



# 2015 T<sup>3™</sup> INTERNATIONAL CONFERENCE

March 13-15, Fort Worth, Texas



# CONTINUE THE CONVERSATION THIS SUMMER...

For T<sup>3™</sup>Summer Workshops near you: education.ti.com/go/t3summer

### High Quality Professional Development

T<sup>3-</sup> Summer Workshops provide math and science educators with professional development that combines content-rich curriculum and compelling instruction on best teaching practices.

### Extend your T<sup>3™</sup> learning:

- » Receive in-depth instruction on exam-accepted technology
- » Get hands-on experience with standards-aligned activities
- » Gain up to 18 hours of professional development
- » Choose from 75 workshops offered across the U.S.
- » TI technology and instructional materials included
- » Exceptional value Pricing starts at \$125
- » Team discounts available







# Join the conversa Lon



#### Welcome to the 2015 T<sup>3™</sup> International Conference

At the T<sup>3™</sup> International Conference in Fort Worth, Texas, you will have the opportunity to connect with the movers and shakers in math and science education and gain new ideas, proven classroom strategies and materials that you can use to create exceptional learning environments.

Presented by teachers, for teachers, the T<sup>3™</sup> International Conference is the No. 1 professional development event devoted exclusively to improving student achievement in math and science through the effective use of TI education technology.

You'll hear from some of the best middle- and high school teachers who have faced the same pedagogical challenges you confront daily from implementing new and emerging standards in math, science and STEM education to developing strategies for formative assessment.

We hope you enjoy yourself as you take advantage of this unique learning opportunity and experience the power of the T<sup>3™</sup> community.

Welcome 4
Conference Overview
Friday
Saturday
Sunday 8
Administrator Academy, Calculus Conference in a Conference 9
T <sup>3™</sup> 2015 Leadership Awards
Conference Schedule
My Conference Planner
Sessions by Subject
Friday Sessions by Time
Saturday Sessions by Time
Friday Session Details51
Saturday Session Details
Presenter Index125
Exhibitors
Notes
Omni <sup>®</sup> Hotel and Fort Worth Convention Center Maps

### Welcome



Dear educators, administrators and friends,

On behalf of the Teachers Teaching with Technology™ (T<sup>3</sup>™) community and Texas Instruments, I welcome you to the **2015 T<sup>3™</sup> International Conference** in Fort Worth. We are thrilled to have "y'all" in our backyard for our 27th annual conference.

Whether you are a first-time participant or a T<sup>3™</sup> International Conference veteran, you will experience 2½ days of hands-on, interactive, high-energy professional development. We encourage you to "Join the ConversaTlon" and connect with our T<sup>3™</sup> community in person and online (using the hashtag #T3IC) as we share ideas and strategies to ignite students' curiosity in math and science.

At TI, we listen to you and your colleagues talk about the challenges you face in your classrooms, schools and districts. At this conference, you will find new ideas and proven solutions to:

- » Enhance curriculum for standards-based learning and STEM, deepen your content knowledge and explore activities that engage students in math, science and engineering practices
- » Accelerate student achievement through the effective use of TI educational technology, math activities and science simulations
- » Improve instruction through dynamic sessions led by some of the top educators in the world

The 2015 T<sup>3™</sup> International Conference is your conference, and we encourage you to customize your experience by attending a variety of sessions, including the opening and closing events. Stanford University Mathematics Professor and champion for mathematics education reform, Dr. Jo Boaler, will kick things off with a keynote challenging the traditional model of the math classroom. She will inspire you with groundbreaking research that has the potential to transform the way students interact with and understand mathematics.

Wrapping up the conference is Emily Calandrelli, producer and host of FOX's "Xploration Outer Space." Calandrelli holds dual Master's degrees from Massachusetts Institute of Technology (MIT) in aeronautics and astronautics as well as technology and policy and is on a mission to promote scientific literacy and spark student interest in STEM.

Remember to share your thoughts, ideas and experiences online (using #T3IC) to join the conversation with attendees and your colleagues around the world. Have a great conference and join us next year when we meet again for the 2016 T<sup>3™</sup> International Conference in Orlando, Florida.

Best regards,

Peter Balyta, Ph.D. (@pbalyta)

President

TI Education Technology



### **Conference Overview**

### Customize your conference experience

Custom tailor your T<sup>3™</sup> International Conference professional development experience by choosing from more than 300 high-energy, interactive sessions where you'll gain tips, tricks and insights for using TI technology to increase student achievement. Use the conference planner on page 14 to pencil in your sessions from the schedule.



Create your personal schedule on your Smartphone, iPad® or tablet with the 2015 T³™ International Conference app, which includes session schedules, a planner, conference center maps and more. The 2015 T³™ app is available on the iOS App Store, Google Play, Windows Store and BlackBerry World.

Scan this code with your device to download the free app or visit **education.ti.com/go/t3app**.







Stay connected with @TICalculators and fellow attendees using the hashtag **#T3IC**.

#### Friday, March 13

Conference Registration 7:00 a.m. – 4:00 p.m.
Opening Session 8:30 a.m. – 9:45 a.m.
General Sessions 10:00 a.m. – 5:15 p.m.
Exhibits
Welcome Reception 5:30 p.m. – 7:00 p.m.

#### Saturday, March 14

Conference Registration 7:30 a.m. – Noon
General Sessions 8:00 a.m. – 5:30 p.m.
Exhibits

#### Sunday, March 15

Power Sessions	. 8:30 a.m. – 10:00 a.m.
Closing Session	10:15 a.m. – 11:15 a.m.





@TICalculators 5

### Friday, March 13

### **Opening Session**

8:30 a.m. - 9:45 a.m.

Location: Fort Worth Convention Center Ballroom (2nd Floor)

» Welcome

Peter Balyta

President, Education Technology, Texas Instruments

» Keynote Presentation

Dr. Jo Boaler

Professor of Mathematics Education, Stanford University

#### General Sessions

10:00 a.m. - 5:15 p.m.

Locations: Omni® Hotel and Fort Worth Convention Center See the Session Details section for times, locations and descriptions.

#### **Special Sessions**

Getting Started with the TI-Nspire™ CX Handheld 10:00 a.m. - 11:30 a.m.

Location: Fort Worth Convention Center Ballroom (2nd Floor)

Speaker: Betty Gasque

New to Tl-Nspire<sup>™</sup> technology? Get the most out of your T<sup>3™</sup> International Conference experience by attending this hands-on session for beginners. Bring your TI-Nspire™ CX handheld with you, or borrow a loaner for this informative, lively session.

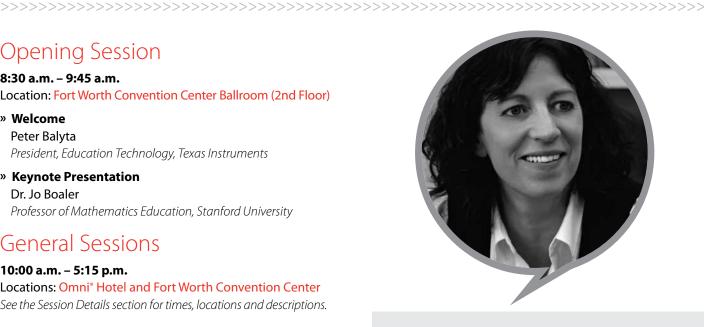
#### **Mathematical Modeling: Fundamental for Advanced Quantitative Reasoning**

12:30 p.m. - 5:15 p.m.

Location: Fort Worth Convention Center - Meeting Room 102 Speakers: John Ashurst, Greg Foley, Rachel Gorsuch, Mike Houston, Steve Phelps

Participants will develop a sense of modeling as described by CCSS and TEKS. This session targets the art of modeling. Activities may prompt participants to apply algebraic thinking, statistical thinking or the use of spatial relationships. Participants will apply critical thinking skills and develop the importance of clarifying questions while being actively engaged throughout. Bring your iPad® (TI-Nspire™ App for iPad® installed) or laptop (TI-Nspire<sup>™</sup> Teacher Software installed).





### Keynote Speaker

#### Dr. Jo Boaler

Dr. Jo Boaler is the driving force behind a spirited movement to revolutionize math teaching and learning in the United States and beyond. A professor of Mathematics Education at Stanford University, Dr. Boaler has published seven books, appeared in the leading peer-reviewed journals in the field and cofounded YouCubed, which provides math-education resources for students, parents, and teachers.

Dr. Boaler is of the "reform" school of thought when it comes to mathematics education. She has earned enthusiastic renown from scholars, educators and parents for the results of her ground-breaking research, ideas and challenges to the traditional model of the math classroom. Her innovative approaches have been proven to transform the way students interact with and understand mathematics.

#### Welcome Reception

5:30 p.m. - 7:00 p.m.

Location: Fort Worth Convention Center Lobby and Water **Gardens Events Plaza** 

Kick up your heels and show off your line-dancing skills while you get to know fellow conference attendees at this fun-filled networking event. Food and drinks will be served.

Note: If weather dictates, the reception will be moved to Fort Worth Convention Center - Exhibit Hall A.







### Saturday, March 14

#### **General Sessions**

#### 8:00 a.m. - 5:30 p.m.

Locations: Omni<sup>®</sup> Hotel and Fort Worth Convention Center See the Session Details section for times, locations and descriptions.

#### Special Sessions

#### Calculus Conference in a Conference (C3)

A (re-)fresh look at Advanced Placement Calculus – Opportunities and Challenges

8:00 a.m. - 5:30 p.m.

Location: Omni® Hotel - Fort Worth Ballroom 5

Please refer to page 9 for session topics, times and presenters.

Engage with nationally recognized leaders as they discuss new directions, new challenges and new opportunities for AP\* Calculus. Topics will include communicating, computing, and connecting concepts with a special lens on the role that technology can play in the teaching and learning of Calculus.

### CCSS and TEKS Special Focus: Transformational Geometry 8:00 a.m. – Noon

Location: Omni® Hotel - Fort Worth Ballroom 4

Speakers: Bill Caroscio, Steve West

One major change in the the Common Core State Standards (CCSS) and the Texas Essential Knowledge and Skills (TEKS) process standards is an emphasis on transformations in Geometry. Students are now expected to investigate similarity and congruence through the lens of transformations. In this workshop, we will examine how TI-Nspire™ technology can help students investigate the role of transformations in congruence and similarity. We will also focus on gaining a deeper understanding of the mathematics emphasized in these standards.

### The Art of Questioning: Leading Learners to Level Up 1:00 p.m. – 5:30 p.m.

Location: Omni<sup>®</sup> Hotel - Fort Worth Ballroom 4
Speakers: Jill Gough, Sam Gough, Jennifer Wilson

This session will focus on the art of questioning and formative assessment tools. Work on becoming a falconer by leading your learners to level up through questions rather than lectures. Enhance and model practical classroom formative assessments that naturally offer differentiation.



#### SLUGFest (Super Lua User Group) 1:00 p.m. – 5:30 p.m.

Location: Fort Worth Convention Center - Meeting Room 102 Speakers: Steve Arnold, Adrian Bertrand and others

The sessions in this sequence are offered for Intermediate to Advanced Lua users ("Super" Lua Users).

Several themes will be explored, including Optimizing Lua documents for all platforms (handheld, desktop and tablet) Bluetooth Low Energy (BLE) and Lua: from first steps to advanced applications.

If you have been honing your Lua skills and would like to be a part of the ongoing development of this exciting part of the TI-Nspire™ solution, then come along to this forum and contribute your suggestions and ideas.

Bring your own laptop and take the next step in enhancing your Lua expertise.

#### Pi Day Highlights

Are you excited about Pi Day? So are we! We've planned these activities help celebrate all things 3.14.15:

#### Run a Pi-K

If you're a runner, meet in the Omni® Hotel lobby at 6 a.m. to run a Pi-K (3.14 miles) with other attendees. Get your heart racing for a fun day of learning!



#### Pie at Pi Time

At the epic moment of 9:26:53, we will serve an assortment of pie in the hallway outside of all sessions. What better way to start the day?

#### Pi Day Photo Booth

Be sure to stop by the photo booth to take fun pictures with a Pi Day theme. Share all of your photos online using the **#T3IC** and **#PiDay** hashtags.

#### Follow @TICalculators

Be sure to follow **@TICalculators** on Twitter or check the conference app for more Pi Day fun!

@TICalculators

### Sunday, March 15

#### **Power Sessions**

8:30 a.m. - 10:00 a.m.

#### Using NCTM's Mathematics Teaching Practices and TI **Technology to Reason Mathematically**

Location: Fort Worth Convention Center - Meeting Room 201 ABC

Speakers: Diane Briars, Gail Burrill

Subject: Middle Grades through High School Mathematics

(Teachers and Administrators)

Principles to Actions focuses on how teachers can create effective learning environments for all students. We will address the Mathematics Teaching Practices through the use of coherent activities and investigations with TI technology. Learn how to integrate technology into your lessons to help students make stronger connections in mathematics.

#### STEM: Engaging Students in the Classroom and Beyond

Location: Fort Worth Convention Center - Meeting Room 202 D

Speakers: Stephanie Ogden, Tanya Sharpe, Monica Trevathan,

Fred Fotsch, Dr. Steve Schlozman

Subject: STEM

Hear from a panel of STEM advocates – with diverse involvement in industry, classrooms, and higher education – who will share their perspectives on what it takes to connect learning across the fields of science, technology, engineering and mathematics for all students. Panelists will discuss ways to create engaging STEM experiences that develop students' abilities to collaborate, think creatively, solve problems and innovate for the world of tomorrow.

#### AP\* Calculus: Learning From Those in the Know

Location: Fort Worth Convention Center - Meeting Room 203 A

Speakers: Vicki Carter, Steve Kokoska, Craig Wright

Subject: High School Mathematics

Engage with those in the know in the AP\* Calculus arena as they discuss issues and challenges facing educators today. What should teachers be doing to get their students ready for the AP\* exams? Why are scores low?

#### **Maximizing Instruction: Integrating the Process and Content**

Location: Fort Worth Convention Center - Meeting Room 203 BC

Speaker: Toni Norell, Michelle Rinehart

**Subject: Mathematics** 

The new mathematics TEKS contain many new processes and content topics. How can TI technology facilitate integrated instruction of these varied standards? Come explore how we can use ready-made TI activities to teach brand new and/or toughto-teach concepts in a way that seamlessly and powerfully integrates our unified K-12 process standards.

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

Location: Fort Worth Convention Center - Meeting Room 202 AB Speakers: Louise Chapman, Doris Teague, Clara Tolbert Subject: All

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

#### **Making the Math Practices Accessible to Students**

Location: Fort Worth Convention Center - Meeting Room 204 AB Speakers: Jill Gough, Jennifer Wilson

Subject: All

The Standards for Mathematical Practice are goals for mathematically proficient students. How do we help our students on their journey to become mathematically proficient? How can we help students who don't yet know how to make sense of problems and persevere in solving them? Lead your learners to level up to the math practices.



### Closing Session

Sunday, March 15 • 10:15 a.m. - 11:15 a.m.

Location: Fort Worth Convention Center - Ballroom

#### **Emily Calandrelli**

Be inspired by Emily Calandrelli, a recent MIT graduate who represents the future of students in your classroom. Co-producer and host of FOX's "Xploration Outer Space", Ms. Calandrelli is passionate about promoting scientific literacy and getting students, especially young women, interested in STEM.

#### **Grand Prize Drawing:**

**Tips** 

Attend the closing session for a chance to win the T<sup>3™</sup> International Conference Grand Prize: Attendance for two (2) participants at any 2015 T<sup>3™</sup> Summer Workshop, including travel, lodging and meals. Retail Value: \$2,650

Terms and conditions apply. Full  $T^{3m}$  International Conference Grand Prize rules and prize descriptions are available at the booth. TI employees and  $T^{3m}$  instructors are not eligible to win.







#### Administrator Academy

### College and Career Readiness in STEM Education Friday, March 15, 2015 10:00 a.m. – 5:15 p.m.

Location: Omni® Hotel - Fort Worth Ballroom 5

Administrator Academy participants will engage in a day of inspiring conversation on the administrator's role as a catalyst for building dynamic STEM programs. Respected STEM advocates from classrooms, higher education, business and entertainment will share unique insights on the effective leader's impact in overcoming the challenges of preparing students for success. Pre-registration is required as seating is limited. Lunch is provided for Academy participants.

#### Welcome

#### Dr. Deborah Donnelly

Professional Development Consultant

### STEM Workforce Development: Preparing for Jobs of the Future

Arturo Sanchez, III

Integration Manager to International Space Station NASA Johnson Space Center

#### **Developing STEM Habits to Promote College Readiness**

Dr. Stephanie Ogden

Dean of Research and Development L&N STEM Academy, Knoxville, TN

#### Inspiring Interest in STEM: A Recent Graduate's Perspective

**Emily Calandrelli** 

Host/Co-Producer, "Xploration Outer Space" on FOX & Hulu MIT Graduate

#### STEM Curricular Ideas: Connecting Math and Science

Cassie Whitecotton

Physics and AP\* Physics Teacher

### STEM Behind Hollywood: Promoting STEM through Adventure, Drama and Mystery

Dr. Steve Schlozman

Assistant Professor of Psychiatry, Harvard Medical School Consultant, The Science & Entertainment Exchange, a program of the National Academy of Sciences



### Calculus Conference in a Conference (C<sup>3</sup>)

A (re-)fresh look at Advanced Placement Calculus – Opportunities and Challenges

Saturday, March 14, 2015

8:00 a.m. - 5:30 p.m.

Location: Omni® Hotel - Fort Worth Ballroom 5

Key changes are being made to the AP\* Calculus Curriculum effective for the 2016-17 year. New topics have been added (none have been removed). At the core of the new design are six "Mathematical Practices for AP\* Calculus" (MPACs) that form a framework for the curriculum in place of the topic outlines:

- 1) Reasoning with definitions and theorems
- 2) Connecting concepts
- 3) Implementing algebraic/computational processes
- 4) Connecting multiple representations
- 5) Building notational fluency
- 6) Communicating

Learn from leaders in AP\* and college calculus about the opportunities and challenges for high school calculus teachers, speakers include:

#### **Dr. David Bressoud**

DeWitt Wallace Professor of Mathematics, Macalester College

#### **Gail Burrill**

Advanced Placement Calculus Development Committee

#### Vicki Carter

Advanced Placement Calculus Development Committee

#### **Dr. Tom Dick**

Oregon State University

#### **Wade Ellis**

West Valley College

#### **Dr. Deborah Hughes Hallett**

University of Arizona and Harvard University

#### **Benjamin Hedrick**

The College Board

#### Dr. Stephen Kokoska

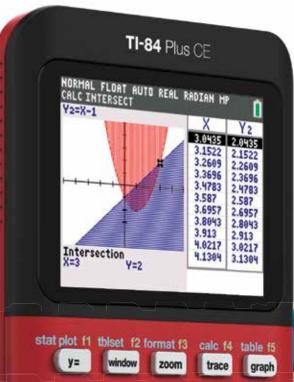
Chief Reader of Advanced Placement Calculus

#### **Craig Wright**

**Educational Testing Service** 

9)

The T<sup>3™</sup> Leadership Awards will be announced at the 2015 T<sup>3™</sup> International Conference on Thursday, March 12th.



ins

del

list

stat

draw C

prgm

cos F

COS

8

TEXAS INSTRUMENTS

distr

vars

tan' 6

tan

L6

L3

ans

3

entry solve

clear

mode

link x,t,e,n

angle B

SIN E

sin

0

ÉE

A-lock

test A

math

x2

log

In

sto+

rcl

matrix D

Surprisingly slimmer. Lots lighter. Totally TI-84 Plus.



#### Our next-generation TI-84 Plus graphing calculator

features familiar functionality and a crisp color screen in a handheld that's the thinnest, lightest and most colorful member of the family.

### Presenting the TI-84 Plus CE graphing calculator

Watch the introductory video and learn more at education.ti.com/84CE





### February 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29					

# Save the Date

Join us in Orlando as T<sup>3™</sup> kicks off another year of connecting teachers and technology.

> 2016 T<sup>3™</sup> International Conference February 26-28, 2016 Orlando Marriott World Center Orlando, Florida

Visit education.ti.com/go/t3orlando.





### **Conference Schedule**

### Thursday, March 12

	Time	Location
Registration	5:00 p.m. – 9:00 p.m.	Fort Worth Convention Center - Registration Counters (near 13th Street Lobby)

### Friday, March 13

	Time	Location
Registration	7:00 a.m. – 4:00 p.m.	Fort Worth Convention Center - Registration Counters (near 13th Street Lobby)
Opening Session	8:30 a.m. – 9:45 a.m.	Fort Worth Convention Center - Ballroom (2nd Floor)
Conference Sessions	10:00 a.m. – 5:15 p.m.	Fort Worth Convention Center and Omni® Hotel
Exhibits	10:00 a.m. – 6:00 p.m.	Omni® Hotel - 2nd Floor Foyer
Welcome Reception	5:30 p.m. – 7:00 p.m.	Convention Center Lobby and Water Gardens Events Plaza

### Saturday, March 14

	Time	Location
Registration	. /:30 a m = NOOn	Fort Worth Convention Center - Registration Counters (near 13th Street Lobby)
Conference Sessions	8:00 a.m. – 5:30 p.m.	Fort Worth Convention Center and Omni® Hotel
Exhibits	8:00 a.m. – 5:30 p.m.	Omni® Hotel - 2nd Floor Foyer

### Sunday, March 15

	Time	Location
Power Sessions	8:30 a.m. – 10:00 a.m.	Fort Worth Convention Center - 2nd Floor meeting rooms
Closing Session	10:15 a.m. – 11:15 a.m.	Fort Worth Convention Center - Ballroom (2nd Floor)



### **My Conference Planner**

TIME	FRIDAY	TIME	SATURDAY
7:00 a.m. – 4:00 p.m.	Registration Fort Worth Convention Center	7:30 a.m. – Noon	Registration Fort Worth Convention Center
8:30 a.m. – 9:45 a.m.	Opening Session Fort Worth Convention Center - Ballroom	8:00 a.m. – 9:30 a.m.	
10:00 a.m. – 11:30 a.m.		9:45 a.m. – 10:45 a.m.	
11:30 a.m. – 12:30 p.m. Lunch		11:00 a.m. – Noon	
		Noon – 1:00 p.m. Lunch	
12:30 p.m. – 1:30 p.m.		1:00 p.m. – 2:00 p.m.	
1:45 p.m. – 2:45 p.m.		2:15 p.m. – 3:45 p.m.	
3:00 p.m. – 4:00 p.m.		4:00 p.m. – 5:30 p.m. TIME	SUNDAY
4:15 p.m. – 5:15 p.m.		8:30 a.m. – 10:00 a.m.	
5:30 p.m. – 7:00 p.m.	Welcome Reception Fort Worth Convention Center Lobby and Water Gardens Events Plaza	10:15 a.m. – 11:15 a.m.	Closing Session Fort Worth Convention Center - Ballroom







Sessions by Subject Join the Conversa Tion

No.	Title	Day	Time	Presenter	Location	Room
ADN	/INISTRATOR					
146	Getting TI-Nspire™ Technology in the Science Classroom	Friday	4:15 p.m 5:15 p.m.	Leann lacuone	Omni Hotel	Texas Ballroom G
196	Leading the Way: How Administrators Should Support Technology Integration Throughout Their Schools	Saturday	8:00 a.m 9:30 a.m.	Susan Horowitz	Omni Hotel	Texas Ballroom G
264	Changing Opportunities, Changing Lives With the TI MathForward™ Program	Saturday	11:00 a.m noon	Ronda Davis	Omni Hotel	Texas Ballroom G
298	Building A Digital School Culture	Saturday	1:00 p.m 2:00 p.m.	Susan Horowitz	Omni Hotel	Texas Ballroom G
ALG	EBRA 1					
5	Content Target Assessment in Algebra Using CAS	Friday	10:00 a.m 11:30 a.m.	Robin Gapinski	Omni Hotel	Texas Ballroom G
20	What the App Is That?	Friday	10:00 a.m 11:30 a.m.	Gina Allred	Convention Ctr.	Meeting Room 202 A
21	CCSS Algebra 1 and the TI-84 Plus C Silver Edition Graphing Calculator	Friday	10:00 a.m 11:30 a.m.	Ann Davidian	Convention Ctr.	Meeting Room 202 B
25	CCSS Statistics	Friday	10:00 a.m 11:30 a.m.	Sharon Cichocki	Convention Ctr.	Meeting Room 203 C
27	Simulating CCSS Every Day Using TI-Nspire™ Technology in Algebra 1	Friday	10:00 a.m 11:30 a.m.	Veronica Carlson	Convention Ctr.	Meeting Room 204 B
56	Learning Cycle Lesson Plan Using TI Technology	Friday	12:30 p.m 1:30 p.m.	Miriam Santana	Convention Ctr.	Meeting Room 202 A
57	Lights, Camera, Active Learning With a Twist	Friday	12:30 p.m 1:30 p.m.	Kristy Curran	Convention Ctr.	Meeting Room 202 B
63	The New TEKS Got You Tied in a Knot?	Friday	12:30 p.m 1:30 p.m.	Sandra Hocutt	Convention Ctr.	Meeting Room 204 B
91	Exploring the TI-84 Plus C Silver Edition Graphing Calculator and the Revised Apps	Friday	1:45 p.m 2:45 p.m.	Linda Apicella	Convention Ctr.	Meeting Room 202 A
92	Starfish Family Transformed with the New TI-84 Plus C Silver Edition Graphing Calculator	Friday	1:45 p.m 2:45 p.m.	Barbara Ward	Convention Ctr.	Meeting Room 202 B
96	Promoting Deep Understanding: Problem-Based Learning and TI-Nspire™ Technology	Friday	1:45 p.m 2:45 p.m.	Nancy Johnson	Convention Ctr.	Meeting Room 203 C
98	The TI-Nspire™ CX Navigator™ System: Supporting the Algebra 1 Classroom	Friday	1:45 p.m 2:45 p.m.	Abigail Sanchez	Convention Ctr.	Meeting Room 204 B
126	Transformations in the Coordinate Plane With the TI-84 Plus C Silver Edition Graphing Calculator	Friday	3:00 p.m 4:00 p.m.	Margaret Bambrick	Convention Ctr.	Meeting Room 202 A
127	Exploring Lines Using a TI-84 Plus Silver Edition Graphing Calculator	Friday	3:00 p.m 4:00 p.m.	Vicki Stebbins	Convention Ctr.	Meeting Room 202 B
131	Useful Linear Applications	Friday	3:00 p.m 4:00 p.m.	Denny St. John	Convention Ctr.	Meeting Room 203 C
133	Using TI-Nspire™ Technology to Model Statistics in Algebra CCSS	Friday	3:00 p.m 4:00 p.m.	Mary Giannetto	Convention Ctr.	Meeting Room 204 B
135	Nspiring Creativity With TI-Nspire™ Technology: A Graphing Art Project	Friday	3:00 p.m 4:00 p.m.	Shaun Reynolds	Omni Hotel	Sundance 2
161	Discover The Vertex Form of a Parabola With the TI-84 Plus C Silver Edition Graphing Calculator	Friday	4:15 p.m 5:15 p.m.	Alice Carson	Convention Ctr.	Meeting Room 202 A
166	Playing With Perpendicular Lines: Conjecturing and Proof With TI-Nspire™ Technology	Friday	4:15 p.m 5:15 p.m.	Douglas Lapp	Convention Ctr.	Meeting Room 203 C







No.	Title	Day	Time	Presenter	Location	Room
ALG	EBRA 1					
168	Angry Birds <sup>™</sup> and Other Games to Motivate Learning	Friday	4:15 p.m 5:15 p.m.	Lauren Jensen	Convention Ctr.	Meeting Room 204 B
170	Line Designs and Patterns in Linear Functions	Friday	4:15 p.m 5:15 p.m.	Deobra Solomon	Omni Hotel	Sundance 2
175	Are You <i>Up to Code</i> With the TI-Nspire™ App for iPad®?	Friday	4:15 p.m 5:15 p.m.	Ann Wheeler	Omni Hotel	Texas Ballroom I
182	Simplify Algebra 1 Function Investigations With the Transformation Graphing App and Data Programs	Saturday	8:00 a.m 9:30 a.m.	Allan Bellman	Convention Ctr.	Meeting Room 201 B
185	I've Turned It On, Now What? Getting Started With TI-Nspire™ Technology	Saturday	8:00 a.m 9:30 a.m.	Sherry Everding	Convention Ctr.	Meeting Room 202 B
189	Statistics Explorations With TI-Nspire™ Technology in Middle Grades Math and Algebra 1	Saturday	8:00 a.m 9:30 a.m.	Katie England	Convention Ctr.	Meeting Room 203 C
191	Using TI-Nspire™ Technology to Prepare for STAAR® and EOC Assessments	Saturday	8:00 a.m 9:30 a.m.	Kathy Hale	Convention Ctr.	Meeting Room 204 B
206	It's OK to Use the Calculator, Even if You Can't on the Test	Saturday	8:00 a.m 9:30 a.m.	Tara Whittington	Omni Hotel	Sundance 4
216	Exploring Topics in High School Mathematics With the TI-84 Plus C Silver Edition Graphing Calculator	Saturday	9:45 a.m 10:45 a.m.	Ruth Casey	Convention Ctr.	Meeting Room 201 B
218	The TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices	Saturday	9:45 a.m 10:45 a.m.	Rebecca Caison	Convention Ctr.	Meeting Room 202 A
219	Using TI-Nspire™ Technology to Enhance Modeling in Algebra 1	Saturday	9:45 a.m 10:45 a.m.	Judith Olson	Convention Ctr.	Meeting Room 202 B
225	Using TI-Nspire™ Technology to Find Relationship Between Dimensions of Famous Paintings	Saturday	9:45 a.m 10:45 a.m.	Amin Lalani	Convention Ctr.	Meeting Room 204 B
238	Investigating Algebra 1 With TI-Nspire™ Technology	Saturday	9:45 a.m 10:45 a.m.	Patrick Sanchez	Omni Hotel	Sundance 2
252	Exploring the new Algebra 1 TEKS With the TI-84 Plus C Silver Edition Graphing Calculator	Saturday	11:00 a.m noon	Richard Parr	Convention Ctr.	Meeting Room 202 A
253	Transforming Linear Functions Using TI-Nspire <sup>™</sup> Technology	Saturday	11:00 a.m noon	Sherri Phegley	Convention Ctr.	Meeting Room 202 B
257	It's Getting Hot in Here: Using TI-Nspire™ Technology and Data Collection to Analyze Temperature Relationships	Saturday	11:00 a.m noon	Kari Craddock	Convention Ctr.	Meeting Room 203 C
259	Modeling as a Way to Implement All of the Math Practices	Saturday	11:00 a.m noon	Carl Veater	Convention Ctr.	Meeting Room 204 B
270	Parameters, Variables, Functions and Graphs	Saturday	11:00 a.m noon	Yew Fook Chan	Omni Hotel	Fort Worth Ballroom 8
272	Creating Your TI-84 Plus CE Graphing Calculator Classroom Using TI-SmartView™ CE Emulator Software and the TI Connect™ CE Software App	Saturday	11:00 a.m noon	Margo Lynn Mankus	Omni Hotel	Sundance 2
276	TI-84 Plus Family of Graphing Calculators, Line Designs and Patterns in Linear Functions	Saturday	11:00 a.m noon	Deobra Solomon	Omni Hotel	Texas Ballroom H
284	The TI-84 Plus C Silver Edition Graphing Calculator and TEKS: The Perfect Match	Saturday	1:00 p.m 2:00 p.m.	Beth Smith	Convention Ctr.	Meeting Room 201 B
287	Functions, TI-Nspire <sup>™</sup> Technology and Process Standards, United	Saturday	1:00 p.m 2:00 p.m.	Andi Parr	Convention Ctr.	Meeting Room 202 B

Sessions by Subject (17) @TICalculators

No.	Title	Day	Time	Presenter	Location	Room
ALG	EBRA 1					
291	Using Algebra TI-Nspire™ Applets in CCSS-based Courses	Saturday	1:00 p.m 2:00 p.m.	Wade Ellis	Convention Ctr.	Meeting Room 203 C
306	Using TI-Nspire™ Technology's PublishView™ Feature to Empower Teachers Through Ongoing Personal Professional Development	Saturday	1:00 p.m 2:00 p.m.	Melfried Olson	Omni Hotel	Sundance 2
318	Seven-percent Grade Ahead: How Steep is It? Slope Concepts in the Real World	Saturday	2:15 p.m 3:45 p.m.	Stuart Moskowitz	Convention Ctr.	Meeting Room 201 B
320	Catch a STAAR® or EOC or Other State Assessment	Saturday	2:15 p.m 3:45 p.m.	Kathy Hale	Convention Ctr.	Meeting Room 202 A
321	Constructing Algebra With TI-Nspire™ Technology	Saturday	2:15 p.m 3:45 p.m.	Pamela Harris	Convention Ctr.	Meeting Room 202 B
325	Algebraic and Statistical Thinking, Reasoning and CCSS Performance Standards	Saturday	2:15 p.m 3:45 p.m.	Ron Armontrout	Convention Ctr.	Meeting Room 203 C
327	Persevering through Algebra 1 and Geometry Problems Using TI-Nspire™ Technology	Saturday	2:15 p.m 3:45 p.m.	Katie Martinez	Convention Ctr.	Meeting Room 204 B
341	Why Does the TI-84 Plus CE Graphing Calculator Give That Result? What Can be Blocked for an Exam?	Saturday	2:15 p.m 3:45 p.m.	Margo Lynn Mankus	Omni Hotel	Sundance 3
346	Finding the Sweet Spot Between PBL and PBA Using the TI-Nspire™ App for iPad and Other Resources	Saturday	2:15 p.m 3:45 p.m.	Stephanie Ogden	Omni Hotel	Texas Ballroom J
352	Lining Up to Use the TI-84 Plus C Silver Edition Graphing Calculator	Saturday	4:00 p.m 5:30 p.m.	Debbie Sheridan	Convention Ctr.	Meeting Room 201 B
354	TI-84 Plus C Silver Edition Graphing Calculator Makes Algebra More Colorful and More Memorable	Saturday	4:00 p.m 5:30 p.m.	Marian Prince	Convention Ctr.	Meeting Room 202 A
359	Differentiation in the Algebra 1 Classroom Using TI-Nspire™ Technology	Saturday	4:00 p.m 5:30 p.m.	Rachael Smilowitz	Convention Ctr.	Meeting Room 203 C
ALG	EBRA 2					
9	Fun and Engaging Activities Using Technology that Address the CCSS	Friday	10:00 a.m 11:30 a.m.	Randy Lobe	Omni Hotel	Fort Worth Ballroom 4
32	Nspire-ational Mathematics for the 21st Century	Friday	10:00 a.m 11:30 a.m.	Joyce Lee	Omni Hotel	Sundance 4
33	TI-Nspire™ CX CAS Technology Constructions Are not for the Faint of Heart	Friday	10:00 a.m 11:30 a.m.	Tony Timms	Omni Hotel	Sundance 5
45	Simulations for Algebra Through Precalculus Using the TI-84 Plus Silver Edition Graphing Calculator	Friday	12:30 p.m 1:30 p.m.	Alice Hess	Omni Hotel	Fort Worth Ballroom 4
54	An Nspired Look at Transformations in Algebra	Friday	12:30 p.m 1:30 p.m.	Landy Godbold	Convention Ctr.	Meeting Room 201 B
65	Using the TI-Nspire™ CX Navigator™ System for Dynamic Interactive Activities	Friday	12:30 p.m 1:30 p.m.	Peg McVay	Omni Hotel	Sundance 2
66	The Real World: TI-Nspire™ Philadelphia	Friday	12:30 p.m 1:30 p.m.	Scott Bricker	Omni Hotel	Sundance 3
67	Small Steps, Big Strides in Understanding With the TI-84 Plus Family of Graphing Calculators	Friday	12:30 p.m 1:30 p.m.	Kara Leaman	Convention Ctr.	Sundance 4





No.	Title	Day	Time	Presenter	Location	Room
ALG	EBRA 2					
80	Cell Phones and the TI-84 Plus C Silver Edition Graphing Calculator: Why Not?	Friday	1:45 p.m 2:45 p.m.	Antoinette Kidwell	Omni Hotel	Fort Worth Ballroom 4
89	If You Can Learn to Use a Smartphone, You Can Learn to Teach With TI-Nspire™ Technology	Friday	1:45 p.m 2:45 p.m.	Karyn Nemeth	Convention Ctr.	Meeting Room 201 B
100	Transformers With TI-Nspire™ Technology	Friday	1:45 p.m 2:45 p.m.	Matthew Owens	Omni Hotel	Sundance 2
103	Simulating CCSS Every Day Using TI-Nspire™ Technology in Algebra 2	Friday	1:45 p.m 2:45 p.m.	Kim Thomas	Omni Hotel	Sundance 5
115 	Mathematical Modeling Using Real-world Data for the TI-84 Plus C Silver Edition Graphing Calculator	Friday	3:00 p.m 4:00 p.m.	Scott Trahan	Omni Hotel	Fort Worth Ballroom 4
136	Be Nspired to Tackle CCSS	Friday	3:00 p.m 4:00 p.m.	Della Highman	Omni Hotel	Sundance 3
138	Connecting Math and Science With Consumer-based Decisions	Friday	3:00 p.m 4:00 p.m.	Brenda Peterman	Omni Hotel	Sundance 5
150	TI-84 Plus C Silver Edition Graphing Calculators for Beginners	Friday	4:15 p.m 5:15 p.m.	Fan Disher	Omni Hotel	Fort Worth Ballroom 4
173	Magical Motivational Activities for Teaching CCSS in Algebra 2 Using TI-Nspire™ Technology	Friday	4:15 p.m 5:15 p.m.	Brendan Kelly	Omni Hotel	Sundance 5
194	Unlocking the TI-Nspire™ Graphing Application	Saturday	8:00 a.m 9:30 a.m.	Matt Almon	Omni Hotel	Texas Ballroom C
207	The Power of Visualization in Algebra 2	Saturday	8:00 a.m 9:30 a.m.	Howard Stern	Omni Hotel	Sundance 5
228	Shooting Free Throws with TI-Nspire™ Technology	Saturday	9:45 a.m 10:45 a.m.	Scott Washburn	Omni Hotel	Texas Ballroom C
262	Understanding Transformations of Graphs Using TI-Nspire™ Technology	Saturday	11:00 a.m noon	Hugh Daniels	Omni Hotel	Texas Ballroom C
275 	Using the TI-84 Plus C Silver Edition Graphing Calculator to Meet CCSS Math Practices and TEKS Process Standards	Saturday	11:00 a.m noon	Karen Campe	Omni Hotel	Sundance 5
296	Want to Talk About Making Connections With Extended Family?	Saturday	1:00 p.m 2:00 p.m.	Monique Chatman	Omni Hotel	Texas Ballroom C
09	Next Steps in a TI-Nspire™ Technology Algebra Adventure	Saturday	1:00 p.m 2:00 p.m.	Valerie Hudson	Omni Hotel	Sundance 5

Saturday 2:15 p.m. - 3:45 p.m.

Saturday 2:15 p.m. - 3:45 p.m.

Saturday 2:15 p.m. - 3:45 p.m.

Saturday 4:00 p.m. - 5:30 p.m.

Saturday 4:00 p.m. - 5:30 p.m.

Saturday 4:00 p.m. - 5:30 p.m.

Kathleen McKinley

**Julie Riggins** 

Brittney Sly

Heidi Rudolph

@TICalculators Sessions by Subject (19)

Standard Deviation vs. Mean Absolute Deviation (M.A.D.)

Create Graphing Calculator Art Using Piecewise Functions

Functions, Equations, and Matrices – Oh My!

No Handhelds, No Problem!

Flipping with the TI-Nspire™

Dazzle them with Data Collection!

