explorer™ Graphing Calculator and the TI-84 Plus Graphing Calculator with an Activity on Quadratics***90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld,**TI-Nspire™ CX CAS Handheld, TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld**Molly Rockstroh, DePere High School, Depere, WI, USA*

Teachers will learn how to make text appear and disappear based on a given condition. To demonstrate, we will create an activity that allows students to practice generating perfect square trinomials, and the text will tell them if they are correct or not. The activity also involves generating random coefficients. Next we will create an activity that explores the graphs of quadratics, where the text changes to describe the nature of the roots.

**4:00 pm - 5:30 pm****Room: San Francisco**

Seats: 25

PRECALCULUS

**390 Precalculus Nspired – Activities to Inspire Your Precalculus Classroom***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld,**TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System**Bryson Perry, Lafayette High School, Lexington, KY, USA*

Precalculus activities using the TI-Nspire™ CX handheld and TI-Nspire™ Teacher Software version 3.0 will be shared.

**4:00 pm - 5:30 pm****Room: Grand Ballroom A**

Seats: 120

ALGEBRA I

**391 From Patterns to Functions: Developing Slope as a Rate of Change***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld,**TI-Nspire™ with Touchpad Handheld, TI-Nspire™ CAS with Touchpad Handheld, TI-Nspire™ CX Navigator™ System,**TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-84 Plus Graphing Calculator Family**Sherri Abel, Greenville County Schools, Mauldin, SC, USA*

In this hands-on session, participants will write sequences of numbers generated from the creation of diagrams and categorize varying growth patterns of sequences from a variety of representations. This session lays the foundation for arithmetic sequences leading to a conceptual approach to slope. TI-Nspire™ CX handheld and TI-84 Plus graphing calculators will be used. Prepare to have fun!

**4:00 pm - 5:30 pm****Room: Hong Kong**

Seats: 30

ALGEBRA I

**392 Bridging the Gap – From Low Tech to High Tech Data Collection in Math & Science***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software,**TI-84 Plus Graphing Calculator Family, TI-73 Explorer™ Graphing Calculator, TI-89 Titanium Graphing Calculator**Mary Beth Murrell, Great Prairie Area Education Agency, Burlington, IA, USA**Co-Presenter(s): Tami Plein*

The purpose of this session is to connect algebra, geometry and science through both hands-on and calculator/computer data collection. We will revisit a very real bodily kinesthetic inquiry lesson using mirrors. The basic lesson can be done with a TI-84 Plus graphing calculator, but we will also explore how constructing and simulating the activity using TI-Nspire™ technology can deepen our understanding of the math and science.

# Session Details

**4:00 pm - 5:30 pm**

**Room: Columbus Hall AB**

Seats: 120

GENERAL INTEREST

**393 Programming the TI-Nspire™ Handhelds with OS 3.0**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds

Tom Hanson, Thompson Valley High School, Loveland, CO, USA

The participants in this session will program TI-Nspire™ handhelds in the session. They will then learn what needs to be done to make the program the most useful to them on their TI-Nspire™ handheld. Topics will include quadratic formula, area under the curve and geometry functions.

**4:00 pm - 5:30 pm**

**Room: Wrigley**

Seats: 80

MIDDLE GRADES SCIENCE

**394 Data Collection for Middle School Using the TI-73 Explorer™ Graphing Calculator**

90-Minute Hands-On • TI-73 Explorer™ Graphing Calculator, TI-SmartView™ Emulator Software, Calculator-Based Laboratory 2™ Data Collection Device, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes

Tara Windle, Curriculum/Technology, Grove City, OH, USA

Engage your middle school students with interactive lessons that use the TI-73 Explorer™ graphing calculator with CBL™/CBR™ probe technology to collect authentic math/science data and use it to explore challenging and meaningful concepts and analysis.

**8:15 am - 9:45 am**

**Room: Grand Ballroom B**

Seats: 100

TECHNOLOGY  
INTEGRATION

**395 Putting It Together – TI-Nspire™ Technology**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software

Natalie Robinson, Mother Teresa High School, Ottawa, ON, Canada

Co-Presenter(s): Maureen McNeil, Thomas Steinke

We will share how we learned to teach with TI-Nspire™ handhelds, TI-Nspire™ Navigator™ Systems and TI-Nspire™ Teacher Software over the past year. Together these technologies prove to be powerful and effective in helping reach and engage all our students. Come prepared to enjoy some activities and videos of these technologies at work in our classrooms.

**4:00 pm - 5:30 pm**

**Room: New Orleans**

Seats: 45

ASSESSMENT

**396 Windows into Student Thinking**

90-Minute Lecture/Demonstration • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software

Maureen McNeil, Mother Teresa High School, Ottawa, ON, Canada

Co-Presenter(s): Chris Atkinson, Thomas Steinke

Over the past year our school math department has embarked on an exciting journey exploring how technologies like SMART™ Board interactive whiteboards, TI-Nspire™ handhelds and the TI-Nspire™ Navigator™ System can help us gain deeper insight into student thinking. Chris, Tom and I will share our journey of how we collaboratively learned about and integrated these technologies into our practice. We will share how quick poll, screen capture and document cameras have enhanced our formative assessment practices.

**4:00 pm - 5:30 pm**

**Room: Atlanta**

Seats: 30

ALGEBRA II

**397 Windows into Student Thinking Using TI-Nspire™ Navigator™ System**

90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software

Chris Atkinson, Mother Teresa High School, Ottawa, ON, Canada

Come experience wireless connectivity of your TI-Nspire™ handhelds as we look at features such as live presenter, class view, quick poll and wireless file transfers. Combining the TI-Nspire™ Navigator™ System with SMART™ Board interactive whiteboards and the SMART™ document camera has given us a window into student thinking while they are thinking it and not just at the end of unit evaluation. We'll use the latter half of the session to answer how-to questions about setting up a class, creating quick polls or associating cradles/hats. The more hands-on we can be the better. Come be a Canadian student today, eh!

**4:00 pm - 5:30 pm****Room: Picasso**

Seats: 30

CHEMISTRY

**398 Chemistry Activities with TI-Nspire™ Family of Handhelds Using the Vernier™ DataQuest App for TI-Nspire***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Lab Cradle, Other Data Collection Probes**C.W. Eaker, University of Dallas, Irving, TX, USA*

The session will focus on data collection in the chemistry classroom using the Vernier DataQuest™ app on TI-Nspire™ handhelds. Activities will include Endo/Exothermic Reactions, Beer's Law, Boyle's Law and the Evaporation of Alcohols.

**4:00 pm - 5:30 pm****Room: Buckingham**

Seats: 30

GENERAL SCIENCE

**399 Data Analysis for Science Using the Vernier DataQuest™ App for TI-Nspire***90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software, TI-Nspire™ Lab Cradle, Calculator-Based Ranger 2™ Data Collection Device, Other Data Collection Probes**Rob Reniewicki, Arcadia High School, Scottsdale, AZ, USA*

In this session participants will learn how to use the Vernier DataQuest app using TI-Nspire™ CX and TI-Nspire™ CX CAS handhelds. Participants will collect and analyze data using various probe ware.

**4:00 pm - 5:30 pm****Room: Grand Ballroom E**

Seats: 120

PRECALCULUS

**400 Precalculus and Algebra 2 Activities Using TI-Nspire™ CX and TI-Nspire™ CX CAS Handhelds***90-Minute Hands-On • TI-Nspire™ CX Handheld, TI-Nspire™ CX CAS Handheld**Ann Davidian, Gen. Douglas MacArthur High School, Syosset, NY, USA*

Are you looking for some new ideas for your classes? Are you wondering how you can incorporate the Common Core Standards for Mathematical Practice into your lessons? Come and see how TI-Nspire™ CX and TI-Nspire™ CX CAS handhelds can be used to enhance learning in your Precalculus and Algebra 2 classes. When students are truly involved in a lesson, they form a deeper understanding of the material. Experience some hands-on activities to use in your classroom. Learn about materials that are available from TI's Math Nspired website. Receive activities to take home and use with your classes.

**1:00 pm - 2:00 pm****Room: Grand Ballroom A**

Seats: 120

ALGEBRA I

**402 What's New with HMH and TI?***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Navigator™ System, TI-Nspire™ Teacher Software, TI-Nspire™ CAS Teacher Software**Linda Antinone, Paschal High School, Fort Worth, TX, USA*

Come hear about the NEW Houghton Mifflin Harcourt activities utilizing the latest TI-Nspire™ technology. Algebra 1, Geometry and Algebra 2 examples will be previewed along with HMH's "Constructing Meaning" PublishView™ documents.

**4:00 pm - 5:30 pm****Room: Regency D**

Seats: 100

CHEMISTRY

**403 Exploring Heating Curves and Phase Diagrams Using the TI-84 Plus Graphing Calculator Family and the Calculator-Based Laboratory 2™ Data Collection Device and/or Using the TI-Nspire™ with Data Collection***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software, TI-84 Plus Graphing Calculator Family, TI-Nspire™ Lab Cradle, Other Data Collection Probes**Lisa McGaw, Laying the Foundation, Inc., Dallas, TX, USA*

The heating curve and phase diagram lesson will allow teachers the opportunity to graph and analyze three sets of vaporization data and interpret the results by comparison. Participants will then use either the CBL 2™ along with the calculator or the TI-Nspire™ with data collection and temperature probe to generate a heating curve for water. The water will begin well below the freezing point and data will be collected to the boiling point.

# Session Details

**2:15 pm - 3:45 pm**

**Room: Hong Kong**

Seats: 30

ALGEBRA II

**404 Analyzing Function Behavior Using Graphical Displays**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™

Lori Edwards, Laying the Foundation, Dallas, TX, USA

Explore how to incorporate graphical displays with analysis of functions. Through the use of histograms and other graphical displays, learn about the connection between the graph of a function and the univariate display of its function values on a fixed domain. Use the TI-84 graphing calculator to randomly generate values, evaluate the functions, and create histograms and boxplots.

**1:00 pm - 2:00 pm**

**Room: Grand Ballroom B**

Seats: 40

TECHNOLOGY  
INTEGRATION

**406 Utilizing Technology to Increase Student Achievement**

60-Minute Lecture/Demonstration • TI-Nspire™ with Touchpad Handheld

Patrick Flynn, Olathe East High School, Overland Park, KS, USA

Attend to find ways of extending the walls of your classroom. This session will investigate ways of increasing student learning through the use of technology – specifically through the use of social networks (Edmodo), cell phones (flash cards) and the TI-Nspire™ Navigator System.