Ballroom C

Sundance 4

Sundance 3

Sundance 4

Sundance 5

Omni Hotel

Omni Hotel

Omni Hotel

Omni Hotel

No.	Title	Day	Time	Presenter	Location	Room
Δςς	ESSMENT					
30	Creative Questioning Using TI-Nspire™ CX Navigator™ Teacher Software	Friday	10:00 a.m 11:30 a.m.	Tracy Slate	Omni Hotel	Sundance 3
43	Dissecting Formative Assessment	Friday	12:30 p.m 1:30 p.m.	Louise Chapman	Omni Hotel	Fort Worth Ballroom 2
78	Face-to-Face Time in a Flipped Class	Friday	1:45 p.m 2:45 p.m.	Sharon Bruce	Omni Hotel	Fort Worth Ballroom 2
113	Formative Assessment with Pictures and TI-Nspire™ Technology	Friday	3:00 p.m 4:00 p.m.	Patti Nicodemo	Omni Hotel	Fort Worth Ballroom 2
197	Dissecting and Differentiating Formative Assessment	Saturday	8:00 a.m 9:30 a.m.	David Young	Omni Hotel	Fort Worth Ballroom 2
231	STAAR® Test Preparation: What to Clear and How to Clear It	Saturday	9:45 a.m 10:45 a.m.	Patrick Fariss	Omni Hotel	Fort Worth Ballroom 2
265	CCSS, Formative Assessment and the TI-Nspire™ CX Navigator™ System	Saturday	11:00 a.m noon	Kim Zeydel	Omni Hotel	Fort Worth Ballroom 2
299	Enhancing Formative Assessments, Lessons and Question- formulating Techniques Using TI-Nspire" Technology	Saturday	1:00 p.m 2:00 p.m.	RuthieAnn Trujillo	Omni Hotel	Fort Worth Ballroom 2
333	Using the TI-Nspire™ CX Navigator™ System as a Formative Assessment Tool	Saturday	2:15 p.m 3:45 p.m.	Amanda Roble	Omni Hotel	Fort Worth Ballroom 2
367	Best Student Success Strategy: Formative Assessment With and Without the TI-Nspire™ CX Navigator™ System	Saturday	4:00 p.m 5:30 p.m.	Katie England	Omni Hotel	Fort Worth Ballroom 2
AUT	HORING					
260	Easy and Efficient Graphical User Interface (GUI) Creation for TI-Nspire™ Lua Scripts	Saturday	11:00 a.m noon	Adrien Bertrand	Omni Hotel	Texas Ballroom A
294	Dancing With Lua: Using Lua to Enhance Constructions Made on TI-Nspire™ Technology's Graphs Page	Saturday	1:00 p.m 2:00 p.m.	Adam Pennell	Omni Hotel	Texas Ballroom A
340	Sliders, Conditionals and Active Math Boxes: Spice Up Your Documents With Interactivity	Saturday	2:15 p.m 3:45 p.m.	Mark Arguijo	Omni Hotel	Sundance 2
362	Getting Started on Authoring TI-Nspire <sup>™</sup> Documents	Saturday	4:00 p.m 5:30 p.m.	Jerry Scherer	Omni Hotel	Texas Ballroom A
374	Programs and Sliders and Conditions, Oh My!	Saturday	4:00 p.m 5:30 p.m.	Dennis Donovan	Omni Hotel	Sundance 2
BIO	LOGY					
12	Argumentation Science Style: Biology, TEKS and TI-Nspire™ Technology	Friday	10:00 a.m 11:30 a.m.	Shawn Schlueter	Omni Hotel	Fort Worth Ballroom 8
81	How Safe Is My Water? Testing With the TI-84 Plus C Silver Edition Graphing Calculator	Friday	1:45 p.m 2:45 p.m.	Judy Day	Omni Hotel	Fort Worth Ballroom 6
134	Catalase Activity: It's a Gas, Gas, Gas	Friday	3:00 p.m 4:00 p.m.	Stacy Thibodeaux	Omni Hotel	Stockyards 2
151	Learning to Fail: Building Confidence With Data Collection	Friday	4:15 p.m 5:15 p.m.	Jessica Kohout	Omni Hotel	Fort Worth Ballroom 6
203	Nspiring Photosynthesis and Respiration	Saturday	8:00 a.m 9:30 a.m.	Judy Day	Omni Hotel	Stockyards 2
234	TI-Nspire <sup>™</sup> Technology Will Help Show How Different They Really Are	Saturday	9:45 a.m 10:45 a.m.	Jacklyn Bonneau	Omni Hotel	Fort Worth Ballroom 6





No.	Title	Day	Time	Presenter	Location	Room
CAL	CULUS					
2	The Amusement Park of Your Mind: TI-Nspire™ CX CAS Technology's AP* Calculus Review Game	Friday	10:00 a.m 11:30 a.m.	Kim Schjelderup	Omni Hotel	Texas Ballroom B
3	PBL in AP* Calculus: A Hand-on Approach That Says, <i>Mahalo</i>	Friday	10:00 a.m 11:30 a.m.	Michael Long	Omni Hotel	Texas Ballroom C
38	Exploring Motion in AP* Calculus	Friday	12:30 p.m 1:30 p.m.	Vicki Carter	Omni Hotel	Texas Ballroom B
39	Calculus Concepts Are Very Easy With TI-Nspire™ CX CAS Technology and Sensors	Friday	12:30 p.m 1:30 p.m.	Jonnathan Resendiz	Omni Hotel	Texas Ballroom C
73	Teacher Moves That Engage Students and Promote Understanding in Calculus	Friday	1:45 p.m 2:45 p.m.	Ray Barton	Omni Hotel	Texas Ballroom B
74	A Serious Look at Series With TI-Nspire™ CAS Technology	Friday	1:45 p.m 2:45 p.m.	Patricia Brooks	Omni Hotel	Texas Ballroom C
108	3-D Graphing Using TI-Nspire™ Technology	Friday	3:00 p.m 4:00 p.m.	Steve Phelps	Omni Hotel	Texas Ballroom B
142	Visualizing Series and Covergence	Friday	4:15 p.m 5:15 p.m.	Dennis Wilson	Omni Hotel	Texas Ballroom A
143	Jazzing Up Homework Assignments Using TI-Nspire™ Technology	Friday	4:15 p.m 5:15 p.m.	Anthony Record	Omni Hotel	Texas Ballroom B
144	Linear Approximations With the TI-84 Plus Silver Edition Graphing Calculator	Friday	4:15 p.m 5:15 p.m.	Shayla Hoffman	Omni Hotel	Texas Ballroom C
CAS						
14	Awesome CAS Activities That Integrate Algebra and Geometry Using TI-Nspire™ Technology	Friday	10:00 a.m 11:30 a.m.	Tom Reardon	Convention Ctr.	Meeting Room 103 A
15	Unraveling Data Analysis	Friday	10:00 a.m 11:30 a.m.	John Hanna	Convention Ctr.	Meeting Room 103 B
29	CAS as a Platform for Dynamic Assessment: Create Your Own Auto-grading Tasks	Friday	10:00 a.m 11:30 a.m.	Stephen Arnold	Omni Hotel	Sundance 2
42	Geometric Transformations Made Simple With Complex Numbers	Friday	12:30 p.m 1:30 p.m.	Thomas Dick	Omni Hotel	Fort Worth Ballroom 1
50	CAS on TI-Nspire™ Technology: It's Not Just for Your Top Students	Friday	12:30 p.m 1:30 p.m.	Ray Klein	Convention Ctr.	Meeting Room 103 A
51	Taking Tasks to Task: Targeting Tasks for Mathematical Practices Using TI-Nspire™ Technology	Friday	12:30 p.m 1:30 p.m.	Rose Mary Zbiek	Convention Ctr.	Meeting Room 103 B
85	Investigating Trinomials With Integer Roots	Friday	1:45 p.m 2:45 p.m.	Ray Williams	Convention Ctr.	Meeting Room 103 A
86	Why CAS? Why Not?	Friday	1:45 p.m 2:45 p.m.	Fred Ferneyhough	Convention Ctr.	Meeting Room 103 B
120	Reaching Weaker Algebra Students With TI-Nspire™ Technology	Friday	3:00 p.m 4:00 p.m.	Michael Buescher	Convention Ctr.	Meeting Room 103 A
121	CAS Technology in the Australian Curriculum	Friday	3:00 p.m 4:00 p.m.	Neale Woods	Convention Ctr.	Meeting Room 103 B

Sessions by Subject (21) @TICalculators

No.	Title	Day	Time	Presenter	Location	Room
CAS						
156	Using the TI-Nspire™ CAS Technology to Enhance Solving of Precalculus Problems	Friday	4:15 p.m 5:15 p.m.	Pat Bowler Johnson	Convention Ctr.	Meeting Room 103 B
162	TI-Nspire™ Technology: Graphing from Linear Equations to Slope Fields	Friday	4:15 p.m 5:15 p.m.	Joanne Ryan	Convention Ctr.	Meeting Room 202 B
178	Delving Deeper With TI-Nspire™ Technology	Saturday	8:00 a.m 9:30 a.m.	Peter Flynn	Convention Ctr.	Meeting Room 103 A
179	Nspired CAS and Statistics	Saturday	8:00 a.m 9:30 a.m.	Chris Harrow	Convention Ctr.	Meeting Room 103 B
210	Using TI-Nspire™ CAS Technology to Address Functions Tasks: An Avenue to Mathematical Practices	Saturday	8:00 a.m 9:30 a.m.	M. Kathleen Heid	Omni Hotel	Texas Ballroom J
212	Modeling Real-world Calculus Problems With Symbolic Geometry Software	Saturday	9:45 a.m 10:45 a.m.	Irina Lyublinskaya	Convention Ctr.	Meeting Room 103 A
213	Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire™ Technology	Saturday	9:45 a.m 10:45 a.m.	Frank Moya	Convention Ctr.	Meeting Room 103 B
246	Using CAS as Building Blocks for Algebra Concepts	Saturday	11:00 a.m noon	Lynda Ferneyhough	Convention Ctr.	Meeting Room 103 A
314	TI-Nspire <sup>™</sup> CAS Technology Takes on the CCSS (+) Standards and Wins	Saturday	2:15 p.m 3:45 p.m.	Joe Fiedler	Convention Ctr.	Meeting Room 103 A
315	Around The World In 80 Days (Or 90 Minutes): A Function Exploration	Saturday	2:15 p.m 3:45 p.m.	Stephen Julian	Convention Ctr.	Meeting Room 103 B
CHE	MISTRY					
202	pH, pKa, and Half-titrations	Saturday	8:00 a.m 9:30 a.m.	Greg Dodd	Omni Hotel	Fort Worth Ballroom 8
305	Crime Scene Analysis With TI-Nspire <sup>™</sup> Technology	Saturday	1:00 p.m 2:00 p.m.	Barbara Ward	Omni Hotel	Stockyards 2
337	Chemical Equilibrium: A Matter of Balance	Saturday	2:15 p.m 3:45 p.m.	Ray Lesniewski	Omni Hotel	Fort Worth Ballroom 7
CON	NECTING SCIENCE AND MATH/STEM					
11	Let's Put the <i>E</i> in STEM	Friday	10:00 a.m 11:30 a.m.	Greg Dodd	Omni Hotel	Fort Worth Ballroom 7
46	TI-Nspire™ Technology and Math and Science Projects	Friday	12:30 p.m 1:30 p.m.	Delbra Robinson	Omni Hotel	Fort Worth Ballroom 6
47	Step up STEM With TI-Nspire™ Technology	Friday	12:30 p.m 1:30 p.m.	Audrey Cucci	Omni Hotel	Fort Worth Ballroom 7
82	A Reason for the Seasons	Friday	1:45 p.m 2:45 p.m.	Doug Roberts	Omni Hotel	Fort Worth Ballroom 7
104	(Infusing TI-Nspire <sup>™</sup> Technology) + (STEM Education) = SUCCESS on CSSS Exams	Friday	1:45 p.m 2:45 p.m.	Edward Chaves	Omni Hotel	Texas Ballroom H
116	Lasting Connections Using Data Collection	Friday	3:00 p.m 4:00 p.m.	JoAnn Miltenberg	Omni Hotel	Fort Worth Ballroom 6
117	Engaging TI-Nspire™ Activities for Grades Four Through Six	Friday	3:00 p.m 4:00 p.m.	Maria Benzon	Omni Hotel	Fort Worth Ballroom 7





No.	Title	Day	Time	Presenter	Location	Room
CON	NECTING SCIENCE AND MATH/STEM					
152	Use a Reality-oriented Framework for High-Engagement Lessons	Friday	4:15 p.m 5:15 p.m.	Roger Fuller	Omni Hotel	Fort Worth Ballroom 7
200	Understanding Zombies Using TI-Nspire <sup>™</sup> Technology Armed With Sensors in Your Math and Science Classrooms	Saturday	8:00 a.m 9:30 a.m.	Michael Smith	Omni Hotel	Fort Worth Ballroom 6
209	Just Chilling: A STEM Project Using Vernier Go Wireless® Temp Sensor	Saturday	8:00 a.m 9:30 a.m.	Fred Fotsch	Omni Hotel	Texas Ballroom I
235	STEM Springboard: Zombie Infections to Real Human and Livestock Diseases	Saturday	9:45 a.m 10:45 a.m.	Peggy Welch	Omni Hotel	Fort Worth Ballroom 7
237	Teaching for Understanding, Teaching for Transfer	Saturday	9:45 a.m 10:45 a.m.	Tami Plein	Omni Hotel	Stockyards 2
271	Building Student Understanding Through Problem-solving Tasks	Saturday	11:00 a.m noon	Lynda Vincent	Omni Hotel	Stockyards 2
336	Wow, I Could Teach Algebra Even Better if I Knew More Physics, She Replied	Saturday	2:15 p.m 3:45 p.m.	Sean Bird	Omni Hotel	Fort Worth Ballroom 6
370	Nspiring a Green Revolution	Saturday	4:00 p.m 5:30 p.m.	Christina Middlebrook	Omni Hotel	Fort Worth Ballroom 6
373	Project- and Problem-based Learning With TI-Nspire™ Technology	Saturday	4:00 p.m 5:30 p.m.	Michelle Bonds	Omni Hotel	Stockyards 2
ELE	MENTARY MATH					
76	Fractions and Decimals and Lions: Oh, My!	Friday	1:45 p.m 2:45 p.m.	Tammy L. Jones	Omni Hotel	Texas Ballroom G
140	The TI-Nspire™ App for iPad® is the Perfect Tool to Teach Fractions in Grades Three Through Five	Friday	3:00 p.m 4:00 p.m.	Marsha Burkholder	Omni Hotel	Texas Ballroom I
230	Putting Place Value in Its Place for Elementary Students	Saturday	9:45 a.m 10:45 a.m.	Marsha Burkholder	Omni Hotel	Texas Ballroom G
GEN	ERAL INTEREST					
16	Expanding Your TI-84 Family of Graphing Calculators Skill Set for IB® Mathematics	Friday	10:00 a.m 11:30 a.m.	Jim Nakamoto	Convention Ctr.	Meeting Room 104
382	Getting Started With TI-Nspire™ Technology?	Friday	10:00 a.m 11:30 a.m.	Elizabeth (Betty) Gasque	Convention Ctr.	Convention Ctr. Ballroom
41	Changing Math Attitudes With Technology	Friday	12:30 p.m 1:30 p.m.	Christine Kasitz	Omni Hotel	Texas Ballroom G
52	All About TI-Nspire™ Technology's Graphs Page	Friday	12:30 p.m 1:30 p.m.	Stephanie MacKay	Convention Ctr.	Meeting Room 104
69	Using Technology Tools Appropriately	Friday	12:30 p.m 1:30 p.m.	Bill Caroscio	Omni Hotel	Texas Ballroom H
71	The iPad® and Apple TV®: Say Goodbye to Your SMART Board®	Friday	12:30 p.m 1:30 p.m.	Sam Gough	Omni Hotel	Texas Ballroom J
87	Getting Nspired With Online Learning	Friday	1:45 p.m 2:45 p.m.	Richard Snow	Convention Ctr.	Meeting Room 104
122	TeacherTube® Classrooms: Nspired!	Friday	3:00 p.m 4:00 p.m.	Jason Smith	Convention Ctr.	Meeting Room 104

Sessions by Subject (23) @TICalculators

No.	Title	Day	Time	Presenter	Location	Room
GEN	IERAL INTEREST	•••••				
155	Would You Teach Writing Without Word Processing? So Why Are You Teaching Math Without Calculators?	Friday	4:15 p.m 5:15 p.m.	Kathy Traylor	Convention Ctr.	Meeting Room 103 A
157	TI Resources to Support Instruction of the TEKS	Friday	4:15 p.m 5:15 p.m.	Robb Wilson	Convention Ctr.	Meeting Room 104
176	Intro to the TI-Nspire™ App for iPad®	Friday	4:15 p.m 5:15 p.m.	Travis Bower	Omni Hotel	Texas Ballroom J
188	How We are Flipping the Script	Saturday	8:00 a.m 9:30 a.m.	Sarah Thomas	Convention Ctr.	Meeting Room 203 B
236	Informing and Nspiring Students to Take Ownership Over Their Learning	Saturday	9:45 a.m 10:45 a.m.	Pareesa Shirazi	Omni Hotel	Fort Worth Ballroom 8
243	Down With the Upload: Experience the New Means of Data Transfer	Saturday	9:45 a.m 10:45 a.m.	Andrew Benzing	Omni Hotel	Texas Ballroom I
247	Using TI-Nspire™ Technology as a Formative Assessment Tool to Elicit Evidence of Student Thinking	Saturday	11:00 a.m noon	Linda Griffith	Convention Ctr.	Meeting Room 103 B
268	Building Essential Understandings of Function Within TEKS and CCSS Using TI-Nspire™ Technology	Saturday	11:00 a.m noon	Jon Davis	Omni Hotel	Fort Worth Ballroom 6
280	Creative Solutions	Saturday	1:00 p.m 2:00 p.m.	Jean McKenny	Convention Ctr.	Meeting Room 103 A
281	An Introductory Tour of TI-Nspire <sup>™</sup> Technology	Saturday	1:00 p.m 2:00 p.m.	Ron Kennedy	Convention Ctr.	Meeting Room 103 B
292	Explore TI-Nspire™ Technology's Power and Range via AP* Calculus, Ch 1 Activities	Saturday	1:00 p.m 2:00 p.m.	Dan Kennedy	Convention Ctr.	Meeting Room 204 A
302	Interfacing With Students Through TI-Nspire™ Technology: Meshing Old Activities With New Technology	Saturday	1:00 p.m 2:00 p.m.	Sarah Schmitz	Omni Hotel	Fort Worth Ballroom 6
303	Using the PublishView™ Feature as a Presentation Tool	Saturday	1:00 p.m 2:00 p.m.	Dawn Easter	Omni Hotel	Fort Worth Ballroom 7
326	Using Technology as an Accommodation for Students With Disabilities	Saturday	2:15 p.m 3:45 p.m.	Gayle Warmbrodt	Convention Ctr.	Meeting Room 204 A
332	Reinforcement through the StudyCards™ App	Saturday	2:15 p.m 3:45 p.m.	Leanne Barbour	Omni Hotel	Texas Ballroom G
348	Setup, Installation and First-day Usage of the TI-Nspire™ CX Navigator™ System	Saturday	4:00 p.m 5:30 p.m.	Daryl Ewry	Convention Ctr.	Meeting Room 103 A
366	Help Struggling Math Students and First-time Calculator Users be Successful	Saturday	4:00 p.m 5:30 p.m.	Kerry Burross	Omni Hotel	Texas Ballroom G
GEN	IERAL MATH					
24	I See It: Visualizing Math Concepts Using TI-Nspire™ Technology	Friday	10:00 a.m 11:30 a.m.	Marc Garneau	Convention Ctr.	Meeting Room 203 B
26	Rising to the Challenges of the Process Standards and Math Practices Using the TI-Nspire™ CX Navigator™ System	Friday	10:00 a.m 11:30 a.m.	Jennifer High	Convention Ctr.	Meeting Room 204 A
35	Getting Started With the TI-Nspire™ CAS App for iPad®	Friday	10:00 a.m 11:30 a.m.	Tom Steinke	Omni Hotel	Texas Ballroom I
36	Fostering the Growth Mindset With the TI-Nspire™ App for iPad®	Friday	10:00 a.m 11:30 a.m.	Kristin Arterbury	Omni Hotel	Texas Ballroom J
60	Spiralling Through the Curriculum With Activities	Friday	12:30 p.m 1:30 p.m.	Mary Bourassa	Convention Ctr.	Meeting Room 203 B
62	Simple Programming With the TI-84 Plus Silver Edition Graphing Calculator	Friday	12:30 p.m 1:30 p.m.	Lisa Suarez	Convention Ctr.	Meeting Room 204 A
70	No TI-Nspire™ Technology? Don't Worry, Be Appy	Friday	12:30 p.m 1:30 p.m.	Michelle Goetz	Omni Hotel	Texas Ballroom I
			· · · · · · · · · · · · · · · · · · ·			- · · · · · · · · · · · · · · · · · · ·





No.	Title	Day	Time	Presenter	Location	Room
GEN	IERAL MATH					
95	Making the Transition From the TI-83 Plus or TI-84 Plus Silver Edition Graphing Calculator to TI-Nspire™ Technology	Friday	1:45 p.m 2:45 p.m.	David Sword	Convention Ctr.	Meeting Room 203 B
97	The TI-84 Plus Silver Edition Graphing Calculator and the Special Needs Classroom	Friday	1:45 p.m 2:45 p.m.	Holly Terrill	Convention Ctr.	Meeting Room 204 A
105	iCalculus: Teaching AP* Calculus With the TI-Nspire™ CAS App for iPad®	Friday	1:45 p.m 2:45 p.m.	Corey Boby	Omni Hotel	Texas Ballroom I
130	Let's Get Started Nspiring Students: Learn the Basics to Share With Your Colleagues	Friday	3:00 p.m 4:00 p.m.	Patsy Fagan	Convention Ctr.	Meeting Room 203 B
132	The Science of Learning Using the TI-Nspire™ CX Navigator™ System	Friday	3:00 p.m 4:00 p.m.	Ellen Browne	Convention Ctr.	Meeting Room 204 A
165	Using the TI-84 Plus Silver Edition Graphing Calculator for Math Education in Singapore	Friday	4:15 p.m 5:15 p.m.	Tiow Choo Kwee	Convention Ctr.	Meeting Room 203 B
167	Using TI-Nspire™ Technology to Enrich High School Mathematics Conversations	Friday	4:15 p.m 5:15 p.m.	Karen Cockburn	Convention Ctr.	Meeting Room 204 A
171	Formative Assessments, Student Engagement and Classroom Management Using the TI-Nspire™ CX Navigator™ System	Friday	4:15 p.m 5:15 p.m.	Osmond Owusu	Omni Hotel	Sundance 3
190	Programming on TI-Nspire™ Technology	Saturday	8:00 a.m 9:30 a.m.	Jared Despain	Convention Ctr.	Meeting Room 204 A
222	TI-84 Plus C Silver Edition Graphing Calculator and TI-SmartView™ Emulator Software Tips and Tricks: They're not Just for SMART Board®	Saturday	9:45 a.m 10:45 a.m.	Tom Reardon	Convention Ctr.	Meeting Room 203 B
224	Flipping for Problem-solving Mondays and No-homework Weekends	Saturday	9:45 a.m 10:45 a.m.	Robyn Poulsen	Convention Ctr.	Meeting Room 204 A
256	Maths in a Box: A Paper-folding Investigation Using TI-Nspire™ Technology	Saturday	11:00 a.m noon	Jim Lowe	Convention Ctr.	Meeting Room 203 B
258	What Do I Do the First Day I Use TI-Nspire™ Technology With My Students?	Saturday	11:00 a.m noon	Jeremy Zelkowski	Convention Ctr.	Meeting Room 204 A
269	Got TI-Nspire™ CX Navigator™ System Questions?	Saturday	11:00 a.m noon	Jeff McCalla	Omni Hotel	Fort Worth Ballroom 7
290	Underwhelming Resources: Finding and Adapting Resources for Your TI-Nspire™ Technology	Saturday	1:00 p.m 2:00 p.m.	Rafael Raya	Convention Ctr.	Meeting Room 203 B
310	CCSS 2 Go: Developing Apps for In- and Out-of-School Learning	Saturday	1:00 p.m 2:00 p.m.	Irina Lyublinskaya	Omni Hotel	Texas Ballroom H
324	Using TI-Nspire™ Technology Quizzes and Quick Polls for TEKS Assessment	Saturday	2:15 p.m 3:45 p.m.	Sukhhbir Singh	Convention Ctr.	Meeting Room 203 B
GEN	IERAL SCIENCE					
48	My Students Collected Data: Now What do I do?	Friday	12:30 p.m 1:30 p.m.	Cassie Whitecotton	Omni Hotel	Fort Worth Ballroom 8
64	Ending the Aggregation Aggravation With the TI-Nspire™ CX Navigator™ System	Friday	12:30 p.m 1:30 p.m.	Ed Roberts	Omni Hotel	Stockyards 2
118	TI-Nspire <sup>™</sup> Technology Forensics: Drug Testing	Friday	3:00 p.m 4:00 p.m.	Peggy Welch	Omni Hotel	Fort Worth Ballroom 8
201	Inquiring Minds Want to Know: Guided Inquiry in Science	Saturday	8:00 a.m 9:30 a.m.	Todd Morstein	Omni Hotel	Fort Worth Ballroom 7
371	Climate Change With TI-Nspire™ Technology	Saturday	4:00 p.m 5:30 p.m.	Marc Drougel	Omni Hotel	Fort Worth Ballroom 7

Sessions by Subject (25) @TICalculators

NO.	Title	Day	Time	Presenter	Location	Room
GEO	METRY	• • • • • • • • • • • • • • • • • • • •				
6	Investigations With TI-Nspire™ Technology Involving Parabolas to Enrich Our Teaching Standards at All Levels	Friday	10:00 a.m 11:30 a.m.	Jean-Jacques Dahan	Omni Hotel	Fort Worth Ballroom 1
8	Using Origami Boxes as a Context for Exploring Graphs	Friday	10:00 a.m 11:30 a.m.	Arsalan Wares	Omni Hotel	Fort Worth Ballroom 3
44	It Is in Color? The Cabri™ Jr. Geometry App on the TI-84 Plus C Silver Edition Graphing Calculator	Friday	12:30 p.m 1:30 p.m.	Dona McSpadden	Omni Hotel	Fort Worth Ballroom 3
77	These Are a Few of My Favorite Things	Friday	1:45 p.m 2:45 p.m.	Doug Smeltz	Omni Hotel	Fort Worth Ballroom 1
79	Integrating TI Technology While Writing a Geometry Curriculum	Friday	1:45 p.m 2:45 p.m.	Jessica Kachur	Omni Hotel	Fort Worth Ballroom 3
102	Strategies for an Effective Co-taught Math Classroom	Friday	1:45 p.m 2:45 p.m.	Kerry Burross	Omni Hotel	Sundance 4
112	Transforming Geometry: Teaching Transformations and Proof on TI-Nspire™ Technology	Friday	3:00 p.m 4:00 p.m.	David Reeves	Omni Hotel	Fort Worth Ballroom 1
114	Reflect on This: Rigid Motions as the Composition of Reflections	Friday	3:00 p.m 4:00 p.m.	Stephen West	Omni Hotel	Fort Worth Ballroom 3
137	Discovering the Definition of the Parabola Using TI-Nspire™ Technology as Seen Through a CCSS Classroom	Friday	3:00 p.m 4:00 p.m.	Stan Pappo	Omni Hotel	Sundance 4
147	Geometry Through the Lens of TI-Nspire™ Technology: An Investigational Approach	Friday	4:15 p.m 5:15 p.m.	Mark Cox	Omni Hotel	Fort Worth Ballroom 1
149	You Can Menu Program for Trigonometric Ratio Operations	Friday	4:15 p.m 5:15 p.m.	Mark von Rosenberg	Omni Hotel	Fort Worth Ballroom 3
172	Designing a Wishing Well With TI-Nspire™ Technology	Friday	4:15 p.m 5:15 p.m.	Ray Fox	Omni Hotel	Sundance 4
193	Rectangles, Squares, Circles and Quadratics: Modeling and Optimization With TI-Nspire™ Technology	Saturday	8:00 a.m 9:30 a.m.	Karen Campe	Omni Hotel	Texas Ballroom B
198	Standards-based Investigations in Geometry With TI-Nspire™ Technology	Saturday	8:00 a.m 9:30 a.m.	Fred Decovsky	Omni Hotel	Fort Worth Ballroom 3
227	Prove it: Rigid Motion Transformations and TI-Nspire™ Technology	Saturday	9:45 a.m 10:45 a.m.	Johnny Ashurst	Omni Hotel	Texas Ballroom B
239	Designing for Geometry	Saturday	9:45 a.m 10:45 a.m.	Matt Rhodes	Omni Hotel	Sundance 3
240	TI-Nspire™ Technology in a Geometry Classroom for Beginners	Saturday	9:45 a.m 10:45 a.m.	Tracy Watson	Omni Hotel	Sundance 4
244	Constructing any Given Triangle With TI-Nspire™ Technology: A Complement to CCSS Geometry/Trigonometry	Saturday	9:45 a.m 10:45 a.m.	Russell Brown	Omni Hotel	Texas Ballroom J
261	Use TI-Nspire™ Technology to Meet the Needs of CCSS	Saturday	11:00 a.m noon	Tracy Wingert	Omni Hotel	Texas Ballroom B
266	Discovering Euler's Line in Triangles: Using the TI-84 Plus C Silver Edition Graphing Calculator and Cabri™ Jr. Geometry App	Saturday	11:00 a.m noon	Mary A. Brese	Omni Hotel	Fort Worth Ballroom 3
273	Exploring Basic Geometric Constructions	,	11:00 a.m noon	Martin Sanchez	Omni Hotel	Sundance 3





No.	Title	Day	Time	Presenter	Location	Room
GEO	METRY					
274	Make'em or Break'em	Saturday	11:00 a.m noon	Tammy Casey	Omni Hotel	Sundance 4
277	Geometry Constructions: Fun and Easy Using the TI-Nspire™ App for iPad®	Saturday	11:00 a.m noon	Vicki Cable	Omni Hotel	Texas Ballroom I
295	What Line Are You On?	Saturday	1:00 p.m 2:00 p.m.	Philip Magner	Omni Hotel	Texas Ballroom B
300	Learn About the Cabri™ Jr. Geometry App on the TI-84 Plus Silver Edition Graphing Calculator in Your Geometry Class	Saturday	1:00 p.m 2:00 p.m.	Naomi Kokason	Omni Hotel	Fort Worth Ballroom 3
304	Geometry Investigations Using the Cabri™ Jr. Geometry App	Saturday	1:00 p.m 2:00 p.m.	Todd Steckler	Omni Hotel	Fort Worth Ballroom 8
308	TI-Nspire™ Technology: Scout Camping the CCSS Way	Saturday	1:00 p.m 2:00 p.m.	Jean Annette Jones	Omni Hotel	Sundance 4
311	Using the TI-Nspire™ App for iPad® to Explore Circles	Saturday	1:00 p.m 2:00 p.m.	Ray Fox	Omni Hotel	Texas Ballroom I
312	Geometry Goodies on the TI-Nspire™ App for iPad®	Saturday	1:00 p.m 2:00 p.m.	Jon Lepeska	Omni Hotel	Texas Ballroom J
329	Transformational Geometry Activities Leading to Proof of Congruence and Similarity	Saturday	2:15 p.m 3:45 p.m.	Charles Vonder Embse	Omni Hotel	Texas Ballroom B
334	Let's Lasso some TI-Nspire™ Circle Activities	Saturday	2:15 p.m 3:45 p.m.	Judy Hicks	Omni Hotel	Fort Worth Ballroom 3
345	Geometric Transformations: Brand New Dynamic Investigations Using TI-Nspire™ Teacher Software	Saturday	2:15 p.m 3:45 p.m.	Tom Reardon	Omni Hotel	Texas Ballroom I
363	Exploring Circle Geometry: Functions Emerging From Data Capture	Saturday	4:00 p.m 5:30 p.m.	Roger Wander	Omni Hotel	Texas Ballroom B
368	Proportional Panting: Proportional Reasoning With Dogs	Saturday	4:00 p.m 5:30 p.m.	Mary Beth Murrell	Omni Hotel	Fort Worth Ballroom 3
MID	DLE GRADES MATH					
17	This Ain't Your Mama's Middle School Math: The TI-84 Plus C Silver Edition Graphing Calculator and CCSS	Friday	10:00 a.m 11:30 a.m.	Sherri Abel	Convention Ctr.	Meeting Room 201 A
19	Less is More	Friday	10:00 a.m 11:30 a.m.	Ellen Johnston	Convention Ctr.	Meeting Room 201 C
22	TEKS and TI-84 Plus Technology: How This Tool Can Help Encourage Students to Aim Higher in Mathematics	Friday	10:00 a.m 11:30 a.m.	Valerie Hudson	Convention Ctr.	Meeting Room 202 C
23	Charting a Course With the TI-84 Plus CE Graphing Calculator	Friday	10:00 a.m 11:30 a.m.	Fred Decovsky	Convention Ctr.	Meeting Room 202 D
53	Let's Saddle Up and Ride With the TEKS	Friday	12:30 p.m 1:30 p.m.	Jane Damaske	Convention Ctr.	Meeting Room 201 A
58 	Taking the Fear Out of Fractions	Friday	12:30 p.m 1:30 p.m.	Vincent Doty	Convention Ctr.	Meeting Room 202 C
59	So, Texas Eighth Grade Can Use the TI-84 Plus C Silver Edition Graphing Calculator: Now What?	Friday	12:30 p.m 1:30 p.m.	Corina Srygley	Convention Ctr.	Meeting Room 202 D

Sessions by Subject (27) @TICalculators

No.	Title	Day	Time	Presenter	Location	Room
MID	DLE GRADES MATH					
88	Making Sense of Ratios and Proportional Reasoning With TI-Nspire™ Technology	Friday	1:45 p.m 2:45 p.m.	Gail Burrill	Convention Ctr.	Meeting Room 201 A
90	Handheld to Handheld: Making Tl-Nspire <sup>™</sup> Technology Work With Cooperative Learning	Friday	1:45 p.m 2:45 p.m.	Susan Riker	Convention Ctr.	Meeting Room 201 C
93	Exploring the New Mathematics TEKS Through the Lens of TI-Nspire™ Technology	Friday	1:45 p.m 2:45 p.m.	Mayra Chao	Convention Ctr.	Meeting Room 202 C
94	Understanding Solutions of Systems on the TI-84 Plus Silver Edition Graphing Calculator in Middle School	Friday	1:45 p.m 2:45 p.m.	Donna Harris	Convention Ctr.	Meeting Room 202 D
111	Fractions: The Good, the Bad and the Ugly: Teaching and Learning With the TI-34 MultiView™ Scientific Calculator and TI-84 Plus C Silver Edition Graphing Calculator	Friday	3:00 p.m 4:00 p.m.	Chris Ruda	Omni Hotel	Texas Ballroom G
123	Middle School Activities Using the TI-84 Plus C Silver Edition Graphing Calculator	Friday	3:00 p.m 4:00 p.m.	Andi Parr	Convention Ctr.	Meeting Room 201 A
125	Reining in the TEKS With TI-Nspire™ Technology	Friday	3:00 p.m 4:00 p.m.	Jane Damaske	Convention Ctr.	Meeting Room 201 C
128	Exploring Data With TI-Nspire™ Technology in Middle Grades Mathematics	Friday	3:00 p.m 4:00 p.m.	Elizabeth (Betty) Gasque	Convention Ctr.	Meeting Room 202 C
129	MAD, IQR, MoMs: The TI-73 Explorer <sup>™</sup> Graphing Calculator, the TI-83 Plus Graphing Calculator and the TI-84 Plus Silver Edition Graphing Calculator to the Rescue	Friday	3:00 p.m 4:00 p.m.	Judy Wheeler	Convention Ctr.	Meeting Room 202 D
160	Exploration Activities in Mathematics for Middle School Students With TI-Nspire™ Technology in Shanghai	Friday	4:15 p.m 5:15 p.m.	Zhongyi Xin	Convention Ctr.	Meeting Room 201 C
163	Beginning Statistics and TI-Nspire™ Technology	Friday	4:15 p.m 5:15 p.m.	Diane Broberg	Convention Ctr.	Meeting Room 202 C
164	Probability Simulation Application and Programming: Coin Toss, Dice Roll, Marble Pick and Spinner Spin	Friday	4:15 p.m 5:15 p.m.	Jody Johnson	Convention Ctr.	Meeting Room 202 D
181	Flipping Over Transformations	Saturday	8:00 a.m 9:30 a.m.	Melissa Jackson	Convention Ctr.	Meeting Room 201 A
183	Next Steps in a Middle Grades TI-Nspire <sup>™</sup> Technology Adventure	Saturday	8:00 a.m 9:30 a.m.	Valerie Hudson	Convention Ctr.	Meeting Room 201 C
186	MAD in Middle School	Saturday	8:00 a.m 9:30 a.m.	Jean McKenny	Convention Ctr.	Meeting Room 202 C
187	Connecting Proportional Reasoning and Algebraic Thinking Using the TI-84 Plus C Silver Edition Graphing Calculator	Saturday	8:00 a.m 9:30 a.m.	Gloria Beswick	Convention Ctr.	Meeting Room 202 D
215	Motivating Mathematics With History: Texas' History Helps Strengthen Quantitative Skills	Saturday	9:45 a.m 10:45 a.m.	Robert Kimball	Convention Ctr.	Meeting Room 201 A
217	Using TI-Nspire™ Technology to Differentiate your Instruction	Saturday	9:45 a.m 10:45 a.m.	Chris Longueira	Convention Ctr.	Meeting Room 201 C
220	Bouncing Balls and TEKS: Where's the Fit?	Saturday	9:45 a.m 10:45 a.m.	Donna Harris	Convention Ctr.	Meeting Room 202 C
221	Explore Middle Grades TEKS Content With the TI-84 Plus Family of Graphing Calculators	Saturday	9:45 a.m 10:45 a.m.	Elizabeth (Betty) Gasque	Convention Ctr.	Meeting Room 202 D
• • • • • • • •	••••••	• • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •	· · • · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •





No.	Title	Day	Time	Presenter	Location	Room
MID	DLE GRADES MATH					
249	Beginning Statistics and the TI-84 Family of Graphing Calculators	Saturday	11:00 a.m noon	Diane Broberg	Convention Ctr.	Meeting Room 201 A
254	Using the TI-84 Plus C Silver Edition Graphing Calculator to Investigate Quantitative Data Relationships	Saturday	11:00 a.m noon	Susan Howe	Convention Ctr.	Meeting Room 202 C
255	The TI-84 Plus Family of Graphing Calculators in Your Middle School Classroom	Saturday	11:00 a.m noon	Noe Medrano	Convention Ctr.	Meeting Room 202 D
283	Explore the New Mathematics TEKS Using the TI-84 Plus Family of Calculators	Saturday	1:00 p.m 2:00 p.m.	Mayra Chao	Convention Ctr.	Meeting Room 201 A
285	Data Dancing With TI-Nspire™ Technology	Saturday	1:00 p.m 2:00 p.m.	Margaret Bambrick	Convention Ctr.	Meeting Room 201 C
288	Translations, Reflections, Rotations: Transformational Fun on TI-84 Plus Silver Edition Graphing Calculators	Saturday	1:00 p.m 2:00 p.m.	Valerie Roebuck	Convention Ctr.	Meeting Room 202 C
307	Rich Tasks for the CCSS in Middle Grades Math	Saturday	1:00 p.m 2:00 p.m.	Deb Nutt	Omni Hotel	Sundance 3
317	So, TEKS Eighth Grade Can Use TI-Nspire™ Technology: Now What?	Saturday	2:15 p.m 3:45 p.m.	Corina Srygley	Convention Ctr.	Meeting Room 201 A
319 	Exploring Equations and Relationships With Tl-Nspire™ Technology in Junior High Math	Saturday	2:15 p.m 3:45 p.m.	Sarah Bauguss	Convention Ctr.	Meeting Room 201 C
322	Thinking Algebraically About Geometry	Saturday	2:15 p.m 3:45 p.m.	Tammy L. Jones	Convention Ctr.	Meeting Room 202 C
351	Dealing With Data in Middle Grades Using Multiple Representations and the TI-84 Family of Graphing Calculators	Saturday	4:00 p.m 5:30 p.m.	Jane Barnard	Convention Ctr.	Meeting Room 201 A
355	Getting to Know the TI-84 Plus C Silver Edition Graphing Calculator	Saturday	4:00 p.m 5:30 p.m.	Pam Littleton	Convention Ctr.	Meeting Room 202 B
356 	Exploring Integer Operations With the TI-84 Plus C Silver Edition Graphing Calculator	Saturday	4:00 p.m 5:30 p.m.	Patti Nicodemo	Convention Ctr.	Meeting Room 202 C
357	Don't Stop Until You Get Enough? Beyond Getting The Right Answer	Saturday	4:00 p.m 5:30 p.m.	Bernadette Salgarino	Convention Ctr.	Meeting Room 202 D
MID	DLE GRADES SCIENCE					
10	Let the TI-84 Plus C Silver Edition Graphing Calculator Help You Really Listen to That Chirping	Friday	10:00 a.m 11:30 a.m.	Jacklyn Bonneau	Omni Hotel	Fort Worth Ballroom 6
83	Investigating Middle Grades Space Science With TI-Nspire <sup>™</sup> Technology	Friday	1:45 p.m 2:45 p.m.	Mike Cimino	Omni Hotel	Fort Worth Ballroom 8
PHY	SICS					
153	How Does it Spin? TI-Nspire™ Technology and Various Vernier Sensors	Friday	4:15 p.m 5:15 p.m.	James Bretthauer	Omni Hotel	Fort Worth Ballroom 8
338 	Do the STEM Boot Scootin' Boogie With TI-Nspire <sup>™</sup> Technology and Data Collection	Saturday	2:15 p.m 3:45 p.m.	Linda Antinone	Omni Hotel	Fort Worth Ballroom 8
339	Gathering, Processing and Applying Data in a Science Classroom	Saturday	2:15 p.m 3:45 p.m.	Robert Reniewicki	Omni Hotel	Stockyards 2
			· · · · · · · · · · · · · · · · · · ·			- · · · · · · · · · · · · · · · · · · ·

Sessions by Subject (29) @TICalculators

No. Title **Presenter** Location **Day** Time Room

PRE	CALCULUS			••••		
4	Analyzing Math In the Movies Using the TI-84 Plus Silver Edition Graphing Calculator	Friday	10:00 a.m 11:30 a.m.	Debbie Poss	Omni Hotel	Texas Ballroom D
7	Scrutinizing Functions With the TI-84 Plus C Silver Edition Graphing Calculator	Friday	10:00 a.m 11:30 a.m.	Ann Schlemper	Omni Hotel	Fort Worth Ballroom 2
34	Dig In to the Real World With the TI-84 Plus CE Graphing Calculator	Friday	10:00 a.m 11:30 a.m.	John LaMaster	Omni Hotel	Texas Ballroom H
40	How Much Can You See?	Friday	12:30 p.m 1:30 p.m.	Beverly Farahani	Omni Hotel	Texas Ballroom D
101	Red Solo™ Cup Constructions With TI-Nspire™ Technology	Friday	1:45 p.m 2:45 p.m.	Ricci Slobodnik	Omni Hotel	Sundance 3
110	TI-Nspire™ Technology Precalculus Investigations	Friday	3:00 p.m 4:00 p.m.	Ken Collins	Omni Hotel	Texas Ballroom D
139	Analyzing Rational Functions With TI-Nspire™ Technology	Friday	3:00 p.m 4:00 p.m.	Jeff Corn	Omni Hotel	Texas Ballroom H
141	Use the TI-Nspire™ App for iPad® With Video for STEM Project	Friday	3:00 p.m 4:00 p.m.	Marsha Guntharp	Omni Hotel	Texas Ballroom J
145	Let Them Teach (and Understand More): Using TI-Nspire <sup>™</sup> Technology for Student Designed Lessons	Friday	4:15 p.m 5:15 p.m.	Daniel Wilkie	Omni Hotel	Texas Ballroom D
174	Investigating Models of Exponential and Power Data Using Logarithms	Friday	4:15 p.m 5:15 p.m.	Sheila Horstman	Omni Hotel	Texas Ballroom H
195	Collecting Data in Precalculus Using the TI-84 Plus Silver Edition Graphing Calculator	Saturday	8:00 a.m 9:30 a.m.	Michelle Merriweather	Omni Hotel	Texas Ballroom D
208	The TI-84 Plus C Silver Edition Graphing Calculator in Secondary Math in Preparation for Successful AP* Calculus	Saturday	8:00 a.m 9:30 a.m.	Fan Disher	Omni Hotel	Texas Ballroom H
229	Non-Right Triangle Trig in the 21st Century With the TI-84 Plus Silver Edition Graphing Calculator	Saturday	9:45 a.m 10:45 a.m.	Rick Lancaster	Omni Hotel	Texas Ballroom D
278	Using the TI-Nspire™ App for iPad® to Enhance a Rich Task in Advanced Algebra and Precalculus	Saturday	11:00 a.m noon	Art Mabbott	Omni Hotel	Texas Ballroom J
297	Precalculus Activities for TI-Nspire™ CAS Technology	Saturday	1:00 p.m 2:00 p.m.	Richard Parr	Omni Hotel	Texas Ballroom D
331	Fostering a Math Practices Mindset	Saturday	2:15 p.m 3:45 p.m.	Lynn Adsit	Omni Hotel	Texas Ballroom D
365	Mathematical Modeling on TI-Nspire™ Technology	Saturday	4:00 p.m 5:30 p.m.	Pat Mara	Omni Hotel	Texas Ballroom D
378	Precalculus Activities Using the TI-84 Plus C Silver Edition Graphing Calculator	Saturday	4:00 p.m 5:30 p.m.	Jan Mitchener	Omni Hotel	Texas Ballroom H
380	#LetMeTakeASelfie: TI-Nspire™ CAS App for iPad® Applications	Saturday	4:00 p.m 5:30 p.m.	Tina Schisler	Omni Hotel	Texas Ballroom J





No.	Title	Day	Time	Presenter	Location	Room
PRC	GRAMMING					
1	Basic Building Blocks of Lua Scripting	Friday	10:00 a.m 11:30 a.m.	Bryson Perry	Omni Hotel	Texas Ballroom A
37	Never Programmed? No Problem: Write <i>Prompt-Store-Display</i> Programs for Algebra Using the TI-84 Plus C Silver Edition Graphing Calculator	Friday	12:30 p.m 1:30 p.m.	Jim Haskins	Omni Hotel	Texas Ball- room A
72	The TI-84 Plus C Silver Edition Graphing Calculator Will Help Us Determine Pi and a Euler's Formula: e ^ (i * pi) +1 = 0	Friday	1:45 p.m 2:45 p.m.	Jan Erik Woldmar	Omni Hotel	Texas Ballroom A
107	Teaching TI-BASIC Programming to Solve Formula-based Problems With the TI-84 Plus Silver Edition Graphing Calculator	Friday	3:00 p.m 4:00 p.m.	John Isaacs	Omni Hotel	Texas Ballroom A
192	Teaching Beginner Programming Concepts With the TI-83 Plus and TI-84 Plus C Silver Edition Graphing Calculators	Saturday	8:00 a.m 9:30 a.m.	Christopher Mitchell	Omni Hotel	Texas Ballroom A
204	Hello World: An Intro to Lua Programming	Saturday	8:00 a.m 9:30 a.m.	Becky Byer	Omni Hotel	Sundance 2
205	Learning Lua	Saturday	8:00 a.m 9:30 a.m.	John Hanna	Omni Hotel	Sundance 3
226	Introduction to Writing Code to Program TI-Nspire™ Technology	Saturday	9:45 a.m 10:45 a.m.	Becky Underwood	Omni Hotel	Texas Ballroom A
328	Real-World Problem-solving Using Programming and the TI-84 Plus C Silver Edition Graphing Calculator	Saturday	2:15 p.m 3:45 p.m.	Juan Manuel Gonzalez	Omni Hotel	Texas Ballroom A
STA	TISTICS					
13	Statistics in the Biology/Life Science Classroom, STAT!	Friday	10:00 a.m 11:30 a.m.	Peggy Welch	Convention Ctr.	Meeting Room 102
18	CCSS, Statistics and TI-Nspire <sup>™</sup> Technology: Establishing a Foundation	Friday	10:00 a.m 11:30 a.m.	Gail Burrill	Convention Ctr.	Meeting Room 201 B
55	Type II Error and the Power of a Test: Statistics With the TI-84 Plus CE Graphing Calculator	Friday	12:30 p.m 1:30 p.m.	Mike Koehler	Convention Ctr.	Meeting Room 201 C
106	BYOD: Interactive Statistics Using the TI-Nspire™ App for iPad®	Friday	1:45 p.m 2:45 p.m.	Brandi Falley	Omni Hotel	Texas Ballroom J
124	Activities and Strategies for Teaching Statistics for CCSS High School Math With TI-Nspire™ Technology	Friday	3:00 p.m 4:00 p.m.	Robin Levine-Wissing	Convention Ctr.	Meeting Room 201 B
159	Least-Squares Regression, Oh My: Using TI-Nspire™ Technology to Introduce Regression in Statistics and Algebra	Friday	4:15 p.m 5:15 p.m.	Kyle Atkin	Convention Ctr.	Meeting Room 102
177	Teaching Statistics Using Simulations	Saturday	8:00 a.m 9:30 a.m.	David Scott	Convention Ctr.	Meeting Room 102
180	Using TI-Nspire™ Technology in a Statistics Classroom	Saturday	8:00 a.m 9:30 a.m.	Murney Bell	Convention Ctr.	Meeting Room 104
211	Would You Rather? Studying Hypothesis Testing With TI-Nspire™ Technology	Saturday	9:45 a.m 10:45 a.m.	Rachael Gorsuch	Convention Ctr.	Meeting Room 102
214	Dr. Sheldon Cooper Presents Fun With Flags	Saturday	9:45 a.m 10:45 a.m.	Josh Mize	Convention Ctr.	Meeting Room 104
	• • • • • • • • • • • • • • • • • • • •	. <b>.</b>	. <b>.</b>	• · · · · · · · · · · · · · · · · · · ·	•	• • • • • • • • • • • • • • • • • •

Sessions by Subject (31) @TICalculators

No.	Title	Day	Time	Presenter	Location	Room
STA	TISTICS					
245	Bringing Statistics to Life With TI-Nspire™ Technology	Saturday	11:00 a.m noon	Abel Maestas	Convention Ctr.	Meeting Room 102
248	Using Real-world Data and TI-Nspire™ Technology in Statistics	Saturday	11:00 a.m noon	Don Worcester	Convention Ctr.	Meeting Room 104
251	Are You Ready for Some Nspiring Football?	Saturday	11:00 a.m noon	Lisa Conzemius	Convention Ctr.	Meeting Room 201 C
282	CCSS Statistics? Let the Math Nspired Program Help	Saturday	1:00 p.m 2:00 p.m.	Lee Kucera	Convention Ctr.	Meeting Room 104
289	TI-84 Plus CE Graphing Calculator ProbSim App: A Powerful Tool for Estimating Probability and Enhancing Understanding	Saturday	1:00 p.m 2:00 p.m.	Gloria Barrett	Convention Ctr.	Meeting Room 202 D
316	I Can Do Statistics on the TI-84 Plus Silver Edition Graphing Calculator: How Do I Do It on TI-Nspire™ Technology?	Saturday	2:15 p.m 3:45 p.m.	Chris True	Convention Ctr.	Meeting Room 104
323	Census-at-School Statistics	Saturday	2:15 p.m 3:45 p.m.	Kymn Van Dyken	Convention Ctr.	Meeting Room 202 D
349	Navigating the Central Limit Theorem	Saturday	4:00 p.m 5:30 p.m.	David Kohmetscher	Convention Ctr.	Meeting Room 103 B
353	Safe Driving Studies (Experimental Design) for the AP* Statistics and STEM Classroom	Saturday	4:00 p.m 5:30 p.m.	Robert Hanchett	Convention Ctr.	Meeting Room 201 C
358	Everyday Statistics for Middle School Students	Saturday	4:00 p.m 5:30 p.m.	Gail Gallitano	Convention Ctr.	Meeting Room 203 B
TRIC	GONOMETRY					
75	Heating Up Polar Graphing With TI-Nspire™ Technology	Friday	1:45 p.m 2:45 p.m.	Scott Knapp	Omni Hotel	Texas Ballroom D









Friday Sessions by Time Join the Conversa Tion

# Sessions by Time

Subject No. Title **Presenter** Location Room Friday 10:00 - 11:30 a.m. Omni Hotel Texas Ballroom G Algebra 1 Content Target Assessment in Algebra Using CAS Robin Gapinski 20 Algebra 1 What the App Is That? Convention Ctr. Meeting Room 202 A CCSS Algebra 1 and the TI-84 Plus C Silver Edition 21 Meeting Room 202 B Algebra 1 Ann Davidian Convention Ctr. Graphing Calculator 25 Algebra 1 Sharon Cichocki Meeting Room 203 C Simulating CCSS Every Day Using TI-Nspire™ Technology 27 Convention Ctr. Algebra 1 Veronica Carlson Meeting Room 204 B in Algebra 1 Fun and Engaging Activities Using Technology that 9 Algebra 2 Randy Lobe Omni Hotel Fort Worth Ballroom 4 Address the CCSS Algebra 2 32 Nspire-ational Mathematics for the 21st Century Joyce Lee Omni Hotel Sundance 4 TI-Nspire<sup>™</sup> CX CAS Technology Constructions Are not for Algebra 2 33 **Tony Timms** Omni Hotel Sundance 5 the Faint of Heart Creative Questioning Using TI-Nspire™ CX Navigator™ Assessment 30 Tracy Slate Omni Hotel Sundance 3 Teacher Software Argumentation Science Style: Biology, TEKS and Biology 12 Shawn Schlueter Omni Hotel Fort Worth Ballroom 8 TI-Nspire<sup>™</sup> Technology The Amusement Park of Your Mind: TI-Nspire™ CX CAS Calculus 2 Kim Schjelderup Omni Hotel Texas Ballroom B Technology's AP\* Calculus Review Game 3 Texas Ballroom C Calculus PBL in AP\* Calculus: A Hand-on Approach That Says, Mahalo Michael Long Omni Hotel Awesome CAS Activities That Integrate Algebra and Geometry CAS 14 Tom Reardon Convention Ctr. Meeting Room 103 A Using TI-Nspire™ Technology CAS 15 Meeting Room 103 B **Unraveling Data Analysis** John Hanna Convention Ctr. CAS as a Platform for Dynamic Assessment: Create Your 29 CAS Stephen Arnold Omni Hotel Sundance 2 Own Auto-grading Tasks Connecting Science 11 Let's Put the E in STEM Greg Dodd Omni Hotel Fort Worth Ballroom 7 and Math/STEM Expanding Your TI-84 Family of Graphing Calculators Skill General Interest 16 Jim Nakamoto Convention Ctr. Meeting Room 104 Set for IB® Mathematics Elizabeth (Betty) Convention Ctr. 382 General Interest Getting Started With TI-Nspire™ Technology? Convention Ctr. Ballroom Gasque I See It: Visualizing Math Concepts Using General Math 24 Marc Garneau Convention Ctr. Meeting Room 203 B TI-Nspire<sup>™</sup> Technology Rising to the Challenges of the Process Standards and Math General Math 26 Jennifer High Convention Ctr. Meeting Room 204 A Practices Using the TI-Nspire™ CX Navigator™ System General Math 35 Getting Started With the TI-Nspire™ CAS App for iPad® Tom Steinke Omni Hotel Texas Ballroom I Fostering the Growth Mindset With the TI-Nspire™ App General Math 36 Omni Hotel Texas Ballroom J Kristin Arterbury for iPad® Investigations With TI-Nspire™ Technology Involving Parabolas 6 Jean-Jacques Dahan Omni Hotel Fort Worth Ballroom 1 Geometry to Enrich Our Teaching Standards at All Levels

Arsalan Wares

Omni Hotel

Using Origami Boxes as a Context for Exploring Graphs



Geometry





Fort Worth Ballroom 3

# Sessions by Time

Subject	No.	Title	Presenter	Location	Room			
Friday 10:00 – 11:30 a.m.								
Middle Grades Math	17	This Ain't Your Mama's Middle School Math: The Tl-84 Plus C Silver Edition Graphing Calculator and CCSS	Sherri Abel	Convention Ctr.	Meeting Room 201 A			
Middle Grades Math	19	Less is More	Ellen Johnston	Convention Ctr.	Meeting Room 201 C			
Middle Grades Math	22	TEKS and TI-84 Plus Technology: How This Tool Can Help Encourage Students to Aim Higher in Mathematics	Valerie Hudson	Convention Ctr.	Meeting Room 202 C			
Middle Grades Math	23	Charting a Course With the TI-84 Plus CE Graphing Calculator	Fred Decovsky	Convention Ctr.	Meeting Room 202 D			
Middle Grades Science	10	Let the TI-84 Plus C Silver Edition Graphing Calculator Help You Really Listen to That Chirping	Jacklyn Bonneau	Omni Hotel	Fort Worth Ballroom 6			
Precalculus	4	Analyzing Math In the Movies Using the TI-84 Plus Silver Edition Graphing Calculator	Debbie Poss	Omni Hotel	Texas Ballroom D			
Precalculus	7	Scrutinizing Functions With the Tl-84 Plus C Silver Edition Graphing Calculator	Ann Schlemper	Omni Hotel	Fort Worth Ballroom 2			
Precalculus	34	Dig In to the Real World With the TI-84 Plus CE Graphing Calculator	John LaMaster	Omni Hotel	Texas Ballroom H			
Programming	1	Basic Building Blocks of Lua Scripting	Bryson Perry	Omni Hotel	Texas Ballroom A			
Statistics	13	Statistics in the Biology/Life Science Classroom, STAT!	Peggy Welch	Convention Ctr.	Meeting Room 102			
Statistics	18	CCSS, Statistics and Tl-Nspire™ Technology: Establishing a Foundation	Gail Burrill	Convention Ctr.	Meeting Room 201 B			
Friday 12:30 –	1:30	p.m.						
Algebra 1	56	Learning Cycle Lesson Plan Using TI Technology	Miriam Santana	Convention Ctr.	Meeting Room 202 A			
Algebra 1	57	Lights, Camera, Active Learning With a Twist	Kristy Curran	Convention Ctr.	Meeting Room 202 B			
Algebra 1	63	The New TEKS Got You Tied in a Knot?	Sandra Hocutt	Convention Ctr.	Meeting Room 204 B			
Algebra 2	45	Simulations for Algebra Through Precalculus Using the TI-84 Plus Silver Edition Graphing Calculator	Alice Hess	Omni Hotel	Fort Worth Ballroom 4			
Algebra 2	54	An Nspired Look at Transformations in Algebra	Landy Godbold	Convention Ctr.	Meeting Room 201 B			
Algebra 2	65	Using the TI-Nspire™ CX Navigator™ System for Dynamic Interactive Activities	Peg McVay	Omni Hotel	Sundance 2			
Algebra 2	66	The Real World: TI-Nspire™ Philadelphia	Scott Bricker	Omni Hotel	Sundance 3			
Algebra 2	67	Small Steps, Big Strides in Understanding With the TI-84 Plus Family of Graphing Calculators	Kara Leaman	Convention Ctr.	Sundance 4			
Assessment	43	Dissecting Formative Assessment	Louise Chapman	Omni Hotel	Fort Worth Ballroom 2			
Calculus	38	Exploring Motion in AP* Calculus	Vicki Carter	Omni Hotel	Texas Ballroom B			
Calculus	39	Calculus Concepts Are Very Easy With TI-Nspire™ CX CAS Technology and Sensors	Jonnathan Resendiz	Omni Hotel	Texas Ballroom C			

Sessions by Time (35) @TICalculators

# Sessions by Time

Subject No. Title **Presenter** Location Room Friday 12:30 - 1:30 p.m. Geometric Transformations Made Simple With 42 **Thomas Dick** Omni Hotel Fort Worth Ballroom 1 Complex Numbers CAS on TI-Nspire™ Technology: It's Not Just for Your Convention Ctr. 50 Meeting Room 103 A Taking Tasks to Task: Targeting Tasks for Mathematical 51 CAS Rose Mary Zbiek Convention Ctr. Meeting Room 103 B Practices Using TI-Nspire™ Technology **Connecting Science** 46 TI-Nspire<sup>™</sup> Technology and Math and Science Projects Delbra Robinson Fort Worth Ballroom 6 Omni Hotel and Math/STEM Connecting Science 47 Step up STEM With TI-Nspire™ Technology **Audrey Cucci** Omni Hotel Fort Worth Ballroom 7 and Math/STEM 41 **Changing Math Attitudes With Technology** General Interest Christine Kasitz Omni Hotel Texas Ballroom G General Interest All About TI-Nspire™ Technology's Graphs Page Convention Ctr. Stephanie MacKay Meeting Room 104 69 General Interest Using Technology Tools Appropriately Bill Caroscio Omni Hotel Texas Ballroom H General Interest The iPad® and Apple TV®: Say Goodbye to Your SMART Board® Omni Hotel Texas Ballroom J Sam Gough General Math 60 Spiralling Through the Curriculum With Activities Mary Bourassa Convention Ctr. Meeting Room 203 B Simple Programming With the TI-84 Plus Silver Edition General Math 62 Lisa Suarez Convention Ctr. Meeting Room 204 A **Graphing Calculator** 70 General Math No TI-Nspire™ Technology? Don't Worry, Be Appy Omni Hotel Texas Ballroom I General Science 48 My Students Collected Data: Now What do I do? Cassie Whitecotton Omni Hotel Fort Worth Ballroom 8 Ending the Aggregation Aggravation With the TI-Nspire™ CX General Science 64 **Ed Roberts** Omni Hotel Stockyards 2 Navigator™ System It Is in Color? The Cabri™ Jr. Geometry App on the TI-84 Plus C Geometry Dona McSpadden Omni Hotel Fort Worth Ballroom 3 Silver Edition Graphing Calculator Middle Grades Math 53 Let's Saddle Up and Ride With the TEKS Jane Damaske Convention Ctr. Meeting Room 201 A Meeting Room 202 C Middle Grades Math 58 Taking the Fear Out of Fractions Vincent Doty Convention Ctr. So, Texas Eighth Grade Can Use the TI-84 Plus C Silver Edition Middle Grades Math 59 Corina Srygley Convention Ctr. Meeting Room 202 D Graphing Calculator: Now What? Precalculus 40 How Much Can You See? **Beverly Farahani** Omni Hotel Texas Ballroom D Never Programmed? No Problem: Write Prompt-Store-Display Programming 37 Programs for Algebra Using the TI-84 Plus C Silver Edition Jim Haskins Omni Hotel Texas Ballroom A Type II Error and the Power of a Test: Statistics With the Statistics Mike Koehler Convention Ctr. Meeting Room 201 C TI-84 Plus CE Graphing Calculator Friday 1:45 - 2:45 p.m. Exploring the TI-84 Plus C Silver Edition Graphing Calculator 91 Linda Apicella Convention Ctr. Algebra 1 Meeting Room 202 A and the Revised Apps Starfish Family Transformed with the New TI-84 Plus C 92 Barbara Ward Algebra 1 Convention Ctr. Meeting Room 202 B Silver Edition Graphing Calculator Promoting Deep Understanding: Problem-Based Learning Algebra 1 96 Convention Ctr. Meeting Room 203 C Nancy Johnson and TI-Nspire™ Technology ....... The TI-Nspire™ CX Navigator™ System: Supporting the Algebra 1 98 Abigail Sanchez Convention Ctr. Meeting Room 204 B





**Subject** No. Title Location **Presenter** Room

	•				
Friday 1:45 – 2	:45 p	.m.			
Algebra 2	80	Cell Phones and the TI-84 Plus C Silver Edition Graphing Calculator: Why Not?	Antoinette Kidwell	Omni Hotel	Fort Worth Ballroom 4
Algebra 2	89	If You Can Learn to Use a Smartphone, You Can Learn to Teach With TI-Nspire™ Technology	Karyn Nemeth	Convention Ctr.	Meeting Room 201 B
Algebra 2	100	Transformers With TI-Nspire <sup>™</sup> Technology	Matthew Owens	Omni Hotel	Sundance 2
Algebra 2	103	Simulating CCSS Every Day Using TI-Nspire™ Technology in Algebra 2	Kim Thomas	Omni Hotel	Sundance 5
Assessment	78	Face-to-Face Time in a Flipped Class	Sharon Bruce	Omni Hotel	Fort Worth Ballroom 2
Biology	81	How Safe Is My Water? Testing With the TI-84 Plus C Silver Edition Graphing Calculator	Judy Day	Omni Hotel	Fort Worth Ballroom 6
Calculus	73	Teacher Moves That Engage Students and Promote Understanding in Calculus	Ray Barton	Omni Hotel	Texas Ballroom B
Calculus	74	A Serious Look at Series With TI-Nspire™ CAS Technology	Patricia Brooks	Omni Hotel	Texas Ballroom C
CAS	85	Investigating Trinomials With Integer Roots	Ray Williams	Convention Ctr.	Meeting Room 103 A
CAS	86	Why CAS? Why Not?	Fred Ferneyhough	Convention Ctr.	Meeting Room 103 B
Connecting Science and Math/STEM	82	A Reason for the Seasons	Doug Roberts	Omni Hotel	Fort Worth Ballroom 7
Connecting Science and Math/STEM	104	(Infusing TI-Nspire <sup>™</sup> Technology) + (STEM Education) = SUCCESS on CSSS Exams	Edward Chaves	Omni Hotel	Texas Ballroom H
Elementary Math	76	Fractions and Decimals and Lions: Oh, My!	Tammy L. Jones	Omni Hotel	Texas Ballroom G
General Interest	87	Getting Nspired With Online Learning	Richard Snow	Convention Ctr.	Meeting Room 104
General Math	95	Making the Transition From the TI-83 Plus or TI-84 Plus Silver Edition Graphing Calculator to TI-Nspire™ Technology	David Sword	Convention Ctr.	Meeting Room 203 B
General Math	97	The TI-84 Plus Silver Edition Graphing Calculator and the Special Needs Classroom	Holly Terrill	Convention Ctr.	Meeting Room 204 A
General Math	105	iCalculus: Teaching AP* Calculus With the TI-Nspire™ CAS App for iPad®	Corey Boby	Omni Hotel	Texas Ballroom I
Geometry	77	These Are a Few of My Favorite Things	Doug Smeltz	Omni Hotel	Fort Worth Ballroom 1
Geometry	79	Integrating TI Technology While Writing a Geometry Curriculum	Jessica Kachur	Omni Hotel	Fort Worth Ballroom 3
Geometry	102	Strategies for an Effective Co-taught Math Classroom	Kerry Burross	Omni Hotel	Sundance 4
Middle Grades Math	88	Making Sense of Ratios and Proportional Reasoning With TI-Nspire™ Technology	Gail Burrill	Convention Ctr.	Meeting Room 201 A
Middle Grades Math	90	Handheld to Handheld: Making Tl-Nspire™ Technology Work With Cooperative Learning	Susan Riker	Convention Ctr.	Meeting Room 201 C
Middle Grades Math	93	Exploring the New Mathematics TEKS Through the Lens of TI-Nspire™ Technology	Mayra Chao	Convention Ctr.	Meeting Room 202 C
Middle Grades Math	94	Understanding Solutions of Systems on the TI-84 Plus Silver Edition Graphing Calculator in Middle School	Donna Harris	Convention Ctr.	Meeting Room 202 D
Middle Grades Science	83	Investigating Middle Grades Space Science With TI-Nspire™ Technology	Mike Cimino	Omni Hotel	Fort Worth Ballroom 8

Sessions by Time (37) @TICalculators

Subject	No.	Title	Presenter	Location	Room
Friday 1:45 – 2:	:45 p.	.m.			
Precalculus	101	Red Solo™ Cup Constructions With TI-Nspire™ Technology	Ricci Slobodnik	Omni Hotel	Sundance 3
Programming	72	The TI-84 Plus C Silver Edition Graphing Calculator Will Help Us Determine Pi and a Euler's Formula: e ^ (i * pi) +1 = 0	Jan Erik Woldmar	Omni Hotel	Texas Ballroom A
Statistics	106	BYOD: Interactive Statistics Using the TI-Nspire™ App for iPad®	Brandi Falley	Omni Hotel	Texas Ballroom J
Trigonometry	75	Heating Up Polar Graphing With TI-Nspire™ Technology	Scott Knapp	Omni Hotel	Texas Ballroom D
Friday 3:00 – 4:	:00 p.	m.			
Algebra 1	126	Transformations in the Coordinate Plane With the TI-84 Plus C Silver Edition Graphing Calculator	Margaret Bambrick	Convention Ctr.	Meeting Room 202 A
Algebra 1	127	Exploring Lines Using a TI-84 Plus Silver Edition Graphing Calculator	Vicki Stebbins	Convention Ctr.	Meeting Room 202 B
Algebra 1	131	Useful Linear Applications	Denny St. John	Convention Ctr.	Meeting Room 203 C
Algebra 1	133	Using TI-Nspire™ Technology to Model Statistics in Algebra CCSS	Mary Giannetto	Convention Ctr.	Meeting Room 204 B
Algebra 1	135	Nspiring Creativity With TI-Nspire™ Technology: A Graphing Art Project	Shaun Reynolds	Omni Hotel	Sundance 2
Algebra 2	115	Mathematical Modeling Using Real-world Data for the TI-84 Plus C Silver Edition Graphing Calculator	Scott Trahan	Omni Hotel	Fort Worth Ballroom 4
Algebra 2	136	Be Nspired to Tackle CCSS	Della Highman	Omni Hotel	Sundance 3
Algebra 2	138	Connecting Math and Science With Consumer-based Decisions	Brenda Peterman	Omni Hotel	Sundance 5
Assessment	113	Formative Assessment with Pictures and TI-Nspire™ Technology	Patti Nicodemo	Omni Hotel	Fort Worth Ballroom 2
Biology	134	Catalase Activity: It's a Gas, Gas, Gas	Stacy Thibodeaux	Omni Hotel	Stockyards 2
Calculus	108	3-D Graphing Using Tl-Nspire™ Technology	Steve Phelps	Omni Hotel	Texas Ballroom B
CAS	120	Reaching Weaker Algebra Students With TI-Nspire™ Technology	Michael Buescher	Convention Ctr.	Meeting Room 103 A
CAS	121	CAS Technology in the Australian Curriculum	Neale Woods	Convention Ctr.	Meeting Room 103 B
Connecting Science and Math/STEM	116	Lasting Connections Using Data Collection	JoAnn Miltenberg	Omni Hotel	Fort Worth Ballroom 6
Connecting Science and Math/STEM	117	Engaging TI-Nspire™ Activities for Grades Four Through Six	Maria Benzon	Omni Hotel	Fort Worth Ballroom 7
Elementary Math	140	The TI-Nspire™ App for iPad® is the Perfect Tool to Teach Fractions in Grades Three Through Five	Marsha Burkholder	Omni Hotel	Texas Ballroom I
General Interest	122	TeacherTube® Classrooms: Nspired!	Jason Smith	Convention Ctr.	Meeting Room 104
General Math	130	Let's Get Started Nspiring Students: Learn the Basics to Share With Your Colleagues	Patsy Fagan	Convention Ctr.	Meeting Room 203 B
General Math	132	The Science of Learning Using the TI-Nspire™ CX Navigator™ System	Ellen Browne		Meeting Room 204 A





Subject	No.	Title	Presenter	Location	Room
Friday 3:00 – 4	:00 p	.m.			
General Science	118	TI-Nspire™ Technology Forensics: Drug Testing	Peggy Welch	Omni Hotel	Fort Worth Ballroom 8
Geometry	112	Transforming Geometry: Teaching Transformations and Proof on TI-Nspire™ Technology	David Reeves	Omni Hotel	Fort Worth Ballroom 1
Geometry	114	Reflect on This: Rigid Motions as the Composition of Reflections	Stephen West	Omni Hotel	Fort Worth Ballroom 3
Geometry	137	Discovering the Definition of the Parabola Using TI-Nspire™ Technology as Seen Through a CCSS Classroom	Stan Pappo	Omni Hotel	Sundance 4
Middle Grades Math	111	Fractions: The Good, the Bad and the Ugly: Teaching and Learning With the TI-34 MultiView™ Scientific Calculator and TI-84 Plus C Silver Edition Graphing Calculator	Chris Ruda	Omni Hotel	Texas Ballroom G
Middle Grades Math	123	Middle School Activities Using the TI-84 Plus C Silver Edition Graphing Calculator	Andi Parr	Convention Ctr.	Meeting Room 201 A
Middle Grades Math	125	Reining in the TEKS With TI-Nspire™ Technology	Jane Damaske	Convention Ctr.	Meeting Room 201 C
Middle Grades Math	128	Exploring Data With TI-Nspire™ Technology in Middle Grades Mathematics	Elizabeth (Betty) Gasque	Convention Ctr.	Meeting Room 202 C
Middle Grades Math	129	MAD, IQR, MoMs: The TI-73 Explorer™ Graphing Calculator, the TI-83 Plus Graphing Calculator and the TI-84 Plus Silver Edition Graphing Calculator to the Rescue	Judy Wheeler	Convention Ctr.	Meeting Room 202 D
Precalculus	110	TI-Nspire™ Technology Precalculus Investigations	Ken Collins	Omni Hotel	Texas Ballroom D
Precalculus	139	Analyzing Rational Functions With TI-Nspire <sup>™</sup> Technology	Jeff Corn	Omni Hotel	Texas Ballroom H
Precalculus	141	Use the TI-Nspire™ App for iPad® With Video for STEM Projects	Marsha Guntharp	Omni Hotel	Texas Ballroom J
Programming	107	Teaching TI-BASIC Programming to Solve Formula-based Problems With the TI-84 Plus Silver Edition Graphing Calculator	John Isaacs	Omni Hotel	Texas Ballroom A
Statistics	124	Activities and Strategies for Teaching Statistics for CCSS High School Math With TI-Nspire™ Technology	Robin Levine-Wissing	Convention Ctr.	Meeting Room 201 B
Friday 4:15 – 5	:15 p	.m.			
Administrator	146	Getting TI-Nspire™ Technology in the Science Classroom	Leann lacuone	Omni Hotel	Texas Ballroom G
Algebra 1	161	Discover The Vertex Form of a Parabola With the TI-84 Plus C Silver Edition Graphing Calculator	Alice Carson	Convention Ctr.	Meeting Room 202 A
Algebra 1	166	Playing With Perpendicular Lines: Conjecturing and Proof With TI-Nspire™ Technology	Douglas Lapp	Convention Ctr.	Meeting Room 203 C
Algebra 1	168	Angry Birds™ and Other Games to Motivate Learning	Lauren Jensen	Convention Ctr.	Meeting Room 204 B
Algebra 1	170	Line Designs and Patterns in Linear Functions	Deobra Solomon	Omni Hotel	Sundance 2
Algebra 1	175	Are You <i>Up to Code</i> With the TI-Nspire <sup>™</sup> App for iPad®?	Ann Wheeler	Omni Hotel	Texas Ballroom I
Algebra 2	150	TI-84 Plus C Silver Edition Graphing Calculators for Beginners	Fan Disher	Omni Hotel	Fort Worth Ballroom 4
Algebra 2	173	Magical Motivational Activities for Teaching CCSS in Algebra 2 Using TI-Nspire™ Technology	Brendan Kelly	Omni Hotel	Sundance 5
Biology	151	Learning to Fail: Building Confidence With Data Collection	Jessica Kohout	Omni Hotel	Fort Worth Ballroom 6

Sessions by Time (39) @TICalculators

Subject No. Title Location **Presenter** Room

Friday 4:15 – 5	·15 n	m		<u></u>	
Calculus			Dennis Wilson	Omni Hotel	Texas Ballroom A
Calculus	142	Visualizing Series and Covergence	Dennis Wilson		A
Calculus	143	Jazzing Up Homework Assignments Using TI-Nspire™ Technology	Anthony Record	Omni Hotel	Texas Ballroom B
Calculus	144	Linear Approximations With the TI-84 Plus Silver Edition Graphing Calculator	Shayla Hoffman	Omni Hotel	Texas Ballroom C
CAS	156	Using the TI-Nspire™ CAS Technology to Enhance Solving of Precalculus Problems	Pat Bowler Johnson	Convention Ctr.	Meeting Room 103 B
CAS	162	TI-Nspire™ Technology: Graphing from Linear Equations to Slope Fields	Joanne Ryan	Convention Ctr.	Meeting Room 202 B
Connecting Science and Math/STEM	152	Use a Reality-oriented Framework for High-Engagement Lessons	Roger Fuller	Omni Hotel	Fort Worth Ballroom 7
General Interest	155	Would You Teach Writing Without Word Processing? So Why Are You Teaching Math Without Calculators?	Kathy Traylor	Convention Ctr.	Meeting Room 103 A
General Interest	157	TI Resources to Support Instruction of the TEKS	Robb Wilson	Convention Ctr.	Meeting Room 104
General Interest	176	Intro to the TI-Nspire™ App for iPad®	Travis Bower	Omni Hotel	Texas Ballroom J
General Math	165	Using the TI-84 Plus Silver Edition Graphing Calculator for Math Education in Singapore	Tiow Choo Kwee	Convention Ctr.	Meeting Room 203 B
General Math	167	Using TI-Nspire™ Technology to Enrich High School Mathematics Conversations	Karen Cockburn	Convention Ctr.	Meeting Room 204 A
General Math	171	Formative Assessments, Student Engagement and Classroom Management Using the TI-Nspire™ CX Navigator™ System	Osmond Owusu	Omni Hotel	Sundance 3
Geometry	147	Geometry Through the Lens of TI-Nspire <sup>™</sup> Technology: An Investigational Approach	Mark Cox	Omni Hotel	Fort Worth Ballroom 1
Geometry	149	You Can Menu Program for Trigonometric Ratio Operations	Mark von Rosenberg	Omni Hotel	Fort Worth Ballroom 3
Geometry	172	Designing a Wishing Well With TI-Nspire™ Technology	Ray Fox	Omni Hotel	Sundance 4
Middle Grades Math	160	Exploration Activities in Mathematics for Middle School Students With TI-Nspire™ Technology in Shanghai	Zhongyi Xin	Convention Ctr.	Meeting Room 201 C
Middle Grades Math	163	Beginning Statistics and TI-Nspire™ Technology	Diane Broberg	Convention Ctr.	Meeting Room 202 C
Middle Grades Math	164	Probability Simulation Application and Programming: Coin Toss, Dice Roll, Marble Pick and Spinner Spin	Jody Johnson	Convention Ctr.	Meeting Room 202 D
Physics	153	How Does it Spin? TI-Nspire™ Technology and Various Vernier Sensors	James Bretthauer	Omni Hotel	Fort Worth Ballroom 8
Precalculus	145	Let Them Teach (and Understand More): Using TI-Nspire <sup>™</sup> Technology for Student Designed Lessons	Daniel Wilkie	Omni Hotel	Texas Ballroom D
Precalculus	174	Investigating Models of Exponential and Power Data Using Logarithms	Sheila Horstman	Omni Hotel	Texas Ballroom H
Statistics	159	Least-Squares Regression, Oh My: Using TI-Nspire™ Technology to Introduce Regression in Statistics and Algebra	Kyle Atkin	Convention Ctr.	Meeting Room 102







Saturday Sessions by Time Join the Conversa Tion

Subject No. Title Location **Presenter** Room

C-4		^	·····	· · · · · · · · · · · · · · · · · · ·	
Saturday 8:00	- 9:3	0 a.m.			
Administrator	196	Leading the Way: How Administrators Should Support Technology Integration Throughout Their Schools	Susan Horowitz	Omni Hotel	Texas Ballroom G
Algebra 1	182	Simplify Algebra 1 Function Investigations With the Transformation Graphing App and Data Programs	Allan Bellman	Convention Ctr.	Meeting Room 201 B
Algebra 1	185	I've Turned It On, Now What? Getting Started With TI-Nspire™ Technology	Sherry Everding	Convention Ctr.	Meeting Room 202 B
Algebra 1	189	Statistics Explorations With TI-Nspire™ Technology in Middle Grades Math and Algebra 1	Katie England	Convention Ctr.	Meeting Room 203 C
Algebra 1	191	Using TI-Nspire <sup>™</sup> Technology to Prepare for STAAR® and EOC Assessments	Kathy Hale	Convention Ctr.	Meeting Room 204 B
Algebra 1	206	It's OK to Use the Calculator, Even if You Can't on the Test	Tara Whittington	Omni Hotel	Sundance 4
Algebra 2	194	Unlocking the TI-Nspire™ Graphing Application	Matt Almon	Omni Hotel	Texas Ballroom C
Algebra 2	207	The Power of Visualization in Algebra 2	Howard Stern	Omni Hotel	Sundance 5
Assessment	197	Dissecting and Differentiating Formative Assessment	David Young	Omni Hotel	Fort Worth Ballroom 2
Biology	203	Nspiring Photosynthesis and Respiration	Judy Day	Omni Hotel	Stockyards 2
CAS	178	Delving Deeper With TI-Nspire <sup>™</sup> Technology	Peter Flynn	Convention Ctr.	Meeting Room 103 A
CAS	179	Nspired CAS and Statistics	Chris Harrow	Convention Ctr.	Meeting Room 103 B
CAS	210	Using TI-Nspire™ CAS Technology to Address Functions Tasks: An Avenue to Mathematical Practices	M. Kathleen Heid	Omni Hotel	Texas Ballroom J
Chemistry	202	pH, pKa, and Half-titrations	Greg Dodd	Omni Hotel	Fort Worth Ballroom 8
Connecting Science and Math/STEM	200	Understanding Zombies Using Tl-Nspire™ Technology Armed With Sensors in Your Math and Science Classrooms	Michael Smith	Omni Hotel	Fort Worth Ballroom 6
Connecting Science and Math/STEM	209	Just Chilling: A STEM Project Using Vernier Go Wireless® Temp Sensor	Fred Fotsch	Omni Hotel	Texas Ballroom I
General Interest	188	How We are Flipping the Script	Sarah Thomas	Convention Ctr.	Meeting Room 203 B
General Math	190	Programming on TI-Nspire™ Technology	Jared Despain	Convention Ctr.	Meeting Room 204 A
General Science	201	Inquiring Minds Want to Know: Guided Inquiry in Science	Todd Morstein	Omni Hotel	Fort Worth Ballroom 7
Geometry	193	Rectangles, Squares, Circles and Quadratics: Modeling and Optimization With TI-Nspire™ Technology	Karen Campe	Omni Hotel	Texas Ballroom B
Geometry	198	Standards-based Investigations in Geometry With TI-Nspire™ Technology	Fred Decovsky	Omni Hotel	Fort Worth Ballroom 3