**4:00 pm - 5:30 pm**

**Room: Grand Ballroom F**

Seats: 120

TECHNOLOGY  
INTEGRATION

**407 Integrating Math Nspired Lessons and Technology Using Common Core Mathematical Practices**

60-Minute Lecture/Demonstration • TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator™ System

Pamela Baker, Fayetteville High School, Fayetteville, AR, USA

Math Nspired activities utilize the power of TI-Nspire™ technology to help students build a deeper understanding of the math concepts that research shows are tough to learn. These activities have been aligned with the Mathematics Common Core State Standards and utilize the eight mathematical practices of the MCCSS. In this session, I will share how Fayetteville High School has integrated Math Nspired lessons in their curriculum. We are now transitioning to TI-Nspire™ CX handhelds, the TI-Nspire™ CX Navigator™ system, and integrating the eight mathematical practices into our curriculum.

**11:15 am - 12:45 pm**

**Room: Wright**

Seats: 25

AUTHORING

**408 Create Assessments Using the LearningCheck™ App and the TI-Navigator™ Classroom Learning System**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-Navigator™ Classroom Learning System, TI-SmartView™ Emulator for TI-Nspire™

Noe Medrano, Cedar Park, TX, USA

Use LearningCheck™ app and the TI-Navigator™ classroom learning system to create meaningful assessments that will challenge your students. Learn how this tool and the Class Analysis feature can assist you and your students to see if they have mastered the content. Create warm-ups, focus questions or guiding questions to use with the lessons, quizzes, tests and tickets out the door. Spend the time analyzing the results and use that information to guide your instruction.

**4:00 pm - 5:30 pm**

**Room: Columbus Hall H**

Seats: 40

GEOMETRY

**409 The Cabri™ Jr. Geometry App is FREE on the TI-84 Plus Graphing Calculator – Why Aren't You Using it?**

90-Minute Hands-On • TI-84 Plus Graphing Calculator Family, TI-SmartView™ Emulator for TI-Nspire™

Dona McSpadden, Fayetteville High School, Fayetteville, AR, USA

Learn how your students can use the Cabri™ Jr. geometry app on their TI-84 Plus graphing calculator. Come get introduced to key app functions and pull-down menus. Experience classroom examples such as constructing figures that retain their properties and more. TI technology incorporated in this hands-on workshop includes the TI-84 Plus graphing calculator, TI-Nspire™ handheld with TI-84 keypad and TI-SmartView™ emulator software. Expect an increase in student involvement and reinforce vocabulary using the Cabri Jr. geometry app.

**1:00 pm - 2:00 pm****Room: Water Tower**

Seats: 50

GENERAL INTEREST

**410 Creating and Interpreting Graphs Using TI-Nspire™ Technology***60-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ Teacher Software**Joy Brokes, Whippany, NJ, USA*

Participants will create bar graphs, dot plots, circle graphs and scatter plots. Once the graphs are created we will spend time interpreting the various graphs and will discuss ways to motivate students to do depth interpretation of graphs. Lines of best fit will be created both manually and by letting the handheld do the work. We will discuss the merit of both methods.

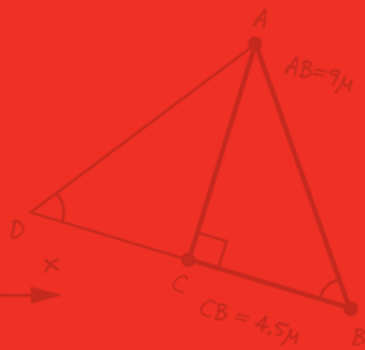
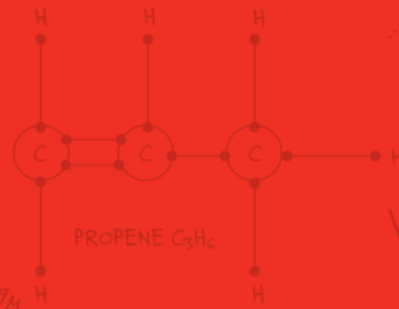
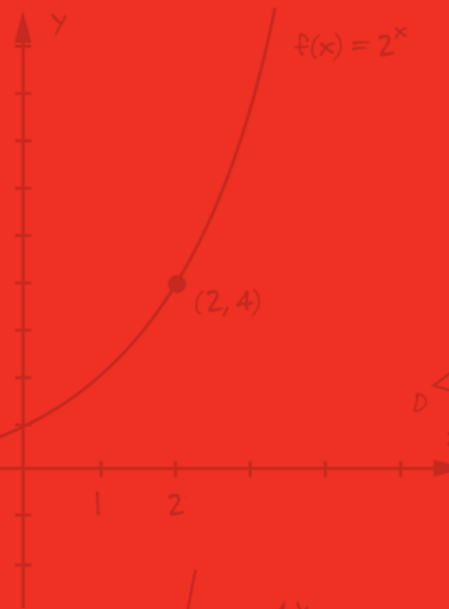
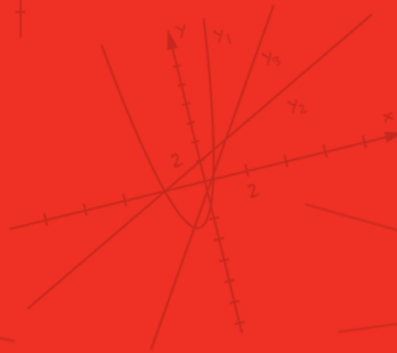
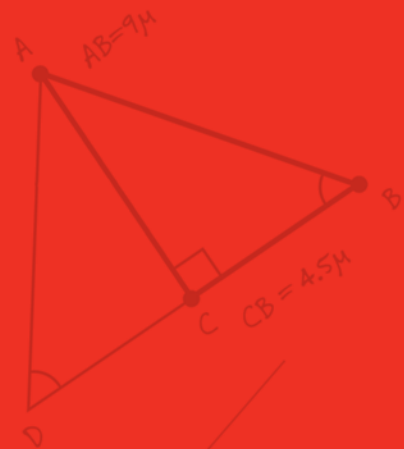
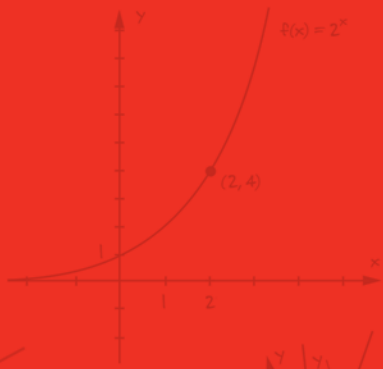
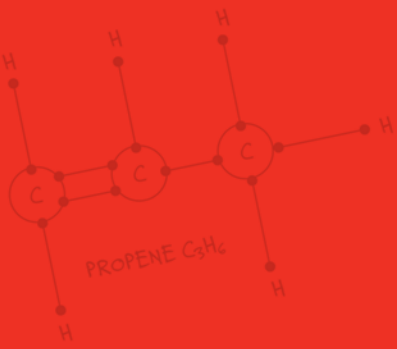
**4:00 pm - 5:30 pm****Room: Crystal Ballroom C**

Seats: 100

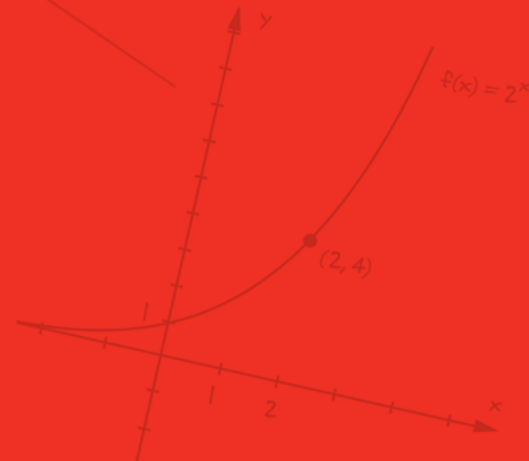
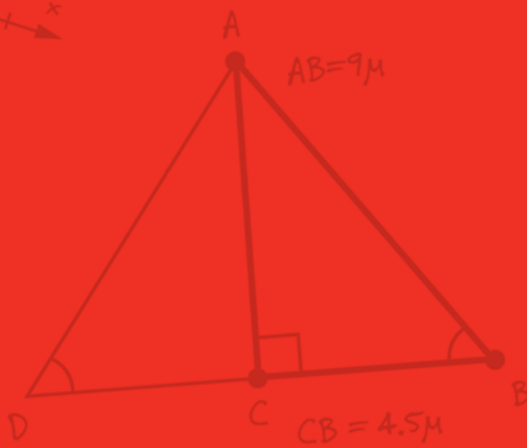
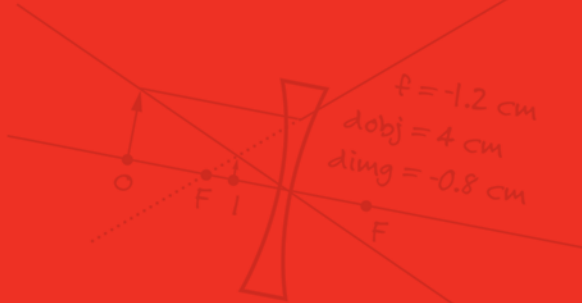
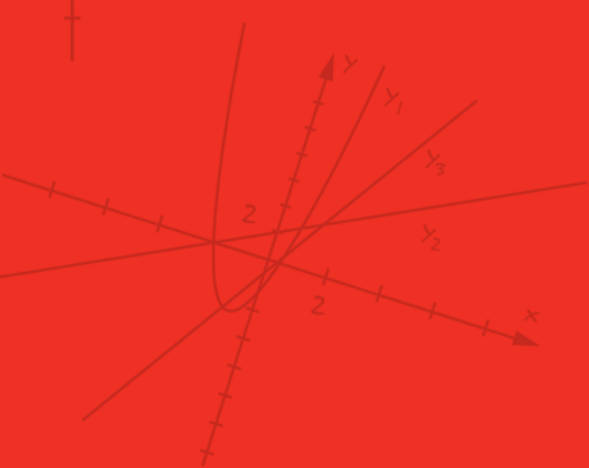
GEOMETRY

**412 Common Core State Standards and Math Nspired***90-Minute Hands-On • TI-Nspire™ Family of Handhelds, TI-Nspire™ CX Handheld, TI-Nspire™ CX Navigator**Ellen Johnston, Fayetteville, AR, USA*

Participants will explore exemplary Math Nspired lessons aligned to Algebra and Geometry High School Common Core State Standards using TI-Nspire™ CX and TI-Nspire™ Navigator™ System. The activities shared will demonstrate how appropriate technology can be used strategically to explore and deepen understanding of math concepts. In addition to hands-on experience with the lessons, teachers will have the opportunity to learn how to identify other Math Nspired lessons to help in the transition to CCSS. They will leave with a multitude of activities and ideas to use in their classroom and gain a better understanding of high school mathematics and the CCSS.