## Sessions by Time Saturday

Saturday 8:00 – 9:30 a.m.  Middle Grades Math 181 Flipping Over Transformations Melissa Jackson Convention Ctr. Meeting Room 201 A  Middle Grades Math 183 Next Stepsin a Middle Grades TI-Nspire* Technology Adventure Valerie Hudson Convention Ctr. Meeting Room 201 C  Middle Grades Math 186 MAD in Middle School Jean McKenny Convention Ctr. Meeting Room 201 C  Middle Grades Math 187 Convecting Proportional Reasoning and Algebraic Thinking Using the TI-84 Plus C Silver Edition Graphing Calculator Meriveather Omni Hotel Texas Ballroom D  Precalculus 195 Collecting Data in Precalculus Using the TI-84 Plus Silver Edition Graphing Calculator in Secondary Math in Perparation for Successful APP Calculus Michelle Merriveather Omni Hotel Texas Ballroom D  Precalculus 208 Scandary Math in Perparation for Successful APP Calculus Fan Disher Omni Hotel Texas Ballroom D  Programming 192 Texching Beginner Programming Concepts With the TI-88 Plus Silver Edition Graphing Calculator in Secondary Math in Perparation for Successful APP Calculus Fan Disher Omni Hotel Texas Ballroom A  Programming 204 Hello World: An Intro so Lua Programming B Becky Byer Omni Hotel Sundance 2  Programming 205 Learning Lua John Hanna Omni Hotel Sundance 2  Programming 206 Learning Statistics Using Simulations David Scott Convention Ctr. Meeting Room 102  Statistics 180 Using TI-Nspire* Technology in a Statistics Classroom Murney Bell Convention Ctr. Meeting Room 104  Saturday 9:45 – 10:45 a.m.  Algebra 1 216 Exploring Topics in High School Mathematics With the TI-84 Plus C Silver Edition Graphing Calculator Meets  Calculator Meeting Room 201 B  The TI-84 Plus C Silver Edition Graphing Calculator Meets  Convention Ctr. Meeting Room 202 A  Convention Ctr. Meeting Room 202 A  Convention Ctr. Meeting Room 203 B  Algebra 1 219 Using TI-Nspire* Technology to Enhance Modeling Judith Olson Convention Ctr. Meeting Room 204 B  Description Convention Ctr. Meeting Room 204 B  Algebra 1 228 Investigating Algebra I With TI-Nspire* Technology Scott Washburn Omni Hotel	Subject	No.	Title	Presenter	Location	Room
Middle Grades Math 183 Next Steps in a Middle Grades TI-Nspire*Technology Adventure Valerie Hudson Convention Ctr. Meeting Room 201 C  Middle Grades Math 186 MAD in Middle School Jean McKenny Convention Ctr. Meeting Room 202 C  Middle Grades Math 187 Connecting Proportional Reasoning and Algebraic Thinking Jung the TI-84 Plus C Silver Edition Graphing Calculator Metric Michelle Merriveather Omni Hotel Texas Ballroom D  Precalculus 195 Collecting Data in Precalculus Using the TI-84 Plus Silver Edition Graphing Calculator in Secondary Math in Preparation for Successful APP Calculus Metriveather Omni Hotel Texas Ballroom D  Pregramming 192 Texas Hallow Collecting Data in Preparation Graphing Calculator in Secondary Math in Preparation for Successful APP Calculus Fan Disher Omni Hotel Texas Ballroom A  Programming 204 Hello World: An Intro to Lua Programming Occupts With the TI-83 Plus Solver Edition Graphing Calculators And TI-84 Plus C Silver Edition Graphing Calculator Meets And TI-84 Plus C Silver Edition Graphing Calculator Meets And TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices CSS Mathematical Practices And TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices And TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices Computed And TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices Computed And TI-84 Plus C Silver Edition Graphing Calculator Meets And TI-84 Plus C Silver Edition Graphing Calculator Meets And TI-84 Plus C Silver Edition Graphing Calculator Meets And TI-84 Pl	Saturday 8:00	- 9 <b>:</b> 3(	0 a.m.			
Middle Grades Math 186 MAD in Middle School Jean McKenny Convention Ctr. Meeting Room 202 C Middle Grades Math 187 Convention Proportional Reasoning and Algebraic Thinking Using the T1-84 Plus C Silver Edition Graphing Calculator Merriwewather Convention Ctr. Meeting Room 202 D Precalculus 195 Collecting Data in Precalculus Using the T1-84 Plus Michelle Merriwewather Merriwewather Merriwewather Merriwewather Precalculus 208 The T1-84 Plus C Silver Edition Graphing Calculator Merriwewather Mercalculus 208 The T1-84 Plus C Silver Edition Graphing Calculators Merriwewather	Middle Grades Math	181	Flipping Over Transformations	Melissa Jackson	Convention Ctr.	Meeting Room 201 A
Middle Grades Math 187 Connecting Proportional Reasoning and Algebraic Thinking Using the TI-84 Plus C Silver Edition Graphing Calculator Merriweather Omni Hotel Texas Ballroom D Precalculus 195 Collecting Data in Precalculus Using the TI-84 Plus Michelle Merriweather Merriweather Merriweather Precalculus Using the TI-84 Plus C Michelle Merriweather Merriweather Merriweather Merriweather Precalculus 208 The TI-84 Plus C Silver Edition Graphing Calculator in Merriweather Merriweather Precalculus 208 The TI-84 Plus C Silver Edition Graphing Calculator in Fan Disher Omni Hotel Texas Ballroom D Programming 192 Teaching Beginner Programming Concepts With the TI-83 Plus and TI-84 Plus C Silver Edition Graphing Calculators Programming 204 Hello World: An Intro to Lua Programming Becky Byer Omni Hotel Sundance 2 Programming 205 Learning Lua John Hanna Omni Hotel Sundance 3 Statistics 177 Teaching Statistics Using Simulations David Scott Convention Ctr. Meeting Room 102 Statistics 180 Using TI-Nspire* Technology in a Statistics Classroom Murney Bell Convention Ctr. Meeting Room 104  Saturday 9:45 - 10:45 a.m.  Algebra 1 216 Exploring Topics in High School Mathematics With the TI-84 Plus C Silver Edition Graphing Calculator Meets Rebecca Caison Convention Ctr. Meeting Room 201 B TI-84 Plus C Silver Edition Graphing Calculator Meets Rebecca Caison Convention Ctr. Meeting Room 202 A  Algebra 1 219 Using TI-Nspire* Technology to Enhance Modeling In Algebra 1 in Algebra Plus C Silver Edition Graphing Calculator Meets Rebecca Caison Convention Ctr. Meeting Room 202 B  Algebra 1 228 Shooting Free Throws with TI-Nspire* Technology Patrick Sanchez Omni Hotel Sundance 2  Algebra 2 228 Shooting Free Throws with TI-Nspire* Technology Patrick Sanchez Omni Hotel Sundance 2  Algebra 3 TI-Nspire* Technology Will Help Show How Different They Really Are  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Intractive Computations Using TI-Nspire* Technology Frank Moya Convention Ctr. Meeting Room 103 A	Middle Grades Math	183	Next Steps in a Middle Grades TI-Nspire™ Technology Adventure	Valerie Hudson	Convention Ctr.	Meeting Room 201 C
Precalculus 195 Collecting Data in Precalculus Using the Ti-84 Plus C Silver Edition Graphing Calculator Merriweather Merriweather Merriweather Precalculus Using the Ti-84 Plus C Silver Edition Graphing Calculator Merriweather Merriweather Merriweather Precalculus 208 The Ti-84 Plus C Silver Edition Graphing Calculator in Secondary Math in Preparation for Successful Apr Calculus Fan Disher Omni Hotel Texas Ballroom H Programming 192 Teaching Beginner Programming Concepts With the Ti-83 Plus And Ti-84 Plus C Silver Edition Graphing Calculators Christopher Mitchell Omni Hotel Texas Ballroom A Programming 204 Hello World: An Intro to Lua Programming Becky Byer Omni Hotel Sundance 2  Programming 205 Learning Lua John Hanna Omni Hotel Sundance 3  Statistics 177 Teaching Statistics Using Simulations David Scott Convention Ctr. Meeting Room 102  Statistics 180 Using Ti-Nspire* Technology in a Statistics Classroom Murrey Bell Convention Ctr. Meeting Room 104  Saturday 9:45 – 10:45 a.m.  Algebra 1 216 Exploring Topics in High School Mathematics With the Ti-84 Plus C Silver Edition Graphing Calculator Meets CSCS Mathematical Practices CSCS Mathematical Practices Programming Concepts With Ti-Nspire* Technology to Enhance Modeling in Algebra 1 219 Using Ti-Nspire* Technology to Enhance Modeling in Algebra 1 225 Using Ti-Nspire* Technology to Find Relationship Between Dimensions of Famous Paintings  Algebra 1 228 Investigating Algebra 1 With Ti-Nspire* Technology Scott Washburn Omni Hotel Texas Ballroom C Assessment 231 STAAR* Test Preparation: What to Clear and How to Clear the Patrick Fariss Omni Hotel Fort Worth Ballroom C AS 212 Modeling Real-world Calculus Problems With Symbolic Cannel Convention Ctr. Meeting Room 103 A Convention Ctr. Modeling Real-world Calculus Problems With Symbolic Cannel Calculus Problems With Symbolic Ca	Middle Grades Math	186	MAD in Middle School	Jean McKenny	Convention Ctr.	Meeting Room 202 C
Precalculus 208 The TI-84 Plus C Silver Edition Graphing Calculator in Secondary Math in Preparation for Successful APP Calculus Fan Disher Omni Hotel Texas Ballroom H Secondary Math in Preparation for Successful APP Calculus Fan Disher Omni Hotel Texas Ballroom A Programming 192 Teaching Beginner Programming Concepts With the TI-83 Plus C hiristopher Mitchell Omni Hotel Texas Ballroom A Programming 204 Hello World: An Intro to Lua Programming Becky Byer Omni Hotel Sundance 2  Programming 205 Learning Lua John Hanna Omni Hotel Sundance 3  Statistics 177 Teaching Statistics Using Simulations David Scott Convention Ctr. Meeting Room 102  Statistics 180 Using TI-Nspirer Technology in a Statistics Classroom Murney Bell Convention Ctr. Meeting Room 104  Saturday 9:45 - 10:45 a.m.  Algebra 1 216 Exploring Topics in High School Mathematics With the TI-84 Plus C Silver Edition Graphing Calculator Reuts CCSS Mathematical Practices  Algebra 1 218 The TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices  Algebra 1 219 Using TI-Nspirer Technology to Enhance Modeling Judith Olson Convention Ctr. Meeting Room 202 A  Algebra 1 219 Using TI-Nspirer Technology to Enhance Modeling Judith Olson Convention Ctr. Meeting Room 202 B In Algebra 1 225 Using Ti-Nspirer Technology to Find Relationship Between Dimensions of Famous Paintings  Algebra 2 228 Shooting Free Throws with TI-Nspirer Technology Scott Washburn Omni Hotel Sundance 2  Algebra 2 228 Shooting Free Throws with TI-Nspirer Technology Scott Washburn Omni Hotel Fort Worth Ballroom C They Really Are They Really Are Meeting Room 103 A  Assessment 231 STAAR* Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom 6 Geometry Software  CAS 212 Modeling Real-world Calculus Problems With Symbolic Irina Lyublinskaya Convention Ctr. Meeting Room 103 A Geometry Software	Middle Grades Math	187	5 .	Gloria Beswick	Convention Ctr.	Meeting Room 202 D
Programming 192 Teaching Beginner Programming Concepts With the Ti-B3 Plus And Ti-84 Plus C Silver Edition Graphing Calculators  Programming 204 Hello World: An Intro to Lua Programming Becky Byer Omni Hotel Sundance 2  Programming 205 Learning Lua John Hanna Omni Hotel Sundance 3  Statistics 177 Teaching Statistics Using Simulations David Scott Convention Ctr. Meeting Room 102  Statistics 180 Using Ti-Nspire* Technology in a Statistics Classroom Murney Bell Convention Ctr. Meeting Room 104  Saturday 9:45 – 10:45 a.m.  Algebra 1 216 Exploring Topics in High School Mathematics With the Ti-84 Plus C Silver Edition Graphing Calculator Rebecta Caison Convention Ctr. Meeting Room 201 B  Algebra 1 218 The Ti-84 Plus C Silver Edition Graphing Calculator Rebecta Caison Convention Ctr. Meeting Room 202 A  Algebra 1 219 Using Ti-Nspire* Technology to Enhance Modeling in Algebra 1  Algebra 1 225 Using Ti-Nspire* Technology to Find Relationship Between Dimensions of Famous Paintings  Algebra 2 238 Investigating Algebra 1 With Ti-Nspire* Technology Scott Washburn Omni Hotel Sundance 2  Algebra 2 238 Shooting Free Throws with Ti-Nspire* Technology Scott Washburn Omni Hotel Sundance 2  Algebra 2 238 Shooting Free Throws with Ti-Nspire* Technology Scott Washburn Omni Hotel Fort Worth Ballroom C  Assessment 231 STAAR* Test Preparation: What to Clear and How to Clear It Patrick Fairss Omni Hotel Fort Worth Ballroom C  CAS 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software  CAS 213 Algebra and Calculus Erriched With Dynamic Graphs and Interactive Computations Sting Ti-Nspire* Technology Frank Moya Convention Ctr. Meeting Room 103 8	Precalculus	195			Omni Hotel	Texas Ballroom D
Programming 192 and TI-84 Plus C Silver Edition Graphing Calculators Christopher Mitchell Umni Hotel Texas Baliroom A Programming 204 Hello World: An Intro to Lua Programming Becky Byer Omni Hotel Sundance 2  Programming 205 Learning Lua John Hanna Omni Hotel Sundance 3  Statistics 177 Teaching Statistics Using Simulations David Scott Convention Ctr. Meeting Room 102  Statistics 180 Using TI-Nspire* Technology in a Statistics Classroom Murney Bell Convention Ctr. Meeting Room 104  Saturday 9:45 – 10:45 a.m.  Algebra 1 216 Exploring Topics in High School Mathematics With the TI-84 Plus C Silver Edition Graphing Calculator Algebra 1 218 The TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices  Algebra 1 219 Using TI-Nspire* Technology to Enhance Modeling in Algebra 1 219 Using TI-Nspire* Technology to Find Relationship Between Amin Lalani Convention Ctr. Meeting Room 202 B Dimensions of Famous Paintings  Algebra 1 238 Investigating Algebra 1 With TI-Nspire* Technology Patrick Sanchez Omni Hotel Sundance 2  Algebra 2 228 Shooting Free Throws with TI-Nspire* Technology Scott Washburn Omni Hotel Texas Ballroom C  Assessment 231 STAAR* Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom C  Biology 234 TI-Nspire* Technology Will Help Show How Different They Really Are Modeling Real-world Calculus Problems With Symbolic Geometry Software  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire* Technology Frank Moya Convention Ctr. Meeting Room 103 A	Precalculus	208	. ,	Fan Disher	Omni Hotel	Texas Ballroom H
Programming 205 Learning Lua John Hanna Omni Hotel Sundance 3  Statistics 177 Teaching Statistics Using Simulations David Scott Convention Ctr. Meeting Room 102  Statistics 180 Using TI-Nspire" Technology in a Statistics Classroom Murney Bell Convention Ctr. Meeting Room 104  Saturday 9:45 – 10:45 a.m.  Algebra 1 216 Exploring Topics in High School Mathematics With the TI-84 Plus C Silver Edition Graphing Calculator Reuth Casey Convention Ctr. Meeting Room 201 B  Algebra 1 218 The TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices  Algebra 1 219 Using TI-Nspire" Technology to Enhance Modeling in Algebra 1  219 Using TI-Nspire" Technology to Find Relationship Between Dimensions of Famous Paintings  Algebra 1 225 Using TI-Nspire" Technology to Find Relationship Between Dimensions of Famous Paintings  Algebra 1 238 Investigating Algebra 1 With TI-Nspire" Technology Patrick Sanchez Omni Hotel Sundance 2  Algebra 2 228 Shooting Free Throws with TI-Nspire" Technology Scott Washburn Omni Hotel Texas Ballroom C  Assessment 231 STAAR* Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom 2  Biology 234 TI-Nspire" Technology Will Help Show How Different They Really Are Modeling Real-world Calculus Problems With Symbolic Geometry Software  CAS 212 Modeling Real-world Calculus Problems With Dynamic Graphs and Interactive Computations Using TI-Nspire" Technology Frank Moya Convention Ctr. Meeting Room 103 A Convention Ctr. Meeting Room 103 B	Programming	192		Christopher Mitchell	Omni Hotel	Texas Ballroom A
Statistics 177 Teaching Statistics Using Simulations David Scott Convention Ctr. Meeting Room 102  Statistics 180 Using TI-Nspire*Technology in a Statistics Classroom Murney Bell Convention Ctr. Meeting Room 104  Saturday 9:45 – 10:45 a.m.  Algebra 1 216 Exploring Topics in High School Mathematics With the TI-84 Plus C Silver Edition Graphing Calculator Ruth Casey Convention Ctr. Meeting Room 201 B  Algebra 1 218 CCSS Mathematical Practices Rebecca Caison Convention Ctr. Meeting Room 202 A  Algebra 1 219 Using TI-Nspire*Technology to Enhance Modeling in Algebra 1 225 Using TI-Nspire*Technology to Find Relationship Between Dimensions of Famous Paintings  Algebra 1 228 Investigating Algebra 1 With TI-Nspire*Technology Patrick Sanchez Omni Hotel Sundance 2  Algebra 2 228 Shooting Free Throws with TI-Nspire*Technology Scott Washburn Omni Hotel Texas Ballroom C  Assessment 231 STAAR* Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom 2  Biology 234 TI-Nspire*Technology Will Help Show How Different They Really Are Modeling Real-world Calculus Problems With Symbolic Geometry Software  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire*Technology Frank Moya Convention Ctr. Meeting Room 103 A Meeting Room 103 B	Programming	204	Hello World: An Intro to Lua Programming	Becky Byer	Omni Hotel	Sundance 2
Statistics 180 Using TI-Nspire* Technology in a Statistics Classroom Murney Bell Convention Ctr. Meeting Room 104  Saturday 9:45 – 10:45 a.m.  Algebra 1 216 Exploring Topics in High School Mathematics With the TI-94 Plus C Silver Edition Graphing Calculator Ruth Casey Convention Ctr. Meeting Room 201 B  Algebra 1 218 The TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices  Algebra 1 219 Using TI-Nspire* Technology to Enhance Modeling In Algebra 1 219 Using TI-Nspire* Technology to Enhance Modeling In Algebra 1 225 Using TI-Nspire* Technology to Find Relationship Between Dimensions of Famous Paintings  Algebra 1 238 Investigating Algebra 1 With TI-Nspire* Technology Patrick Sanchez Omni Hotel Sundance 2  Algebra 2 228 Shooting Free Throws with TI-Nspire* Technology Scott Washburn Omni Hotel Texas Ballroom C  Assessment 231 STAAR* Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom 2  Biology 234 TI-Nspire* Technology Will Help Show How Different They Really Are  CAS 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire* Technology Frank Moya Convention Ctr. Meeting Room 103 B	Programming	205	Learning Lua	John Hanna	Omni Hotel	Sundance 3
Saturday 9:45 – 10:45 a.m.  Algebra 1 216 Exploring Topics in High School Mathematics With the TI-84 Plus C Silver Edition Graphing Calculator Ruth Casey Convention Ctr. Meeting Room 201 B  Algebra 1 218 The TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices Rebecca Caison Convention Ctr. Meeting Room 202 A  Algebra 1 219 Using TI-Nspire" Technology to Enhance Modeling in Algebra 1 Judith Olson Convention Ctr. Meeting Room 202 B  Algebra 1 225 Using TI-Nspire" Technology to Find Relationship Between Dimensions of Famous Paintings  Algebra 1 238 Investigating Algebra 1 With TI-Nspire" Technology Patrick Sanchez Omni Hotel Sundance 2  Algebra 2 228 Shooting Free Throws with TI-Nspire" Technology Scott Washburn Omni Hotel Texas Ballroom C  Assessment 231 STAAR* Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom 2  Biology 234 TI-Nspire" Technology Will Help Show How Different They Really Are Jacklyn Bonneau Omni Hotel Fort Worth Ballroom 6  CAS 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire" Technology Frank Moya Convention Ctr. Meeting Room 103 B	Statistics	177	Teaching Statistics Using Simulations	David Scott	Convention Ctr.	Meeting Room 102
Algebra 1 216 Exploring Topics in High School Mathematics With the TI-84 Plus C Silver Edition Graphing Calculator Ruth Casey Convention Ctr. Meeting Room 201 B  Algebra 1 218 The TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices Rebecca Caison Convention Ctr. Meeting Room 202 A  Algebra 1 219 Using TI-Nspire" Technology to Enhance Modeling in Algebra 1 Judith Olson Convention Ctr. Meeting Room 202 B  Algebra 1 225 Using TI-Nspire" Technology to Find Relationship Between Dimensions of Famous Paintings  Algebra 1 238 Investigating Algebra 1 With TI-Nspire" Technology Patrick Sanchez Omni Hotel Sundance 2  Algebra 2 228 Shooting Free Throws with TI-Nspire" Technology Scott Washburn Omni Hotel Texas Ballroom C  Assessment 231 STAAR® Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom 2  Biology 234 TI-Nspire" Technology Will Help Show How Different They Really Are Modeling Real-world Calculus Problems With Symbolic Geometry Software Geometry Software Frank Moya Convention Ctr. Meeting Room 103 A Interactive Computations Using TI-Nspire" Technology	Statistics	180	Using TI-Nspire™ Technology in a Statistics Classroom	Murney Bell	Convention Ctr.	Meeting Room 104
Algebra 1 218 TI-84 Plus C Silver Edition Graphing Calculator Retir Casey Convention Ctr. Meeting Room 201 B  Algebra 1 218 The TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices Rebecca Caison Convention Ctr. Meeting Room 202 A  Algebra 1 219 Using TI-Nspire" Technology to Enhance Modeling in Algebra 1 Judith Olson Convention Ctr. Meeting Room 202 B  Algebra 1 225 Using TI-Nspire" Technology to Find Relationship Between Dimensions of Famous Paintings  Algebra 1 238 Investigating Algebra 1 With TI-Nspire" Technology Patrick Sanchez Omni Hotel Sundance 2  Algebra 2 228 Shooting Free Throws with TI-Nspire" Technology Scott Washburn Omni Hotel Texas Ballroom C  Assessment 231 STAAR* Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom 2  Biology 234 TI-Nspire" Technology Will Help Show How Different They Really Are Jacklyn Bonneau Omni Hotel Fort Worth Ballroom 6  CAS 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software Irina Lyublinskaya Convention Ctr. Meeting Room 103 B	Saturday 9:45	- 10:4	45 a.m.			
Algebra 1 218 CCCSS Mathematical Practices Rebecca Caison Convention Ctr. Meeting Room 202 A  Algebra 1 219 Using TI-Nspire" Technology to Enhance Modeling in Algebra 1  Algebra 1 225 Using TI-Nspire" Technology to Find Relationship Between Dimensions of Famous Paintings  Algebra 1 238 Investigating Algebra 1 With TI-Nspire" Technology Patrick Sanchez Omni Hotel Sundance 2  Algebra 2 228 Shooting Free Throws with TI-Nspire" Technology Scott Washburn Omni Hotel Texas Ballroom C  Assessment 231 STAAR® Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom 2  Biology 234 TI-Nspire" Technology Will Help Show How Different They Really Are  CAS 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire" Technology  Frank Moya Convention Ctr. Meeting Room 103 B	Algebra 1	216		Ruth Casey	Convention Ctr.	Meeting Room 201 B
Algebra 1 219 Using TI-Nspire" Technology to Enhance Modeling in Algebra 1 Judith Olson Convention Ctr. Meeting Room 202 B  Algebra 1 225 Using TI-Nspire" Technology to Find Relationship Between Dimensions of Famous Paintings Amin Lalani Convention Ctr. Meeting Room 204 B  Algebra 1 238 Investigating Algebra 1 With TI-Nspire" Technology Patrick Sanchez Omni Hotel Sundance 2  Algebra 2 228 Shooting Free Throws with TI-Nspire" Technology Scott Washburn Omni Hotel Texas Ballroom C  Assessment 231 STAAR" Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom 2  Biology 234 TI-Nspire" Technology Will Help Show How Different They Really Are Jacklyn Bonneau Omni Hotel Fort Worth Ballroom 6  CAS 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software Irina Lyublinskaya Convention Ctr. Meeting Room 103 A  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire" Technology Frank Moya Convention Ctr. Meeting Room 103 B	•	218	. 3	Rebecca Caison	Convention Ctr.	Meeting Room 202 A
Algebra 1 225 Dimensions of Famous Paintings Amin Lalani Convention Ctr. Meeting Room 204 B  Algebra 1 238 Investigating Algebra 1 With TI-Nspire Technology Patrick Sanchez Omni Hotel Sundance 2  Algebra 2 228 Shooting Free Throws with TI-Nspire Technology Scott Washburn Omni Hotel Texas Ballroom C  Assessment 231 STAAR® Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom 2  Biology 234 TI-Nspire Technology Will Help Show How Different They Really Are Jacklyn Bonneau Omni Hotel Fort Worth Ballroom 6  CAS 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software Irina Lyublinskaya Convention Ctr. Meeting Room 103 A  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire Technology Frank Moya Convention Ctr. Meeting Room 103 B		219		Judith Olson	Convention Ctr.	Meeting Room 202 B
Algebra 2 228 Shooting Free Throws with TI-Nspire Technology Scott Washburn Omni Hotel Texas Ballroom C  Assessment 231 STAAR® Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom 2  Biology 234 TI-Nspire Technology Will Help Show How Different They Really Are  CAS 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software Irina Lyublinskaya Convention Ctr. Meeting Room 103 A  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire Technology Frank Moya Convention Ctr. Meeting Room 103 B	Algebra 1	225		Amin Lalani	Convention Ctr.	Meeting Room 204 B
Assessment 231 STAAR® Test Preparation: What to Clear and How to Clear It Patrick Fariss Omni Hotel Fort Worth Ballroom 2  Biology 234 TI-Nspire™ Technology Will Help Show How Different They Really Are Jacklyn Bonneau Omni Hotel Fort Worth Ballroom 6  CAS 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software Irina Lyublinskaya Convention Ctr. Meeting Room 103 A  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire™ Technology Frank Moya Convention Ctr. Meeting Room 103 B	Algebra 1	238	Investigating Algebra 1 With TI-Nspire™ Technology	Patrick Sanchez	Omni Hotel	Sundance 2
Biology 234 TI-Nspire™Technology Will Help Show How Different They Really Are Jacklyn Bonneau Omni Hotel Fort Worth Ballroom 6  CAS 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software Irina Lyublinskaya Convention Ctr. Meeting Room 103 A  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire™ Technology Frank Moya Convention Ctr. Meeting Room 103 B	Algebra 2	228	Shooting Free Throws with TI-Nspire™ Technology	Scott Washburn	Omni Hotel	Texas Ballroom C
Biology 234 TI-Nspire™ Technology Will Help Show How Different They Really Are Jacklyn Bonneau Omni Hotel Fort Worth Ballroom 6  CAS 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software Irina Lyublinskaya Convention Ctr. Meeting Room 103 A  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire™ Technology Frank Moya Convention Ctr. Meeting Room 103 B		231	STAAR® Test Preparation: What to Clear and How to Clear It	Patrick Fariss	Omni Hotel	Fort Worth Ballroom 2
CAS 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software Irina Lyublinskaya Convention Ctr. Meeting Room 103 A  CAS 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire™ Technology Frank Moya Convention Ctr. Meeting Room 103 B	Biology	234	. 3, .	Jacklyn Bonneau	Omni Hotel	Fort Worth Ballroom 6
Interactive Computations Using TI-Nspire™ Technology		212		Irina Lyublinskaya	Convention Ctr.	Meeting Room 103 A
		213		Frank Moya		3

Sessions by Time (43) @TICalculators

Subject No. Title Location **Presenter** Room

Saturday 9:45	- 10:	45 a.m.			
Connecting Science and Math/STEM	235	STEM Springboard: Zombie Infections to Real Human and Livestock Diseases	Peggy Welch	Omni Hotel	Fort Worth Ballroom 7
Connecting Science and Math/STEM	237	Teaching for Understanding, Teaching for Transfer	Tami Plein	Omni Hotel	Stockyards 2
Elementary Math	230	Putting Place Value in Its Place for Elementary Students	Marsha Burkholder	Omni Hotel	Texas Ballroom G
General Interest	236	Informing and Nspiring Students to Take Ownership Over Their Learning	Pareesa Shirazi	Omni Hotel	Fort Worth Ballroom 8
General Interest	243	Down With the Upload: Experience the New Means of Data Transfer	Andrew Benzing	Omni Hotel	Texas Ballroom I
General Math	222	TI-84 Plus C Silver Edition Graphing Calculator and TI-SmartView™ Emulator Software Tips and Tricks: They're not Just for SMART Board®	Tom Reardon	Convention Ctr.	Meeting Room 203 B
General Math	224	Flipping for Problem-solving Mondays and No-homework Weekends	Robyn Poulsen	Convention Ctr.	Meeting Room 204 A
Geometry	227	Prove it: Rigid Motion Transformations and TI-Nspire™ Technology	Johnny Ashurst	Omni Hotel	Texas Ballroom B
Geometry	239	Designing for Geometry	Matt Rhodes	Omni Hotel	Sundance 3
Geometry	240	TI-Nspire <sup>™</sup> Technology in a Geometry Classroom for Beginners	Tracy Watson	Omni Hotel	Sundance 4
Geometry	244	Constructing any Given Triangle With Tl-Nspire™ Technology: A Complement to CCSS Geometry/Trigonometry	Russell Brown	Omni Hotel	Texas Ballroom J
Middle Grades Math	215	Motivating Mathematics With History: Texas' History Helps Strengthen Quantitative Skills	Robert Kimball	Convention Ctr.	Meeting Room 201 A
Middle Grades Math	217	Using TI-Nspire™ Technology to Differentiate your Instruction	Chris Longueira	Convention Ctr.	Meeting Room 201 C
Middle Grades Math	220	Bouncing Balls and TEKS: Where's the Fit?	Donna Harris	Convention Ctr.	Meeting Room 202 C
Middle Grades Math	221	Explore Middle Grades TEKS Content With the TI-84 Plus Family of Graphing Calculators	Elizabeth (Betty) Gasque	Convention Ctr.	Meeting Room 202 D
Precalculus	229	Non-Right Triangle Trig in the 21st Century With the TI-84 Plus Silver Edition Graphing Calculator	Rick Lancaster	Omni Hotel	Texas Ballroom D
Programming	226	Introduction to Writing Code to Program TI-Nspire™ Technology	Becky Underwood	Omni Hotel	Texas Ballroom A
Statistics	211	Would You Rather? Studying Hypothesis Testing With TI-Nspire™ Technology	Rachael Gorsuch	Convention Ctr.	Meeting Room 102
Statistics	214	Dr. Sheldon Cooper Presents Fun With Flags	Josh Mize	Convention Ctr.	Meeting Room 104





# Sessions by Time Saturday

**Subject** No. Title Location **Presenter** Room

Coturdov 11.00				•••••	
Saturday 11:00	) a.m	. – noon			
Administrator	264	Changing Opportunities, Changing Lives With the TI MathForward™ Program	Ronda Davis	Omni Hotel	Texas Ballroom G
Algebra 1	252	Exploring the new Algebra 1 TEKS With the TI-84 Plus C Silver Edition Graphing Calculator	Richard Parr	Convention Ctr.	Meeting Room 202 A
Algebra 1	253	Transforming Linear Functions Using TI-Nspire™ Technology	Sherri Phegley	Convention Ctr.	Meeting Room 202 B
Algebra 1	257	It's Getting Hot in Here: Using TI-Nspire™ Technology and Data Collection to Analyze Temperature Relationships	Kari Craddock	Convention Ctr.	Meeting Room 203 C
Algebra 1	259	Modeling as a Way to Implement All of the Math Practices	Carl Veater	Convention Ctr.	Meeting Room 204 B
Algebra 1	270	Parameters, Variables, Functions and Graphs	Yew Fook Chan	Omni Hotel	Fort Worth Ballroom 8
Algebra 1	272	Creating Your TI-84 Plus CE Graphing Calculator Classroom Using TI-SmartView™ CE Emulator Software and the TI Connect™ CE Software App	Margo Lynn Mankus	Omni Hotel	Sundance 2
Algebra 1	276	TI-84 Plus Family of Graphing Calculators, Line Designs and Patterns in Linear Functions	Deobra Solomon	Omni Hotel	Texas Ballroom H
Algebra 2	262	Understanding Transformations of Graphs Using TI-Nspire™ Technology	Hugh Daniels	Omni Hotel	Texas Ballroom C
Algebra 2	275	Using the TI-84 Plus C Silver Edition Graphing Calculator to Meet CCSS Math Practices and TEKS Process Standards	Karen Campe	Omni Hotel	Sundance 5
Assessment	265	CCSS, Formative Assessment and the TI-Nspire™ CX Navigator™ System	Kim Zeydel	Omni Hotel	Fort Worth Ballroom 2
Authoring	260	Easy and Efficient Graphical User Interface (GUI) Creation for TI-Nspire™ Lua Scripts	Adrien Bertrand	Omni Hotel	Texas Ballroom A
CAS	246	Using CAS as Building Blocks for Algebra Concepts	Lynda Ferneyhough	Convention Ctr.	Meeting Room 103 A
Connecting Science and Math/STEM	271	Building Student Understanding Through Problem-solving Tasks	Lynda Vincent	Omni Hotel	Stockyards 2
General Interest	247	Using TI-Nspire™ Technology as a Formative Assessment Tool to Elicit Evidence of Student Thinking	Linda Griffith	Convention Ctr.	Meeting Room 103 B
General Interest	268	Building Essential Understandings of Function Within TEKS and CCSS Using TI-Nspire™ Technology	Jon Davis	Omni Hotel	Fort Worth Ballroom 6
General Math	256	Maths in a Box: A Paper-folding Investigation Using TI-Nspire™ Technology	Jim Lowe	Convention Ctr.	Meeting Room 203 B
General Math	258	What Do I Do the First Day I Use TI-Nspire™ Technology With My Students?	Jeremy Zelkowski	Convention Ctr.	Meeting Room 204 A
General Math	269	Got TI-Nspire™ CX Navigator™ System Questions?	Jeff McCalla	Omni Hotel	Fort Worth Ballroom 7

Sessions by Time (45) @TICalculators

## Saturday Sessions by Time

Subject	No.	Title	Presenter	Location	Room
Saturday 11:00	) a.m.	. – noon			
Geometry	261	Use TI-Nspire™ Technology to Meet the Needs of CCSS	Tracy Wingert	Omni Hotel	Texas Ballroom B
Geometry	266	Discovering Euler's Line in Triangles: Using the TI-84 Plus C Silver Edition Graphing Calculator and Cabri™ Jr. Geometry App	Mary A. Brese	Omni Hotel	Fort Worth Ballroom 3
Geometry	273	Exploring Basic Geometric Constructions	Martin Sanchez	Omni Hotel	Sundance 3
Geometry	274	Make'em or Break'em	Tammy Casey	Omni Hotel	Sundance 4
Geometry	277	Geometry Constructions: Fun and Easy Using the TI-Nspire™ App for iPad®	Vicki Cable	Omni Hotel	Texas Ballroom I
Middle Grades Math	249	Beginning Statistics and the TI-84 Family of Graphing Calculators	Diane Broberg	Convention Ctr.	Meeting Room 201 A
Middle Grades Math	254	Using the TI-84 Plus C Silver Edition Graphing Calculator to Investigate Quantitative Data Relationships	Susan Howe	Convention Ctr.	Meeting Room 202 C
Middle Grades Math	255	The TI-84 Plus Family of Graphing Calculators in Your Middle School Classroom	Noe Medrano	Convention Ctr.	Meeting Room 202 D
Precalculus	278	Using the TI-Nspire™ App for iPad® to Enhance a Rich Task in Advanced Algebra and Precalculus	Art Mabbott	Omni Hotel	Texas Ballroom J
Statistics	245	Bringing Statistics to Life With TI-Nspire™ Technology	Abel Maestas	Convention Ctr.	Meeting Room 102
Statistics	248	Using Real-world Data and TI-Nspire™ Technology in Statistics	Don Worcester	Convention Ctr.	Meeting Room 104
Statistics	251	Are You Ready for Some Nspiring Football?	Lisa Conzemius	Convention Ctr.	Meeting Room 201 C
Saturday 1:00	- 2:00	) p.m.			
Administrator	298	Building A Digital School Culture	Susan Horowitz	Omni Hotel	Texas Ballroom G
Algebra 1	284	The TI-84 Plus C Silver Edition Graphing Calculator and TEKS: The Perfect Match	Beth Smith	Convention Ctr.	Meeting Room 201 B
Algebra 1	287	Functions, TI-Nspire™ Technology and Process Standards, United	Andi Parr	Convention Ctr.	Meeting Room 202 B
Algebra 1	291	Using Algebra TI-Nspire™ Applets in CCSS-based Courses	Wade Ellis	Convention Ctr.	Meeting Room 203 C
Algebra 1	306	Using TI-Nspire™ Technology's PublishView™ Feature to Empower Teachers Through Ongoing Personal Professional Development	Melfried Olson	Omni Hotel	Sundance 2
Algebra 2	296	Want to Talk About Making Connections With Extended Family?	Monique Chatman	Omni Hotel	Texas Ballroom C
Algebra 2	309	Next Steps in a TI-Nspire™ Technology Algebra Adventure	Valerie Hudson	Omni Hotel	Sundance 5
	• • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	· • · · · · · · · · · · · · · · · · · ·	• · · · · · · · · · · · · · · · · · · ·





# Sessions by Time Saturday

**Subject** No. Title Location **Presenter** Room

Saturday 1:00	- 2:0	0 p.m.			
Assessment	299	Enhancing Formative Assessments, Lessons and Question- formulating Techniques Using Tl-Nspire™ Technology	RuthieAnn Trujillo	Omni Hotel	Fort Worth Ballroom 2
Authoring	294	Dancing With Lua: Using Lua to Enhance Constructions Made on TI-Nspire™ Technology's Graphs Page	Adam Pennell	Omni Hotel	Texas Ballroom A
Chemistry	305	Crime Scene Analysis With TI-Nspire™ Technology	Barbara Ward	Omni Hotel	Stockyards 2
General Interest	280	Creative Solutions	Jean McKenny	Convention Ctr.	Meeting Room 103 A
General Interest	281	An Introductory Tour of TI-Nspire™ Technology	Ron Kennedy	Convention Ctr.	Meeting Room 103 B
General Interest	292	Explore TI-Nspire™ Technology's Power and Range via AP* Calculus, Ch 1 Activities	Dan Kennedy	Convention Ctr.	Meeting Room 204 A
General Interest	302	Interfacing With Students Through TI-Nspire™ Technology: Meshing Old Activities With New Technology	Sarah Schmitz	Omni Hotel	Fort Worth Ballroom 6
General Interest	303	Using the PublishView™ Feature as a Presentation Tool	Dawn Easter	Omni Hotel	Fort Worth Ballroom 7
General Math	290	Underwhelming Resources: Finding and Adapting Resources for Your TI-Nspire™ Technology	Rafael Raya	Convention Ctr.	Meeting Room 203 B
General Math	310	CCSS 2 Go: Developing Apps for In- and Out-of-School Learning	Irina Lyublinskaya	Omni Hotel	Texas Ballroom H
Geometry	295	What Line Are You On?	Philip Magner	Omni Hotel	Texas Ballroom B
Geometry	300	Learn About the Cabri™ Jr. Geometry App on the TI-84 Plus Silver Edition Graphing Calculator in Your Geometry Class	Naomi Kokason	Omni Hotel	Fort Worth Ballroom 3
Geometry	304	Geometry Investigations Using the Cabri™ Jr. Geometry App	Todd Steckler	Omni Hotel	Fort Worth Ballroom 8
Geometry	308	TI-Nspire™ Technology: Scout Camping the CCSS Way	Jean Annette Jones	Omni Hotel	Sundance 4
Geometry	311	Using the TI-Nspire™ App for iPad® to Explore Circles	Ray Fox	Omni Hotel	Texas Ballroom I
Geometry	312	Geometry Goodies on the TI-Nspire™ App for iPad®	Jon Lepeska	Omni Hotel	Texas Ballroom J
Middle Grades Math	283	Explore the New Mathematics TEKS Using the TI-84 Plus Family of Calculators	Mayra Chao	Convention Ctr.	Meeting Room 201 A
Middle Grades Math	285	Data Dancing With TI-Nspire™ Technology	Margaret Bambrick	Convention Ctr.	Meeting Room 201 C
Middle Grades Math	288	Translations, Reflections, Rotations: Transformational Fun on TI-84 Plus Silver Edition Graphing Calculators	Valerie Roebuck	Convention Ctr.	Meeting Room 202 C
Middle Grades Math	307	Rich Tasks for the CCSS in Middle Grades Math	Deb Nutt	Omni Hotel	Sundance 3
Precalculus	297	Precalculus Activities for TI-Nspire <sup>™</sup> CAS Technology	Richard Parr	Omni Hotel	Texas Ballroom D
Statistics	282	CCSS Statistics? Let the Math Nspired Program Help	Lee Kucera	Convention Ctr.	Meeting Room 104
Statistics	289	TI-84 Plus CE Graphing Calculator ProbSim App: A Powerful Tool for Estimating Probability and Enhancing Understanding	Gloria Barrett	Convention Ctr.	Meeting Room 202 D

Sessions by Time (47) @TICalculators

Subject No. Title Location **Presenter** Room

Saturday 2:15	2.4	5 n		•	•••••
Saturday 2:15	- 5:4:	o p.m.			
Algebra 1	318	Seven-percent Grade Ahead: How Steep is It? Slope Concepts in the Real World	Stuart Moskowitz	Convention Ctr.	Meeting Room 201 B
Algebra 1	320	Catch a STAAR® or EOC or Other State Assessment	Kathy Hale	Convention Ctr.	Meeting Room 202 A
Algebra 1	321	Constructing Algebra With TI-Nspire™ Technology	Pamela Harris	Convention Ctr.	Meeting Room 202 B
Algebra 1	325	Algebraic and Statistical Thinking, Reasoning and CCSS Performance Standards	Ron Armontrout	Convention Ctr.	Meeting Room 203 C
Algebra 1	327	Persevering through Algebra 1 and Geometry Problems Using TI-Nspire™ Technology	Katie Martinez	Convention Ctr.	Meeting Room 204 B
Algebra 1	341	Why Does the TI-84 Plus CE Graphing Calculator Give That Result? What Can be Blocked for an Exam?	Margo Lynn Mankus	Omni Hotel	Sundance 3
Algebra 1	346	Finding the Sweet Spot Between PBL and PBA Using the TI-Nspire™ App for iPad and Other Resources	Stephanie Ogden	Omni Hotel	Texas Ballroom J
Algebra 2	330	Standard Deviation vs. Mean Absolute Deviation (M.A.D.)	Jeff McCalla	Omni Hotel	Texas Ballroom C
Algebra 2	342	Functions, Equations, and Matrices – Oh My!	Kathleen McKinley	Omni Hotel	Sundance 4
Algebra 2	343	Create Graphing Calculator Art Using Piecewise Functions	Sarada Toomey	Omni Hotel	Sundance 5
Assessment	333	Using the TI-Nspire™ CX Navigator™ System as a Formative Assessment Tool	Amanda Roble	Omni Hotel	Fort Worth Ballroom 2
Authoring	340	Sliders, Conditionals and Active Math Boxes: Spice Up Your Documents With Interactivity	Mark Arguijo	Omni Hotel	Sundance 2
CAS	314	TI-Nspire™ CAS Technology Takes on the CCSS (+) Standards and Wins	Joe Fiedler	Convention Ctr.	Meeting Room 103 A
CAS	315	Around The World In 80 Days (Or 90 Minutes): A Function Exploration	Stephen Julian	Convention Ctr.	Meeting Room 103 B
Chemistry	337	Chemical Equilibrium: A Matter of Balance	Ray Lesniewski	Omni Hotel	Fort Worth Ballroom 7
Connecting Science and Math/STEM	336	Wow, I Could Teach Algebra Even Better if I Knew More Physics, She Replied	Sean Bird	Omni Hotel	Fort Worth Ballroom 6
General Interest	326	Using Technology as an Accommodation for Students With Disabilities	Gayle Warmbrodt	Convention Ctr.	Meeting Room 204 A
General Interest	332	Reinforcement through the StudyCards™ App	Leanne Barbour	Omni Hotel	Texas Ballroom G
General Math	324	Using TI-Nspire™ Technology Quizzes and Quick Polls for TEKS Assessment	Sukhhbir Singh	Convention Ctr.	Meeting Room 203 B
Geometry	329	Transformational Geometry Activities Leading to Proof of Congruence and Similarity	Charles Vonder Embse	Omni Hotel	Texas Ballroom B
Geometry	334	Let's Lasso some TI-Nspire™ Circle Activities	Judy Hicks	Omni Hotel	Fort Worth Ballroom 3
Geometry	345	Geometric Transformations: Brand New Dynamic Investigations Using TI-Nspire™ Teacher Software	Tom Reardon	Omni Hotel	Texas Ballroom I





## Sessions by Time Saturday

Subject	No.	Title	Presenter	Location	Room
Saturday 2:15	<b>- 3:4</b> !	5 p.m.	•••••	•••••	
Middle Grades Math	317	So, TEKS Eighth Grade Can Use TI-Nspire™ Technology: Now What?	Corina Srygley	Convention Ctr.	Meeting Room 201 A
Middle Grades Math	319	Exploring Equations and Relationships With TI-Nspire™ Technology in Junior High Math	Sarah Bauguss	Convention Ctr.	Meeting Room 201 C
Middle Grades Math	322	Thinking Algebraically About Geometry	Tammy L. Jones	Convention Ctr.	Meeting Room 202 C
Physics	338	Do the STEM Boot Scootin' Boogie With TI-Nspire™ Technology and Data Collection	Linda Antinone	Omni Hotel	Fort Worth Ballroom 8
Physics	339	Gathering, Processing and Applying Data in a Science Classroom	Robert Reniewicki	Omni Hotel	Stockyards 2
Precalculus	331	Fostering a Math Practices Mindset	Lynn Adsit	Omni Hotel	Texas Ballroom D
Programming	328	Real-World Problem-solving Using Programming and the TI-84 Plus C Silver Edition Graphing Calculator	Juan Manuel Gonzalez	Omni Hotel	Texas Ballroom A
Statistics	316	I Can Do Statistics on the TI-84 Plus Silver Edition Graphing Calculator: How Do I Do It on TI-Nspire™ Technology?	Chris True	Convention Ctr.	Meeting Room 104
Statistics	323	Census-at-School Statistics	Kymn Van Dyken	Convention Ctr.	Meeting Room 202 D
Saturday 4:00	- 5:30	0 p.m.			
Algebra 1	352	Lining Up to Use the TI-84 Plus C Silver Edition Graphing Calculator	Debbie Sheridan	Convention Ctr.	Meeting Room 201 B
Algebra 1	354	TI-84 Plus C Silver Edition Graphing Calculator Makes Algebra More Colorful and More Memorable	Marian Prince	Convention Ctr.	Meeting Room 202 A
Algebra 1	359	Differentiation in the Algebra 1 Classroom Using TI-Nspire™ Technology	Rachael Smilowitz	Convention Ctr.	Meeting Room 203 C
Algebra 2	375	No Handhelds, No Problem!	Julie Riggins	Omni Hotel	Sundance 3
Algebra 2	376	Flipping with the TI-Nspire™	Brittney Sly	Omni Hotel	Sundance 4
Algebra 2	377	Dazzle them with Data Collection!	Heidi Rudolph	Omni Hotel	Sundance 5
Assessment	367	Best Student Success Strategy: Formative Assessment With and Without the TI-Nspire™ CX Navigator™ System	Katie England	Omni Hotel	Fort Worth Ballroom 2
Authoring	362	Getting Started on Authoring TI-Nspire™ Documents	Jerry Scherer	Omni Hotel	Texas Ballroom A
Authoring	374	Programs and Sliders and Conditions, Oh My!	Dennis Donovan	Omni Hotel	Sundance 2
Connecting Science and Math/STEM	370	Nspiring a Green Revolution	Christina Middlebrook	Omni Hotel	Fort Worth Ballroom 6
Connecting Science and Math/STEM	373	Project- and Problem-based Learning With TI-Nspire™ Technology	Michelle Bonds	Omni Hotel	Stockyards 2

Sessions by Time (49) @TICalculators

Subject No. Title Location **Presenter** Room

Saturday (400	5.2	n m			
Saturday 4:00	-5:5	շ թ.ու.			
General Interest	348	Setup, Installation and First-day Usage of the TI-Nspire™ CX Navigator™ System	Daryl Ewry	Convention Ctr.	Meeting Room 103 A
General Interest	366	Help Struggling Math Students and First-time Calculator Users be Successful	Kerry Burross	Omni Hotel	Texas Ballroom G
General Science	371	Climate Change With TI-Nspire <sup>™</sup> Technology	Marc Drougel	Omni Hotel	Fort Worth Ballroom 7
Geometry	363	Exploring Circle Geometry: Functions Emerging From Data Capture	Roger Wander	Omni Hotel	Texas Ballroom B
Geometry	368	Proportional Panting: Proportional Reasoning With Dogs	Mary Beth Murrell	Omni Hotel	Fort Worth Ballroom 3
Middle Grades Math	351	Dealing With Data in Middle Grades Using Multiple Representations and the TI-84 Family of Graphing Calculators	Jane Barnard	Convention Ctr.	Meeting Room 201 A
Middle Grades Math	355	Getting to Know the TI-84 Plus C Silver Edition Graphing Calculator	Pam Littleton	Convention Ctr.	Meeting Room 202 B
Middle Grades Math	356	Exploring Integer Operations With the TI-84 Plus C Silver Edition Graphing Calculator	Patti Nicodemo	Convention Ctr.	Meeting Room 202 C
Middle Grades Math	357	Don't Stop Until You Get Enough? Beyond Getting The Right Answer	Bernadette Salgarino	Convention Ctr.	Meeting Room 202 D
Precalculus	365	Mathematical Modeling on TI-Nspire™ Technology	Pat Mara	Omni Hotel	Texas Ballroom D
Precalculus	378	Precalculus Activities Using the TI-84 Plus C Silver Edition Graphing Calculator	Jan Mitchener	Omni Hotel	Texas Ballroom H
Precalculus	380	#LetMeTakeASelfie: TI-Nspire™ CAS App for iPad® Applications	Tina Schisler	Omni Hotel	Texas Ballroom J
Statistics	349	Navigating the Central Limit Theorem	David Kohmetscher	Convention Ctr.	Meeting Room 103 B
Statistics	353	Safe Driving Studies (Experimental Design) for the AP* Statistics and STEM Classroom	Robert Hanchett	Convention Ctr.	Meeting Room 201 C
Statistics	358	Everyday Statistics for Middle School Students	Gail Gallitano	Convention Ctr.	Meeting Room 203 B





Friday Session Details Join the Conversa Tion

#### 1 Basic Building Blocks of Lua Scripting

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Bryson Perry, brysonperryjr@msn.com, @MrPerryMath, Lafayette High School, Lexington, Kentucky, United States

Come learn the basic building blocks of scripting with Lua. No programming or Lua experience needed. You'll acquire basic skills, examples and resources.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** 

**Texas Ballroom A** 

90-Minute Hands-On **PROGRAMMING** 

#### 2 The Amusement Park of Your Mind: TI-Nspire™ CX CAS Technology's AP\* Calculus **Review Game**

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Kim Schjelderup, kim.schjelderup@mercerislandschools.org, @kimmis49, Mercer Island High School, Mercer Island, Washington, United States

Co-Presenter: Lynn Adsit

The Amusement Park of Your Mind is a challenging and engaging multi-day review game to help students prepare for the AP\* Calculus exam. Participants will learn strategies for success in Calculus, tips on TI-Nspire™ CX CAS Technology integration will be addressed and methods to improve student understanding throughout the year will be shared. Time will be allocated for participants to experience the review game so they will be able to implement the materials with their students this year.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** 

**Texas Ballroom B** 

90-Minute Hands-On

**CALCULUS** 

#### 3 PBL in AP\* Calculus: A Hand-on Approach That Says, Mahalo

Michael Long, milong4@gmail.com, @APCalcT, Kapolei High School, Kapolei, Hawaii, United States

Graduating seniors in AP\* Calculus need a way to say mahalo (thank you) to adults who have helped them get to this point. Come see a unique hands-on project that allows students to apply Calculus and Statistics to a project that accomplishes this goal. Examples of how the TI-Nspire™ technology supports the students' heartfelt projects, which have been well received by both the students and the adult.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** 

**Texas Ballroom C** 

90-Minute Hands-On **CALCULUS** 

#### 4 Analyzing Math In the Movies Using the TI-84 Plus Silver Edition Graphing Calculator

TI-84 Plus Silver Edition Graphing Calculator

Debbie Poss, deborah.poss@cobbk12.org, @debbielovesmath, Lassiter High School, Marietta, Georgia, **United States** 

Co-Presenter: Don Slater

Can the team win the big game? Can the bus jump that gap in the freeway? Movies and TV shows provide excellent motivation for students to apply mathematical concepts and the TI-84 Plus Silver Edition graphing calculator is the appropriate tool for modeling these situations.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** 

**Texas Ballroom D** 

90-Minute Hands-On

**PRECALCULUS** 

#### 5 Content Target Assessment in Algebra Using CAS

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Robin Gapinski, rgapinski@dist113.org, Highland Park High School, Highland Park, Illinois, United States

Co-Presenter: Debbie Dicker

Our journey will show how TI-Nspire™ technology, through implementation of Common Core State Standards (CCSS), transformed a traditional Algebra curriculum into a more meaningful and richer classroom environment for all learners. Participants will learn how to create formative assessments with the TI-Nspire™ CX Navigator™ System. Teaching techniques, activities and summative assessments implemented in our curriculum will be shared and practiced. The process that was used to bring our classroom from a traditional Algebra classroom to a content-focused curriculum driven by CCSS will be discussed as well.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** 

Texas Ballroom G

90-Minute Hands-On

ALGEBRA 1

CCSS





#### 6 Investigations With TI-Nspire™ Technology Involving Parabolas to Enrich Our Teaching Standards at All Levels

TI-Nspire<sup>™</sup> CX CAS Handheld

Jean-Jacques Dahan, jjdahan@wanadoo.fr, IREM of Toulouse, Montrabe, France

Using the Graphs and Geometry applications, and the 3-D graphing tool of TI-Nspire™ technology, we will present: examples using simple figures where parabolas will appear; an example leading to the conjecture of an original theorem proved with computer algebra system functionality; an example in relation with reflection in physics; other examples using parametric and 3-D representations. We will illustrate the experimental process of discovery in mathematics when research is supported by technology, Words like experiments, exploration, investigation, conjecture, plausibility and experimental validation will be defined accurately.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 1

90-Minute Lecture/Demonstration

**GEOMETRY** 

#### 7 Scrutinizing Functions With the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Ann Schlemper, aschlemper@ccis.edu, Columbia College, Columbia, Missouri, United States

Co-Presenter: Michelle Goetz

Students can use TI-84 Plus family of graphing calculators to thoroughly investigate the nuances of the graph of a function. They can determine where the function is increasing and decreasing, its extrema, its intercepts, its asymptotes and the end-behavior of the graph. This session will show how students can use the technology to enhance their understanding of functions and how that can help them to graph by hand.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 2

90-Minute Hands-On **PRECALCULUS** 

#### 8 Using Origami Boxes as a Context for Exploring Graphs

TI-84 Plus C Silver Edition Graphing Calculator

Arsalan Wares, awares@valdosta.edu, Valdosta State University, Valdosta, Georgia, United States

The session will allow participants to make an origami box and explore the relationship between the dimensions of the paper and the volume of the constructed box using TI-83 Plus graphing calculator and the TI-84 Plus graphing calculator family. The session will give participants, especially teachers, an opportunity to understand how abstract mathematical ideas may be made concrete in the context of hands-on activities like origami. The use of graphing technology will help teachers see the connections between and among a variety of representations such as: graphical, tabular, symbolic and concrete.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 3

90-Minute Hands-On **GEOMETRY** 

#### 9 Fun and Engaging Activities Using Technology that Address the CCSS

TI-84 Plus C Silver Edition Graphing Calculator

Randy Lobe, randylobe@comcast.net, @LobeRandy, Timberline High School, Lacey, Washington, United States

After 25 years of teaching mathematics, I have acquired some fun activities that engage students and allow the learning to take place. Technology enables us to ask the questions and look at the mathematics with more rigor, which addresses the Common Core State Standards (CCSS) and it makes learning more fun. We will explore activities using the TI-84 Plus C Silver Edition graphing calculator. You will walk away with activities that are ready for you to use in your classroom and address CCSS.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel Fort Worth Ballroom 4** 

90-Minute Hands-On ALGEBRA 2

CCSS

#### 10 Let the TI-84 Plus C Silver Edition Graphing Calculator Help You Really Listen to That Chirping

TI-84 Plus C Silver Edition Graphing Calculator

Jacklyn Bonneau, bonneau@wpi.edu, Massachusetts Academy of Math and Science at WPI, Worcester, Massachusetts, United States

Co-Presenter: Louise Chapman

That constant chirping of those annoying crickets has meaning. We will explore its relationship to respiration and temperature in a hands-on, ears-on activity that is fun, interesting and scientific. You will use your TI-84 family graphing calculator to measure the respiration rates of the crickets then map it to the temperature. We will the correlate all of that information to the number of chirps to gain a deeper understanding of these little critters found everywhere in nature.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 6

90-Minute Hands-On

MIDDLE GRADES SCIENCE

@TICalculators Session Details (53)

#### 11 Let's Put the E in STEM

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Greq Dodd, qbdodd@gmail.com, Kanawha County Schools, Charleston, West Virginia, United States

Our future depends on making America more competitive by training a STEM-educated work force. The Next Generation Science Standards emphasize the need for the integration of STEM instruction into the science curriculum. The goal of this hands-on workshop is to make STEM instruction cross-curricular through the use of technology. Participants will be using TI-Nspire™ CX CAS handhelds and Vernier Colorimeters to study spectrophotometry and learn how to introduce engineering into their science curriculum.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 7

90-Minute Hands-On

CONNECTING SCIENCE AND MATH/STEM

#### 12 Argumentation Science Style: Biology, TEKS and TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Handheld

Shawn Schlueter, sschlueter@esc14.net, @R14Science, Abilene, Texas, United States

Science discourse doesn't have to sound like an episode of Judge Judy. Come get strategies and see examples of how to help students discuss claims effectively, write critically, conduct scientific argumentation and learn biology content with TI-Nspire™ technology.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 8

90-Minute Hands-On **BIOLOGY** 

#### 13 Statistics in the Biology/Life Science Classroom, STAT!

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Peggy Welch, peggywelch851@gmail.com, Nicholasville, Kentucky, United States

Co-Presenter: Margaret Bambrick

Life Science/Biology is no longer the non-math science. Statistics has invaded Biology EOC' and AP\* Biology Exams. The power of visualization using TI-Nspire™ technology will help you and your students understand the meaning of statistical analysis. Real data from Princeton University evolutionary biologists Peter and Rosemary Grant have been incorporated into an activity by the Howard Hughes Medical Institute BioInteractive Evolution in Action Series. Morphological measurements including wing length, body mass and beak depth gathered from Galapogos finches will be graphed and analyzed. Come and explore, STAT!

#### 10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

Meeting Room 102

90-Minute Hands-On **STATISTICS** 

#### 14 Awesome CAS Activities That Integrate Algebra and Geometry Using **TI-Nspire™ Technology**

TI-Nspire<sup>™</sup> CX CAS Handheld

Tom Reardon, tom@tomreardon.com, @tomreardon3, Youngstown State University, Youngstown, Ohio,

This is a cool way to learn and teach! Have your students investigate a hands-on geometry activity interactively and self-paced. Then have them test and generate their hypotheses and prove their results using the power of computer algebra system functionality. They are still doing the thinking, the logic, investigation and problem-solving; the CAS allows them to do the difficult mathematics. Four activities are covered: Midpoint Polygons; Squares to Octagons; Squares to Squares; and develop and prove the distance from a point to a line formula. Lots of great mathematics in these activities, and some surprising, fascinating results.

#### 10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

**Meeting Room 103 A** 

90-Minute Lecture/Demonstration CAS





#### 15 Unraveling Data Analysis

TI-Nspire™ CX Navigator™ System

John Hanna, jehanna@optonline.net, Hopatcong, New Jersey, United States

Don't use a hammer to drive a screw! Common Core State Standards (CCSS) expects students to use technology as a tool. But it can be dangerous using the wrong tool for the job. This session examines the why behind regressions and residuals through concrete data analysis examples from Geometry using TI-Nspire<sup>™</sup> CX CAS technology.

#### 16 Expanding Your TI-84 Family of Graphing Calculators Skill Set for IB® Mathematics

TI-84 Plus C Silver Edition Graphing Calculator

Jim Nakamoto, tcubedjim@gmail.com, Richmond, British Columbia, Canada

This session will focus on some great but little-used features of the TI-84 Plus C Silver Edition graphing calculator; e.g., using mathematical logic and truth tables and generating statistical tables and critical values, GDBs, Groups and 3-D vectors. Questions will be taken from the latest examination papers for IB® Mathematics Studies, Mathematics SL and Mathematics HL with international baccalaureate teachers in mind, but all are most welcome. Come and see what odd things go on in IB® Mathematics.

#### 17 This Ain't Your Mama's Middle School Math: The TI-84 Plus C Silver Edition **Graphing Calculator and CCSS**

TI-84 Plus C Silver Edition Graphing Calculator

Sherri Abel, sherriabel 1014 @qmail.com, @sherriabel 1014, Legacy Charter School, Greenville, South Carolina, **United States** 

Boy, has middle school math changed! With the advent of Common Core State Standards (CCSS), many former high school topics can be found hanging out at the middle level. This session will focus on using the TI-84 Plus C Silver Edition graphing calculator to teach those topics. Participants will be actively engaged in a variety of activities using sensors and other manipulatives to teach CCSS topics and math practices. Come prepared to have fun.

#### 18 CCSS, Statistics and TI-Nspire™ Technology: Establishing a Foundation

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Gail Burrill, burrill@msu.edu, Michigan State University, East Lansing, Michigan, United States

The Common Core State Standards (CCSS) suggest fundamental statistical concepts such as analyzing data and developing linear models for relationships between two variables should be developed in middle school to lay the groundwork for informal inference in high school. TI-Nspire™ technology can support the development of the key concepts described in the CCSS and contribute to an understanding of the difference between a statistical and a mathematical approach to these concepts.

#### 19 Less is More

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Ellen Johnston, ellen.johnston@fayar.net, @ellenclj, Fayetteville Public Schools, Fayetteville, Arkansas, **United States** 

Less is more when students are engaging in high-level tasks that elicit student thinking, connect to previous learning and are aligned to numerous Common Core State Standards (CCSS). Come explore some of our favorite low-floor, high-ceiling tasks that will motivate your students of all levels to want to do the math.

#### 10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

#### Meeting Room 103 B

90-Minute Hands-On

CAS

**CCSS** 

#### 10:00 a.m. - 11:30 a.m.

Location: Convention Ctr.

#### **Meeting Room 104**

90-Minute Hands-On

**GENERAL INTEREST** 

#### 10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

#### Meeting Room 201 A

90-Minute Hands-On

MIDDLE GRADES MATH

CCSS

#### 10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

#### Meeting Room 201 B

90-Minute Hands-On **STATISTICS** 

CCSS

#### 10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

#### Meeting Room 201 C

90-Minute Hands-On

MIDDLE GRADES MATH

CCSS

@TICalculators Session Details (55)

#### 20 What the App Is That?

TI-84 Plus Silver Edition Graphing Calculator

Gina Allred, ticoach.ginaallred@gmail.com, @ginaallred, Franklinville, North Carolina, United States

Come explore the apps available on the TI-84 Plus Silver Edition graphing calculator. The presentation will include Algebra 1 part 1; inequality graphing; rational rampage and others as time allows.

10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

Meeting Room 202 A

90-Minute Hands-On ALGEBRA 1

#### 21 CCSS Algebra 1 and the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Ann Davidian, davidian3@aol.com, Syosset, New York, United States

The Common Core State Standards (CCSS) for Algebra 1 emphasize greater focus and deeper understanding. Teachers must provide students with opportunities to explore and apply the mathematics they are learning. The TI-84 Plus C Silver Edition graphing calculator is a wonderful tool to assist students in their exploration. Come to this session to receive materials that you can take home to use with your Algebra 1 classes.

10:00 a.m. - 11:30 a.m.

Location: Convention Ctr.

**Meeting Room 202 B** 

90-Minute Hands-On

ALGEBRA 1

CCSS

#### 22 TEKS and TI-84 Plus Technology: How This Tool Can Help Encourage Students to Aim Higher in Mathematics

TI-84 Plus C Silver Edition Graphing Calculator

Valerie Hudson, vhudsonmath@gmail.com, @vhudson\_math, Arlington Independent School District, Colleyville, Texas, United States

With the addition of the new calculator requirement for eighth grade, the Texas STAAR® test opens up new, exciting avenues for students to utilize technology. This session will help you identify the various uses of the TI-84 Plus graphing calculator family, which can help develop and encourage greater levels of student mathematical exploration, problem solving and communication. All activities are correlated to the Texas Essential Knowledge and Skills (TEKS) process standards and will be provided so you can use them with your students right away.

10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

Meeting Room 202 C

90-Minute Hands-On

MIDDLE GRADES MATH

**TEKS** 

#### 23 Charting a Course With the TI-84 Plus CE Graphing Calculator

TI-84 Plus CE Graphing Calculator

Fred Decovsky, fdecovsky@aol.com, Millburn, New Jersey, United States

This session will focus on activities that give students an opportunity to: select and create the most appropriate graph to represent a given data set and then analyze that data; and discuss and understand the correspondence between data sets and their graphical representations, including histograms, box plots, scatterplots, bar graphs and pie charts.

10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

Meeting Room 202 D

90-Minute Hands-On

MIDDLE GRADES MATH

#### 24 I See It: Visualizing Math Concepts Using TI-Nspire™ Technology

TI-Nspire™ CX CAS Handheld

Marc Garneau, piman@telus.net, @314Piman, Surrey School District Education Centre, Surrey, British Columbia, Canada

Co-Presenter: Dona McSpadden

What does it mean to see the math? Taking concepts typically taught only symbolically, we'll explore tasks with TI-Nspire™ technology that can engage students to reason and make sense of mathematical concepts through visual representations.

10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

**Meeting Room 203 B** 

90-Minute Hands-On **GENERAL MATH** 





#### 25 CCSS Statistics

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Sharon Cichocki, scichock@buffalo.edu, Hamburg Central School District, Hamburg, New York, United States

Teaching materials for Common Core State Standards (CCSS) on statistics, including dot plots, describing shapes of graphs, measuring center, scatter plots and regression, will be explored. Takeaway worksheets that can be used in your classroom with be provided. Bring your TI-Nspire™ technology to the workshop.

#### 10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

#### Meeting Room 203 C

90-Minute Hands-On

ALGEBRA 1

CCSS

#### 26 Rising to the Challenges of the Process Standards and Math Practices Using the TI-Nspire™ CX Navigator™ System

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Jennifer High, jenniferhigh01@gmail.com, Hauke Academic Alternative High School, Conroe Independent School District, Spring, Texas, United States

Work through activities using the TI-Nspire™ CX Navigator™ System that will engage students while enhancing their learning. Learn strategies for increasing student ownership in the learning process and promoting math talk among students.

#### 10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

#### **Meeting Room 204 A**

90-Minute Hands-On
GENERAL MATH

#### 27 Simulating CCSS Every Day Using TI-Nspire™ Technology in Algebra 1

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Veronica Carlson, veronica.carlson@guhsdaz.org, @Veronica\_math, Moon Valley High School, Phoenix, Arizona, United States

Co-Presenter: Kim Thomas

Formal Assessment is changing with the Common Core Mathematical Standards. The TI-Nspire™ Navigator™ System makes it possible for students to learn and explore mathematics while participating in activities and assessment tasks similar to national testing. Participants will analyze PARCC practice assessment questions while utilizing reasoning skills and critiquing the reasoning of others.

#### 10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

#### **Meeting Room 204 B**

90-Minute Hands-On

ALGEBRA 1

**CCSS** 

#### 29 CAS as a Platform for Dynamic Assessment: Create Your Own Auto-grading Tasks

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Stephen Arnold, smarnold@me.com, Swansea, New South Wales, Australia

Two of the most time-consuming but important tasks that teachers face involve setting and grading student tasks. Imagine if these processes could be simplified. Teachers create and customize tasks for exploration and assessment with just a few mouse clicks. Once completed, student results are automatically graded and organized for analysis and review. In this session, you will be introduced to a free resource package for TI-Nspire™ technology that prototypes this approach for functions and graphs. Feedback from the session will help guide further development and participants are warmly encouraged to use these materials with their own students.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** 

Sundance 2

90-Minute Hands-On

CAS

@**TICalculators** Session Details

#### **30** Creative Questioning Using TI-Nspire™ CX Navigator™ Teacher Software

TI-Nspire™ CX Navigator™ System

Tracy Slate, slate.tracy@me.com, @MsSlate, ASTEC Charter Schools, Oklahoma City, Oklahoma, United States

Have you ever heard, Never answer a question that your students can answer? TI-Nspire™ Teacher Software is a great tool for creating questions that drive instruction through student inquiry and discourse. In this session participants will learn how to create questions that Nspire their students to think and discuss. This is a great opportunity for teachers new to TI-Nspire™ CX Navigator™ System to learn the ins and outs of creating questions using the TI-Nspire<sup>™</sup> Teacher Software.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** 

**Sundance 3** 

90-Minute Lecture/Demonstration

**ASSESSMENT** 

#### 32 Nspire-ational Mathematics for the 21st Century

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Joyce Lee, jymlee@aol.com, @coffee72, G. W. Carver STEM High School, Columbus, Georgia, United States Activities using TI-Nspire™ CX Navigator™ System to motivate student achievement will be presented.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** 

Sundance 4

90-Minute Hands-On

ALGEBRA 2

#### 33 TI-Nspire™ CX CAS Technology Constructions Are not for the Faint of Heart

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Tony Timms, timms\_tony@yahoo.com, Pearson, Searcy, Arkansas, United States

Develop mathematically proficient students through a plethora of cool ways to showcase powerful constructions of linear, quadratic, ellipse and power function problems.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** 

Sundance 5

90-Minute Hands-On

ALGEBRA 2

#### 34 Dig In to the Real World With the TI-84 Plus CE Graphing Calculator

TI-84 Plus CE Graphing Calculator

John LaMaster, lamaster@ipfw.edu, @JohnLaMaster, Indiana University – Purdue University Fort Wayne, Fort Wayne, Indiana, United States

With the TI-84 Plus CE graphing calculator we will model and extend the Ditch Diggers problem at threeacts.mrmeyer.com and unearth other treasures on this and similar websites.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** 

Texas Ballroom H

90-Minute Hands-On

**PRECALCULUS** 

#### 35 Getting Started With the TI-Nspire™ CAS App for iPad®

TI-Nspire<sup>™</sup> CAS App for iPad<sup>®</sup>

Tom Steinke, thomas.steinke@ocsb.ca, @tomsteinke, Mother Teresa High School, Nepean, Ontario, Canada

Participants will be introduced to the powerful and intuitive TI-Nspire™ App for iPad® through some demonstration and hands-on activities. No previous experience the app or TI-Nspire™ technology is required. We will also do a whirlwind tour the main environments of the app: calculator, graphs, geometry, data and statistics, and lists and spreadsheet.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** 

Texas Ballroom I

90-Minute Hands-On

GENERAL MATH





#### **36** Fostering the Growth Mindset With the TI-Nspire™ App for iPad®

TI-Nspire<sup>™</sup> App for iPad<sup>®</sup>

Kristin Arterbury, karterbury@esc12.net, @karterbury, Education Service Center Region 12, Waco, Texas, United States

Come explore how the TI-Nspire™ App for iPad® can foster the math process Texas Essential Knowledge and Skills (TEKS) process standards and the growth mindset in your classroom. We will investigate student-centered activities that promote exploration, conjecturing, risk-taking, effort and perseverance. Help your students take control of their learning by embracing mistakes and struggle as part of the learning process. A limited number of iPad® mobile digital devices will be available for use.

#### 10:00 a.m. - 11:30 a.m.

**Location: Omni Hotel** 

Texas Ballroom J

90-Minute Hands-On GENERAL MATH

#### **382** Getting Started With TI-Nspire™ Technology?

TI-Nspire<sup>™</sup> CX Handheld

Elizabeth (Betty) Gasque, bgasque@aol.com, @bgmathsc, Charleston, South Carolina, United States

New to TI-Nspire™ technology? Get the most out of your T³™ International Conference experience by attending this hands-on session for beginners. The technology brings math and science to life with a full-color display, interactive touchpad, photos and images, real-time data collection and multiple representations on a single screen. We'll explore patterns, graph functions and relationships, graph and model data and learn how to engage students using TI-Nspire™ documents designed to discover and explore various math and science concepts. Get the most out of the experience by bringing your personal TI-Nspire™ handheld with you.

#### 10:00 a.m. - 11:30 a.m.

**Location: Convention Ctr.** 

Convention Ctr. Ballroom

GENERAL INTEREST

90-Minute Hands-On

### 37 Never Programmed? No Problem: Write *Prompt-Store-Display* Programs for Algebra Using the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Jim Haskins, jimhaskins@charter.net, Georgia Military College, Milledgeville, Georgia, United States

Students feel *powerful* when they can do simple programming with graphing handhelds and harness the capabilities of the calculator. Understanding of solving systems of equations and using the quadratic formula can be enhanced by writing and/or using simple programs. These programs and others like them make homework and classwork more accessible and more likely to get done. Bring your TI-84 Plus C Silver Edition graphing calculator (or any other handheld in the TI-84 Plus family of graphing calculators) to feel the *power* and leave with a variety of programs.

#### 12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** 

**Texas Ballroom A** 

60-Minute Hands-On PROGRAMMING

#### **38** Exploring Motion in AP\* Calculus

TI-Nspire™ CX Navigator™ System

Vicki Carter, vcarter@fsd1.org, @vickimcarter, West Florence High School, Florence, South Carolina, United States

Motion along a line and motion in a plane are important concepts in AP\* Calculus. With Tl-Nspire™ technology in the classroom, students have opportunities to visualize the relationship of the derivative and the integral to the concept of motion. In this session, participants will explore some interactive documents relating position and velocity. We will also explore some activities using the motion detector. We will discuss the appropriate use of technology in the AP\* Calculus classroom. Several released AP\* Free Response questions on the topic of motion will be presented.

#### 12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** 

**Texas Ballroom B** 

60-Minute Hands-On CALCULUS

@TICalculators Session Details (59)

#### 39 Calculus Concepts Are Very Easy With TI-Nspire™ CX CAS Technology and Sensors

TI-Nspire™ CX CAS Handheld

Jonnathan Resendiz, jonnathan.resendiz@gmail.com, Dallas Independent School District, Dallas, Texas, **United States** 

Co-Presenter: Guillermo Trujano

Help your students gain a deeper understanding of key concepts such as functions, slope and derivatives by using motion sensors to determine an object's position and velocity. Using the TI-Nspire™ CX CAS handheld and motion sensors, participants will model linear and trigonometric functions. An intuitive, graphic and experimental approach to the slope and the derivative will help students build these concepts.

#### 12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** 

**Texas Ballroom C** 

60-Minute Hands-On

**CALCULUS** 

#### **40** How Much Can You See?

TI-84 Plus C Silver Edition Graphing Calculator

Beverly Farahani, bamfarahani@gmail.com, Limestone District School Board, Kingston, Ontario, Canada

When you were a child, you may remember using paper towel rolls or plastic piping as a spy glass. Now you can use them to collect data. Using our calculators we will model the data to see if it is linear or nonlinear.

#### 12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** 

**Texas Ballroom D** 

60-Minute Hands-On **PRECALCULUS** 

#### 41 Changing Math Attitudes With Technology

TI-30XS MultiView™ Calculator

Christine Kasitz, ckasitz@hotmail.com, Opportunities for Learning Public Charter Schools, Burbank, California, **United States** 

How do you change a student's attitude towards mathematics? Why do students think math is hard? Come join me in an engaging hands-on presentation to learn the answers to these two questions and change how you teach mathematics. The session will use the TI-30XS MultiView™ scientific calculator.

#### 12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** 

**Texas Ballroom G** 

60-Minute Lecture/Demonstration **GENERAL INTEREST** 

#### 42 Geometric Transformations Made Simple With Complex Numbers

TI-Nspire™ CX CAS Handheld

Thomas Dick, tpdick@math.oregonstate.edu, Oregon State University, Corvallis, Oregon, United States

Geometric transformations of the plane (translations, rotations, reflections, glide reflections, dilations) can be represented as simple functions of a complex variable. The connections between algebra and geometry afforded by this approach are incredibly rich. TI-Nspire™ CX CAS technology's linked computer algebra system and dynamic geometry environment bring those connections alive.

#### 12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** 

Fort Worth Ballroom 1

60-Minute Lecture/Demonstration CAS

#### 43 Dissecting Formative Assessment

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Louise Chapman, Ichapman@volusia.k12.fl.us, @Chapman-Iouise, Volusia County Public Schools, DeLand, Florida, United States

Co-Presenter: David Young

This workshop focuses on two topics. First, you'll learn how to integrate TI-Nspire™ technology for formative assessment. And once you've determined what is and is not working, you'll see how to use the technology to differentiate instruction and fix what is not working.

#### 12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 2

60-Minute Hands-On **ASSESSMENT** 







### **44** It Is in Color? The Cabri™ Jr. Geometry App on the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Dona McSpadden, makingsmilesetc@gmail.com, University of Arkansas, Fayetteville, Arkansas, United States

Learn how each of your Geometry or Algebra 1 students can use the Cabri™ Jr. geometry app on their TI-84 Plus C Silver Edition graphing calculator. Come for an introduction to the app, key functions, pull-down menus, tools, classroom examples and capabilities such as constructing figures that retain their properties. Expect an increase in student involvement and reinforce mathematics vocabulary using the Cabri™ Jr. Leave with classroom-ready activities

### **45** Simulations for Algebra Through Precalculus Using the TI-84 Plus Silver Edition Graphing Calculator

TI-84 Plus Silver Edition Graphing Calculator

Alice Hess, ahess@juno.com, Archdiocese of Philadelphia, Philadelphia, Pennsylvania, United States

The use of simulation as a tool to lead students to higher order thinking is the focus. Participants will experience several hands-on activities which have been successfully used with student from Pre-Algebra through Pre-Calculus. They include geometric, binomial and conditional probability.

#### **46** TI-Nspire<sup>™</sup> Technology and Math and Science Projects

TI-Nspire™ CX Handheld

Delbra Robinson, delstar@comcast.net, Chesterfield, Michigan, United States

Participants will learn how TI-Nspire™ technology can help facilitate conducting a Mathematics and/or Science Fair in their school or classroom. They will use light, sound, voltage, temperature and motion sensors with TI-Nspire™ technology to investigate and to explore real-world independent and dependent variables and real-time data collection. This session will offer a hands-on, fun approach to applying the Common Core State Standards (CCSS) while making data and graphical analysis correlations. In addition, participants will actually build a mini-project board to represent their experience.

#### 47 Step up STEM With TI-Nspire™ Technology

TI-Nspire™ CX Navigator™ System

Audrey Cucci, alscucci@gmail.com, @audreycucci, Frankfort-Schuyler Consolidated School District, Poland, New York, United States

Are you looking for ways to improve STEM instruction in your classroom? Come and work through STEM activities that can be used in your math classroom. Learn how to present these activities using the TI-Nspire™ technology. See how these STEM activities help reach our students and get them excited about STEM careers. Learn a few tricks on how these activities can be used in a flipped classroom in order to expand your students learning. Let's get our students excited about STEM together.

#### 48 My Students Collected Data: Now What do I do?

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Cassie Whitecotton, cassie.whitecotton@gmail.com, Fort Worth Independent School District, Fort Worth, Texas,

Using TI-Nspire™ technology, multiple data aggregation techniques will be demonstrated in a hands-on learning environment. Collecting and analyzing data is a must in the science classroom and can be done efficiently.

#### 12:30 p.m. - 1:30 p.m.

Location: Omni Hotel
Fort Worth Ballroom 3

60-Minute Hands-On
GEOMETRY

#### 12:30 p.m. - 1:30 p.m.

Location: Omni Hotel Fort Worth Ballroom 4

60-Minute Lecture/Demonstration
ALGEBRA 2

12:30 p.m. - 1:30 p.m.

Location: Omni Hotel
Fort Worth Ballroom 6

60-Minute Hands-On

CONNECTING SCIENCE AND MATH/STEM

**CCSS** 

#### 12:30 p.m. - 1:30 p.m.

Location: Omni Hotel
Fort Worth Ballroom 7

60-Minute Hands-On

**CONNECTING SCIENCE AND** 

MATH/STEM

#### 12:30 p.m. - 1:30 p.m.

Location: Omni Hotel
Fort Worth Ballroom 8

60-Minute Hands-On

**GENERAL SCIENCE** 

@TICalculators Session Details (61)

#### 50 CAS on TI-Nspire™ Technology: It's Not Just for Your Top Students

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Ray Klein, rklein9019@aol.com, Northern Illinois University, DeKalb, Illinois, United States

Too many people believe that the use of TI-Nspire™ CX CAS technology should be reserved for the top students in Calculus classes or honors courses. It is my belief that a Computer Algebra System should be used for all students. By leveling the playing field, all students can learn more mathematics. Come and see how this approach was implemented in my former school and see some of the results that happily surprised us.

12:30 p.m. - 1:30 p.m. **Location: Convention Ctr.** 

Meeting Room 103 A

60-Minute Lecture/Demonstration

CAS

#### 51 Taking Tasks to Task: Targeting Tasks for Mathematical Practices Using **TI-Nspire™ Technology**

Rose Mary Zbiek, rmz101@psu.edu, @RZbiek, The Pennsylvania State University, State College, Pennsylvania, **United States** 

Mathematical tasks appear in many places. Particular tasks are promoted for certain purposes. Some help prepare students for Algebra or modeling portions of high-stakes tests. Some engage students in mathematical practices. Some student are able to use TI-Nspire™ CAS technology. Our challenge is to locate, adapt or develop appropriately challenging tasks that do all of these good things. In this session, we start with easily found typical tasks. We won't simply do the tasks; we'll do the mathematics. The session highlights how typical tasks blended with mathematical inquiry and reflective questions enrich mathematical practices in a computer algebra system setting.

12:30 p.m. - 1:30 p.m.

**Location: Convention Ctr.** 

Meeting Room 103 B

60-Minute Hands-On

CAS

#### **52** All About TI-Nspire™ Technology's Graphs Page

TI-Nspire™ CX Navigator™ System

Stephanie MacKay, stephanie.mackay@ecsd.net, @mackay\_steph, Edmonton Catholic Schools, Edmonton, Alberta, Canada

Co-Presenter: Ron Kennedy

This hands-on session will give beginning users an in-depth experience with many features of the TI-Nspire™ CX technology Graphs app. We will begin with basic graphing skills then explore advanced graphing techniques including tricks and tips or available shortcuts.

12:30 p.m. - 1:30 p.m. **Location: Convention Ctr.** 

Meeting Room 104

60-Minute Hands-On

GENERAL INTEREST

#### 53 Let's Saddle Up and Ride With the TEKS

TI-84 Plus Silver Edition Graphing Calculator

Jane Damaske, įdamaske@comcast.net, @tijane@tijane53, Lakeshore Public Schools, Saint Joseph, Michigan, **United States** 

Co-Presenter: Judy Hicks

Grab your best TI-84 Plus family graphing calculator and get ready to ride the way to success. Using the TI-84 Plus Silver Edition graphing calculator and TEKS aligned activities, you will be ready to enhance students' mathematical understanding for the eighth grade STAAR test, which now requires students to use a graphing calculator. Texas Essential Knowledge and Skills (TEKS) process standards activities for the TI-84 Plus Silver Edition will be provided in this session.

12:30 p.m. - 1:30 p.m.

**Location: Convention Ctr.** 

60-Minute Hands-On

MIDDLE GRADES MATH

**Meeting Room 201 A** 

**TEKS** 

#### 54 An Nspired Look at Transformations in Algebra

TI-Nspire<sup>™</sup> CX Handheld

Landy Godbold, I.godbold@comap.com, The Westminster Schools, Atlanta, Georgia, United States

Many activities help students infer what multiplications and additions to functions or in them accomplish. In this session, we'll crawl under the hood of transformations and discover what makes them tick. Now you'll have an answer when students say, I see what it's doing, but why does it work like that? We will use our feet (for real) along with spreadsheets, dynamic mapping diagrams and more. Learn how to build and interpret any sequence of any number of transformations of any kind. Wow and amaze your friends.

12:30 p.m. - 1:30 p.m.

**Location: Convention Ctr.** 

Meeting Room 201 B

60-Minute Lecture/Demonstration

ALGEBRA 2





#### 55 Type II Error and the Power of a Test: Statistics With the TI-84 Plus CE **Graphing Calculator**

TI-84 Plus CE Graphing Calculator

Mike Koehler, mikoehler@aol.com, Blue Valley North High School, Overland Park, Missouri, United States

Simulation techniques that enhance the understanding of Type II error and the power of a test will be examined using the TI-84 Plus CE graphing calculator. Hands-on activities that model effective classroom use of technology will be presented.

### 12:30 p.m. - 1:30 p.m.

**Location: Convention Ctr.** 

Meeting Room 201 C

60-Minute Hands-On **STATISTICS** 

#### 56 Learning Cycle Lesson Plan Using TI Technology

TI-84 Plus Silver Edition Graphing Calculator

Miriam Santana, mesntm@rit.edu, Rochester Institute of Technology, Rochester, New York, United States

This presentation focuses on planning inquiry lessons using the 5E lesson plan model (Engagement, Exploration, Explanation, Elaboration and Evaluation) through the use of technology. During the presentation we will explore topics such as linear and quadratic functions using the TI-84 Plus family of graphing calculator and TI-Nspire™ technology.

#### 12:30 p.m. - 1:30 p.m.

**Location: Convention Ctr.** 

**Meeting Room 202 A** 

60-Minute Hands-On ALGEBRA 1

#### 57 Lights, Camera, Active Learning With a Twist

TI-84 Plus Silver Edition Graphing Calculator

Kristy Curran, kcurran@bcps.org, Chesapeake High School/Baltimore County Public Schools, Essex, Maryland, **United States** 

Co-Presenter: Amy Parlette

In this session, participants will explore PARCC Algebra 1 and Geometry problems through hands-on active learning strategies in order to keep students engaged. Participants will use the TI-84 Plus family of graphing calculators to complete activities including the Amazing Race, Inside-Outside Circle, Last Man Standing and Grudge Ball. Participants will leave the session with a variety of resources and strategies that are ready to implement in their classroom. Come ready to do math and have fun.

#### 12:30 p.m. - 1:30 p.m.

**Location: Convention Ctr.** 

**Meeting Room 202 B** 

60-Minute Hands-On

ALGEBRA 1

CCSS

#### 58 Taking the Fear Out of Fractions

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Vincent Doty, vadoty17@hotmail.com, Canastota, New York, United States

Participants will take a fresh look at combining fractions through the use of unit fractions. TI-Nspire™ CX technology will be used to seek patterns and draw conclusions about addition, subtraction, multiplication and division of fractions. Teachers from middle school through Algebra 1 will find this session eye opening.

#### 12:30 p.m. - 1:30 p.m. **Location: Convention Ctr.**

Meeting Room 202 C

60-Minute Hands-On

MIDDLE GRADES MATH

#### 59 So, Texas Eighth Grade Can Use the TI-84 Plus C Silver Edition Graphing Calculator: **Now What?**

TI-84 Plus C Silver Edition Graphing Calculator

Corina Srygley, mrssrygley@gmail.com, @ccsrygle, Amarillo Area Center for Advanced Learning, Amarillo, Texas, United States

Struggling with implementing the TI-84 Plus C Silver Edition graphing calculator in the new eighth grade Texas Essential Knowledge and Skills (TEKS) process standards? Come experience activities you can use in your classroom tomorrow to enrich student learning. Find out where to get more activities and how to gain confidence in teaching using the TI-84 Plus C Silver Edition.

#### 12:30 p.m. - 1:30 p.m.

**Location: Convention Ctr.** 

**Meeting Room 202 D** 

60-Minute Hands-On

MIDDLE GRADES MATH

**TEKS** 

@TICalculators Session Details (63)

#### **60** Spiralling Through the Curriculum With Activities

TI-Nspire™ CX CAS Handheld

Mary Bourassa, mary.bourassa@ocdsb.ca, @MaryBourassa, West Carleton Secondary School, Dunrobin, Ontario, Canada

Can a math curriculum be taught through inquiry-based learning? Yes. Come hear how successful it can be, especially for students who struggle with math. Learn how students work through engaging activities and are interested in the mathematics they are learning. Spiraling through concepts, instead of teaching units, allows students to revisit topics and make greater connections between topics. Evaluations cover multiple curriculum expectations (standards) allowing students to demonstrate growth over the semester. This session will allow you to try an activity and provide time for questions.

12:30 p.m. - 1:30 p.m.

**Location: Convention Ctr.** Meeting Room 203 B

60-Minute Hands-On **GENERAL MATH** 

#### 62 Simple Programming With the TI-84 Plus Silver Edition Graphing Calculator

TI-84 Plus Silver Edition Graphing Calculator

Lisa Suarez, fractalsuar@yahoo.com, @fractalsuar, Ccolumbia Station, Ohio, United States Co-Presenter: Sheryl Edwards

Engage students while they practice using formulas by learning to program the TI-84 Plus Silver Edition and TI-84 Plus C Silver Edition graphing calculators. This session will show you how to write simple programs that allow students to calculate answers using common mathematical formulas such as area, perimeter and others.

12:30 p.m. - 1:30 p.m.