# Presenter Index



# Presenter Index

## A

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Abel	Sherri	Precalculus	352	Saturday	2:15 pm - 3:45 pm	San Francisco
Abel	Sherri	Algebra I	391	Saturday	4:00 pm - 5:30 pm	Grand Ballroom A
Acciardo	Elena	Algebra II	374	Saturday	4:00 pm - 5:30 pm	Toronto
Adams	Rob	Biology	219	Saturday	10:00 am - 11:00 am	Buckingham
Adsit	Lynn	Algebra II	204	Saturday	8:15 am - 9:45 am	Hong Kong
Airhart	Eva	Algebra I	18	Friday	10:15 am - 11:15 am	Columbus Hall EF
Allard-Martinez	Katie	Algebra I	257	Saturday	11:15 am - 12:45 pm	Columbus Hall EF
Allred	Gina	General Math	36	Friday	11:30 am - 1:00 pm	Regency D
Almon	Matt	Geometry	343	Saturday	2:15 pm - 3:45 pm	Crystal Ballroom C
Alonzo	Matt	Technology Integration	358	Saturday	2:15 pm - 3:45 pm	Grand Ballroom F
Alves	Paul	General Math	200	Saturday	8:15 am - 9:45 am	Regency B
Amstutz	Andrew	Algebra II	95	Friday	1:15 pm - 2:15 pm	Toronto
Anderson	Neil	Middle Grades Science	166	Friday	4:15 pm - 5:15 pm	Columbian
Antinone	Linda	Algebra I	208	Saturday	8:15 am - 9:45 am	Columbus Hall EF
Antinone	Linda	Algebra I	402	Saturday	1:00 pm - 2:00 pm	Grand Ballroom A
Apicella	Linda	Administrator	109	Friday	2:30 pm - 4:00 pm	Wright
Apicella	Linda	Algebra II	294	Saturday	1:00 pm - 2:00 pm	Grand Ballroom D
Armontrout	Ron	Algebra II	383	Saturday	4:00 pm - 5:30 pm	Acapulco
Arnold	Steve	Authoring	180	Saturday	11:15 am - 12:45 pm	Regency B
Arnold	Steve	CAS	186	Saturday	8:15 am - 9:45 am	Field
Ashurst	Johnny	Geometry	146	Friday	4:15 pm - 5:15 pm	Field
Ashurst	John	Algebra I	372	Saturday	4:00 pm - 5:30 pm	Columbus Hall EF
Atkin	Kyle	Statistics	10	Friday	10:15 am - 11:15 am	Soldier Field
Atkinson	Chris	Algebra II	397	Saturday	4:00 pm - 5:30 pm	Atlanta
Aumayr	Gertrud	Calculus	341	Saturday	2:15 pm - 3:45 pm	Atlanta
Baars	Cathy	Physics	293	Saturday	1:00 pm - 2:00 pm	Picasso
Baker	Pamela	Technology Integration	407	Saturday	4:00 pm - 5:30 pm	Grand Ballroom F

## B

# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Bambrick	Margaret	Administrator	205	Saturday	8:15 am - 9:45 am	Wright
Barrett	Gloria	Statistics	280	Saturday	11:15 am - 12:45 pm	Soldier Field
Barton	Ray	Statistics	302	Saturday	1:00 pm - 2:00 pm	Soldier Field
Bell	Murney	Algebra II	165	Friday	4:15 pm - 5:15 pm	Acapulco
Bellman	Allan	Algebra I	60	Friday	11:30 am - 1:00 pm	Columbus Hall EF
Bellman	Allan	Assessment	126	Friday	2:30 pm - 4:00 pm	McCormick
Benzing	Andrew	Algebra I	136	Friday	2:30 pm - 4:00 pm	Columbus Hall EF
Beswick	Gloria	Middle Grades Math	160	Friday	4:15 pm - 5:15 pm	Gold Coast
Bevelacqua	Micheal	Algebra I	51	Friday	11:30 am - 1:00 pm	Columbus Hall IJ
Bird	Sean	Physics	284	Saturday	11:15 am - 12:45 pm	Wrigley
Boby	Corey	Assessment	42	Friday	11:30 am - 1:00 pm	Horner
Bonds	Michelle	Technology Integration	213	Saturday	10:00 am - 11:00 am	Grand Ballroom F
Bonds	Michelle	General Math	368	Saturday	4:00 pm - 5:30 pm	Regency C
Bonneau	Jacklyn	General Interest	150	Friday	4:15 pm - 5:15 pm	Crystal Ballroom A
Bonneau	Jacklyn	General Science	176	Saturday	8:15 am - 9:45 am	Picasso
Bourassa	Mary	Algebra II	50	Friday	11:30 am - 1:00 pm	Acapulco
Brese	Mary A.	Assessment	40	Friday	11:30 am - 1:00 pm	McCormick
Brewer	Wallece	Middle Grades Math	107	Friday	2:30 pm - 4:00 pm	Water Tower
Broberg	Diane	Statistics	350	Saturday	2:15 pm - 3:45 pm	Gold Coast
Brokes	Joy	General Interest	410	Saturday	1:00 pm - 2:00 pm	Water Tower
Brooks	Patricia	General Interest	312	Saturday	1:00 pm - 2:00 pm	Ogden
Browne	Ellen	General Math	268	Saturday	11:15 am - 12:45 pm	Regency D
Browning	Christine	Middle Grades Math	38	Friday	11:30 am - 1:00 pm	Water Tower
Bruce	Sharon	Algebra II	355	Saturday	2:15 pm - 3:45 pm	Acapulco
Buescher	Michael	CAS	229	Saturday	10:00 am - 11:00 am	McCormick
Burbano	Jaime	Geometry	240	Saturday	10:00 am - 11:00 am	Haymarket
Burkholder	Marsha	Elementary Math	96	Friday	1:15 pm - 2:15 pm	Addams

# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Burkholder	Marsha	Elementary Math	199	Saturday	8:15 am - 9:45 am	Addams
Burrill	Gail	Statistics	339	Saturday	2:15 pm - 3:45 pm	Water Tower
Butterbaugh	Eric	Algebra I	361	Saturday	2:15 pm - 3:45 pm	Ogden
Button	Tom	Algebra I	222	Saturday	10:00 am - 11:00 am	Columbus Hall H
Byer	Becky	General Interest	154	Friday	4:15 pm - 5:15 pm	Crystal Ballroom B
Cain	Prudie	Algebra I	123	Friday	2:30 pm - 4:00 pm	Columbus Hall IJ
Caison	Becky	Algebra I	234	Saturday	10:00 am - 11:00 am	Columbus Hall IJ
Campe	Karen	Geometry	354	Saturday	2:15 pm - 3:45 pm	Haymarket
Canales-Pastrana	Rafael	General Interest	347	Saturday	2:15 pm - 3:45 pm	Columbus Hall AB
Carlson	Veronica	Algebra I	198	Saturday	8:15 am - 9:45 am	Columbus Hall IJ
Caroscio	Bill	Geometry	379	Saturday	4:00 pm - 5:30 pm	Grand Ballroom D
Carr	Marcelline	Algebra I	281	Saturday	11:15 am - 12:45 pm	Columbus Hall IJ
Carter	Vicki	Calculus	22	Friday	10:15 am - 11:15 am	Atlanta
Carter	Vicki	Statistics	313	Saturday	10:00 am - 11:00 am	Grand Ballroom E
Caruso-Sharpe	Stacey	Middle Grades Math	64	Friday	11:30 am - 1:00 pm	Haymarket
Casey	Patricia	Calculus	69	Friday	11:30 am - 1:00 pm	Atlanta
Casey	Ruth	Middle Grades Math	100	Friday	1:15 pm - 2:15 pm	Water Tower
Castrillon	Oscar	Calculus	323	Saturday	1:00 pm - 2:00 pm	San Francisco
Cates	Sharon	Biology	242	Saturday	10:00 am - 11:00 am	Picasso
Cates	Cara	Algebra I	298	Saturday	1:00 pm - 2:00 pm	Columbus Hall H
Cauffield	Tom	General Science	16	Friday	10:15 am - 11:15 am	Columbian
Chapman	Louise	General Science	214	Saturday	10:00 am - 11:00 am	Wrigley
Chapman	Louise	General Interest	292	Saturday	1:00 pm - 2:00 pm	Grand Ballroom E
Chaves	Edward	Administrator	27	Friday	10:15 am - 11:15 am	Wright
Chirles	Jennifer	General Math	73	Friday	1:15 pm - 2:15 pm	Horner
Churchill	Melissa	Geometry	296	Saturday	1:00 pm - 2:00 pm	Haymarket
Cichocki	Sharon	General Math	4	Friday	10:15 am - 11:15 am	Regency B

# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Cimino	Mike	Middle Grades Science	103	Friday	1:15 pm - 2:15 pm	Columbian
Clark-Wilson	Alison	General Math	149	Friday	4:15 pm - 5:15 pm	Regency B
Cleaver	Vanessa	Algebra I	357	Saturday	2:15 pm - 3:45 pm	Columbus Hall IJ
Cloud	Cory	Algebra II	6	Friday	10:15 am - 11:15 am	Hong Kong
Cockburn	Karen	Algebra I	185	Saturday	8:15 am - 9:45 am	Columbus Hall CD
Coleman	Bridget	Middle Grades Math	388	Saturday	4:00 pm - 5:30 pm	Crystal Ballroom B
Collins	Ken	Calculus	270	Friday	1:15 pm - 2:15 pm	Crystal Ballroom A
Connors	Mary Ann	Technology Integration	88	Friday	1:15 pm - 2:15 pm	San Francisco
Conzemius	Lisa	Algebra II	232	Saturday	10:00 am - 11:00 am	Toronto
Conzemius	Lisa	Statistics	382	Saturday	4:00 pm - 5:30 pm	Water Tower
Corn	Jeff	Algebra II	260	Saturday	11:15 am - 12:45 pm	Acapulco
Cornehl	Krista	Statistics	351	Saturday	2:15 pm - 3:45 pm	Soldier Field
Coskey	Kathy	CAS	288	Saturday	12:45 pm - 2:00 pm	Burnham
Cucci	Audrey	Assessment	153	Friday	4:15 pm - 5:15 pm	McCormick
Cullen	Mike	General Math	318	Saturday	1:00 pm - 2:00 pm	Regency D
Cummins	Jerry	Algebra 1	413	Friday	10:15 am - 11:15 am	Columbus G
Cuoco	Al	CAS	247	Saturday	10:00 am - 11:00 am	Burnham
<b>D</b> Dahan	Jean-Jacques	Geometry	84	Friday	1:15 pm - 2:15 pm	Field
Dailey	Sharon	Algebra I	264	Saturday	11:15 am - 12:45 pm	Columbus Hall CD
Damaske	Jane	General Interest	311	Saturday	1:00 pm - 2:00 pm	Horner
Daniel	Allen	General Science	9	Friday	10:15 am - 11:15 am	Wrigley
Dansby	Julie	Middle Grades Math	253	Saturday	11:15 am - 12:45 pm	Crystal Ballroom A
Davidian	Ann	Precalculus	400	Saturday	4:00 pm - 5:30 pm	Grand Ballroom E
Davis	Sarah	General Math	167	Friday	4:15 pm - 5:15 pm	Ogden
Day	Judy	Biology	68	Friday	11:30 am - 1:00 pm	Buckingham
Day	Judy	Biology	171	Friday	4:15 pm - 5:15 pm	Wrigley
Day	Judy	Biology	287	Saturday	11:15 am - 12:45 pm	Columbian

# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Decovsky	Fred	Geometry	46	Friday	11:30 am - 1:00 pm	Dusable
DePeau	Edward	General Interest	364	Saturday	2:15 pm - 3:45 pm	Grand Ballroom A
DePue	Alissa	Geometry	192	Saturday	8:15 am - 9:45 am	Haymarket
Dick	Thomas	CAS	275	Saturday	12:45 pm - 2:00 pm	Field
Disher	Fan	Algebra II	89	Friday	1:15 pm - 2:15 pm	Hong Kong
Dodd	Greg	General Interest	188	Saturday	8:15 am - 9:45 am	Columbus Hall AB
Dodd	Greg	General Science	332	Saturday	2:15 pm - 3:45 pm	Picasso
Dodson	Dana	Elementary Math	244	Saturday	10:00 am - 11:00 am	Addams
Doty	Vincent	Geometry	172	Saturday	8:15 am - 9:45 am	Crystal Ballroom C
Dudzic	Stella	Statistics	221	Saturday	10:00 am - 11:00 am	Gold Coast
Eaker	C.W.	General Science	193	Saturday	8:15 am - 9:45 am	Wrigley
Eaker	C.W.	Chemistry	398	Saturday	4:00 pm - 5:30 pm	Picasso
Ealy	Jim	Chemistry	26	Friday	10:15 am - 11:15 am	Buckingham
Ealy	Julie	Chemistry	356	Saturday	2:15 pm - 3:45 pm	Wrigley
Edwards	Sheryl	Algebra I	12	Friday	10:15 am - 11:15 am	Columbus Hall CD
Edwards	Lori	Algebra II	404	Saturday	2:15 pm - 3:45 pm	Hong Kong
Ellis	Wade	Technology Integration	113	Friday	2:30 pm - 4:00 pm	Ogden
England	Katie	Technology Integration	57	Friday	11:30 am - 1:00 pm	New Orleans
England	Katie	General Interest	411	Friday	4:14 pm - 5:15 pm	Addams
Everding	Sherry	Algebra II	279	Saturday	11:15 am - 12:45 pm	Toronto
Fagan	Patsy	Administrator	91	Friday	1:15 pm - 2:15 pm	Wright
Fagan	Patsy	General Math	380	Saturday	4:00 pm - 5:30 pm	Regency B
Farahani	Beverly	Algebra II	111	Friday	2:30 pm - 4:00 pm	Hong Kong
Felsager	Bjoern	CAS	194	Saturday	8:15 am - 9:45 am	Horner
Felton	Kimberly	Middle Grades Math	278	Saturday	11:15 am - 12:45 pm	Grand Ballroom A
Ferneyhough	Fred	CAS	43	Friday	11:30 am - 1:00 pm	Regency B
Ferneyhough	Lynda	Algebra I	102	Friday	1:15 pm - 2:15 pm	Columbus Hall G

# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Ferrara	Joe	General Interest	124	Friday	2:30 pm - 4:00 pm	Crystal Ballroom B
Fiedler	Joe	Middle Grades Math	340	Saturday	2:15 pm - 3:45 pm	Crystal Ballroom A
Flynn	Patrick	Technology Integration	406	Saturday	1:00 pm - 2:00 pm	Grand Ballroom B
Fogg	Nathan	Middle Grades Math	371	Saturday	4:00 pm - 5:30 pm	Crystal Ballroom A
Fonger	Nicole	Algebra I	348	Saturday	2:15 pm - 3:45 pm	Columbus Hall CD
Fotsch	Fred	Programming	49	Friday	11:30 am - 1:00 pm	Crystal Ballroom C
Fotsch	Fred	Programming	248	Saturday	10:00 am - 11:00 am	Horner
Fox	Kenneth Ray	Statistics	139	Friday	4:15 pm - 5:15 pm	Soldier Field
Fox	Tom	CAS	300	Saturday	10:00 am - 11:00 am	Wright
Fox	Kenneth Ray	Statistics	367	Saturday	4:00 pm - 5:30 pm	Soldier Field
Fuller	Roger	Technology Integration	23	Friday	10:15 am - 11:15 am	Columbus Hall AB
Gaddis	Scott	Calculus	79	Friday	1:15 pm - 2:15 pm	Atlanta
Gallitano	Gail	Middle Grades Math	161	Friday	4:15 pm - 5:15 pm	Haymarket
Galloway	Ian	Physics	147	Friday	4:15 pm - 5:15 pm	Picasso
Galson	Scott	CAS	32	Friday	10:15 am - 11:15 am	Burnham
Garcia	Miguel	Middle Grades Math	17	Friday	10:15 am - 11:15 am	Haymarket
Garneau	Marc	Authoring	345	Saturday	2:15 pm - 3:45 pm	Grand Ballroom B
Garvey	Bob	Middle Grades Math	75	Friday	1:15 pm - 2:15 pm	Haymarket
Gasque	Betty	Algebra I	290	Saturday	1:00 pm - 2:00 pm	Columbus Hall G
Godbold	Landy	Statistics	269	Saturday	11:15 am - 12:45 pm	Water Tower
Goetz	Michelle	Technology Integration	282	Saturday	11:15 am - 12:45 pm	Grand Ballroom F
Golembeski	Lana	Algebra I	92	Friday	1:15 pm - 2:15 pm	Columbus Hall CD
Gonzalez	Marco	Algebra I	141	Friday	4:15 pm - 5:15 pm	Columbus Hall G
Gonzalez	Juan Manuel	Algebra II	320	Saturday	1:00 pm - 2:00 pm	Atlanta
Gough	Jill	Assessment	28	Friday	10:15 am - 11:15 am	McCormick
Gough	Sam	Calculus	203	Saturday	8:15 am - 9:45 am	Atlanta
Gough	Jill	Algebra I	285	Saturday	11:15 am - 12:45 pm	Columbus Hall G

G

# Presenter Index

H

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Green	William	General Science	187	Saturday	8:15 am - 9:45 am	Buckingham
Griffin	Don	Calculus	237	Saturday	10:00 am - 11:00 am	San Francisco
Griffith	Linda	Algebra I	366	Saturday	4:00 pm - 5:30 pm	Columbus Hall IJ
Guntharp	Marsha	Algebra I	220	Saturday	10:00 am - 11:00 am	Columbus Hall CD
Gutierrez	Claudia	General Science	61	Friday	11:30 am - 1:00 pm	Picasso
Haas	Karlheinz	Physics	359	Saturday	4:00 pm - 5:30 pm	Columbian
Hale	Kathy	General Math	108	Friday	2:30 pm - 4:00 pm	Regency C
Hall	Mary	Technology Integration	101	Friday	1:15 pm - 2:15 pm	Columbus Hall AB
Hankins	Leanne	Statistics	181	Saturday	8:15 am - 9:45 am	Water Tower
Hanna	John	Algebra II	140	Friday	4:15 pm - 5:15 pm	Hong Kong
Hanna	John	CAS	329	Saturday	2:15 pm - 3:45 pm	Dusable
Hanson	Tom	General Interest	393	Saturday	4:00 pm - 5:30 pm	Columbus Hall AB
Harris	Pam	Middle Grades Math	19	Friday	10:15 am - 11:15 am	Water Tower
Harris	Donna	Administrator	156	Friday	4:15 pm - 5:15 pm	Wright
Harrow	Chris	CAS	385	Saturday	4:00 pm - 5:30 pm	Field
Heid	Kathy	CAS	346	Saturday	2:15 pm - 3:45 pm	Field
Heinrich	Claudia	Algebra I	56	Friday	11:30 am - 1:00 pm	Columbus Hall KL
Hernandez	Omar	General Math	249	Saturday	10:00 am - 11:00 am	Regency D
Herrström	Sanja	Physics	5	Friday	10:15 am - 11:15 am	Picasso
Hess	Sister Alice	Algebra II	37	Friday	11:30 am - 1:00 pm	Hong Kong
Hicks	Judy	General Interest	94	Friday	1:15 pm - 2:15 pm	Ogden
Ho	Luong	Algebra I	310	Saturday	1:00 pm - 2:00 pm	Columbus Hall IJ
Hocutt	Sandra	Algebra I	212	Saturday	10:00 am - 11:00 am	Columbus Hall KL
Hoopes	Angela	Algebra I	54	Friday	11:30 am - 1:00 pm	Columbus Hall CD
Hopley	Nevil	CAS	217	Saturday	10:00 am - 11:00 am	Field
Horstman	Sheila	Algebra II	238	Saturday	10:00 am - 11:00 am	Hong Kong
Houston	Michael	Algebra I	289	Saturday	1:00 pm - 2:00 pm	Columbus Hall KL

# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Howe	Susan	General Math	151	Friday	4:15 pm - 5:15 pm	Regency C
Hudson	Valerie	Middle Grades Math	342	Saturday	2:15 pm - 3:45 pm	Crystal Ballroom B
Hunt	Cindy	Middle Grades Math	241	Saturday	10:00 am - 11:00 am	Crystal Ballroom A
Illaria	Dan	General Math	70	Friday	1:15 pm - 2:15 pm	Regency B
Inglis	Andrina	Technology Integration	286	Saturday	11:15 am - 12:45 pm	San Francisco
Jackson	Melissa	Middle Grades Math	233	Saturday	10:00 am - 11:00 am	Crystal Ballroom B
Jensen	Lauren	Algebra I	122	Friday	2:30 pm - 4:00 pm	Columbus Hall H
Johnston	Ellen	Geometry	412	Saturday	4:00 pm - 5:30 pm	Crystal Ballroom C
Jones	Tammy	Elementary Math	53	Friday	11:30 am - 1:00 pm	Addams
Kachur	Jessica	Administrator	378	Saturday	4:00 pm - 5:30 pm	Wright
Karafiol	Paul	CAS	210	Saturday	8:15 am - 9:45 am	Burnham
Karlgard	Don	Algebra II	8	Friday	10:15 am - 11:15 am	Acapulco
Kasitz	Christine	General Interest	80	Friday	1:15 pm - 2:15 pm	Crystal Ballroom B
Kelly	Brendan	Algebra I	303	Saturday	1:00 pm - 2:00 pm	Columbus Hall CD
Kemp	Andy	Authoring	117	Friday	2:30 pm - 4:00 pm	Columbus Hall AB
Keyton	Michael	CAS	72	Friday	1:15 pm - 2:15 pm	Regency C
Klein	Ray	CAS	178	Saturday	8:15 am - 9:45 am	Dusable
Knapp	Scott	Precalculus	191	Saturday	8:15 am - 9:45 am	Grand Ballroom A
Koehler	Mike	Statistics	335	Saturday	4:00 pm - 5:30 pm	Haymarket
Kucera	Lee	Statistics	225	Saturday	10:00 am - 11:00 am	Soldier Field
Kula	Deborah	Precalculus	334	Saturday	2:15 pm - 3:45 pm	New Orleans
LaMaster	John	Technology Integration	118	Friday	2:30 pm - 4:00 pm	San Francisco
Lancaster	Ron	Trigonometry	2	Friday	10:15 am - 11:15 am	Crystal Ballroom C
Langhorn	Christopher	Programming	197	Saturday	8:15 am - 9:45 am	Grand Ballroom D
Lapp	Doug	Algebra II	21	Friday	10:15 am - 11:15 am	Toronto
Lassak	Marshall	Technology Integration	3	Friday	10:15 am - 11:15 am	Horner
Laughbaum	Edward	General Interest	44	Friday	11:30 am - 1:00 pm	Crystal Ballroom B

# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Lavigne	Kevin	Technology Integration	98	Friday	1:15 pm - 2:15 pm	New Orleans
Leaman	Kara	Algebra I	387	Saturday	4:00 pm - 5:30 pm	Columbus Hall G
Lee	Joyce	CAS	169	Friday	4:15 pm - 5:15 pm	Crystal Ballroom C
Lepeska	Jon	CAS	362	Saturday	2:15 pm - 3:45 pm	McCormick
Lesniewski	Ray	Chemistry	376	Saturday	2:15 pm - 3:45 pm	Columbian
Levine-Wissing	Robin	Statistics	47	Friday	11:30 am - 1:00 pm	Soldier Field
Liebner	Frank	Chemistry	7	Friday	10:15 am - 11:15 am	Crystal Ballroom B
Liptock	Jamie	General Math	182	Saturday	8:15 am - 9:45 am	Regency C
Littleton	Pam	Algebra I	202	Saturday	8:15 am - 9:45 am	Columbus Hall KL
Lobe	Randy	Assessment	325	Saturday	2:15 pm - 3:45 pm	Horner
Lovenbury	Margaret 'Peggy'	Geometry	20	Friday	10:15 am - 11:15 am	Dusable
Lukens	Jeff	Biology	77	Friday	1:15 pm - 2:15 pm	Wrigley
Lukens	Jeff	General Science	299	Saturday	1:00 pm - 2:00 pm	Wrigley
Lutz	Mike	Algebra I	259	Saturday	11:15 am - 12:45 pm	Columbus Hall KL
Lyublinskaya	Irina	Middle Grades Math	252	Saturday	11:15 am - 12:45 pm	Grand Ballroom E
Lyublinskaya	Irina	Algebra I	297	Saturday	1:00 pm - 2:00 pm	Columbus Hall EF
Mabbott	Art	Precalculus	327	Saturday	2:15 pm - 3:45 pm	Grand Ballroom D
Magner	Philip	Technology Integration	261	Saturday	11:15 am - 12:45 pm	Horner
Mahoney	John	Statistics	216	Saturday	10:00 am - 11:00 am	Water Tower
Mankus	Margo	Algebra I	274	Saturday	11:15 am - 12:45 pm	Columbus Hall H
Mann	Kristy	Elementary Math	330	Saturday	2:15 pm - 3:45 pm	Addams
Mara	Pat	Geometry	82	Friday	1:15 pm - 2:15 pm	Dusable
Martain	Jane	Elementary Math	115	Friday	2:30 pm - 4:00 pm	Addams
Mathews	Bob	Technology Integration	239	Saturday	10:00 am - 11:00 am	New Orleans
McCalla	Jeff	Algebra II	316	Saturday	1:00 pm - 2:00 pm	Acapulco
McGaw	Lisa	Chemistry	403	Saturday	4:00 pm - 5:30 pm	Regency D
McGehee	Jean	Geometry	277	Saturday	11:15 am - 12:45 pm	Haymarket

M

# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
McInerney	Rhoda	Technology Integration	14	Friday	10:15 am - 11:15 am	San Francisco
McKenny	Jean	General Interest	55	Friday	11:30 am - 1:00 pm	Crystal Ballroom A
McKinley	Kathleen	General Interest	273	Saturday	11:15 am - 12:45 pm	Columbus Hall AB
McNeil	Maureen	Assessment	396	Saturday	4:00 pm - 5:30 pm	New Orleans
McSpadden	Dona	Geometry	409	Saturday	4:00 pm - 5:30 pm	Columbus Hall H
Medrano	Noe	Authoring	408	Saturday	11:15 am - 12:45 pm	Wright
Merriweather	Michelle	Precalculus	401	Friday	2:30 pm - 4:00 pm	Regency D
Miller	Kevin	Technology Integration	134	Friday	2:30 pm - 4:00 pm	New Orleans
Mills	Cole	Algebra I	158	Friday	4:15 pm - 5:15 pm	Columbus Hall EF
Miltenberg	JoAnn	Precalculus	45	Friday	11:30 am - 1:00 pm	Columbus Hall H
Milton	Saki	Algebra I	65	Friday	11:30 am - 1:00 pm	Columbus Hall G
Mitchener	Janice	Precalculus	24	Friday	10:15 am - 11:15 am	Regency D
Mixon	Vicki	Assessment	230	Saturday	10:00 am - 11:00 am	Grand Ballroom A
Mize	Josh	Algebra II	243	Saturday	10:00 am - 11:00 am	Atlanta
Morstein	Todd	Chemistry	67	Friday	11:30 am - 1:00 pm	Wrigley
Moskowitz	Stuart	Algebra I	164	Friday	4:15 pm - 5:15 pm	Columbus Hall IJ
Moskowitz	Stuart	Elementary Math	314	Saturday	1:00 pm - 2:00 pm	Addams
Mueller	Jennifer	Administrator	317	Saturday	1:00 pm - 2:00 pm	Wright
Murrell	Mary Beth	Algebra II	392	Saturday	4:00 pm - 5:30 pm	Hong Kong
<b>N</b> Nakamoto	Jim	General Interest	235	Saturday	10:00 am - 11:00 am	Ogden
Nillas	Leah	General Math	52	Friday	11:30 am - 1:00 pm	Regency C
Nordvik	Øystein	Geometry	258	Saturday	11:15 am - 12:45 pm	Crystal Ballroom C
Nutt	Deb	Algebra II	179	Saturday	8:15 am - 9:45 am	Acapulco
<b>O</b> O'Brien	Pam	Statistics	349	Saturday	2:15 pm - 3:45 pm	Toronto
Olson	Judith	Algebra I	384	Saturday	4:00 pm - 5:30 pm	Horner
Ottman	Larry	General Math	112	Friday	2:30 pm - 4:00 pm	Regency B
<b>P</b> Page	Alicia	General Interest	11	Friday	10:15 am - 11:15 am	Crystal Ballroom A

# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Panova	Anna	CAS	62	Friday	11:30 am - 1:00 pm	Burnham
Pappo	Stan	Geometry	145	Friday	4:15 pm - 5:15 pm	Dusable
Parker	Marilyn	General Interest	405	Friday	2:30 pm - 4:00 pm	Horner
Parr	Richard	Precalculus	250	Saturday	11:15 am - 12:45 pm	Grand Ballroom D
Perry	Kristen	Statistics	86	Friday	1:15 pm - 2:15 pm	Soldier Field
Perry	Bryson	Precalculus	390	Saturday	4:00 pm - 5:30 pm	San Francisco
Peterman	Brenda	Algebra II	174	Saturday	8:15 am - 9:45 am	Toronto
Phelps	Steve	Geometry	110	Friday	2:30 pm - 4:00 pm	Field
Phelps	Steve	CAS	369	Saturday	4:00 pm - 5:30 pm	McCormick
Phillips	Lisa	Geometry	34	Friday	10:15 am - 11:15 am	Field
Pineda	B. Beatriz	Calculus	326	Saturday	2:15 pm - 3:45 pm	Regency D
Plein	Tami	Elementary Science	59	Friday	11:30 am - 1:00 pm	Columbian
Plein	Tami	Chemistry	125	Friday	2:30 pm - 4:00 pm	Columbian
Porzio	Donald	CAS	245	Saturday	10:00 am - 11:00 am	Dusable
Powell	Scott	Middle Grades Math	144	Friday	4:15 pm - 5:15 pm	Water Tower
Powell	Jonathan	General Math	322	Saturday	1:00 pm - 2:00 pm	Regency C
Prince	Marian	Physics	255	Saturday	11:15 am - 12:45 pm	Picasso
Prince	Marian	General Math	344	Saturday	2:15 pm - 3:45 pm	Regency B
Pugliese	Elizabeth	Algebra I	130	Friday	2:30 pm - 4:00 pm	Columbus Hall G
Ransom	Peter	Middle Grades Math	48	Friday	11:30 am - 1:00 pm	Gold Coast
Rawson	Pamela	Statistics	183	Saturday	8:15 am - 9:45 am	Gold Coast
Ray	Max	Geometry	315	Saturday	1:00 pm - 2:00 pm	Crystal Ballroom C
Reardon	Tom	General Interest	63	Friday	11:30 am - 1:00 pm	Ogden
Reardon	Tom	CAS	128	Friday	2:30 pm - 4:00 pm	Burnham
Reardon	Tom	Technology Integration	201	Saturday	8:15 am - 9:45 am	Grand Ballroom E
Reeves	David	General Math	155	Friday	4:15 pm - 5:15 pm	Horner
Reniewicki	Rob	General Science	175	Saturday	8:15 am - 9:45 am	Columbian