**Location: Convention Ctr.** 

**Meeting Room 204 A** 

60-Minute Hands-On **GENERAL MATH** 

#### 63 The New TEKS Got You Tied in a Knot?

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Sandra Hocutt, ticoach.sandrahocu@att.net, Allen, Texas, United States

If the new Texas Essential Knowledge and Skills (TEKS) process standards have you tied in knots, come to untie, lose the frustration and find exciting pre-made standards-aligned activities. Participants will use TI-Nspire<sup>™</sup> technology to preview activities that are found on the TI website. Activities are ready to take back to your classroom to get your students on the right path to mastery of the new TEKS.

12:30 p.m. - 1:30 p.m.

**Location: Convention Ctr.** 

Meeting Room 204 B

60-Minute Hands-On ALGEBRA 1

**TEKS** 

#### 64 Ending the Aggregation Aggravation With the TI-Nspire™ CX Navigator™ System

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Ed Roberts, edwin.roberts@swcsd.us, @FHHSRoberts, Franklin Heights High School, Columbus, Ohio, United States Co-Presenter: Jennifer Lippold

Collecting a lot of data in a little time just got easier. Freeing up instructional time to have students analyze data is essential in today's science classroom. This session explores some different ways to use the TI-Nspire™ CX Navigator™ System in the science classroom. We will learn how to aggregate student-collected data and encourage deeper understanding by analyzing it with handhelds.

12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** 

Stockyards 2

60-Minute Hands-On

**GENERAL SCIENCE** 

#### **65** Using the TI-Nspire™ CX Navigator™ System for Dynamic Interactive Activities

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Peg McVay, mcvaym@greatoaks.com, Great Oaks™ Career Campuses, Live Oaks Campus, Milford, Ohio, **United States** 

Co-Presenter: Stephanie Rosselot

We will model an interactive activity using transformations and the TI-Nspire™ CAS Teacher Software. You will see student responses in real time in a Match the Graph activity. During this session you will learn how to create documents that can become interactive activities.

12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** 

Sundance 2

60-Minute Hands-On

ALGEBRA 2





#### **66** The Real World: TI-Nspire™ Philadelphia

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Scott Bricker, brickers@smhs.org, @BrickerCoaching, Santa Margarita Catholic High School, Rancho Santa Margarita, California, United States

This is a true story of a group of teachers picked to adopt Common Core State Standards (CCSS). See what happens when teachers stop lecturing for the entire 60-minute class and start injecting technology and real world relevance into their instruction. It's *The Real World: TI-Nspire™ Philadelphia*. This session is highly interactive and participants will be asked to brainstorm ideas and share experiences while also receiving a host of great resources and projects to implement directly into your classrooms as soon as you get back home.

#### 12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** 

Sundance 3

60-Minute Hands-On

ALGEBRA 2

CCSS

#### 67 Small Steps, Big Strides in Understanding With the TI-84 Plus Family of Graphing Calculators

TI-84 Plus C Silver Edition Graphing Calculator

Kara Leaman, kara.leaman11@qmail.com, @idomath, Unity High School, Tolono Unit 7 Schools, Tolono, Illinois, United States

This session will focus on how to help students who struggle learning mathematics engage in the Texas Essential Knowledge and Skills (TEKS) process standards. A special shout out to you if you aren't a mathematics teacher but in a supportive role of some kind. Come learn some small steps to help your students make big strides with TEKS. New users of the TI-84 Plus family of graphing calculators are welcome.

#### 12:30 p.m. - 1:30 p.m.

**Location: Convention Ctr.** 

**Sundance 4** 

60-Minute Hands-On

ALGEBRA 2

**TEKS** 

#### 69 Using Technology Tools Appropriately

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Bill Caroscio, bcaroscio@gmail.com, @bcaroscio, Elmira, New York, United States

The Texas Essential Knowledge and Skills (TEKS) process standards and the Common Core State Standards (CCSS) math practices call for the appropriate use of technology tools within mathematics instruction. Creating simple TI-Nspire™ documents that model this appropriate use will be demonstrated in this session. Come and share your uses and join the conversation.

#### 12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** 

Texas Ballroom H

60-Minute Hands-On

**GENERAL INTEREST** 

CCSS/TEKS

#### 70 No TI-Nspire™ Technology? Don't Worry, Be Appy

TI-Nspire<sup>™</sup> CAS App for iPad<sup>®</sup>

Michelle Goetz, mgoetz@parkwayschools.net, Parkway North High, St. Louis, Missouri, United States

Co-Presenter: Ann Schlemper

See how you can use an iPad® mobile digital device to Nspire your classroom with the TI-Nspire™ App for iPad®. We will explore the app and share activities that you can do in class tomorrow to engage students in mathematical thinking and prepare for performance-based items on Common Core State Standards (CCSS) exams.

#### 12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** 

Texas Ballroom I

60-Minute Hands-On

**GENERAL MATH** 

CCSS

#### 71 The iPad® and Apple TV®: Say Goodbye to Your SMART Board®

TI-Nspire<sup>™</sup> CAS App for iPad<sup>®</sup>

Sam Gough, samgough@me.com, @swgough, The Westminster Schools, Atlanta, Georgia, United States

Co-Presenter: Jill Gough

Stuck in front of the room? Want to be more mobile? An iPad® with an Apple TV® presents an alternative to teaching with a SMART Board®. The teacher has mobility and can easily join groups as presentations are displayed. Students can take control and quickly show their ideas and solutions. We'll look at several apps, including the TI-Nspire™ App for iPad®, that can change the dynamics of your classroom.

#### 12:30 p.m. - 1:30 p.m.

**Location: Omni Hotel** 

Texas Ballroom J

60-Minute Lecture/Demonstration

**GENERAL INTEREST** 

@TICalculators Session Details (65)

#### 72 The TI-84 Plus C Silver Edition Graphing Calculator Will Help Us Determine Pi and a Euler's Formula: $e \wedge (i * pi) + 1 = 0$

TI-84 Plus C Silver Edition Graphing Calculator

Jan Erik Woldmar, jewoldmar@gmail.com, @woleja, Lernia Utbildning AB, Gothenburg, Sweden

Leonhard Euler (1707–1783) was a famous Swiss mathematician. We will study the two constants (pi and e) in his formula  $e \land (pi * i) + 1 = 0$  and with the help of small programs and darts produce approximate values of these. We will also numerically determine the solution of a differential equation using Euler's method.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** 

**Texas Ballroom A** 

60-Minute Hands-On **PROGRAMMING** 

#### 73 Teacher Moves That Engage Students and Promote Understanding in Calculus

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Ray Barton, bartonr7@comcast.net, @Ray\_Bartonr7, Olympus High School, Salt Lake City, Utah, United States

We will look at mathematically rich activities and strategies that engage calculus students in mathematical practices. TI-Nspire™ CX CAS handhelds and the TI-Nspire™ CX Navigator™ System are wonderful tools to promote student engagement.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** 

**Texas Ballroom B** 

60-Minute Hands-On **CALCULUS** 

#### 74 A Serious Look at Series With TI-Nspire™ CAS Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Patricia Brooks, pbrooks@powayusd.com, Mount Carmel High School, Poway Unified School District, San Diego, California, United States

In this session we will use TI-Nspire™ CX CAS technology to explore the Lagrange Remainder algebraically, numerically and graphically.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** 

**Texas Ballroom C** 

60-Minute Hands-On **CALCULUS** 

#### 75 Heating Up Polar Graphing With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX CAS Handheld

Scott Knapp, sknapp@glenbrook225.org, Glenbrook North High School, Northbrook, Illinois, United States

Learn how to use TI-Nspire<sup>™</sup> technology to introduce the concept of polar graphing. Come discover ideas on how to motivate students to make connections between graphing polar equations on a polar grid and corresponding trig functions on a Cartesian grid. Polar graphs discussed include circles, rose curves, cardioids and limaçon. We will also investigate the mystery behind the number of petals on a rose curve and the true number of intersections for a system of polar equations.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** 

**Texas Ballroom D** 

60-Minute Hands-On

**TRIGONOMETRY** 

#### 76 Fractions and Decimals and Lions: Oh, My!

TI-15 Explorer™ Calculator

Tammy L. Jones, tammyjones@tljconsultinggroup.com, @TLJCG, TLJ Consulting Group, Nashville, Tennessee, **United States** 

Calculator use in the elementary mathematics classroom must be selective and strategic, with attention to how such a tool will support and advance learning. Emphasis and implementation are the critical issues — when and for what purposes should calculators be used in the elementary mathematics classroom? Participants will engage in a STEM investigation that models the deliberate use of the TI-15 Explorer<sup>™</sup> elementary calculator. Literacy connections will be made with the use of an information text trade book. The Common Core State Standards (CCSS) and the Next Generation Science Standards (NGSS) will be addressed.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** 

**Texas Ballroom G** 

60-Minute Hands-On

**ELEMENTARY MATH** 

CCSS







#### 77 These Are a Few of My Favorite Things

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Doug Smeltz, dsmeltz1@hotmail.com, @drsmeltz, Westerville, Ohio, United States

I've decided to present a few of my favorite presentations over the years. Some involve geometry and games, but mostly it's my work with mastery testing in the middle grades into Algebra 1. I've been with T<sup>3™</sup> since the beginning and it's time to give my work to a younger instructor who is in the thick of the action in the schools. It's been a great ride and would like to say all the praise goes to Bert Waits and Frank Demana who Nspired me and allowed me to grow from the beginning.

60-Minute Hands-On

**GEOMETRY** 

1:45 p.m. - 2:45 p.m. **Location: Omni Hotel** 

Fort Worth Ballroom 2

1:45 p.m. - 2:45 p.m. **Location: Omni Hotel** 

Fort Worth Ballroom 1

60-Minute Lecture/Demonstration **ASSESSMENT** 

#### 78 Face-to-Face Time in a Flipped Class

Sharon Bruce, sharon.bruce@cscslions.org, Colorado Springs Christian Schools, Colorado Springs, Colorado, **United States** 

Now that I've flipped my classroom, how do I make the most of my face-to-face time with my students? Learn how I use the TI-Nspire™ technology for formative assessments and discovery activities, and also how I use SharePoint® for feedback from the students. I've been using these strategies in upper level math classes like Algebra 2, Trigonometry, Precalculus, AP\* Calculus and AP\* Statistics.

#### 79 Integrating TI Technology While Writing a Geometry Curriculum

Jessica Kachur, jessicakachur@yahoo.com, @jessicakachur, Kenosha Unified School District, Kenosha, Wisconsin, United States

Are you adopting a new textbook to align to Common Core State Standards (CCSS), rewriting your curriculum so that it aligns with the standards or just trying to update your class so that it is not just the same old stuff? Last summer, I spent my time rewriting our curriculum. Come join me as we together look at how to insert TI-Nspire™ activities into Geometry curricula where it may be most advantageous.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 3

60-Minute Hands-On **GEOMETRY** CCSS

#### 80 Cell Phones and the TI-84 Plus C Silver Edition Graphing Calculator: Why Not?

TI-84 Plus C Silver Edition Graphing Calculator

Antoinette Kidwell, antoinette.kidwell@fcps.edu, Bryant Alternative High School, Alexandria, Virginia, **United States** 

Cell phones have become an integral part of our lives. This presentation will demonstrate how I have used cell phones to enhance teaching mathematics inside and outside of an Algebra 2 classroom. Students take formative assessments in the classroom and download notes with their cell phones. Students also can access saved lecture notes — with important TI-84 Plus C Silver Edition graphing calculator animation — and communicate with the teacher using Blackboard Collaborate™. I will share in this presentation lesson plans dealing with vertical and horizontal asymptotes of different functions, end behavior of functions and sample assessment questions for end of course tests as well as test results.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel Fort Worth Ballroom 4** 

60-Minute Hands-On ALGEBRA 2

#### 81 How Safe Is My Water? Testing With the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Judy Day, judy\_day@mac.com, @judybday, North Carolina State University, Raleigh, North Carolina, **United States** 

Co-Presenter: Louise Chapman

Engage students in learning about water quality issues and how to test for the water quality index. Activities using the TI-84 Plus C Silver Edition graphing calculator and the Calculator Based Laboratory 2™ data collection device and various sensors will be done. Other activities and development of aquatic environmental curriculum will be discussed.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 6

60-Minute Hands-On **BIOLOGY** 

@TICalculators Session Details (67)

#### 82 A Reason for the Seasons

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Doug Roberts, droberts@wideopenwest.com, @dougrobertsohio, Hilliard, Ohio, United States

Co-Presenter: Ed Roberts

We will be collecting data and modeling the data using TI-Nspire™ technology to find the tilt of the earth. We will see that this activity will allow teachers to tie science together with Geometry, Trigonometry and Algebra. We will be discussing additional extensions that can be used in the classroom as a project or

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 7

60-Minute Hands-On

CONNECTING SCIENCE AND MATH/STEM

#### 83 Investigating Middle Grades Space Science With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Mike Cimino, mikecimino@outlook.com, @mike\_cimino, Heritage Middle School, Volusia County Schools, Deltona, Florida, United States

Middle school students love space. The sense of wonder intrigues them. Now that you are teaching space science, what can you do to keep your students engaged? In this session, we will look at a variety of labs that will keep your students wanting more. We will work with simulated astronaut urine to diagnose kidney stone development, create a polymer spacesuit and share many other activities to fill up the space in your curriculum.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 8

60-Minute Hands-On

MIDDLE GRADES SCIENCE

#### 85 Investigating Trinomials With Integer Roots

TI-Nspire™ CX CAS Handheld

Ray Williams, rwilliams@stmark's.wa.edu.au, St. Mark's Anglican Community School, Perth, Washington, Australia

This session uses the TI-Nspire™ CX CAS handheld's ability to do algebra in a spreadsheet to investigate trinomials where the coefficient of x2 is unity. With the Computer Algebra System facility, a time-consuming and difficult exercise is made easy and patterns can emerge to reveal possible solutions to the question, Is there a way of finding which of these trinomials can be factorised with integers? The results are quite interesting and lead to further areas to investigate.

#### 1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 103 A

60-Minute Lecture/Demonstration

CAS

#### 86 Why CAS? Why Not?

TI-Nspire™ CX Navigator™ System

Fred Ferneyhough, dybydx@me.com, Plympton-Wyoming, Ontario, Canada

A computer algebra system cannot be used on my state test, so why should I use it? Quite simply, it's good for kids and there is no better reason. We'll look at some examples of teaching with CAS that help kids understand the mathematics from Algebra 1 to Calculus better.

#### 1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 103 B

60-Minute Hands-On

CAS

#### **87** Getting Nspired With Online Learning

Richard Snow, richardsnow@nl.rogers.com, @ricksnowaputi, Newfoundland and Labrador English School District, Paradise, Newfoundland and Labrador, Canada

Participants will learn how to integrate TI-Nspire™ technology into online and blended learning environments. Topics will include recording lessons for flipped classrooms, conducting science experiments virtually and creating interactive content for upload to Learning Management Systems.

#### 1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 104

60-Minute Hands-On

**GENERAL INTEREST** 





#### 88 Making Sense of Ratios and Proportional Reasoning With TI-Nspire™ Technology

Gail Burrill, burrill@msu.edu, Michigan State University, East Lansing, Michigan, United States

Co-Presenter: Tom Dick

How do the Common Core State Standards (CCSS) suggest we approach teaching ratios? How is this approach connected to proportional reasoning? How can later grades build on these foundations to develop the concepts of slope and similarity? Supported by dynamic, interactive technology and action/ consequence documents, this approach holds promise for addressing many student misconceptions. The discussion will focus how we can take advantage of this new opportunity to build a coherent story about ratios that begins in middle school and extends into high school.

#### 1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 201 A

60-Minute Lecture/Demonstration MIDDLE GRADES MATH

CCSS

#### 89 If You Can Learn to Use a Smartphone, You Can Learn to Teach With **TI-Nspire™ Technology**

TI-Nspire™ CX Handheld

Karyn Nemeth, knemeth@dickinsonisd.org, Dickinson Independent School District, Dickinson, Texas,

In this session we will look at a calculator that can Nspire even the most burnt out instructor. On our journey we'll stick with learning just the basics; that is, being able to use TI-Nspire™ technology just like a TI-83 Plus graphing calculator or a model from the TI-84 Plus family . However, on the way, we'll see that the TI-Nspire<sup>™</sup> handheld uses the same vocabulary we teach in the classroom, shows different colored graphs to illustrate translations of two or more functions on the same screen. In other words, switching to the TI-Nspire<sup>™</sup> handheld is like switching to a smart phone from a Princess push button.

#### 1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

**Meeting Room 201 B** 

60-Minute Hands-On ALGEBRA 2

#### 90 Handheld to Handheld: Making TI-Nspire™ Technology Work With Cooperative Learning

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Susan Riker, ticoach.susanriker@gmail.com, Kalamazoo, Michigan, United States

Sick of sitting? Ready to do instead of get? Come and see how to use cooperative learning strategies and technology side by side. We will be using TI-Nspire™ technology, but any technology can be adapted to these tried-and-true strategies. Walk away with classroom ready activities that incorporate the Common Core State Standards (CCSS) and more.

#### 1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 201 C

60-Minute Hands-On

MIDDLE GRADES MATH

**CCSS** 

#### 91 Exploring the TI-84 Plus C Silver Edition Graphing Calculator and the Revised Apps

TI-84 Plus C Silver Edition Graphing Calculator

Linda Apicella, lapicella@aol.com, Orange, Connecticut, United States

See how the TI-84 Plus C Silver Edition graphing calculator and revised apps engage students in exploration and discovery. Collection activities will be provided, several apps — including Inequalities, Transformations, the Cabri™ Geometry app, and the Polynomial Root Finder and Simultaneous Equation Solver 2 — will be demonstrated and handouts provided.

#### 1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 202 A

60-Minute Hands-On

ALGEBRA 1

#### 92 Starfish Family Transformed with the New TI-84 Plus C Silver Edition **Graphing Calculator**

TI-84 Plus Silver Edition Graphing Calculator

Barbara Ward, bward@misd.org, @docward, Montgomery Independent School District, Montgomery, Texas,

Let's create Patrick the magenta starfish and his family using transformations on the TI-84 Plus C Silver Edition graphing calculator. Participants will create a connected line plot on a starfish image and then create the whole starfish family using transformations and functions of the calculator. In addition, line segments, line plots and the new functions, including QuickPlot and Fit-EQ, will be used to explore relations and their inverses.

#### 1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 202 B

60-Minute Lecture/Demonstration ALGEBRA 1

@TICalculators Session Details (69)

#### 93 Exploring the New Mathematics TEKS Through the Lens of TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Mayra Chao, mayravchao@gmail.com, Austin, Texas, United States

Come see how the TI-Nspire™ technology can help your students understand those hard-to-teach concepts. In this session, you will analyze the Texas Essential Knowledge and Skills (TEKS) process standards and be able to determine which TI-Nspire™ application will help your students best understand the concept being taught.

1:45 p.m. - 2:45 p.m. **Location: Convention Ctr.** 

**Meeting Room 202 C** 

60-Minute Hands-On

MIDDLE GRADES MATH

#### 94 Understanding Solutions of Systems on the TI-84 Plus Silver Edition **Graphing Calculator in Middle School**

TI-84 Plus Silver Edition Graphing Calculator

Donna Harris, ticoach.donnaharris@yahoo.com, Saginaw, Texas, United States

While working with linear relationships is not new to the Texas Essential Knowledge and Skills (TEKS) content standards, focusing on graphical solutions is. We will look for solutions of systems in the graphs and the tables using the TI-84 Plus Silver Edition graphing calculator. Feel free to bring your own handheld or borrow one. Either way, get your hands on a device and explore the variety of ways to find solutions and understand what they mean.

1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

**Meeting Room 202 D** 

60-Minute Hands-On

MIDDLE GRADES MATH

**TEKS** 

#### 95 Making the Transition From the TI-83 Plus or TI-84 Plus Silver Edition Graphing Calculator to TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Handheld

David Sword, dsword1@hotmail.com, Wayne RESA, Wayne, Michigan, United States

This session is designed to focus on the main transitional shifts you need to make to begin using TI-Nspire<sup>™</sup> technology regularly. Specifically, we will compare the familiar TI-83 Plus and TI-84 Plus Silver Edition graphing calculator work spaces to their counterparts on the TI-Nspire™ platform. This will enable you to become as comfortable with the TI-Nspire™ technology as you are TI-83 Plus and TI-84 Plus models.

1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 203 B

60-Minute Hands-On GENERAL MATH

#### 96 Promoting Deep Understanding: Problem-Based Learning and TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Nancy Johnson, njohnson@hopedaleschools.org, @mathlc, Hopedale Jr.-Sr. High School, Hopedale, Massachusetts, United States

Problem-based learning (PBL) engages students with real life problems that foster curiosity and initiate learning. Learn how integrating TI-Nspire™ CAS technology or the TI-84 Plus C Silver Edition graphing calculator into a PBL lesson enhances critical thinking and problem-solving skills. Several Common Core State Standards (CCSS) algebra lessons will be explored that will provide an excellent context for the development of problem solving and technology skills. Performance rubrics for these lessons will be shared and discussed.

1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 203 C

60-Minute Hands-On ALGEBRA 1

#### 97 The TI-84 Plus Silver Edition Graphing Calculator and the Special Needs Classroom

TI-84 Plus Silver Edition Graphing Calculator

Holly Terrill, hterrill@vtsd.com, @HollyTerrill, Vernon Township Public Schools, Vernon, New Jersey, **United States** 

Participants will try a variety of activities that have all been used in a special education classroom to teach middle school and high school subjects. Participants will view the teacher perspective as well as the student perspective. All activities will be made readily available to take with you as you leave.

1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 204 A

60-Minute Hands-On

**GENERAL MATH** 





#### 98 The TI-Nspire™ CX Navigator™ System: Supporting the Algebra 1 Classroom

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Abigail Sanchez, absanchez117@yahoo.com, Waller High School, Waller, Texas, United States

Co-Presenter: Patrick Sanchez

This hands-on session will demonstrate the versatile features of TI-Nspire™ technology and how to implement the technology into your daily Algebra 1 activities to support instruction of the Texas Essential Knowledge and Skills (TEKS) process standards. If you have a TI-Nspire™ CX Navigator™ System in your classroom, this session is for you.

#### 1:45 p.m. - 2:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 204 B

60-Minute Lecture/Demonstration

ALGEBRA 1

**TEKS** 

#### 100 Transformers With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Matthew Owens, manofambition 1@qmail.com, Richland School District Two, Columbia, South Carolina, **United States** 

Co-Presenter: Cathy Stinson

In this workshop, teachers will see how TI-Nspire™ technology can transform mathematical understanding for students to have more mental power with advanced concepts in Algebra 2. Key ideas such as transformations, algebraic identities, graphical analysis, Common Core State Standards (CCSS) math practices and modeling will be serve as a platform for activities.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** 

Sundance 2

60-Minute Hands-On ALGEBRA 2

#### 101 Red Solo™ Cup Constructions With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Ricci Slobodnik, joecoolmath@gmail.com, @phi\_is\_me, Advanced Technologies Academy, Las Vegas, Nevada, United States

These hands-on instructional activities with technology will engage students in Common Core State Standards (CCSS) math practices. Learn how circle constructions in Geometry evolve to conic sections in Precalculus using red Solo™ cups and tracing paper. Next, see how to assess student learning using TI-Nspire<sup>™</sup> technology to re-create the same constructions and move to the next level of understanding.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** 

**Sundance 3** 

60-Minute Hands-On

**PRECALCULUS** 

CCSS

#### 102 Strategies for an Effective Co-taught Math Classroom

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Kerry Burross, kerry.burross@carrollcountyschools.com, Temple High School, Temple, Georgia, United States

Co-Presenter: Tara Whittington

Participants will learn classroom strategies for effective use of TI technology, specifically in a co-taught classroom. Strategies will be modeled using Algebra 1, Geometry and Data and Statistics content most often taught in eighth through 10th grades. Activities with differentiation and formative assessment will be included.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** 

Sundance 4

60-Minute Hands-On

**GEOMETRY** 

#### 103 Simulating CCSS Every Day Using TI-Nspire™ Technology in Algebra 2

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Kim Thomas, kim.thomas@guhsdaz.org, @Kim\_math, Moon Valley High School, Phoenix, Arizona, United States

Co-Presenter: Veronica Carlson

Formal assessment is changing with the Common Core State Standards (CCSS). The TI-Nspire™ CX Navigator™ System makes it possible for students to learn and explore mathematics while participating in activities and assessment tasks similar to national testing. Participants will analyze Partnership for Assessment of Readiness for College and Careers (PARCC) practice assessment questions while utilizing reasoning skills and critiquing the reasoning of others.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** 

Sundance 5

60-Minute Hands-On

ALGEBRA 2

**CCSS** 

@TICalculators Session Details (71

#### 104 (Infusing TI-Nspire™ Technology) + (STEM Education) = SUCCESS on CSSS Exams

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Edward Chaves, eddie\_chaves@yahoo.com, @ChavesEddie, Miami-Dade County Public Schools, Miami, Florida, United States

Maximizing retention of information and application of knowledge is essential for success on the Common Core State Standards (CSSS) exams. Using the TI-Nspire™ technology along with STEM education to actively engage children in learning will bridge the gaps between reading, mathematics, and science. If these skills, content knowledge, STEM-focused education and TI-Nspire™ technology were infused into schools to support educational leaders, children would be actively engaging in mathematical thinking; addressing mathematical practices/process standards; and preparing for performance-based items on the CCSS exams. Rich tasks and lessons will be provided to enhance learning and improve the quality of education.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** 

**Texas Ballroom H** 

60-Minute Hands-On

CONNECTING SCIENCE AND

MATH/STEM

CCSS

#### 105 iCalculus: Teaching AP\* Calculus With the TI-Nspire™ CAS App for iPad®

TI-Nspire<sup>™</sup> CAS App for iPad<sup>®</sup>

Corey Boby, coreyboby@yahoo.com, @coreyboby, Lakeside School District, Hot Springs, Arkansas, **United States** 

Have you ever wanted to have an iPad® mobile digital device classroom? For the past two years I have been teaching AP\* Calculus where my students have school issued iPad® tablets. Come learn tricks and tips for integrating the TI-Nspire™ App for iPad® in your math classroom. This session will be helpful to teachers who teach subjects other than calculus.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** 

Texas Ballroom I

60-Minute Lecture/Demonstration

**GENERAL MATH** 

#### 106 BYOD: Interactive Statistics Using the TI-Nspire™ App for iPad®

TI-Nspire™ App for iPad®

Brandi Falley, bfalley@twu.edu, Texas Woman's University, Denton, Texas, United States

Co-Presenter: Ann Wheeler

During this session, participants will collect statistical data via hands-on activities and learn how to use the TI-Nspire<sup>™</sup> App for iPad® to construct boxplots and discuss regression, including slope and y-intercept. Bring your own iPad® mobile digital device with the TI-Nspire™ app installed.

#### 1:45 p.m. - 2:45 p.m.

**Location: Omni Hotel** 

Texas Ballroom J

60-Minute Hands-On

**STATISTICS** 

#### 107 Teaching TI-BASIC Programming to Solve Formula-based Problems With the TI-84 Plus Silver Edition Graphing Calculator

TI-84 Plus Silver Edition Graphing Calculator

John Isaacs, john.isaacs@huberheightscityschools.org, Weisenborn Junior High School, Huber Heights City Schools, Huber Heights, Ohio, United States

In this session, I'll present my experiences teaching junior and senior high school students to write TI-BASIC formula based programs to derive solutions using the TI-84 Plus Silver Edition graphing calculator in tandem with TI-SmartView™ Emulator Software for the TI-84 Plus graphing calculator family. During this 90-minute lecture, demonstration and interactive workshop, participants will learn hands-on how to program a provided TI-84 Plus C Silver Edition. Attendees will be introduced to TI-BASIC programming commands that are built into the calculator and learn to write programs to calculate one or two solutions per program. I will present my war stories of successful teaching strategies with demonstrations.

#### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** 

**Texas Ballroom A** 

60-Minute Hands-On

**PROGRAMMING** 





### 108 3-D Graphing Using TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Steve Phelps, sphelps@madeiracityschools.org, @giohio, Madeira High School, Cincinnati, Ohio, United States

One of the most exciting — but probably the least used — features of TI-Nspire™ technology is its 3-D graphing capability. Starting with the basics of graphing planes, we will explore and learn about those capabilities through an activity suitable for Geometry. However, we will take advantage of the parametric graphing capabilities to learn how to graph 3-D curves, spheres and other common surfaces, as well as surfaces of revolution typically seen in a Calculus class.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** 

**Texas Ballroom B** 

60-Minute Hands-On **CALCULUS** 

### 110 TI-Nspire™ Technology Precalculus Investigations

TI-Nspire™ CX CAS Handheld

Ken Collins, kcollins@charlottelatin.org, Charlotte Latin School, Charlotte, North Carolina, United States

This session will illustrate precalculus activities that are effective preparation for calculus using TI-Nspire™ CX CAS handhelds. Participants will receive a reproducible copy of these tested classroom activities. We will discuss how to integrate these investigations into the precalculus curriculum.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** 

Texas Ballroom D

60-Minute Lecture/Demonstration **PRECALCULUS** 

### 111 Fractions: The Good, the Bad and the Ugly: Teaching and Learning With the TI-34 MultiView™ Scientific Calculator and TI-84 Plus C Silver Edition **Graphing Calculator**

TI-34 MultiView™ Calculator

Chris Ruda, cruda@juno.com, Miami, Florida, United States

Fractions don't have to be ugly. Discover how the TI-34 MultiView™ scientific calculator, TI-84 Plus C Silver Edition graphing calculator, TI-SmartView™ Emulator Software for the TI-84 Plus graphing family and the TI-15 Explorer<sup>™</sup> elementary calculator can build conceptual understanding and make fractions meaningful and fun. Participants will engage in practice rich tasks that integrate the unique features of TI technology, digital content and manipulatives. Specific examples of Common Core State Standards (CCSS) math practices in action will show effective teaching of fractions for all learners.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** 

Texas Ballroom G 60-Minute Hands-On

MIDDLE GRADES MATH

CCSS

### 112 Transforming Geometry: Teaching Transformations and Proof on TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

David Reeves, Nspire™dmathteacher@gmail.com, San Juan Unified School District, Carmichael, California, **United States** 

Under Common Core State Standards (CCSS), geometric transformations play a bigger role than ever in teaching congruence, similarity and symmetry. The goal of this session is to show how TI-Nspire™ technology can be used to teach transformations clearly and efficiently. Additionally, how high school teachers will have an opportunity to see how transformations incorporate into to teaching the traditional proof criterion of SSS, SAS, ASA and more.

## 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 1

60-Minute Hands-On **GEOMETRY** 

CCSS

### 113 Formative Assessment with Pictures and TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Patti Nicodemo, pnicodemo@esc4.net, @PattiNicMath, Education Service Center Region 4, Houston, Texas, **United States** 

This session will focus on using pictures with TI-Nspire™ handhelds and TI-Nspire™ CX Navigator™ System to formatively assess students' understanding of functions, including linear, quadratic, trigonometric and piecewise.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 2

60-Minute Hands-On **ASSESSMENT** 

@TICalculators Session Details (73)

### 114 Reflect on This: Rigid Motions as the Composition of Reflections

TI-Nspire™ CX CAS Handheld

Stephen West, west@geneseo.edu, @StephenFWest, SUNY Geneseo, Livonia, New York, United States

This session will use TI-Nspire™ technology to investigate the fact that each of the rigid motions/ isometeries (translations, rotations, reflections and glide reflections) can be expressed as a reflection or the composition of at most three reflections. We'll also explore how their component reflections relate to the definition of these rigid motions.

# 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 3

60-Minute Hands-On **GEOMETRY** 

### 115 Mathematical Modeling Using Real-world Data for the TI-84 Plus C Silver Edition **Graphing Calculator**

TI-84 Plus C Silver Edition Graphing Calculator

Scott Trahan, sltrahan@gmail.com, Agawam High School, Agawam, Massachusetts, United States

It's easy to collect simple real-world data in the classroom using a Calculator-Based Laboratory 2™ (CBL 2) data collection device. In this session, we will review the various regression features of the TI-84 Plus C Silver Edition graphing calculator to model classroom generated data sets that demonstrate various functions found in the Algebra 2 and Precalculus curriculum. We will the use the model to interpolate and extrapolate information and make predictions.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 4

60-Minute Lecture/Demonstration ALGEBRA 2

### 116 Lasting Connections Using Data Collection

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

JoAnn Miltenberg, milty630@aol.com, Farmingdale High School, Farmingdale Public Schools, Farmingdale, New York, United States

Use the Calculator-Based Ranger 2™ (CBR 2) motion sensor and data sensors to model real-life situations involving all types of functions to make lasting connections in math and science. Plug-and-play sensors make data collection fun and easy, and investigations and simulations will excite and engage students.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 6

60-Minute Hands-On

CONNECTING SCIENCE AND MATH/STEM

### 117 Engaging TI-Nspire™ Activities for Grades Four Through Six

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Maria Benzon, maria.benzon@gmail.com, @mariabenzon, University of Houston, Houston, Texas, **United States** 

Co-Presenter: Rodolfo Morales

Learn how we modified several TI activities so younger kids can explore carnival physics, solve crimes and explore superheroes and zombies using TI-Nspire™ technology. We will discuss the specific modifications and the results, for better or worse, which you can implement in your elementary or middle schools.

## 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 7

60-Minute Lecture/Demonstration

CONNECTING SCIENCE AND MATH/STEM

### 118 TI-Nspire™ Technology Forensics: Drug Testing

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Peggy Welch, peggywelch851@gmail.com, Nicholasville, Kentucky, United States

Participants will use TI-Nspire™ technology and pH and conductivity sensors to test unknown substances collected from the cars of crime suspects. Then they'll compare the results to a known substance collected from the crime scene. Use this activity to engage your students when they learn about conductivity, pH scale, solubility, ions and types of bonds.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 8

60-Minute Hands-On

**GENERAL SCIENCE** 





### 120 Reaching Weaker Algebra Students With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Michael Buescher, michael@mbuescher.com, @BuescherMath, Hathaway Brown School, Shaker Heights, Ohio, United States

Many schools only allow computer algebra systems like the TI-Nspire™CX CAS handheld and TI-89 Titanium graphing calculator at higher levels, such as AP\* Calculus. When used properly, however, a computer algebra system can be an incredible learning tool for students who struggle with the basics of symbolic representation and manipulation. Learn how to use it to reach weaker students struggling with basic algebra concepts. Take home practical strategies and tools.

# 3:00 p.m. - 4:00 p.m. Location: Convention Ctr.

Meeting Room 103 A

60-Minute Hands-On

CAS

### 121 CAS Technology in the Australian Curriculum

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Neale Woods, nwoods1@optusnet.com.au, Distance Education Centre Victoria, Thornbury, Victoria, Australia In this session, participants will be given a brief history on how computer algebra systems have been successfully introduced into the mathematics curriculum in the state of Victoria in Australia. For the majority of the session, participants will have a hands-on opportunity to try a selection of TI Activities that are aligned to the Australian National Curriculum.

3:00 p.m. - 4:00 p.m. Location: Convention Ctr.

**Meeting Room 103 B** 

60-Minute Hands-On

CAS

### 122 TeacherTube® Classrooms: Nspired!

Jason Smith, jason@teachertube.com, @teachertube, TeacherTube®, McKinney, Texas, United States

TeacherTube® classrooms are free, fast and safe learning environments for teachers to organize videos, documents, photos, audio and collections. Learn how to engage your students through captivating, sometimes hilarious, examples found on **TeacherTube.com**. This session will be a quick overview of features and tools for teachers and educational leaders, including: aligning your content to learning standards and best practices for finding the best resources the website offers. This presentation will feature TI activities within a TeacherTube® classroom.

3:00 p.m. - 4:00 p.m.

Location: Convention Ctr.
Meeting Room 104

60-Minute Lecture/Demonstration
GENERAL INTEREST

#### 123 Middle School Activities Using the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Andi Parr, aparr@esc12.net, @mathparr, Education Service Center Region 12, Waco, Texas, United States

Join us for this hands-on session where we will explore activities to support Texas Essential Knowledge and Skills (TEKS) middle school math instruction with the TI-84 Plus C Silver Edition graphing calculator. Topics will include multiple representations of data, data collection, graphing, and much more.

3:00 p.m. - 4:00 p.m. Location: Convention Ctr.

Meeting Room 201 A

60-Minute Hands-On

MIDDLE GRADES MATH

TEKS

# **124** Activities and Strategies for Teaching Statistics for CCSS High School Math With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Handheld

Robin Levine-Wissing, rlevine-wissing@glenbrook225.org, Glenbrook North High School, Northbrook, Illinois, United States

This session will focus on the new statistics and probability content in Algebra 1 and Algebra 2 that meet the Common Core State Standards (CCSS). We will work through some instruction and activities for students in the courses where these topics are relevant. This session is perfect for high school math teachers who have not taught Statistics or Probability and need instruction or a refresher. Even if you do not use the TI-Nspire™ technology, the activities will be appropriate for your course.

3:00 p.m. - 4:00 p.m.

**Location: Convention Ctr.** 

**Meeting Room 201 B** 

60-Minute Hands-On

**STATISTICS** 

**CCSS** 

@**TICalculators** Session Details (75)

### 125 Reining in the TEKS With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Jane Damaske, jdamaske@comcast.net, @tijane53, Lakeshore Public Schools, Stevensville, Michigan, **United States** 

Co-Presenter: Judy Hicks

Howdy pardner! It's time to saddle up and break out those middle grades Texas Essential Knowledge and Skills (TEKS) process standards. No chaps or spurs are necessary as we use TI activities aligned to the new TEKS to enhance mathematical understanding. Classroom ready activities will be provided.

3:00 p.m. - 4:00 p.m. **Location: Convention Ctr.** 

Meeting Room 201 C

60-Minute Hands-On

MIDDLE GRADES MATH

### 126 Transformations in the Coordinate Plane With the TI-84 Plus C Silver Edition **Graphing Calculator**

TI-84 Plus C Silver Edition Graphing Calculator

Margaret Bambrick, ndbambrick@att.net, @ndbambrick, University High School, Orange City, Florida, **United States** 

Co-Presenter: Ruth Casey

Participants will explore strategies to engage students in generalizing the patterns and relationships that lead to the understanding of transformations in the coordinate plane. The TI-84 Plus C Silver Edition graphing calculator will be used as we make connections between algebra and geometry with transformations that may include translations, reflections and rotations. Photographs and images will be used to connect mathematics to the world around us as we use new features of the TI-84 Plus C Silver Edition that can increase student engagement and learning. This session will include mathematics topics from Common Core State Standards (CCSS) and Texas Essential Knowledge and Skills (TEKS) process standards.

3:00 p.m. - 4:00 p.m.

**Location: Convention Ctr.** Meeting Room 202 A

60-Minute Hands-On

ALGEBRA 1

CCSS/TEKS

### 127 Exploring Lines Using a TI-84 Plus Silver Edition Graphing Calculator

TI-84 Plus Silver Edition Graphing Calculator

Vicki Stebbins, vstebbins@heritagehall.com, Heritage Hall School, Oklahoma City, Oklahoma, United States

Participants will explore the slope-intercept form of a line using the TI-84 Plus Silver Edition graphing calculator to develop an understanding of the relationship between the equation and its graphical representation. During the activity, participants will also explore domain and range of a function. Calculator skills include creating and graphing lists, changing window settings, graphing equations in the form of y = mx + b as well as vertical and horizontal lines. Session will culminate with a game in which participants write equations based on written description or its relationship to another line.

3:00 p.m. - 4:00 p.m.

**Location: Convention Ctr.** Meeting Room 202 B

60-Minute Hands-On

ALGEBRA 1

### 128 Exploring Data With TI-Nspire™ Technology in Middle Grades Mathematics

TI-Nspire™ CX Handheld

Elizabeth (Betty) Gasque, bgasque@aol.com, @bgmathsc, Charleston, South Carolina, United States

Experience TI-Nspire™ activities that will engage your students as they study topics in probability and statistics. We'll graph and analyze real data, look for trends and use sampling to make inferences about a population. The focus of this session is on middle grades Common Core State Standards (CCSS) for statistics and probability and Texas Essential Knowledge and Skills (TEKS) process standards.

3:00 p.m. - 4:00 p.m.

**Location: Convention Ctr.** 

Meeting Room 202 C

60-Minute Hands-On

MIDDLE GRADES MATH

CCSS/TEKS





## 129 MAD, IQR, MoMs: The TI-73 Explorer™ Graphing Calculator, the TI-83 Plus Graphing Calculator and the TI-84 Plus Silver Edition Graphing Calculator to the Rescue

TI-84 Plus Silver Edition Graphing Calculator

Judy Wheeler, jmw.mathed@gmail.com, JMW MathEd Consulting LLC, Bridgman, Michigan, United States

Just what is this alphabet gobbledygook anyhow? We'll look closely at the middle grades learning progression of the Common Core State Standards (CCSS) Data Domain to make sense of all the new concepts — such Mean Absolute Deviation, InterQuartile Range, Mean/Median of Means/Medians, Sample Distribution vs Sampling Distribution — that have not previously been a part of most states' standards for sixth and seventh grades. Yes, your calculator can create dot plots. Exploring data with a TI-73 Explorer™ graphing calculator, TI-83 Plus graphing calculator or TI-84 Plus Silver Edition graphing calculator equates to fun in the classroom and helps kids to make sense of the alphabet soup.

# 3:00 p.m. - 4:00 p.m. **Location: Convention Ctr.**

Meeting Room 202 D

60-Minute Hands-On

MIDDLE GRADES MATH

CCSS

### 130 Let's Get Started Nspiring Students: Learn the Basics to Share With Your Colleagues

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Patsy Fagan, patsy@pfagan.com, @fagan\_patsy, Des Moines, Idaho, United States

Your school is purchasing TI-Nspire™ technology and you need more information to take back to your teachers. This session will give an introduction that you can use to take the first steps and to share with others. Learn the basics.

# 3:00 p.m. - 4:00 p.m. **Location: Convention Ctr.**

Meeting Room 203 B

90-Minute Hands-On **GENERAL MATH** 

### 131 Useful Linear Applications

TI-Nspire™ CX Navigator™ System

Denny St. John, stjoh1d@cmich.edu, @DennyStJohn, Central Michigan University, Mt. Pleasant, Michigan, **United States** 

Linear relationships are all around us. We will use the TI-84 Plus C Silver Edition graphing calculator and TI-Nspire<sup>™</sup> technology to explore several applications of linear relationships found in everyday data sets. We will use a variety of techniques to find these functions and then interpret our work.

# 3:00 p.m. - 4:00 p.m.

**Location: Convention Ctr.** Meeting Room 203 C

60-Minute Hands-On ALGEBRA 1

### 132 The Science of Learning Using the TI-Nspire™ CX Navigator™ System

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Ellen Browne, esbrowne@pomfretschool.org, @EllenSBrowne, Pomfret School, Pomfret, Connecticut, **United States** 

Come learn how to incorporate the art of questioning using the TI-Nspire™ CX Navigator™ System Quick Poll feature. How can you get the students to do more of the work and teach them how to ask and answer the questions? This session will demonstrate strategies to accomplish a student-centered classroom with the help of technology.

# 3:00 p.m. - 4:00 p.m. **Location: Convention Ctr.**

Meeting Room 204 A

60-Minute Hands-On **GENERAL MATH** 

### 133 Using TI-Nspire™ Technology to Model Statistics in Algebra CCSS

TI-Nspire™ CX Handheld

Mary Giannetto, mlgia@aol.com, @MrsG091251, North Salem Consolidated School District, North Salem, New York, United States

Co-Presenter: Lynbda Vincent

Participants will come away with statistical activities that they can use in their classes that incorporate math modeling and STEM using TI-Nspire<sup>™</sup> technology.

3:00 p.m. - 4:00 p.m. **Location: Convention Ctr. Meeting Room 204 B** 

60-Minute Hands-On ALGEBRA 1

@TICalculators Session Details (77

### 134 Catalase Activity: It's a Gas, Gas, Gas

TI-Nspire™ CX Navigator™ System

Stacy Thibodeaux, sythibodeaux@lpssonline.com, @stacythibodeaux, David Thibodaux STEM Magnet Academy, Lafayette, Louisiana, United States

Enzymatic activity will be investigated using TI-Nspire™ technology and the Vernier Gas Pressure sensor. Participants will design an inquiry-based activity to determine the effectiveness of the catalase activity.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** 

Stockyards 2

60-Minute Hands-On

**BIOLOGY** 

### 135 Nspiring Creativity With TI-Nspire™ Technology: A Graphing Art Project

TI-Nspire<sup>™</sup> CX Handheld

Shaun Reynolds, shannont.reynolds@fortbendisd.com, @TeacherShaun, First Colony Middle School, Fort Bend Independent School District, Sugar Land, Texas, United States

Participants will gain hands-on experience of graphing linear piecewise functions using TI-Nspire™ technology as an enrichment or extension activity with their students to gain a better understanding of linear functions, domain, and range and how they can work in conjunction. In addition, participants will learn how to incorporate vertical lines (non-functions) into this activity.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** 

Sundance 2

60-Minute Hands-On

ALGEBRA 1

### 136 Be Napired to Tackle CCSS

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Della Highman, della.highman@swcsd.us, Franklin Heights, South-Western City Schools, Columbus, Ohio, **United States** 

This session will address how to use TI-Nspire™ technology to keep your students actively engaged in their learning while you teach the Common Core State Standards (CCSS). We will look at rich tasks that you can take back and use with your algebra students.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** 

Sundance 3

60-Minute Hands-On

ALGEBRA 2

**CCSS** 

## 137 Discovering the Definition of the Parabola Using TI-Nspire™ Technology as Seen Through a CCSS Classroom

TI-Nspire™ CX Handheld

Stan Pappo, spappo@optonline.net, Port Jefferson Station, New York, United States

Participants will discover the definition of the parabola using TI-Nspire™ technology four ways: visually, geometrically, algebraically and through data collection. The setting will be a Common core State Standards (CCSS) classroom. The goal will be reaching our students with a deeper understanding of mathematics.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** 

**Sundance 4** 

60-Minute Hands-On

**GEOMETRY** 

### 138 Connecting Math and Science With Consumer-based Decisions

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Brenda Peterman, bgpeterman@gmail.com, @bgpettie, Fremont County School District No. 25, Riverton, Wyoming, United States

Which antacid is really the best? Engage your students by challenging them to make a consumer choice then use science and math to test their hypothesis (Mathematical Practice 1). Participants will use TI-Nspire™ CX technology in conjunction with Vernier pH sensors (MP5) to determine which of four antacids offers the fastest relief. Problem-solve using unit cost analysis to determine which product is the best value (MP3). Graph analysis and equation modeling will support which antacid offers the quickest relief and which offers the most effective (MP6). Have fun while learning with cross-curricular activities.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** 

Sundance 5

60-Minute Hands-On

ALGEBRA 2





### 139 Analyzing Rational Functions With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Jeff Corn, jcorn@madeiracityschools.org, @madeiramath1, Madeira City Schools, Cincinnati, Ohio, United States

We will use the TI-Nspire™ CX handhelds and the the TI-Nspire™ CX Navigator™ System to create your own interesting rational function.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** 

**Texas Ballroom H** 

60-Minute Hands-On **PRECALCULUS** 

### 140 The TI-Nspire™ App for iPad® is the Perfect Tool to Teach Fractions in Grades **Three Through Five**

TI-Nspire<sup>™</sup> App for iPad<sup>®</sup>

Marsha Burkholder, teamburk@yahoo.com, Columbus City Schools, Columbus, Ohio, United States

During this hands-on session, participants will learn to use the TI-Nspire™ App for iPad® to teach fractions to elementary students. Participants will explore how this app has been used with students and their development of fractional concepts.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** 

Texas Ballroom I

60-Minute Hands-On

**ELEMENTARY MATH** 

### 141 Use the TI-Nspire™ App for iPad® With Video for STEM Projects

TI-Nspire<sup>™</sup> App for iPad<sup>®</sup>

Marsha Guntharp, marsha\_guntharp@pba.edu, @mguntharp, Palm Beach Atlantic University, West Palm Beach, Florida, United States

Co-Presenter: Fred Browning

This session will demonstrate ways in which we use video and the TI-Nspire™ App for iPad®, including a pumpkin launch used with our partnering local school and a cow popper that spews out foam balls when squeezed. Participants who have the TI-Nspire™ App for iPad® and the Vernier Video Physics™ for iPad® will be able to use this demonstration also as a workshop.

### 3:00 p.m. - 4:00 p.m.

**Location: Omni Hotel** 

Texas Ballroom J

60-Minute Lecture/Demonstration

**PRECALCULUS** 

### 142 Visualizing Series and Covergence

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Dennis Wilson, dwilson@landmark-cs.org, @MC\_Dennis\_Funk, Landmark Christian School, Fairburn, Georgia, **United States** 

What is the difference between the convergence of a sequence and that of a series? What is the meaning behind all the convergence tests? What is the significance of the radius of convergence? The analysis of series can be a difficult topic to master for even the best students. This session will present methods for helping students visualize power series, convergence tests and even Lagrange Error Bound. Participants will create visual examples on paper using student explorations. The concept introduced in these activities will then be reinforced using documents on the TI-Nspire™ CX CAS handheld to build a visual understanding of series.

# 4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel** 

**Texas Ballroom A** 

60-Minute Lecture/Demonstration **CALCULUS** 

### 143 Jazzing Up Homework Assignments Using TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Anthony Record, ajrecord@avon-schools.org, @APCalcTchr, Avon High School, Avon, Indiana, United States

Are your students tired of the same old homework assignments found in their textbooks? With TI-Nspire™ technology, you can inject much needed life into those problems. Participants in this session will see how teachers can use technology to scaffold some of the more difficult exercises. Watch how TI-Nspire™ Teacher Software can be used to develop invaluable question pages to guide students through the rough spots of troublesome assignments. Several activities that are immediately ready for classroom use will be shared.

### 4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel** 

Texas Ballroom B

60-Minute Lecture/Demonstration **CALCULUS** 

@TICalculators Session Details (79)

### 144 Linear Approximations With the TI-84 Plus Silver Edition Graphing Calculator

TI-84 Plus Silver Edition Graphing Calculator

Shayla Hoffman, pridsh@grisd.net, @priddyshayla, Glen Rose High School, Glen Rose Independent School District, Glen Rose, Texas, United States

Beginning Calculus students often struggle with using tangent lines to approximate functions. With a TI-84 Plus Silver Edition graphing calculator activity, students can build upon Algebra 1 skills and see how close they can approximate the true value of a function with a tangent line approximation.

### 4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel** 

Texas Ballroom C

60-Minute Hands-On

**CALCULUS** 

### 145 Let Them Teach (and Understand More): Using TI-Nspire™ Technology for Student Designed Lessons

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Daniel Wilkie, dwilkie@greenville.k12.sc.us, @starwarsmthprof, Woodmont IB® High School, Greenville County Schools, Piedmont, South Carolina, United States

Co-Presenter: Jeff Lamb

What is one of the best ways for your students to learn and understand the math that you are teaching? Have them design a lesson and teach other students. Let me show you how I use TI-Nspire™ technology and some free recording software to get the students involved in almost every lesson and how it helps not only my students but every math student at my school. I will demonstrate how each of my students designs one lesson per quarter and posts them for all to see and benefit from. Sample lessons will be shared with all participants.

### 4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel** 

**Texas Ballroom D** 60-Minute Hands-On

**PRECALCULUS** 

### 146 Getting TI-Nspire™ Technology in the Science Classroom

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Leann Iacuone, mrsiacuone@yahoo.com, @liacuone, Riverside Unified School District, Riverside, California, **United States** 

Do you have TI-Nspire™ technology in your school? Is only your math department using it? Come and learn, discuss and see some ideas on how to convince your science teachers to use technology. We will explore some simple data collection techniques you can take back and use with science teachers to pique their interest.

### 4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel** 

Texas Ballroom G

60-Minute Lecture/Demonstration

**ADMINISTRATOR** 

### 147 Geometry Through the Lens of TI-Nspire™ Technology: An Investigational Approach

TI-Nspire<sup>™</sup> CX Handheld

Mark Cox, cox4math@hotmail.com, Montessori School of Fort Worth, Fort Worth, Texas, United States

Co-Presenter: Monica Wilson

Do you ever feel like you are holding your students' hands and dragging them through lessons with technology? Explore ways to help empower students to use TI-Nspire™ technology as a problem-solving tool. We will work through several activities that build not only on geometric concepts but also foster student critical thinking skills. We will investigate lines, quadrilaterals, triangles and circles. Tips for organizing and evaluating student work will be shared.

### 4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel Fort Worth Ballroom 1** 

60-Minute Hands-On **GEOMETRY** 





### 149 You Can Menu Program for Trigonometric Ratio Operations

TI-84 Plus C Silver Edition Graphing Calculator

Mark von Rosenberg, mvonrosenberg@nchstx.org, @lyndavin, Nolan Catholic High School, Fort Worth Catholic Diocese, Fort Worth, Texas, United States

Using the TI-84 Plus family of graphing calculators and TI-SmartView™ Emulator Software for the TI-84 Plus graphing calculator family, guide your students to a higher level of understanding and technical expertise. This beginner-level, hands-on programming workshop will use a detailed handout and visual demonstration to help you create an item-specific menu designed to calculate trigonometric ratio values from scratch. You will take with you with a fully functioning menu program on your own calculator. Although calculators will be provided, this is a BYOD workshop and you are strongly encouraged to bring your own calculator.

### 4:15 p.m. - 5:15 p.m.

Location: Omni Hotel Fort Worth Ballroom 3

60-Minute Hands-On GEOMETRY

### 150 TI-84 Plus C Silver Edition Graphing Calculators for Beginners

TI-84 Plus C Silver Edition Graphing Calculator

Fan Disher, fan.disher@stpsb.org, @DisherFan, Mandeville High School, Covington, Louisiana, United States

Do you want to know more about the graphing calculators than your students? This session will explore the basic functions of the TI-84 Plus C Silver Edition graphing calculator with a few simple tricks even your students haven't discovered. See how basic calculator functions can incorporate the Common Core State Standards (CCSS) in high school math curriculum. Definitely for beginners.

### 4:15 p.m. - 5:15 p.m.

Location: Omni Hotel
Fort Worth Ballroom 4

60-Minute Hands-On ALGEBRA 2 CCSS

### 151 Learning to Fail: Building Confidence With Data Collection

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Jessica Kohout, jessica\_kohout@hcpss.org, @MrsKohout, Reservoir High School, Howard County Public School System, Fulton, Maryland, United States

Do your students expect to have perfect results every time they step into the lab? Do they think the lab is flawed when they don't? In this session, learn ways to build confidence in future scientists though data collection with the TI-Nspire™ CX Navigator™ System. We will use conductivity sensors to investigate diffusion and learn how to help students troubleshoot while thinking through the experimentation process. Give your students a science toolbox to help them reason through problems they might encounter.

### 4:15 p.m. - 5:15 p.m.

Location: Omni Hotel Fort Worth Ballroom 6

60-Minute Hands-On BIOLOGY

### 152 Use a Reality-oriented Framework for High-Engagement Lessons

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Roger Fuller, fullermath@yahoo.com, @rogerfuller, Grand Prairie, Texas, United States

Today's students disengage quickly from teachers and lessons in which they see no value. There are various ways to compensate for this, such as the 5E model. However, just how does one do the engagement portion? See examples of reaching students where they live — or will live — with real, everyday objects and short video clips using TI-Nspire™ technology. Also learn how to use psychologically based questioning techniques that capture student attention and builds a learning community.

# 4:15 p.m. - 5:15 p.m.

Location: Omni Hotel Fort Worth Ballroom 7

60-Minute Hands-On

CONNECTING SCIENCE AND MATH/STEM

### 153 How Does it Spin? TI-Nspire™ Technology and Various Vernier Sensors

TI-Nspire™ CX Navigator™ System

James Bretthauer, james.bretthauer@fwisd.org, Fort Worth Independent School District, Fort Worth, Texas, United States

A hands-on experience to discover the relationship between linear and rotational mechanics all while using Vernier sensors and TI-Nspire™ technology. Rotational motion is now being included in AP\* Physics 1.

### 4:15 p.m. - 5:15 p.m.

Location: Omni Hotel
Fort Worth Ballroom 8

60-Minute Hands-On PHYSICS

@TICalculators Session Details (81)

### 155 Would You Teach Writing Without Word Processing? So Why Are You Teaching Math Without Calculators?

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Kathy Traylor, kathy\_traylor@gwinnett.k12.ga.us, Shiloh Middle School, Snellville, Georgia, United States

Just as word processing encourages students to explore ideas and literary structure, TI-Nspire™ technology encourages mathematical exploration, creativity and understanding. When you combine TI-Nspire™ CX handhelds with the TI-Nspire™ CX Navigator™ System, you can easily share and present your students' problem-solving results and explanations. See how technology goes way beyond quotients, cosines and cube roots. See lessons, problems, activities and assessments that work with eighth grade math, Coordinate Algebra and Analytic Geometry students. Beginners welcome.

4:15 p.m. - 5:15 p.m. **Location: Convention Ctr.** 

Meeting Room 103 A

60-Minute Hands-On

**GENERAL INTEREST** 

### 156 Using the TI-Nspire™ CAS Technology to Enhance Solving of Precalculus Problems

TI-Nspire™ CX CAS Handheld

Pat Bowler Johnson, bowlerjp@newtrier.k12.il.us, New Trier Township High School, Winnetka, Illinois,

TI-Nspire™ CX CAS handhelds allow for interesting problems to be solved in the classroom. Making the problems interesting enhances learning topics instead of spending class time finding solutions.

4:15 p.m. - 5:15 p.m.

**Location: Convention Ctr.** 

Meeting Room 103 B

60-Minute Lecture/Demonstration

CAS

### 157 TI Resources to Support Instruction of the TEKS

Robb Wilson, rwilson@ti.com, @rwilson\_robb, Sulphur Springs, Texas, United States

This session will provide attendees with resources to support instruction of the Texas Essential Knowledge and Skills (TEKS) practices. The primary focus of the presentation will be resources available at the various TI websites. These websites include www.education.ti.com/activities, TIMath.com, Math Nspired, Science Nspired and the new Building Concepts website for Fractions and Proportional Reasoning. A short overview of available calculator tutorials will also be provided.

4:15 p.m. - 5:15 p.m.

**Location: Convention Ctr.** 

**Meeting Room 104** 

**GENERAL INTEREST** 

**TEKS** 

### 159 Least-Squares Regression, Oh My: Using TI-Nspire™ Technology to Introduce **Regression in Statistics and Algebra**

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Kyle Atkin, atkin4@bak.rr.com, @4kyleatkin, Kern High School District, Bakersfield, California, United States

Co-Presenter: David Reeves

This session will use TI-Nspire™ technology to incorporate Least-Squares Regression modeling strategies in Intro Statistics and Algebra 1 courses. We will investigate why the Pythagorean expectation of winning percentage is a good model to predict a baseball team's winning percentage while deepening our understanding of the concept of least-squares.

4:15 p.m. - 5:15 p.m.

**Location: Convention Ctr.** 

Meeting Room 102

60-Minute Hands-On **STATISTICS** 

## **160** Exploration Activities in Mathematics for Middle School Students With TI-Nspire™ **Technology in Shanghai**

TI-Nspire™ CX CAS Handheld

Zhongyi Xin, xinzhongyi\_ti@126.com, East China Normal University, Shanghai, China

To promote the use of TI technology in mathematics teaching and to stimulate students' interest in using technology to explore mathematical problems, Shanghai consecutively organized annual Shanghai High School Math TI Cup contests. We will introduce an overview of the competition, which began in 2002, and focus on the use of TI graphing technology to do induction exploration and function curve exploration. Shanghai has organized high school students to use TI graphing calculators for drawing works in six consecutive years and there is an annual awards event for drawing works.

4:15 p.m. - 5:15 p.m.

**Location: Convention Ctr.** 

Meeting Room 201 C

60-Minute Hands-On

MIDDLE GRADES MATH





# 161 Discover The Vertex Form of a Parabola With the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Alice Carson, alice.carson@knoxschools.org, @AliceInMathland, Knox County Schools, Knoxville, Tennessee, United States

Using the TI-84 Plus C Silver Edition graphing calculator, participants will work through an activity that guides students to discover the vertex form of a parabola. Through exploration, the student will see effect of changing parameters. Other activities will be shared as time permits.

# 4:15 p.m. - 5:15 p.m. Location: Convention Ctr.

Meeting Room 202 A

60-Minute Hands-On ALGEBRA 1

### 162 TI-Nspire™ Technology: Graphing from Linear Equations to Slope Fields

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Joanne Ryan, jryan@buckley.org, The Buckley School, Sherman Oaks, California, United States

Learn how to use the TI-Nspire™ CX CAS handheld to graph equations, inequalities and systems from Algebra 1, Algebra 2 and Precalculus. We will look at finding zeroes, min and max points, as well as points of intersection. Explore Parametric & Polar graphing, Piece-Wise Functions, attributes of Conic Sections, as well as graphs of Sequences. Delve into Calculus through finding points of inflection, slopes of tangent lines, shaded areas, Logistic Growth curves, slope fields, Differential Equations and Euler's Method. We'll conclude with Taylor Polynomials and 3-D graphing. We'll also look at the window and table options for each of the above.

# 4:15 p.m. - 5:15 p.m.

Location: Convention Ctr.

**Meeting Room 202 B** 

60-Minute Hands-On

CAS

### 163 Beginning Statistics and TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Diane Broberg, dbroberg@allendalecolumbia.org, Allendale Columbia School, Rochester, New York, United States

Collect data and explore statistics using TI-Nspire™ technology. Participants will use many methods to collect and distribute data so students are actively engaged in statistics. Participants will leave with methods to compare data and draw conclusions. Real world examples will be investigated. Texas Essential Knowledge and Skills (TEKS) process standards and Common Core State Standards (CCSS) will be discussed with focus on middle school and Algebra 1.

# 4:15 p.m. - 5:15 p.m.

**Location: Convention Ctr.** 

Meeting Room 202 C

60-Minute Hands-On

MIDDLE GRADES MATH

CCSS/TEKS

# 164 Probability Simulation Application and Programming: Coin Toss, Dice Roll, Marble Pick and Spinner Spin

TI-84 Plus Silver Edition Graphing Calculator

Jody Johnson, jody0429@bellsouth.net, Mount Pisgah Christian School, Alpharetta, Georgia, United States

This project begins by using the Probability Simulation App to obtain data for the Coin Toss, Dice Roll, Marble Pick and Spinner Spin. This information is tallied by hand and then put into a chart to represent these numbers as fractions, decimals, percentages and degrees in a circle. The TI-84 Pluse Silver Edition graphing calculator is then used to show how this information can be obtained as a series of Lists under the STAT function. Information is also given as to how calculator programs are users.

# 4:15 p.m. - 5:15 p.m.

**Location: Convention Ctr.** 

Meeting Room 202 D

60-Minute Lecture/Demonstration
MIDDLE GRADES MATH

# 165 Using the TI-84 Plus Silver Edition Graphing Calculator for Math Education in Singapore

TI-84 Plus Silver Edition Graphing Calculator

 ${\it Tiow\ Choo\ Kwee, kweetc@hci.edu.sg, Hwa\ Chong\ Institution, Singapore, Singapore}$ 

In Singapore, we have been using the TI-84 Plus C Silver Edition graphing calculator for the General Certificate of Education Advanced Level syllabus (GCE A level), which is equivalent to U.S. 11th and 12th grades. During the course of this workshop, participants will experience and learn how the TI-84 Plus C Silver Edition is used in our Singapore classroom to enhance the teaching and learning of mathematics. The lesson scope will cover topics such as graphing, recurrence sequence, function, limit, design competition, etc. The soft copies of all resources used in the workshop will be made available to participants.

# 4:15 p.m. - 5:15 p.m.

**Location: Convention Ctr.** 

**Meeting Room 203 B** 

60-Minute Hands-On
GENERAL MATH

@TICalculators Session Details (8

### 166 Playing With Perpendicular Lines: Conjecturing and Proof With TI-Nspire™ Technology

TI-Nspire™ CX Navigator™ System

Douglas Lapp, lapp1da@cmich.edu, @DougLappCMU, Central Michigan University, Mount Pleasant, Michigan, **United States** 

A vignette from an actual classroom exchange is used to motivate the discussion of how dynamically linked representations can be used to explore the relationships between perpendicular lines graphically, geometrically, numerically and algebraically. Once the student has made a conjecture about these relationships inductively, the computer algebra system is used to prove them by algebrafying the same geometric constructions that were manipulated in the inductive phase of the exploration. Connections to the Common Core State Standards (CCSS) are discussed with particular attention to standards of mathematical practice.

4:15 p.m. - 5:15 p.m.

**Location: Convention Ctr.** Meeting Room 203 C

60-Minute Hands-On

ALGEBRA 1

### **167** Using TI-Nspire™ Technology to Enrich High School Mathematics Conversations

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Karen Cockburn, ticoach.kcockburn@gmail.com, Spokane Valley, Washington, United States

The TI-Nspire™ CX Navigator™ System can be used in high school classrooms to stimulate thinking and discussions. Come experience classroom examples obtained by a TI MathForward™ program coach from Algebra 1, Algebra 2, Geometry, Statistics, and Calculus classes in which teachers are utilizing the best technology to promote learning. Formative assessment helps guide instructional decisions and, perhaps more important, gives students information that creates meaningful learning and promotes understanding and retention.

4:15 p.m. - 5:15 p.m.

**Location: Convention Ctr.** 

Meeting Room 204 A

60-Minute Hands-On **GENERAL MATH** 

### 168 Angry Birds™ and Other Games to Motivate Learning

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Lauren Jensen, ljensenmath@gmail.com, Spring Green, Wisconsin, United States

Come join us to experience how linear and quadratic TI-Nspire™ activities can motivate student learning. Materials will be provided.

4:15 p.m. - 5:15 p.m.

**Location: Convention Ctr.** 

Meeting Room 204 B

60-Minute Hands-On

ALGEBRA 1

### 170 Line Designs and Patterns in Linear Functions

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Deobra Solomon, mathiscool\_chick@yahoo.com, @deobra, Sparks, Nevada, United States

Participants will explore line designs on the coordinate plane by looking for patterns in linear equations and slope via x- and y-intercepts. They will explore Texas Essential Knowledge and Skills (TEKS) process standards and the Common Core State Standards (CCSS) during the hands-on lesson.

4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel** 

**Sundance 2** 

90-Minute Lecture/Demonstration

ALGEBRA 1

CCSS







## 171 Formative Assessments, Student Engagement and Classroom Management Using the TI-Nspire™ CX Navigator™ System

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Osmond Owusu, osmondsco@yahoo.com, Dallas Independent School District, Royse City, Texas, United States

This session will focus on using the TI-Nspire™ CX Navigator™ System to support assessing our students formatively in the course of our lessons. It also will explore the use of technology to aid student engagement in mathematics activities and as a classroom management tool for effective instruction. Participants will be engaged from the word qo! You will acquire skills such as setting up the system; creating mini-assessments, sending these to students and collecting instant feedback for students; getting individual students to present work; displaying individual students screens and other exploratory activities.

### 4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel** 

Sundance 3

60-Minute Hands-On **GENERAL MATH** 

### 172 Designing a Wishing Well With TI-Nspire™ Technology

TI-84 Plus C Silver Edition Graphing Calculator

Ray Fox, rayisfox@gmail.com, @krayfox, Mount Juliet, Tennessee, United States

Co-Presenter: Johnny Ashurst

Participants will use TI-Nspire™ technology's Geometry App to design a wishing-well planter. We will explore the relationship of the diameter, side length, inside and outside angles and angle to cut ends of the sides to form a regular octagon using discovery. The activity allows extension by challenging participants to create a planter with different diameter or number of sides.

### 4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel** 

**Sundance 4** 

60-Minute Hands-On **GEOMETRY** 

### 173 Magical Motivational Activities for Teaching CCSS in Algebra 2 Using **TI-Nspire™ Technology**

TI-Nspire™ CX CAS Handheld

Brendan Kelly, bkelly10@cogeco.ca, University of Toronto, Burlington, Ontario, Canada

Co-Presenter: Fred Ferneyhough

In this session you will see some highly motivational activities in real-world contexts that showcase the use of TI-Nspire™ technology in teaching Algebra II. You will also work through some exciting applications involving rational expressions and trigonometric, exponential and logarithmic functions. Full-color handouts containing detailed keying sequences for the activities will be distributed. Algebra textbooks and DVDs that embed TI-Nspire<sup>™</sup> content in the instruction will be given as prizes at this session. A website for free TI-Nspire™ documents, 66 free e-Lessons and presentations will be provided.

### 4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel** 

Sundance 5

60-Minute Hands-On

ALGEBRA 2

### 174 Investigating Models of Exponential and Power Data Using Logarithms

TI-Nspire<sup>™</sup> CX Handheld

Sheila Horstman, sheila.horstman@cmcss.net, @swhorowitz, Clarksville High School, Clarksville, Tennessee, **United States** 

This session will investigate how real-world data that models exponential curves and power law curves can be transformed using logarithms to linearize the data. The properties of logarithms can be used to justify how the transformed data guides the statistician in a mathematical sense. Participants will gain insight into the practice of using logarithms to linearize data. Current, real world data sets will be investigated. Attendees may use TI-Nspire™ technology or TI-84 Silver Edition graphing calculators to investigate the data sets. This presentation involves multiple representations and utilizes the practice standards for making use of structure, reasoning and modeling with mathematics.

### 4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel** 

**Texas Ballroom H** 

60-Minute Lecture/Demonstration

**PRECALCULUS** 

@TICalculators Session Details (85

### 175 Are You *Up to Code* With the TI-Nspire™ App for iPad®?

TI-Nspire<sup>™</sup> App for iPad<sup>®</sup>

Ann Wheeler, awheeler2@twu.edu, Texas Woman's University, Denton, Texas, United States

Using the TI-Nspire™ App for iPad®, participants will learn how to take and import pictures, as well as calculate best fit lines to determine the slopes of staircases and wheelchair ramps. Bring your own iPad® mobile digital device with the TI-Nspire™ app loaded to see how to create interactive mathematics lessons using engineering codes to make mathematics come to life.

### 176 Intro to the TI-Nspire™ App for iPad®

TI-Nspire<sup>™</sup> App for iPad<sup>®</sup>

Travis Bower, tbower@dphs.org, Santa Barbara Unified School District, Santa Barbara, California, United States

Come find out how to use this exciting tool effectively and confidently. This session is designed for beginner and intermediate users. We will note some new features of the latest upgrade. We will discuss a one-iPad® model as well as a 1-to-1 model in the classroom. Examples will be graphing and transformational geometry. We will mention some of the significant differences between the TI-Nspire<sup>™</sup> handheld and the TI-Nspire<sup>™</sup> App for iPad. The goal is to provide you with a vision for this tool's potential. Bring your iPad® mobile digital device with the app installed.

### 4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel** 

Texas Ballroom I

60-Minute Hands-On

ALGEBRA 1

### 4:15 p.m. - 5:15 p.m.

**Location: Omni Hotel** 

**Texas Ballroom J** 

60-Minute Lecture/Demonstration

**GENERAL INTEREST** 









Saturday Session Details Join the Conversa Tion

### 177 Teaching Statistics Using Simulations

TI-84 Plus C Silver Edition Graphing Calculator

David Scott, dscott@udel.edu, @davidleonscott, University of Delaware, Wilmington, Delaware, United States

Teachers will learn to use the TI-84 Plus family of graphing calculators to create data from simulations. We will analyze the data in the context of mean, median, mean, extremes and variation to help students understand how these parameters help decipher data. Participants will learn to create histograms and box plots to visually explore the data. We will explore the concept of confidence intervals at a middle school level.

8:00 a.m. - 9:30 a.m. **Location: Convention Ctr.** 

Meeting Room 102

90-Minute Hands-On **STATISTICS** 

### 178 Delving Deeper With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Peter Flynn, peterjohnflynn@gmail.com, Kyneton, Victoria, Australia

Problems in secondary school textbooks are often specific instances of problems that can be readily generalized. In this session, TI-Nspire™ CX CAS handhelds will be used to delve more deeply into such textbook problems. In doing so, I aim to highlight the importance of the role of parameters in determining function behaviour and the ability to correctly interpret outputs derived from the Computer Algebra System. The latter links strongly with the need to foster mathematical reasoning in a CAS-active learning environment. Topics to be covered include algebra, probability, functions and calculus. Beginner, intermediate and advanced users are welcome.

8:00 a.m. - 9:30 a.m.

**Location: Convention Ctr.** 

**Meeting Room 103 A** 

90-Minute Hands-On

CAS

### 179 Nspired CAS and Statistics

TI-Nspire<sup>™</sup> CX CAS Handheld

Chris Harrow, cdharr@hawken.edu, @chris\_harrow, Hawken School, Gates Mills, Ohio, United States

Dynamic software is ubiquitous in statistics courses. Less well-known is the power of the TI-Nspire™ CX CAS handheld to support statistical learning. This session has two goals: review a non-CAS TI-Nspire™ document explaining linear regressions without black-box calculus; and explore implications of Computer Algebra Systems approaches, which have helped many of the presenter's students achieve a deeper understanding of statistics, in AP\* and non-AP statistics courses. The regressions activity has been successfully used in Algebra 2 and Statistics courses.

8:00 a.m. - 9:30 a.m.

**Location: Convention Ctr.** 

Meeting Room 103 B

90-Minute Lecture/Demonstration CAS

#### 180 Using TI-Nspire™ Technology in a Statistics Classroom

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Murney Bell, murneybell@sbcqlobal.net, @mrBell01, Siena Heights University, Adrian, Michigan, United States

Common Core State Standards (CCSS) state that statistics provides tools for describing variability in data and for making informed decisions that take it into account. We will demonstrate designs in statistics activities and projects that enable students to collect, organize, summarize and analyze data and use data sets to draw conclusions or answer questions. You will be given project guidelines that will help you to construct questions that students will use to work with the data and make decisions that will be needed in the workplace.

8:00 a.m. - 9:30 a.m.

**Location: Convention Ctr.** 

Meeting Room 104

90-Minute Hands-On

**STATISTICS** 

CCSS

# **181 Flipping Over Transformations**

TI-84 Plus C Silver Edition Graphing Calculator

Melissa Jackson, melissa.jackson@doe.state.nj.us, @luvmath2, New Jersey Department of Education, Clarksboro, New Jersey, United States

In this hands-on session, you will experience transformations, rotations and reflections coming alive on the TI-84 Plus C Silver Edition graphing calculator. See how the technology can increase conceptual understanding and make learning math fun. Using these tools improved my instructional techniques, changed my students' attitude towards mathematics and created a fun, dynamic student-centered class. 8:00 a.m. - 9:30 a.m.

**Location: Convention Ctr.** 

Meeting Room 201 A

90-Minute Lecture/Demonstration MIDDLE GRADES MATH





# 182 Simplify Algebra 1 Function Investigations With the Transformation Graphing App and Data Programs

TI-84 Plus C Silver Edition Graphing Calculator

Allan Bellman, abellman@olemiss.edu, @abellman17, University of Mississippi, Oxford, Mississippi, United States

Visually fitting functions to real data is a great way to encourage student investigation of the effect of the parameters of a function on its graph. Getting identical scatterplots on all student calculators and making repeated changes to a function for fitting is time consuming and often difficult. Data programs and transformation graphing can solve these problems. During the session, investigate the Transformation Graphing App and watch a function being transformed as its parameters change. Experience using this app with data plotted on your calculator from a program. Finally, discuss creating data programs themselves. Come simplify your real data life.

8:00 a.m. - 9:30 a.m. Location: Convention Ctr.

Meeting Room 201 B

90-Minute Hands-On ALGEBRA 1

### 183 Next Steps in a Middle Grades TI-Nspire™ Technology Adventure

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Valerie Hudson, vhudsonmath@gmail.com, @vhudson\_math, Arlington Independent School District, Arlington, Texas, United States

Do you use TI-Nspire™ technology and want to know how to utilize this powerful tool better? If so, this session is for you. Come learn how the technology can be used in middle grades mathematics classes beyond the basics of button pressing. All activities are correlated to Texas Essential Knowledge and Skills (TEKS) process standards and will be provided so you can use them with your students right away.

8:00 a.m. - 9:30 a.m.

**Location: Convention Ctr.** 

Meeting Room 201 C

90-Minute Hands-On

MIDDLE GRADES MATH

**TEKS** 

### 185 I've Turned It On, Now What? Getting Started With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Handheld

Sherry Everding, severding@corjesu.org, @sherryeverding, Cor Jesu Academy, St. Louis, Missouri, United States Co-Presenter: Aurelia Weil

This session introduces new users to the world of TI-Nspire™ CX handheld technology. Come explore from the beginning and participate in activities you can take back to students to help them gain a deeper understanding through multiple representations. It's easier than you think. No experience necessary. Activities will touch on Algebra 1 and above.

8:00 a.m. - 9:30 a.m.

**Location: Convention Ctr.** 

Meeting Room 202 B

90-Minute Hands-On ALGEBRA 1

### 186 MAD in Middle School

TI-84 Plus C Silver Edition Graphing Calculator

Jean McKenny, jmckenny@together.net, Northeast Kingdom Learning Services, Hardwick, Vermont, United States

Common Core State Standards (CCSS) and Texas Essential Knowledge and Skills (TEKS) process standards have moved mean absolute deviation to middle school. This session will show how this topic can be taught for understanding using appropriate technology. Any graphing TI technology — the TI-73 Explorer™ graphing calculator, the TI-83 Plus graphing calculator, TI-84 Plus family of graphing calculators or the TI-Nspire™ family of handhelds — can be used. The presenter will share data sets that can be used with students. Understand conceptually what MAD is (as opposed to just procedurally) will be stressed.

8:00 a.m. - 9:30 a.m.

**Location: Convention Ctr.** 

**Meeting Room 202 C** 

90-Minute Hands-On

MIDDLE GRADES MATH

CCSS/TEKS

@TICalculators Session Details (8

### 187 Connecting Proportional Reasoning and Algebraic Thinking Using the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Gloria Beswick, grbeswick@aol.com, @grbeswick, Jefferson County Public Schools, Louisville, Kentucky, **United States** 

Understanding multiplicative relationships and reasoning proportionally is essential to student success in algebra. Participants will engage in hands-on activities designed to develop proportional reasoning at a concrete level and make explicit connections to algebraic thinking. Participants will compare verbal descriptions, diagrams, tables, graphs and mathematical models representing various proportional and non-proportional relationships. Similarities and differences among the relationships and representations will be explored using the TI-84 Plus C Silver Edition graphing calculator in order to build a deep understanding of the connections between proportional relationships, algebraic reasoning and linear functions. Activities will emphasize the Standards for Mathematical Practice.

8:00 a.m. - 9:30 a.m. **Location: Convention Ctr.** 

Meeting Room 202 D

90-Minute Hands-On

MIDDLE GRADES MATH

### 188 How We are Flipping the Script

Sarah Thomas, me@sarahjanethomas.com, @sarahdateechur, Prince George County Public Schools, Prince George, Virginia, United States

Co-Presenter: Crystal Morgan

Flipping seems like the educational technology buzzword of 2015 but what does it mean exactly? In this session, discover why a middle school ELA/Technology Integration teacher has fallen head over heels. Topics covered will include videotaped lessons, useful resources and best practices to begin.

8:00 a.m. - 9:30 a.m. **Location: Convention Ctr.** 

Meeting Room 203 B

90-Minute Hands-On

GENERAL INTEREST

### 189 Statistics Explorations With TI-Nspire™ Technology in Middle Grades Math and Algebra 1

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Katie England, katie.england@comcast.net, @EnglandKatie, Montgomery County Public Schools, Rockville, Maryland, United States

Is analyzing one- and two-variable data sets new to a course you teach? Some statistical concepts have shifted grades or courses with Common Core State Standards (CCSS) implementation. What exactly are students supposed to learn in your course? What do the CCSS and Texas Essential Knowledge and Skills (TEKS) process standards actually mean? How will we provide rich tasks that support student proficiency in these statistics standards and mathematical practices? We'll explore the standards in middle grades courses and in Algebra 1 with favorite activities and explorations using TI-Nspire™ technology.

8:00 a.m. - 9:30 a.m. **Location: Convention Ctr.** 

Meeting Room 203 C

90-Minute Hands-On

ALGEBRA 1

CCSS/TEKS

### 190 Programming on TI-Nspire™ Technology

TI-Nspire™ CX Navigator™ System

Jared Despain, jared.despain@outlook.com, Canyon View High School, Cedar City, Utah, United States

Co-Presenter: Charles Atchley

Ready to take your calculator skills to the next level? Learn how to write your own programs and functions on TI-Nspire™ technology. We'll explore great ways to build on mathematical reasoning and logic by writing our own code, from easy to learn-and-use functions, to more difficult algorithms, to nifty math shortcuts with lots of physics and science formulas applications as well. Be the envy of all your friends.

8:00 a.m. - 9:30 a.m. **Location: Convention Ctr. Meeting Room 204 A** 90-Minute Hands-On **GENERAL MATH** 

## 191 Using TI-Nspire™ Technology to Prepare for STAAR® and EOC Assessments

TI-Nspire™ CX Handheld

Kathy Hale, khale@esc14.net, Abilene, Texas, United States

Co-Presenter: Richard Roper

Test prep is more than finding answers. It is about helping all students understand the math. Using Ti-Nspire™ technology, participants will look at strategies and materials to help students perform at their highest with less stress on STAAR®, Algebra 1 EOC and other high-stakes assessments. Specific strategies related to testing samples will be included.

8:00 a.m. - 9:30 a.m.

**Location: Convention Ctr.** 

Meeting Room 204 B

90-Minute Hands-On

ALGEBRA 1

**TEKS** 





# 192 Teaching Beginner Programming Concepts With the TI-83 Plus and TI-84 Plus C Silver Edition Graphing Calculators

TI-84 Plus C Silver Edition Graphing Calculator

Christopher Mitchell, christopher@cemetech.net, @KermMartian, Cemetech and Manning Publications Co., New York, New York, United States

This session will introduce you to TI-BASIC for the TI-83 Plus graphing calculator and the TI-84 Plus family of graphing calculators. It will motivate the pedagogical value of encouraging your students to pursue graphing calculator programming. You'll learn the important programming commands and write a few programs of your own. The lesson will be grounded in material from the book *Programming the TI-83 Plus/TI-84 Plus* and sample lesson plans that you can use to teach programming as a primary topic or curriculum enrichment will be presented.

### 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** 

Texas Ballroom A

90-Minute Hands-On PROGRAMMING

# 193 Rectangles, Squares, Circles and Quadratics: Modeling and Optimization With TI-Nspire™ Technology

TI-Nspire™ CX CAS Handheld

Karen Campe, skcampe@optonline.net, New Canaan, Connecticut, United States

Use TI-Nspire™ technology to investigate real-context optimization problems that can be modeled by dynamic geometric constructions. Take the models to the next level by learning the technology's data capture capability. Discover interesting connections between quadrilaterals and quadratics, circles and proportions. Work with multiple representations to solve problems using algebra and geometry concepts and bring the Common Core State Standards (CCSS) and the Texas Essential Knowledge and Skills (TEKS) process standards into your teaching.

#### 8:00 a.m. - 9:30 a.m.

Location: Omni Hotel Texas Ballroom B

90-Minute Hands-On

GEOMETRY

CCSS/TEKS

### 194 Unlocking the TI-Nspire™ Graphing Application

TI-Nspire™ CX Handheld

Matt Almon, matt.almon\_ti@yahoo.com, @Matt\_D\_Almon, Joliet West High School, Joliet, Illinois, United States

We will take a tour of everything the graphing application has to offer, such as different ways to graph a line, conics, scatter plots, and more. We will also look at creating pictures using different graphs and setting restriction and using piecewise functions.

#### 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** 

**Texas Ballroom C** 

90-Minute Hands-On

ALGEBRA 2

## 195 Collecting Data in Precalculus Using the TI-84 Plus Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Michelle Merriweather, mmerriweather@cnr.edu, The College of New Rochelle, New Rochelle, New York, United States

This session will demonstrate how to collect data using probes with the TI-84 Plus family of graphing calculators. We will work through several activities that help connect the functions we study with their applications. Applications include ball bounce to study quadratic and exponential functions and an aspirin simulation to study power functions.

# 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** 

**Texas Ballroom D** 

90-Minute Lecture/Demonstration

**PRECALCULUS** 

# 196 Leading the Way: How Administrators Should Support Technology Integration Throughout Their Schools

TI-Nspire<sup>™</sup> CX Handheld

Susan Horowitz, susan\_horowitz@allenisd.org, @swhorowitz, Ford Middle School, Allen Independent School District, Allen, Texas, United States

As a school or district leader, you are aware that it is essential to know how to support the use of the technology in your school. Come see how one principal uses the TI-Nspire™ technology and social media to support her teachers and build a strong school community.