R

# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Reniewicki	Rob	General Science	399	Saturday	4:00 pm - 5:30 pm	Buckingham
Rhodes	Matt	Algebra I	360	Saturday	2:15 pm - 3:45 pm	Columbus Hall KL
Riddle	Heather	Algebra I	338	Saturday	2:15 pm - 3:45 pm	Columbus Hall G
Riggins	Julie	Algebra II	207	Saturday	8:15 am - 9:45 am	Ogden
Riker	Susan	Middle Grades Math	291	Saturday	1:00 pm - 2:00 pm	Crystal Ballroom B
Rinas	Rob	Algebra II	87	Friday	1:15 pm - 2:15 pm	Acapulco
Roberts	Ed	General Science	119	Friday	2:30 pm - 4:00 pm	Buckingham
Roberts	Doug	Algebra I	377	Saturday	4:00 pm - 5:30 pm	Columbus Hall KL
Robinson	Delbra	Algebra I	195	Saturday	8:15 am - 9:45 am	Columbus Hall G
Robinson	Natalie	Technology Integration	395	Saturday	8:15 am - 9:45 am	Grand Ballroom B
Rockstroh	Molly	Algebra I	389	Saturday	4:00 pm - 5:30 pm	Columbus Hall CD
Rodgers	Kevin	Technology Integration	152	Friday	4:15 pm - 5:15 pm	San Francisco
Romero	Marty	General Math	267	Saturday	11:15 am - 12:45 pm	Regency C
Ruda	Chris	Middle Grades Math	132	Friday	2:30 pm - 4:00 pm	Haymarket
Russell	Craig	Assessment	276	Saturday	11:15 am - 12:45 pm	Ogden
Russow	Daniel	Technology Integration	168	Friday	4:15 pm - 5:15 pm	Columbus Hall AB
Ryrstedt	Petra	Chemistry	215	Saturday	10:00 am - 11:00 am	Columbian
Sanchez	Martin	Middle Grades Math	196	Saturday	8:15 am - 9:45 am	Crystal Ballroom A
Sanchez	Stej	Geometry	227	Saturday	10:00 am - 11:00 am	Crystal Ballroom C
Santana	Miriam	Algebra I	99	Friday	1:15 pm - 2:15 pm	Columbus Hall EF
Sapuppo	Ninamarie	Technology Integration	35	Friday	10:15 am - 11:15 am	New Orleans
Scherer	Jerry	Algebra I	13	Friday	10:15 am - 11:15 am	Columbus Hall IJ
Schjelderup	Kim	Calculus	133	Friday	2:30 pm - 4:00 pm	Atlanta
Schlemper	Ann	Technology Integration	173	Saturday	8:15 am - 9:45 am	Grand Ballroom F
Scott	David	Statistics	262	Saturday	11:15 am - 12:45 pm	Gold Coast
Sever	Eric	Calculus	148	Friday	4:15 pm - 5:15 pm	Atlanta
Shirazi	Pareesa	General Math	386	Saturday	4:00 pm - 5:30 pm	Ogden

S

# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Simms	Kevin	Elementary Math	30	Friday	10:15 am - 11:15 am	Addams
Skelton	Diann	General Interest	226	Saturday	10:00 am - 11:00 am	Grand Ballroom D
Smeltz	Douglas	Authoring	272	Saturday	11:15 am - 12:45 pm	Grand Ballroom B
Smith	Charlie	Middle Grades Science	85	Friday	1:15 pm - 2:15 pm	Buckingham
Smith	Michael	Physics	121	Friday	2:30 pm - 4:00 pm	Wrigley
Smith	Beth	Middle Grades Math	127	Friday	2:30 pm - 4:00 pm	Gold Coast
Smith	Beth	Algebra I	353	Saturday	2:15 pm - 3:45 pm	Columbus Hall H
Smith	Patti	Chemistry	363	Saturday	2:15 pm - 3:45 pm	Buckingham
Solomon	Deobra	Assessment	251	Saturday	11:15 am - 12:45 pm	New Orleans
Speelman	Julie	Algebra I	231	Saturday	10:00 am - 11:00 am	Columbus Hall G
Spradley	Dan	Geometry	137	Friday	2:30 pm - 4:00 pm	Dusable
Srygley	Corina	Algebra I	25	Friday	10:15 am - 11:15 am	Columbus Hall H
St. John	Denny	General Interest	129	Friday	2:30 pm - 4:00 pm	Crystal Ballroom A
Standiford	Gail	Algebra I	328	Saturday	2:15 pm - 3:45 pm	Columbus Hall EF
Stead	Dwight	CAS	271	Saturday	4:00 pm - 5:30 pm	Addams
Steinke	Tom	Assessment	78	Friday	1:15 pm - 2:15 pm	Crystal Ballroom C
Steinke	Tom	CAS	256	Saturday	12:45 pm - 2:00 pm	Dusable
Stern	Howard	Algebra II	120	Friday	2:30 pm - 4:00 pm	Acapulco
Stiggers	Bill	Algebra I	97	Friday	1:15 pm - 2:15 pm	Columbus Hall IJ
Suarez	Lisa	General Math	162	Friday	4:15 pm - 5:15 pm	Regency D
Sullivan	Kathleen	Algebra II	304	Saturday	1:00 pm - 2:00 pm	Toronto
Swierczek	Derek	CAS	337	Saturday	2:15 pm - 3:45 pm	Burnham
Sword	David	Algebra I	170	Friday	4:15 pm - 5:15 pm	Columbus Hall H
Terrill	Holly	General Math	246	Saturday	10:00 am - 11:00 am	Regency C
Tewes	Mirco	Physics	116	Friday	2:30 pm - 4:00 pm	Picasso
Thomas	Kim	General Math	71	Friday	1:15 pm - 2:15 pm	Regency D
Thomas	Mike	CAS	265	Saturday	12:45 pm - 2:00 pm	McCormick

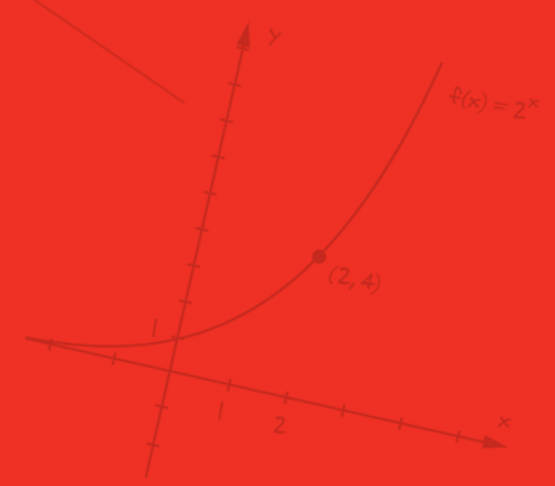
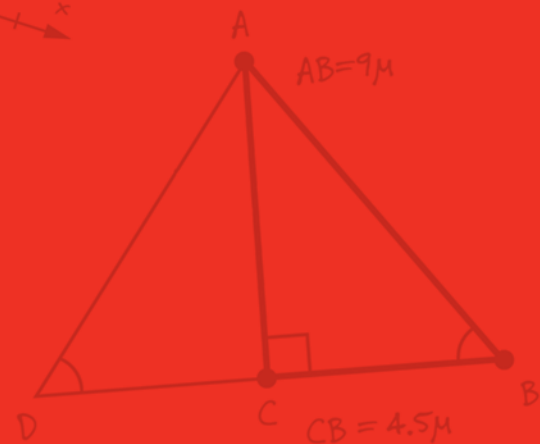
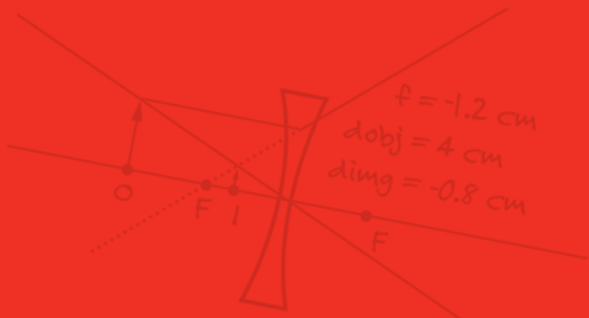
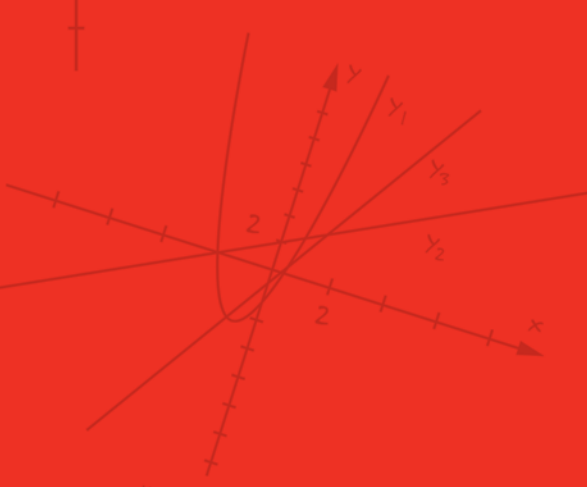
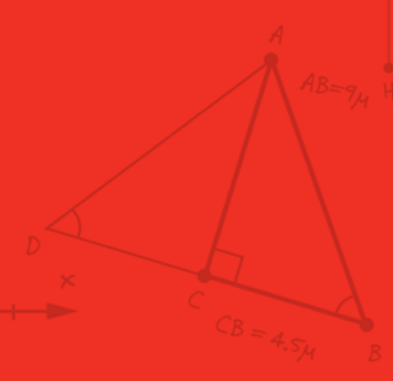
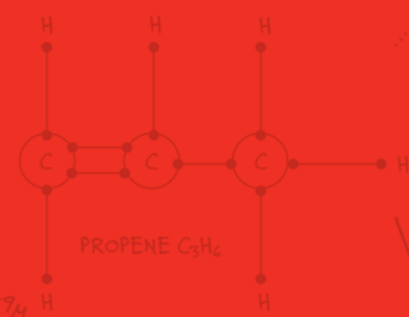
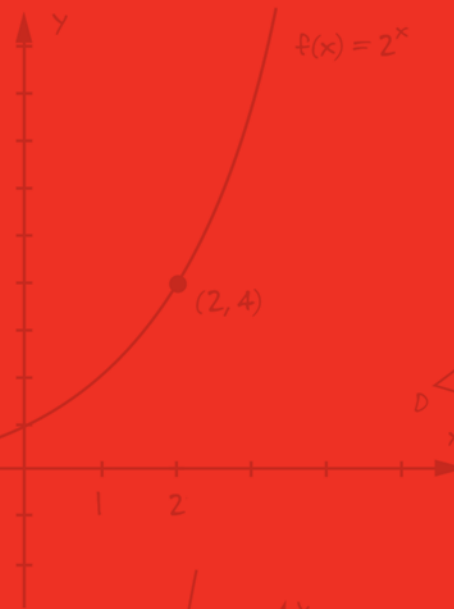
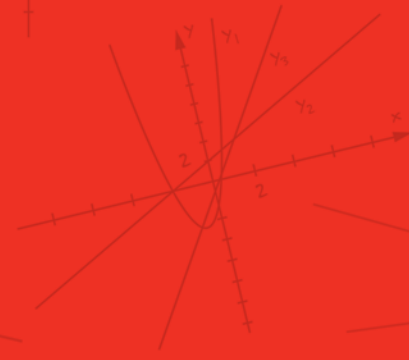
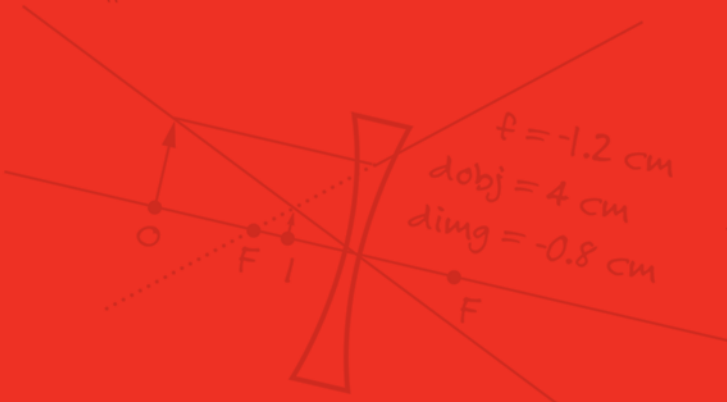
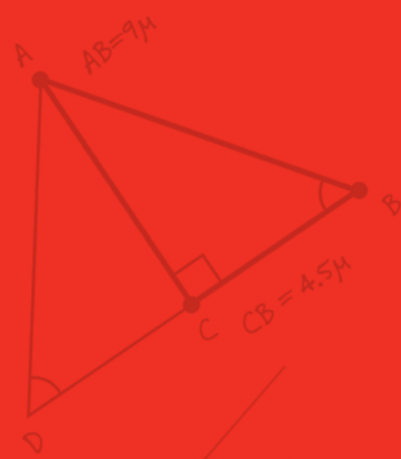
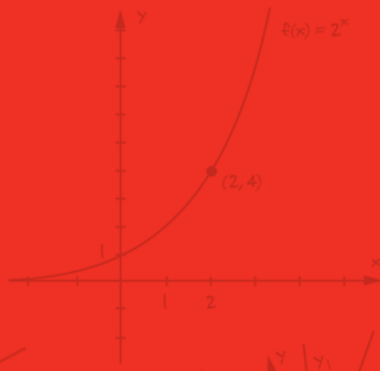
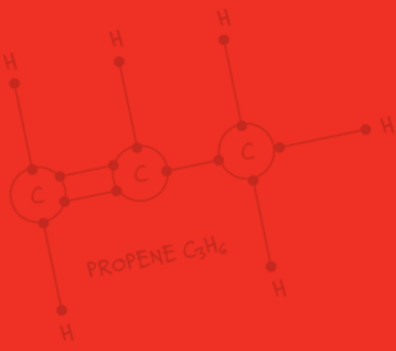
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# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room
Thompson	Jeff	Algebra II	283	Saturday	11:15 am - 12:45 pm	Hong Kong
Timms	Tony	Algebra II	135	Friday	2:30 pm - 4:00 pm	Toronto
Tindall	Lisa	Technology Integration	157	Friday	4:15 pm - 5:15 pm	New Orleans
Trafficante	Carlo	Precalculus	131	Friday	2:30 pm - 4:00 pm	Crystal Ballroom C
True	Chris	Statistics	308	Saturday	1:00 pm - 2:00 pm	Gold Coast
<b>U</b> Underdonk	Joshua	Geometry	41	Friday	11:30 am - 1:00 pm	Field
Underdonk	Joshua	General Math	331	Saturday	2:15 pm - 3:45 pm	Regency C
Underwood	Becky	Programming	381	Saturday	4:00 pm - 5:30 pm	Grand Ballroom B
Usinski	Dave	Technology Integration	66	Friday	11:30 am - 1:00 pm	Columbus Hall AB
Usiskin	Zalman	CAS	177	Saturday	8:15 am - 9:45 am	McCormick
<b>V</b> van Ast	Michel	Technology Integration	319	Saturday	1:00 pm - 2:00 pm	Grand Ballroom F
VanArnhem	Jeff	Assessment	74	Friday	1:15 pm - 2:15 pm	McCormick
Viktora	Steven	CAS	370	Saturday	4:00 pm - 5:30 pm	Dusable
Vonder Embse	Chuck	Algebra I	114	Friday	2:30 pm - 4:00 pm	Columbus Hall KL
Voshall	Chip	Middle Grades Math	321	Saturday	1:00 pm - 2:00 pm	Crystal Ballroom A
<b>W</b> Wadden	Allister	Algebra I	138	Friday	4:15 pm - 5:15 pm	Columbus Hall CD
Wander	Roger	Algebra II	1	Friday	10:15 am - 11:15 am	Regency C
Warren	Gail	Algebra I	31	Friday	10:15 am - 11:15 am	Columbus Hall KL
Washburn	Scott	General Math	159	Friday	4:15 pm - 5:15 pm	Toronto
Watson	Tracy	Algebra I	106	Friday	2:30 pm - 4:00 pm	Columbus Hall CD
Watson	Tracy	Algebra II	305	Saturday	1:00 pm - 2:00 pm	Hong Kong
Wayne	Conrad	Algebra I	184	Saturday	8:15 am - 9:45 am	Columbus Hall H
Weil	Aurelia	Algebra I	163	Friday	4:15 pm - 5:15 pm	Columbus Hall KL
Welch	Peggy	Biology	295	Saturday	1:00 pm - 2:00 pm	Columbian
Wheeler	Judy	Middle Grades Math	189	Saturday	8:15 am - 9:45 am	Crystal Ballroom B
Whitecotton	Cassie	Physics	104	Friday	1:15 pm - 2:15 pm	Picasso
Whitmire	Bill	Elementary Math	263	Saturday	11:15 am - 12:45 pm	Addams

# Presenter Index

Last Name	First Name	Subject	Session	Day	Start-End Time	Room	
Williams	Ray	CAS	83	Friday	1:15 pm - 2:15 pm	Burnham	
Williams	Paul	General Science	143	Friday	4:15 pm - 5:15 pm	Buckingham	
Williams	Greg	Physics	254	Saturday	11:15 am - 12:45 pm	Buckingham	
Williams	Paul	Physics	301	Saturday	1:00 pm - 2:00 pm	Buckingham	
Williams	Ray	Administrator	333	Saturday	2:15 pm - 3:45 pm	Wright	
Willis	Solomon	Statistics	105	Friday	2:30 pm - 4:00 pm	Soldier Field	
Wilson	Jennifer	Technology Integration	29	Friday	10:15 am - 11:15 am	Ogden	
Wilson	Dennis	Algebra I	81	Friday	1:15 pm - 2:15 pm	Columbus Hall H	
Wilson	Jennifer	Technology Integration	209	Saturday	8:15 am - 9:45 am	San Francisco	
Windle	Tara	Middle Grades Science	394	Saturday	4:00 pm - 5:30 pm	Wrigley	
Wingert	Tracy	Technology Integration	211	Saturday	8:15 am - 9:45 am	New Orleans	
Woldmar	Jan Erik	Programming	236	Saturday	10:00 am - 11:00 am	Grand Ballroom B	
Woods	Neale	Technology Integration	307	Saturday	1:00 pm - 2:00 pm	Columbus Hall AB	
Worcester	Don	Statistics	206	Saturday	8:15 am - 9:45 am	Soldier Field	
Wright	David	General Math	224	Saturday	10:00 am - 11:00 am	Regency B	
Y	Young	David	Technology Integration	39	Friday	11:30 am - 1:00 pm	San Francisco
Young	Jana	General Math	309	Saturday	1:00 pm - 2:00 pm	Regency B	
Young	David	General Interest	324	Saturday	2:15 pm - 3:45 pm	Grand Ballroom E	
Z	Zbiek	Rose Mary	CAS	373	Saturday	4:00 pm - 5:30 pm	Burnham
Zelkowski	Jeremy	Algebra II	58	Friday	11:30 am - 1:00 pm	Toronto	
Zeydel	Kim	Assessment	306	Saturday	1:00 pm - 2:00 pm	New Orleans	
Zweibel	Brittany	General Math	190	Saturday	8:15 am - 9:45 am	Regency D	



# Exhibitors

# Exhibitors

## EXHIBIT HOURS

**Friday, March 2, 10:00 a.m. – 6:00 p.m.**  
**Saturday, March 3, 9:00 a.m. – 5:00 p.m.**

## LOCATION

**Hyatt Regency Chicago – East Tower – Riverside Center**

**Please take time to visit our friends in the exhibit hall and learn about their great products and services.**

### **A+ Compass**

A+ Compass was developed for the educator, artist or anyone else who needs to create accurate constructions. This is a precision math compass for drawing geometry constructions or circles/arcs with a radius of up to approximately 14 inches. Educators will find this tool excellent for classroom geometry use.

### **The Bach Company**

The Bach Company has been serving the education market for more than 30 years. Superior customer service, along with our always-competitive pricing, make The Bach Company the right source for Texas Instruments products. Stop by our booth and see for yourself!

### **Britannica Mathematics**

Britannica Mathematics: innovative products with the assurance of Britannica quality! SmartMath, the fun and adaptive web-based math practice for K-8, allows teachers to easily assign and assess. Mathematics in Context, our standards-based, NSF-funded curriculum for middle grades, is now available in an interactive digital format that fully engages students.

### **CK-12 Foundation**

CK-12 Foundation is a non-profit dedicated to increasing access to quality educational materials; providing free, high-quality, open content in STEM subjects; and driving educational equity for K-12 students globally. Offerings include free, high-quality, customizable FlexBooks® (digital textbooks), concept-based learning, SAT prep and an interactive Algebra curriculum.

### **Central Michigan University – Educational and Professional Development**

Central Michigan University Off-Campus Programs and Texas Instruments partner to offer academic credit for the T<sup>3</sup>™ professional development training programs offered by Texas Instruments. Central Michigan University, founded in 1892, is accredited by the National Council for the Accreditation of Teacher Education (NCATE) and by the Higher Learning Commission of the North Central Association of Colleges and Schools. CMU has been offering quality off-campus programs to adult learners since 1971.

### **Classroom Products Warehouse (CPW)**

CPW is committed to providing math and science instructional materials at the guaranteed lowest prices. Visit us at [www.shopcpw.com](http://www.shopcpw.com) for more information and to find special deals and free product offers.

### **Convergent Solution**

Explore ground-breaking Visual STEM interventions: KosJourney.com – America's Rite of Passage in Math: Our nation has the largest textbooks in the world and scores almost dead last on the Organization for Economic Cooperation and Development (OECD) scale in math. It's not more curriculum we need; it's a rite of passage. Changing our OECD ranking is more about changing our students' collective story of hating math than getting ahead of another country. Also, explore impressive 3D Geometry at [www.SpatialThinkingLLC.com](http://www.SpatialThinkingLLC.com) and explore pen-centric graphing capabilities at [www.FluiditySoftware.com](http://www.FluiditySoftware.com). We deliver hands-on workshops on interactive, real-world math simulations aligned to the Common Core Standards. Our customized professional development and 24/7 technical support ensure the highest ROI on these impressive digital intervention and enrichment resources.

### **Corwin**

Corwin is the premier publisher of professional resources that equip PreK-12 educators with innovative tools to improve teaching and learning so all students can succeed. Our books and digital content offer practical, research-based strategies created by experts. Visit [www.corwin.com](http://www.corwin.com) for resources on improving teaching with educational technology, leading school change and more.

# Exhibitors

## Delight's Earthly Delights

Delight and Peter Edgell, former middle school science teachers, make jewelry inspired by the beauty of science. Each piece is made of natural stone beads identified on a tag that includes an explanation of the scientific principle involved. Stop by and see our Solar System, DNA, Constellations, Snakes, Emission Spectra, the chemical reaction equation for Photosynthesis and many more.

## D & H Distributing Company

D & H is the nation's #1 distributor of calculators to schools!

## Flatland: The Movie

"Flatland: The Movie" is an animated film inspired by Edwin A. Abbott's classic novel, *Flatland*. It features the voices of Martin Sheen, Kristen Bell and Michael York as well as teacher worksheets and student study guides. It will be available for a special price at the booth. ALSO, see clips from the soon-to-be-released "Flatland 2: Sphereland" and register for discounts!

## Laying the Foundation

Laying the Foundation (LTF) is a non-profit dedicated to providing the best content-based, pedagogy-driven, teacher-to-teacher training, supported by rigorous classroom-ready lessons and web-based resources to improve the quality of math, science and English instruction. LTF has trained over 36,000 teachers to date and has demonstrated dramatic increases in Advanced Placement exam participation and success in STEM subjects. LTF believes that training, mentoring and empowering the teacher corps will lead to high standards of academic excellence for all students.

## MathType by Design Science

MathType by Design Science is the full version of Microsoft's Equation Editor. In addition to Microsoft® Office & Apple iWork®, MathType works with over 600 software applications and web sites, including new capability with TI-Nspire™ software! New version 6.8 for Windows; free upgrade if you already own MathType 6.7 for Windows (bring your product key).

## Media4Math

Media4Math produces video tutorials, TI-Nspire™ handheld tutorials, PowerPoint® presentations, Promethean flipcharts and other media content for algebra, geometry and technology-based math instruction. Our materials can be used for classroom instruction, homework help or independent tutorials. Our goal is to provide the highest-quality video-based materials that can be used in today's math classroom.

## MEECAS

MEECAS (Mathematics Educators Exploring Computer Algebra Systems) is a not-for-profit organization based in the Chicagoland area whose purpose is to encourage active interest in the use of computer algebra systems (CAS) and related technology in schools. To this end, MEECAS strives to improve the learning of mathematics; to influence curriculum, assessment and pedagogy; and to promote teacher development and experimentation with CAS. In addition, MEECAS strives to support CAS research in education and to provide opportunities for the exchange of ideas about teaching and learning with CAS.

## Metropolitan Math Club (MMC)

We are a not-for-profit profession development organization dedicated to improving teacher education through professional development. We are the oldest mathematics organization in the United States with an National Council of Teachers of Mathematics (NCTM) affiliate number of one. Our founders also helped develop NCTM. We offer monthly dinner meetings featuring guest speakers from around the nation. All are welcome.

## Mu Alpha Theta

Mu Alpha Theta, the National High School and Two-Year College Mathematics Honor Society and its Educational Foundation provide recognition, merchandise, free math competitions, awards, grants and scholarships for talented math club members in over 1,900 chapters around the United States and in 13 foreign countries. We also run Chi Alpha Mu, Creative Activities in Mathematics, for middle school students to foster their interest in the subject and keep them wanting more when they enter high school.

# Exhibitors

## Pacq, Inc.

For nine consecutive years Pacq, Inc. is your official source for all the T<sup>3</sup>™ – BRANDED MERCHANDISE: polo-style shirts, bags, jackets, travel mugs and much more. Stop by our booth 34/35 and check out all the new 2012 promotion T<sup>3</sup>™ merchandise. Have a need for other promotional items? Give us a call at 1.800.999.8518 and ask for Dennis or Terri.

## Pi-Dye T-Shirt Shop

Great shirts and more for the math inclined. Visit [www.pidye.com/thestorezone](http://www.pidye.com/thestorezone).

## Saltire Software

Saltire Software has just released Geometry Expressions v. 3.0. – the constraint-based symbolic geometry tool that enables students to practice problem formation, learn through exploration and apply mathematics to real-world situations. The smooth interface between Geometry Expressions and TI-Nspire™ handhelds give students a powerful resource for solving problems. With version 3.0 you can create JavaScript apps for your iPhone®/iPad®, animated gifs for your PowerPoint® presentations, piecewise functions and much more. Come try our unique, constraint-based software at booth 25. You can also test drive the latest version of our drawing tool, Math Illustrations.

## School Savers

School Savers is the low-cost source for classroom calculators, Top Rhino calculator storage solutions, the TI-Navigator™ Classroom Learning System, Vernier Software & Technology™ data collection and Cabri™ software. Stop by our booth and ask for Bill or Margaret about our great 2012 T<sup>3</sup>™ pricing!

## SchoolMart

National distributor for Texas Instruments products and math-related supplies such as rulers, compasses, math manipulatives and storage cases. Our friendly, knowledgeable staff is available to help you find the products that will fit your needs and budget.

## Stratasys 3D Printers and Production Systems

Stratasys invented its patented FDM® (Fused Deposition Modeling) technology in 1988 and has led the development of 3D printing ever since. Stratasys uses FDM technology in its Dimension® 3D Printers, uPrint SE 3D Printers and its Fortus® 3D Production Systems, which enable students to bring CAD files to life in durable thermoplastics. Visit [www.stratasys.com](http://www.stratasys.com).

## Texas A&M University

The Department of Statistics at Texas A&M University offers an online Masters of Science in Statistics degree and certificates with an emphasis in Data Mining, Biostatistics or Applied Statistics. An integrated extension of our renowned on-campus program, distance students receive the same instruction, course materials and exams – with added flexibility.

## Ten80 Education

Visit the booth, attend the interactive workshop and participate in the panel to learn about the FastTrack RC and Ten80's new partnership with NASCAR and Horizon Fuel Cell. Ten80 Education is a team of engineers, scientists, teachers, professors and parents all dedicated to a single mission. We have joined forces to help students and teachers understand STEM subjects, STEM careers and how they deeply impact the world around us.

## Texas Instruments

Supporting educators' vision of student success, TI's technology and support materials help enhance teaching and learning. See how new TI-Nspire™ CX handhelds can deepen student understanding using color. Visit [education.ti.com](http://education.ti.com).

## Texas Instruments Nspired Stories

Stop by the TI Nspired Stories booth and share your inspiring stories about interactive learning in your classroom. We're eager to hear your ideas and best practices about how you're applying TI-Nspire™ technology and other TI teaching tools. We'd like to tell your stories about what's new, what's working, the trends and ideas you're seeing and your school's plans for Nspired Learning.

# Exhibitors

## **The Datamath™ Calculator Museum**

The museum helps to preserve the spectacular achievements of Texas Instruments in electronic calculator history initiated with Jack Kilby's invention of the integrated circuit (IC) in 1958 and the Cal-Tech project in 1965, which lead to the "calculator-on-a-chip" in 1971 that made the calculator available to everyone. The Datamath™ Calculator Museum features every Texas Instruments calculator from the early TI-2500 Datamath introduced in 1972 to the latest TI-Nspire™ CX handheld, educational toys started with the Little Professor and all the speech products like Educational Technology's Speak & Spell.

## **The Math Forum @ Drexel**

The Math Forum @ Drexel is a leading online learning community and provider of professional development. Best known for its Ask Dr. Math, Teacher2Teacher, Math Tools software library and Problems of the Week online interactive services including tPoWs (Technology Problems of the Week), the Math Forum has been helping students, educators, parents and researchers use technology effectively in the math classroom since 1992. Through onsite and online collaborations with many schools and districts, the Math Forum applies its expertise in mathematics, technology and communication to local improvement efforts.

## **Thirteen/WNET New York**

Thirteen/WNET New York is one of the key program providers for public television, bringing such acclaimed series as "Nature," "Secrets of the Dead," "Great Performances," "American Masters," "Charlie Rose," "Religion & Ethics NewsWeekly," "Wide Angle," "Cyber Chase," and "Sesame Street" to audiences nationwide. Thirteen's Educational and Community Outreach Department, the LAB@Thirteen, creates, develops and executes educational and community outreach initiatives that extend the "life after broadcast" of Thirteen's television productions. Thirteen/WNET is currently producing an educational multimedia project, GET THE MATH!, which is designed to help middle and high school students taking Algebra I to appreciate its importance and usefulness.

## **Valley Business Machines**

Valley Business Machines has been providing office products, educational calculators and educational products to schools for over 40 years. We offer exceptional customer service and have very competitive pricing. We pride ourselves in forming lasting relationships with our customers through our service and pricing.

## **Vernier Software & Technology™**

Vernier Software & Technology will be exhibiting data collection equipment, software and lab manuals for math and science curricula. Come by and see how easy it is to bring real-world data into your classroom. Also, drop by to register to win one of ten copies of either "Real-world Math with Vernier" or "Science with TI-Nspire™ Technology." These books feature data collection with our DataQuest™ application for TI-Nspire™ products.

## **Western Governors University**

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