### 8:00 a.m. - 9:30 a.m.

Location: Omni Hotel

**Texas Ballroom G** 

90-Minute Lecture/Demonstration

**ADMINISTRATOR** 

@**TICalculators** Session Details (9

### 197 Dissecting and Differentiating Formative Assessment

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

David Young, dayoung7@gmail.com, @davidallenyoung, Fayetteville, Arkansas, United States

Co-Presenter: Louise Chapman

Come experience various samples of formative assessment using the TI-Nspire™ CX Navigator™ System for mathematics and science. Discuss the power of this technology to help teacher and student assess their learning progress. Using Quick Polls and Question sets, Live Presenter and Screen Capture, teachers can establish interactively what the students have understood and what gaps appear as a lesson progresses.

#### 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 2

90-Minute Hands-On **ASSESSMENT** 

### 198 Standards-based Investigations in Geometry With TI-Nspire™ Technology

TI-Nspire™ CX Handheld

Fred Decovsky, fdecovsky@aol.com, Millburn, New Jersey, United States

Participants will explore hands-on activities designed to investigate Common Core State Standards (CCSS) and the Texas Essential Knowledge and Skills (TEKS) process standards related to geometry. See how these explorations and the use of TI-Nspire™ technology make the mathematical practices come alive in the classroom and engage your students in tasks rich in problem solving.

# 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 3

90-Minute Hands-On **GEOMETRY** 

CCSS/TEKS

### 200 Understanding Zombies Using TI-Nspire™ Technology Armed With Sensors in Your **Math and Science Classrooms**

TI-Nspire™ CX Navigator™ System

Michael Smith, cblsmith2@gmail.com, Big Walnut High School, Sunbury, Ohio, United States

The zombie craze has infected students and adults alike. This session will explore various aspects of the zombie culture to integrate mathematics into the science lessons and create a rich STEM learning environment. The audience will collect and analyze data using TI-Nspire™ technology and sensors in several playful yet academically focused lessons on this popular topic.

### 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 6

90-Minute Hands-On

CONNECTING SCIENCE AND MATH/STEM

### 201 Inquiring Minds Want to Know: Guided Inquiry in Science

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Todd Morstein, morsteint@sd5.k12.mt.us, Glacier High School, Kalispell, Montana, United States

Explore guided inquiry activities in the science classroom. We will talk about how to get them going in the right direction and get usable results.

## 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 7

90-Minute Hands-On **GENERAL SCIENCE** 

### 202 pH, pKa, and Half-titrations

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Greg Dodd, gbdodd@gmail.com, Kanawha County Schools, Charleston, West Virginia, United States Join us in a hands-on laboratory experience linking TI handheld technology with Kemtec's AP\* Chemistry kits. Perform half-titrations on weak acids while measuring pH, determine pKa values of weak acids from half-titration data, confirm the identities of weak acids and correct student misconceptions about the relationship between pH and pKa.

#### 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 8

90-Minute Hands-On

**CHEMISTRY** 

**TEKS** 







### 203 Nspiring Photosynthesis and Respiration

TI-Nspire™ CX CAS Handheld

Judy Day, judy\_day@mac.com, @judybday, North Carolina State University, Raleigh, North Carolina,

**United States** 

Co-Presenter: Louise Chapman

Explore ways to collect data that help students comprehend the processes of cellular respiration and photosynthesis and how they differ. Activities using gas pressure, oxygen gas and carbon dioxide sensors will be done. Analysis of the data helps students understand what is happening during the process.

### 204 Hello World: An Intro to Lua Programming

TI-Nspire™ Teacher Software

Becky Byer, bbyer31415@aim.com, @bb31415, Kelly Walsh High School, Casper, Wyoming, United States

Co-Presenter: Becky Underwood

Have you ever looked at a TI-Nspire™ document and wondered, How'd they do that? It looks like an applet. Chances are it might have been a file coded in Lua. Come learn Lua programming from the ground up. You'll learn how to say, Hello world, color your world, give it shapes and execute actions. We'll get you started then provide you with resources to help you further your programming adventure.

### 205 Learning Lua

TI-Nspire<sup>™</sup> Teacher Software

John Hanna, jehanna@optonline.net, Hopatcong, New Jersey, United States

Curious about Lua? Never heard of it? If you use TI-Nspire™ technology, then you have the capability of creating your own apps from scratch. Come learn the basics of Lua scripting from the ground up. No experience necessary and batteries included.

### 206 It's OK to Use the Calculator, Even if You Can't on the Test

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Tara Whittington, tara.whittington@carrollcountyschools.com, @tarheeltara, Carroll County Schools, Temple, Georgia, United States

Co-Presenter: Kerry Burros

There's a strong correlation between ninth grade course failure and failure to graduate high school. The importance of a smooth transition between eighth and ninth grade can't be overemphasized. Strategies will focus on the remediation of basic skills as a pathway to understanding more complex mathematical concepts. Students unable to factor numbers in middle school can successfully simplify radicals in high school Algebra by using TI-Nspire™ technology to graph functions. This allows students who may have trouble graphing by hand to explore functions. Participants will leave with activities that can immediately be implemented.

#### 207 The Power of Visualization in Algebra 2

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Howard Stern, hastern@gmail.com, @mathmtcs, DeWitt Clinton High School, Bronx, New York, United States

We know that allowing students to visualize their mathematical actions helps them better understand mathematical concepts. The presenter will share some activities he's found helpful in an Algebra II/ Trigonometry curriculum.

#### 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** 

Stockyards 2

90-Minute Hands-On

**BIOLOGY** 

### 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** 

Sundance 2

90-Minute Hands-On

**PROGRAMMING** 

#### 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** 

Sundance 3

90-Minute Hands-On

**PROGRAMMING** 

### 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** 

Sundance 4

90-Minute Hands-On

ALGEBRA 1

8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** 

**Sundance 5** 

90-Minute Hands-On

ALGEBRA 2

@TICalculators Session Details

### 208 The TI-84 Plus C Silver Edition Graphing Calculator in Secondary Math in Preparation for Successful AP\* Calculus

TI-84 Plus C Silver Edition Graphing Calculator

Fan Disher, fan.disher@stpsb.org, @DisherFan, Mandeville High School, Mandeville, Louisiana, United States

Are your students being prepared in grades nine through 11? Learn some concepts and TI-84 Plus C Silver Edition graphing calculator skills that students should learn and master in underclass secondary math classes to prepare them for success in AP\* Calculus.

#### 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** 

**Texas Ballroom H** 

90-Minute Hands-On **PRECALCULUS** 

### 209 Just Chilling: A STEM Project Using Vernier Go Wireless® Temp Sensor

TI-Nspire<sup>™</sup> App for iPad<sup>®</sup>

Fred Fotsch, ffotsch@drury.edu, Glendale High School, Springfield, Missouri, United States

Participants in this hands-on session will build and test a thermos using materials provided in workshop. The STEM learning model and its application in the classroom will be presented. Science skills include heat flow and temperature. Technology skills include using the new Bluetooth® Low Energy (BLE) wireless connectivity in the TI-Nspire™ App for iPad® with the Vernier Go Wireless® Temp sensor. Engineering skills include application of the STEM learning model to build a thermos from available materials. Math skills include analysis of data and mathematical modeling. Session will conclude with a participant-centered discussion of STEM in the classroom.

### 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** 

Texas Ballroom I

90-Minute Hands-On

CONNECTING SCIENCE AND MATH/STEM

## 210 Using TI-Nspire™ CAS Technology to Address Functions Tasks: An Avenue to **Mathematical Practices**

TI-Nspire™ CAS App for iPad®

M. Kathleen Heid, mkh2@psu.edu, The Pennsylvania State University, State College, Pennsylvania, United States

Computer algebra systems (symbolic, graphical and numeric) such as TI-Nspire™ CAS technology are promising tools for addressing mathematical practices standards through mathematics content standards. This session will present and characterize how teachers can use CAS to create, revise and re-envision mathematical tasks that engage students in addressing the functions standards while enhancing students' experience with mathematical practices such as looking for and making use of structure, constructing viable multi-representational arguments and reasoning abstractly. Principles that underpin the creation of such tasks will be explicitly stated and used.

#### 8:00 a.m. - 9:30 a.m.

**Location: Omni Hotel** 

Texas Ballroom J

90-Minute Hands-On

CAS

## 211 Would You Rather? Studying Hypothesis Testing With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Rachael Gorsuch, rachael.gorsuch@gmail.com, Teays Valley High School, Ashville, Ohio, United States

Hypothesis testing can be a little abstract for students to understand. This session will focus on using Would you rather? questions from different websites to test population data against our sample data. TI-Nspire™ technology will be used to conduct hypothesis tests and to create graphs of data gathered during the session.

### 9:45 a.m. - 10:45 a.m.

**Location: Convention Ctr.** 

Meeting Room 102

60-Minute Hands-On

**STATISTICS** 

#### 212 Modeling Real-world Calculus Problems With Symbolic Geometry Software

Irina Lyublinskaya, irina.lyublinskaya@gmail.com, @ilyublin, College of Staten Island (CUNY), Staten Island, New York, United States

The presenter will discuss three examples of using geometry expressions — a dynamic, constraint-based symbolic geometry system — for modeling real-world and complex calculus problems, as well as the process of app generation and teaching strategies using apps.

### 9:45 a.m. - 10:45 a.m.

**Location: Convention Ctr.** 

**Meeting Room 103 A** 

60-Minute Lecture/Demonstration

CAS





## 213 Algebra and Calculus Enriched With Dynamic Graphs and Interactive Computations Using TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Frank Moya, frank.moya@biqpond.com, Educational Consultant, Nar Nar Goon, Victoria, Australia

In this workshop you will explore some under-utilized features of TI-Nspire™ CAS technology to create dynamic graphs and geometric objects and interactive computations. The functionalities that you will explore include the use of sliders, data capture and the transformations menu, as well as the use of the Notes application for interactive computation. You will come away from this session with ready-to-use activities — including exploring mathematical relationships and patterns, and making and testing conjectures about later iterations of the these patterns — that engage students in thinking mathematically. 9:45 a.m. - 10:45 a.m. **Location: Convention Ctr.** 

Meeting Room 103 B

60-Minute Hands-On

CAS

### 214 Dr. Sheldon Cooper Presents Fun With Flags

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Josh Mize, jmize@hcpss.org, @JMize1618, Glenelg High School, Glenelg, Maryland, United States

On a popular network comedy, Dr. Sheldon Cooper creates a web video presentation he calls Fun with Flags. Come see how much fun flags really can be as we use colors of flags and TI-Nspire™ technology to investigate basic probabilities.

9:45 a.m. - 10:45 a.m. **Location: Convention Ctr.** 

**Meeting Room 104** 

60-Minute Hands-On **STATISTICS** 

### 215 Motivating Mathematics With History: Texas' History Helps Strengthen Quantitative Skills

Robert Kimball, rob.kimball@yahoo.com, North Carolina State University, Raleigh, North Carolina, United States

State history provides a rich context for mathematical problems. This presentation will focus on interesting stories from the histories of Texas and North Carolina. Contextually based problems arise naturally that strengthen a student's fundamental skills, helping them become more numerate and better able to engage in mathematical problems with confidence and competence. These examples, and similar ones the presenter has collected, are classroom ready as warm-ups, introductions to topics and as a resource for students who need more work, or simply to make your lesson more interesting. Come enjoy and learn.

9:45 a.m. - 10:45 a.m. Location: Convention Ctr.

**Meeting Room 201 A** 

60-Minute Lecture/Demonstration MIDDLE GRADES MATH

### 216 Exploring Topics in High School Mathematics With the TI-84 Plus C Silver Edition **Graphing Calculator**

TI-84 Plus C Silver Edition Graphing Calculator

Ruth Casey, ruthcasey@aol.com, @rcaseyky, Frankfort, Kentucky, United States

Co-Presenter: Margaret Bambrick

Join us as we explore concepts from algebra to precalculus. We will use multiple representations in activities designed to deepen students' understanding of mathematical topics such as linear functions, systems of equations, zeroes of polynomials, mathematical modeling and more. Come see how using photographs and images with the TI-84 Plus C Silver Edition graphing calculator can help make real-world connections to the mathematics in your classrooms. This session will include mathematics topics from Common Core State Standards (CCSS) and Texas Essential Knowledge and Skills (TEKS) process standards.

9:45 a.m. - 10:45 a.m. **Location: Convention Ctr.** 

Meeting Room 201 B

60-Minute Hands-On

ALGEBRA 1 CCSS/TEKS

### 217 Using TI-Nspire™ Technology to Differentiate your Instruction

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Chris Longueira, ric\_lon@msn.com, @clonquei, Woodbrook Middle School, Clover Park School District, Lakewood, Washington, United States

In this session you will experience how TI technology can support you in the daunting task of differentiating your instruction to meet the diverse needs of your students. You will gain firsthand experience on how to assess your students' needs quickly and differentiate your lessons to meet those needs without loss of precious instructional time.

9:45 a.m. - 10:45 a.m.

**Location: Convention Ctr.** 

Meeting Room 201 C

60-Minute Hands-On

MIDDLE GRADES MATH

@TICalculators Session Details

### 218 The TI-84 Plus C Silver Edition Graphing Calculator Meets CCSS Mathematical Practices

TI-84 Plus C Silver Edition Graphing Calculator

Rebecca Caison, rbcaison@mac.com, @RebeccaBCaison, University of North Carolina at Greensboro, Greensboro, North Carolina, United States

Explore how the use of color on the TI-84 Plus C Silver Edition graphing calculator can help us engage our students in becoming more proficient in the Common Core State Standards (CCSS) math practice while meeting the goals of the CCSS content standards. We will explore one or more high level tasks.

9:45 a.m. - 10:45 a.m.

**Location: Convention Ctr.** 

Meeting Room 202 A

60-Minute Hands-On

ALGEBRA 1

CCSS

### 219 Using TI-Nspire™ Technology to Enhance Modeling in Algebra 1

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Judith Olson, jkolson@hawaii.edu, @mfjko2, University of Hawaii, Kalaoa, Hawaii, United States

Co-Presenter: Melfried Olson

TI-Nspire<sup>™</sup> technology provides students with opportunities to engage in the Common Core State Standards (CCSS) math practices, especially modeling. The CCSS Algebra strand identifies modeling standards for which the technology is an excellent tool to explore concepts of relationships, functions and data analysis. Participants will engage in hands-on activities that emphasize models, promote open-ended inquiry and provide time for developing concepts, generalizations and skills. These activities are designed so students can use the Modeling Cycle in the CCSS to interpret problem situations, understand the goals of a problem, represent, test and revise various approaches to solving the problem and report on results.

9:45 a.m. - 10:45 a.m.

**Location: Convention Ctr.** 

**Meeting Room 202 B** 

60-Minute Lecture/Demonstration

ALGEBRA 1

CCSS

### 220 Bouncing Balls and TEKS: Where's the Fit?

TI-84 Plus C Silver Edition Graphing Calculator

Donna Harris, ticoach.donnaharris@yahoo.com, @donna1harris, Saginaw, Texas, United States

From bouncing balls to scatter plots, predictions and function rules, many Texas Essential Knowledge and Skills (TEKS) practices apply to this one activity that includes all of those topics. Bring your own TI-84 Plus C Silver Edition graphing calculator or TI-84 Plus Silver Edition graphing calculator — or borrow one in the session — but don't miss this chance to see how multiple TEKS are incorporated in a single activity.

9:45 a.m. - 10:45 a.m.

**Location: Convention Ctr.** 

Meeting Room 202 C

60-Minute Hands-On

MIDDLE GRADES MATH

**TEKS** 

### 221 Explore Middle Grades TEKS Content With the TI-84 Plus Family of **Graphing Calculators**

TI-84 Plus Silver Edition Graphing Calculator

Elizabeth (Betty) Gasque, bgasque@aol.com, @bgmathsc, Charleston, South Carolina, United States

Learn to use the TI-84 Plus Silver Edition graphing calculator to help students better understand concepts in middle grades mathematics. We'll investigate Texas Essential Knowledge and Skills (TEKS) content in the Patterns, Relationships, and Algebraic Thinking Strand as well as the Probability and Statistics Strand. Additionally, you'll see how the TI-84 Plus Silver Edition can be used to engage students as they explore topics in Personal Financial Literacy.

9:45 a.m. - 10:45 a.m.

**Location: Convention Ctr.** 

Meeting Room 202 D

60-Minute Hands-On

MIDDLE GRADES MATH

**TEKS** 

# 222 TI-84 Plus C Silver Edition Graphing Calculator and TI-SmartView™ Emulator Software Tips and Tricks: They're not Just for SMART Board®

TI-84 Plus C Silver Edition Graphing Calculator

Tom Reardon, tom@tomreardon.com, @tomreardon3, Youngstown State University, Youngstown, Ohio, **United States** 

Learn all the essential features of TI-SmartView™ Emulator Software for the TI-84 Plus graphing family with and without a SMART Board®. Discover how to easily drag-and-drop screen shots into tests, quizzes, worksheets, Word and PowerPoint®. Load files, programs and apps onto your TI-SmartView™ software. Manage the View³ feature to your students' benefit, save and cleverly use different states of the TI-84 Plus family. Import photos into your TI-84 Plus C Silver Edition graphing calculator and use them creatively with your students. Use the Graph-Table feature to trace, use y= as an evaluator, and more cool ideas. Obtain my 12-page primer with colorful screen shots that illustrates how to fully utilize this awesome software. Grades seven through 12.

9:45 a.m. - 10:45 a.m.

**Location: Convention Ctr.** 

Meeting Room 203 B

60-Minute Lecture/Demonstration **GENERAL MATH** 





### 224 Flipping for Problem-solving Mondays and No-homework Weekends

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Robyn Poulsen, rpoulsen@lpcsd.org, @RobynPoulsen, Lake Placid Middle/High School, Lake Placid, New York, **United States** 

Co-Presenter: Tammy Casey

Balancing busy student (and teacher) lives and course content can seem impossible. We have successfully instituted Problem-solving Mondays and No-homework Weekends in our high school math classes with more than enough time for rich content and Common Core State Standards (CCSS), math practice. How? The flipped classroom. Participants will leave our session with an understanding of how the flipped classroom has allowed us to schedule our year in such a way that we can dedicate every Monday to problem-solving and not assign homework on weekends or holidays. Come see how it works. We'll share our favorite activities.

# 9:45 a.m. - 10:45 a.m.

**Location: Convention Ctr.** 

**Meeting Room 204 A** 

60-Minute Hands-On **GENERAL MATH** 

CCSS

### 225 Using TI-Nspire™ Technology to Find Relationship Between Dimensions of **Famous Paintings**

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Amin Lalani, amin.lalani@utdallas.edu, @aminmlalani, University of Texas at Dallas, Richardson, Texas, **United States** 

Participants will use TI-Nspire™ technology to determine if famous artists, such as Leonardo da Vinci, Rubens, Van Gogh, Picasso and many others, had a preference when it came to the dimensions of their paintings. Participants will work in groups to analyze data from famous paintings with the Data & Statistics app then predict the line of best fit for the data. Finally, participants will run a linear regression and analyze the coefficient of correlation and determination. This activity will support Texas Essential Knowledge and Skills (TEKS) practices 8.5C, A.4A and A.4C.

# 9:45 a.m. - 10:45 a.m.

**Location: Convention Ctr.** 

Meeting Room 204 B

60-Minute Lecture/Demonstration

ALGEBRA 1

**TEKS** 

### 226 Introduction to Writing Code to Program TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Becky Underwood, rebecca\_underwood@ncsd.k12.wy.us, @U23Becky, Kelly Walsh High School, Casper, Wyoming, United States

Co-Presenter: Becky Byer

Have you ever thought, I have a new TI-Nspire™ technology in my classroom but I cannot run my TI-84 Plus Silver Edition graphing calculator programs. Now what? Or, The TI-Nspire™ technology features are awesome, but sometimes an old program would still work the best. In this session you will learn how to rewrite your own programs for TI-Nspire™ technology and learn to implement its features into your programs. Past programming experience would be helpful but is not required. If you have a laptop with TI-Nspire<sup>™</sup> Teacher Software you might want to bring it with you.

# 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** 

**Texas Ballroom A** 

60-Minute Hands-On **PROGRAMMING** 

### 227 Prove it: Rigid Motion Transformations and TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Johnny Ashurst, johnny.ashurst@gmail.com, @kiltedcyclist, Harlan Independent School District, Harlan, Kentucky, United States

Co-Presenter: Kathy Hale

Participants will be presented with pairs of geometric figures that appear to be congruent. By Texas Essential Knowledge and Skills (TEKS) process standards, we will devise strategies for using one or more rigid motion transformations to verify congruency. Simultaneously, we'll analyze the merits of using paper folding, a compass-straight edge and TI-Nspire™ technology.

#### 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** 

**Texas Ballroom B** 

60-Minute Hands-On

**GEOMETRY** 

**TEKS** 

@TICalculators Session Details

### 228 Shooting Free Throws with TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Scott Washburn, scott\_washburn@redlands.k12.ca.us, Redlands East Valley High School, Redlands, California, **United States** 

We will be analyzing data obtained from the relationship between the velocity and the angle of a free throw in a basketball game. Many different apps will be used throughout this activity, such as Lists & Spreadsheet, Data & Statistics and Graphs. The main Algebra topic is quadratic equations. However, there is a surprising exponential relationship that is discovered when analyzing all of the free throws at once. The TI-Nspire™ CX Navigator™ System will be used with several live polls throughout the process.

#### 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** 

Texas Ballroom C

60-Minute Lecture/Demonstration

ALGEBRA 2

### 229 Non-Right Triangle Trig in the 21st Century With the TI-84 Plus Silver Edition **Graphing Calculator**

TI-84 Plus C Silver Edition Graphing Calculator

Rick Lancaster, ricklanc79@gmail.com, Ursuline Academy of Dallas, Dallas, Texas, United States

Learn how make full use of the TI-84 Plus C Silver Edition graphing calculator to solve non-right triangle trigonometry problems quickly and accurately. Learn why, if you start with Law of Cosines, you should continue with Law of Cosines through the whole problem. Learn why the Law of Sines can lie to you. A foolproof method to solve ambiguous case problems will be presented. Classroom methods to explain the ambiguous case and explain Law of Cosines will be included.

#### 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** 

Texas Ballroom D

60-Minute Hands-On **PRECALCULUS** 

### 230 Putting Place Value in Its Place for Elementary Students

TI-15 Explorer™ Calculator

Marsha Burkholder, teamburk@yahoo.com, Columbus City Schools, Columbus, Ohio, United States

During this hands-on session, participants will explore the use of the TI-15 Explorer™ elementary calculator to teach place value. Participants will see how the use of this technology has helped students develop place value concepts.

#### 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** 

Texas Ballroom G

60-Minute Hands-On

**ELEMENTARY MATH** 

### 231 STAAR® Test Preparation: What to Clear and How to Clear It

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Patrick Fariss, pfariss@ti.com, @PatrickFariss, Round Rock, Texas, United States

This hands-on session will demonstrate a variety of ways to prepare your TI graphing calculators and handhelds for testing, including the TAKS and STAAR® EOC exams. Participants will learn how to manually clear calculators and how to use the Press-to-Test app for TI-Nspire™ family of handhelds, the TI-83 Plus graphing calculator and the TI-84 Plus family of graphing calculators and the TestGuard™ App for the TI-83 Plus and TI-84 Plus family. Handouts of all procedures will be provided.

# 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 2

60-Minute Hands-On **ASSESSMENT** 

**TEKS** 

### 234 TI-Nspire™ Technology Will Help Show How Different They Really Are

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Jacklyn Bonneau, bonneau@wpi.edu, Massachusetts Academy of Math and Science at WPI, Worcester, Massachusetts, United States

Co-Presenter: Louise Chapman

We will examine quadrant samples along a transit. We will use TI-Nspire™ technology to present this categorical environmental data effectively and apply some basic statistics to evaluate the differences. Application to NGSS discussion will be conducted around our activity.

### 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 6

60-Minute Hands-On **BIOLOGY** 







### 235 STEM Springboard: Zombie Infections to Real Human and Livestock Diseases

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Peggy Welch, peggywelch851@gmail.com, Nicholasville, Kentucky, United States

Use TI STEM Behind Hollywood zombie activities to design Problem Based Learning (PBL) or Universal Design for Learning (UDL) modules for your students. Successful examples implemented this past summer at STEM zombie student camps will be modeled. You will leave with copies of these examples and a ready-to-go lesson map to help you engage your students in a math, science and technology experience they will totally enjoy. Examples of diseases are Ebola, kuru, Creutzfeld-Jakob disease, mad cow disease and sheep scrapie, as well as frontal lobe damage from concussions. What a way to learn Core Content.

#### 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 7

60-Minute Hands-On

CONNECTING SCIENCE AND MATH/STEM

### 236 Informing and Nspiring Students to Take Ownership Over Their Learning

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Pareesa Shirazi, p.shirazi@aol.com, @PareesaShirazi, Albuquerque, New Mexico, United States

You have used TI-Nspire™ CX Navigator™ System to inform your instructional decisions. Now let's use it to inform your students so they can take ownership over their learning process. The system makes collecting and grading assessments so easy. Learn how you can take it one step further by redistributing graded self-check assessments, with individualized and meaningful feedback, to your students. This simple process will encourage your students to reflect, persevere in problem solving and be motivated to keep working until they have mastered concepts. Leave with step-by-step guides, TI-Nspire<sup>™</sup> documents and templates to get this process started in your classroom.

#### 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** Fort Worth Ballroom 8

60-Minute Hands-On **GENERAL INTEREST** 

### 237 Teaching for Understanding, Teaching for Transfer

TI-84 Plus C Silver Edition Graphing Calculator

Tami Plein, tamiplein@gmail.com, @TamiPlein, Great Prairie Area Education Agency, Burlington, Idaho, **United States** 

Students need to be able to apply their knowledge in places outside the math classroom. Coordinating lessons between science and math courses can help students learn to apply math skills and knowledge to answer scientific questions. Participants will collect and analyze data over density in this hands-on session and discuss strategies for teaching for transfer.

### 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** 

Stockyards 2

60-Minute Lecture/Demonstration

CONNECTING SCIENCE AND MATH/STEM

### 238 Investigating Algebra 1 With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Patrick Sanchez, sanchezpb@att.net, Waller High School, Waller, Texas, United States

Co-Presenter: Abigail Sanchez

Come see how TI-Nspire™ technology assists in the investigation of concepts necessary to be successful in Algebra 1. Participants will share in hands-on activities that have been proven to work in an algebra classroom.

# 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** 

Sundance 2

60-Minute Hands-On

ALGEBRA 1

### 239 Designing for Geometry

TI-Nspire<sup>™</sup> Teacher Software

Matt Rhodes, matt.rhodes@suddenlink.net, @sahsmathman, Kanawha County Schools, Charleston, West Virginia, United States

Are you ready for the next step? Do you dream of a new activity but are having difficulty with the mechanics? Come see student-tested geometry activities that can be built before class or on the fly using the TI-Nspire™ Teacher Software. Learn and experience helpful hints and hidden pitfalls in this fast paced, hands-on session. Bring your questions and suggestions. We'll answer them all as we go. Not intended for beginning users.

### 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** 

**Sundance 3** 

60-Minute Hands-On

**GEOMETRY** 

@TICalculators Session Details

### 240 TI-Nspire™ Technology in a Geometry Classroom for Beginners

TI-Nspire<sup>™</sup> CX Handheld

Tracy Watson, tracymath@yahoo.com, @tracymath, Lakeside High School, Hot Springs, Arkansas, United States

This session will show you the many reasons why you need to use the TI-Nspire™ technology in a geometry classroom. You will learn the basics of the navigating documents and the Geometry application. Pre-made documents and one created from scratch that support Common Core State Standards (CCSS) and Texas Essential Knowledge and Skills (TEKS) process standards will be highlighted.

### 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** 

Sundance 4

60-Minute Hands-On

**GEOMETRY** 

CCSS/TEKS

### 243 Down With the Upload: Experience the New Means of Data Transfer

TI-Nspire<sup>™</sup> CAS App for iPad<sup>®</sup>

Andrew Benzing, abenzing@wssd.org, @Steamereater, Wallingford-Swarthmore School District, Wallingford, Pennsylvania, United States

Come and experience teaching life without the upload. Students don't email, don't use Facebook and definitely don't check websites. Appealing to any teacher of students who have access to the web either by phone or device. Come and experience how tools such as Remind, Google Drive™ online storage device, and QR codes have transferred class resources to students' finger tips. Bring your own device and Google account to experience the future of data transfer in your classroom, including some of my favorite TI-Nspire<sup>™</sup> documents for the iPad® mobile digital device. Beginners welcome, with prizes for most.

### 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** 

Texas Ballroom I

60-Minute Hands-On

**GENERAL INTEREST** 

### 244 Constructing any Given Triangle With TI-Nspire™ Technology: A Complement to CCSS Geometry/Trigonometry

TI-Nspire<sup>™</sup> App for iPad<sup>®</sup>

Russell Brown, russellbrown@iinet.net.au, Strathfieldsaye, Victoria, Australia

Ever wanted to draw a triangle that matches the dimensions and/or angles given in textbooks? Create and save templates in the Dynamic Geometry environment that will allow any triangle to be drawn given varying constraints. With just four different templates you can draw and solve any triangle by editing the sides and/or angles on the templates, including Pythagoras, Cosine Rule and Sine Rule, including the ambiguous case. Using Math Boxes in the Notes application all angles, side lengths, perimeter and area are computed live (no algebra required). Also discover more tricks in the Geometry and Notes applications.

#### 9:45 a.m. - 10:45 a.m.

**Location: Omni Hotel** 

Texas Ballroom J 60-Minute Hands-On

**GEOMETRY** 

### 245 Bringing Statistics to Life With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Handheld

Abel Maestas, amaestas@amail.com, @maestasteacher, Ceres High School, Ceres, California, United States

Have you ever thought about using yourself as a display of data? How about your entire class? In this session, you will learn how to unleash the power of TI-Nspire™ technology to involve your entire class in a kinesthetic experience of quantitative data. The activity in this session is normally used in an AP\* Statistics course but can be adapted to fit any secondary course exploring displays of quantitative data.

# 11:00 a.m. - noon

**Location: Convention Ctr.** 

Meeting Room 102

60-Minute Hands-On

**STATISTICS** 

#### 246 Using CAS as Building Blocks for Algebra Concepts

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Lynda Ferneyhough, d2ybydx2@hotmail.com, Plympton-Wyoming, Ontario, Canada

Co-Presenter: Fred Ferneyhough

We will use TI-Nspire™ CX CAS handhelds for introductory lessons with beginning algebraic concepts. Some pre-established files and activities will be used to take the participant through lessons and quizzes as a student. Some lesson files will be developed together. We will discuss why you should use a computer algebra system even if it is not allowed on state tests.

### 11:00 a.m. - noon

**Location: Convention Ctr.** 

**Meeting Room 103 A** 

60-Minute Hands-On

CAS





### 247 Using TI-Nspire™ Technology as a Formative Assessment Tool to Elicit Evidence of Student Thinking

TI-Nspire<sup>™</sup> CX CAS Handheld

Linda Griffith, lindag@uca.edu, @LindaGriffith5, University of Central Arkansas, Conway, Arkansas, United States

Sample student TI-Nspire™ documents will be provided and examined to gain insight into students thinking and discuss how this information can be used to determine next instructional steps. Research shows that the use of moment-to-moment, day-to-day formative assessment has a large effect size (0.4 to 0.7) on student achievement. The work that students show has the potential to reveal much about their conceptual understanding and their approaches to problem solving. This information should drive next instructional steps.

11:00 a.m. - noon

**Location: Convention Ctr.** 

Meeting Room 103 B

60-Minute Hands-On

**GENERAL INTEREST** 

### 248 Using Real-world Data and TI-Nspire™ Technology in Statistics

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Don Worcester, dworcester@cfl.rr.com, Winter Park High School, Winter Park, Florida, United States

This session will show participants how to use real-world data to stimulate interest in their statistics classrooms using TI-Nspire™ technology. A variety of topics will be explored, including graphical analysis, linear regression and statistical inference.

11:00 a.m. - noon

**Location: Convention Ctr.** 

**Meeting Room 104** 

60-Minute Hands-On **STATISTICS** 

### 249 Beginning Statistics and the TI-84 Family of Graphing Calculators

TI-84 Plus C Silver Edition Graphing Calculator

Diane Broberg, dbroberg@allendalecolumbia.org, Allendale Columbia School, Rochester, New York, United States

Collect data and explore statistics using TI-84 Plus C Silver Edition and the TI-84 Plus Silver Edition graphing calculators. Participants will use many methods to collect and distribute data so students are actively engaged in statistics. Participants will leave with methods to compare data and draw conclusions. Real-world examples will be investigated. The Texas Essential Knowledge and Skills (TEKS) process standards and Common Core State Standards (CCSS) will be discussed. Focus will be middle school and Algebra 1 standards.

11:00 a.m. - noon

**Location: Convention Ctr.** 

**Meeting Room 201 A** 

60-Minute Hands-On

MIDDLE GRADES MATH

CCSS/TEKS

#### 251 Are You Ready for Some Napiring Football?

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Lisa Conzemius, Iconzemius@detlakes.k12.mn.us, @zemilisa, Detroit Lakes High School, Detroit Lakes, Minnesota, **United States** 

Co-Presenter: Becky Byer

How normal is your favorite NFL team? Is your team's passing or rushing data skewed or normally distributed? This session will explore real-world NFL data distributions using quarterback passing, running back rushing and other information. Beginners through advanced users of TI-Nspire™ technology are welcome at this session. Teachers who use TI-84 Plus family of graphing calculators may be interested in this data as well, although the presenters will use TI-Nspire™ technology.

11:00 a.m. - noon

**Location: Convention Ctr.** 

Meeting Room 201 C

60-Minute Hands-On **STATISTICS** 

### 252 Exploring the new Algebra 1 TEKS With the TI-84 Plus C Silver Edition **Graphing Calculator**

TI-84 Plus C Silver Edition Graphing Calculator

Richard Parr, rparr@rice.edu, Rice University School Mathematics Project, Houston, Texas, United States

See how the TI-84 Plus C Silver Edition graphing calculator can help you effectively teach the new Algebra 1 Texas Essential Knowledge and Skills (TEKS) process standards. Transformations of linear and quadratic functions, modeling with exponential functions and arithmetic and geometric sequences will be explored.

11:00 a.m. - noon

**Location: Convention Ctr.** 

Meeting Room 202 A

60-Minute Hands-On ALGEBRA 1

**TEKS** 

@TICalculators Session Details

### 253 Transforming Linear Functions Using TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Sherri Phegley, sheryl.phegley@fortbendisd.com, @slphegley, Fort Bend Independent School District, Sugar Land, Texas, United States

Use your TI-Nspire™ technology to teach linear transformations. Participants will leave with teacher notes, student worksheets as well as an interactive TI-Nspire™ document. This session will help Algebra 1 and middle school teachers apply Texas Essential Knowledge and Skills (TEKS) process standards to develop transformations in linear functions and geometry concepts by examining the effects on the graph of the parent function f(x)=x.

## 11:00 a.m. - noon

**Location: Convention Ctr.** 

Meeting Room 202 B

60-Minute Hands-On

ALGEBRA 1

**TEKS** 

### 254 Using the TI-84 Plus C Silver Edition Graphing Calculator to Investigate **Quantitative Data Relationships**

TI-84 Plus C Silver Edition Graphing Calculator

Susan Howe, susan\_howe@hcpss.org, Howard County Public School System, Columbia, Maryland, United States

What is the quadrant count ratio (QCR) and why would I want to teach it? The quadrant count ratio is a great way to compare two quantitative variables that appear to have a linear relationship. Participants will use TI-84 Plus C Silver Edition graphing calculators to investigate the QCR and explore several ways to informally fit a line to data. These activities develop conceptual understanding to support Common Core State Standards (CCSS) 8.SP.A.1 and 8.SP.A.2.

### 11:00 a.m. - noon

**Location: Convention Ctr.** 

Meeting Room 202 C

60-Minute Hands-On MIDDLE GRADES MATH

CCSS

### 255 The TI-84 Plus Family of Graphing Calculators in Your Middle School Classroom

TI-84 Plus Silver Edition Graphing Calculator

Noe Medrano, noe@noemedrano.net, Cedar Park, Texas, United States

We will look at different ways that the TI-84 Plus C Silver Edition graphing calculator can enhance learning and engagement for students. We will explore two or three common concepts in eighth grade math and Algebra 1 that students usually find difficult. We will explore the best ways to blend the technology so that it has a natural flow to the lesson. We look at different ways the technology can be used to help students develop basic skills. We will also explore how the technology can be used in centers or stations where students can have independent practice and build on the concepts taught.

#### 11:00 a.m. - noon

**Location: Convention Ctr.** 

Meeting Room 202 D

60-Minute Hands-On

MIDDLE GRADES MATH

### 256 Maths in a Box: A Paper-folding Investigation Using TI-Nspire™ Technology

TI-Nspire™ CX CAS Handheld

Jim Lowe, jimlowe@bigpond.com, Queensland University of Technology, Brisbane, Queensland, Australia

This session looks at a hands-on activity in which students gather data by creating a set of paper boxes using origami folding techniques. Using measurements from the boxes to generate data, students investigate patterns and relationships using both graphical and algebraic methods to answer the questions posed at the start of the investigation. Maths in a Box is one of a series of rich tasks developed for high achieving students at year eight or nine level. This session will use TI-Nspire™ technology but could be easily adapted for the TI-84 Plus C Silver Edition graphing calculator.

### 11:00 a.m. - noon

**Location: Convention Ctr.** 

Meeting Room 203 B

60-Minute Hands-On GENERAL MATH

## 257 It's Getting Hot in Here: Using TI-Nspire™ Technology and Data Collection to **Analyze Temperature Relationships**

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Kari Craddock, kari.craddock@swcsd.us, @MathingCraddock, Franklin Heights High School, South-Western City Schools, Columbus, Ohio, United States

In this session, we will use temperature sensors to collect and chart data using the TI-Nspire™ technology. Participants will use the technology's statistics and graphing capabilities to derive the conversion equation between Fahrenheit and Celsius then compare the theoretical equation with their experimental model.

### 11:00 a.m. - noon

**Location: Convention Ctr.** 

Meeting Room 203 C

60-Minute Lecture/Demonstration

ALGEBRA 1





### 258 What Do I Do the First Day I Use TI-Nspire™ Technology With My Students?

TI-Nspire<sup>™</sup> CX Handheld

Jeremy Zelkowski, jzelkowski@ua.edu, The University of Alabama, Tuscaloosa, Alabama, United States

This session will provide a newly developed scavenger hunt lesson for math teachers to use with their classes when they begin to use TI-Nspire™ technology. Participants of all levels are welcome, but the session will focus more so on beginners of TI-Nspire™ technology and those transitioning from the TI-83 Plus graphing calculator and models in the TI-84 Plus family of graphing calculators. All materials will be provided, including the digital files that teachers can edit. Also, learn how to use TI-Nspire™ Teacher Software in your classroom.

# 11:00 a.m. - noon

**Location: Convention Ctr.** 

Meeting Room 204 A

60-Minute Hands-On **GENERAL MATH** 

### 259 Modeling as a Way to Implement All of the Math Practices

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Carl Veater, cveater@fcoe.org, Fresno County Office of Education, Fresno, California, United States

Mathematical modeling is the key to implementation of the Common Core State Standards (CCSS). Modeling comes to life through the use of technology. This session will explore the possibilities of what mathematical modeling can look like and how we are implementing all eight Mathematical Practices if we do it right. We will use TI-Nspire™ technology to collect, study and display data as we truly explore mathematics in ways that are interesting and relevant to kids.

#### 11:00 a.m. - noon

**Location: Convention Ctr.** 

**Meeting Room 204 B** 

60-Minute Hands-On ALGEBRA 1

CCSS

### 260 Easy and Efficient Graphical User Interface (GUI) Creation for TI-Nspire™ Lua Scripts

TI-Nspire™ Teacher Software

Adrien Bertrand, bertrand.adrien@gmail.com, @Adriweb, TI-Planet/UPECS, Pierrefeu-du-Var, France

Creating Graphical User Interfaces (GUIs) for TI-Nspire™ Lua scripts is a great way to engage and excite users and make your document visually appealing and intuitive. However, making these interfaces in code, from scratch, takes a great deal of time and is generally not accessible to many script authors. In this session, we will see how to create GUIs easily and efficiently using tools and frameworks especially designed for TI-Nspire™ Lua scripts. All that in a minimum amount of effort and time so that you can focus on what really matters — your content.

#### 11:00 a.m. - noon

**Location: Omni Hotel** 

**Texas Ballroom A** 

60-Minute Lecture/Demonstration

**AUTHORING** 

#### 261 Use TI-Nspire™ Technology to Meet the Needs of CCSS

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Tracy Wingert, tracy.wingert@lemarscsd.org, @TracyWingert, Le Mars Community School District, Le Mars, Idaho, United States

I will show you how I used TI-Nspire™ technology in my own geometry classroom to help my students conquer the Common Core State Standards (CCSS). Using the TI-Nspire™ CX Navigator™ system, the group will decide which activities we pursue, such as a geometric construction, a pre-made activity or formative assessment. My intention is that teachers with little to no experience can actively participate.

### 11:00 a.m. - noon

**Location: Omni Hotel** 

**Texas Ballroom B** 

60-Minute Lecture/Demonstration

**GEOMETRY** 

CCSS

### 262 Understanding Transformations of Graphs Using TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Hugh Daniels, hdaniels@live.com, @hwdaniels, Yelm High School, Yelm, Washington, United States

Check out this classroom-tested activity. Often text books introduce transformations as a new concept every time a new function is presented. This TI-Nspire™ activity shows students that graphical transformation rules are the same for any function. By the end of this session, you will be able to handle any complex graphical transformation.

#### 11:00 a.m. - noon

**Location: Omni Hotel** 

Texas Ballroom C

60-Minute Lecture/Demonstration

ALGEBRA 2

@TICalculators Session Details (103)

### 264 Changing Opportunities, Changing Lives With the TI MathForward™ Program

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Ronda Davis, ticoach.pareesashirazi@outlook.com, Albuquerque Public Schools, Albuquerque, New Mexico, **United States** 

Co-Presenter: Pareesa Shirazi

Learn how our schools used the TI MathForward™ program to prepare students for success in math classrooms from sixth grade through AP\* Statistics and AP\* Calculus. We'll describe the training and in-classroom coaching that supported teacher instruction and led to increased student engagement and deeper conceptual understanding. We'll show how we used formative assessment and technology to meet the needs of a diverse student body. Finally, we'll share our results focusing on how this implementation impacted state test scores and graduation rates.

### 11:00 a.m. - noon

**Location: Omni Hotel** 

**Texas Ballroom G** 

60-Minute Lecture/Demonstration

**ADMINISTRATOR** 

### **265** CCSS, Formative Assessment and the TI-Nspire™ CX Navigator™ System

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Kim Zeydel, kmzeydel@gmail.com, Meridian Academy, Meridian, Idaho, United States

The Smarter Balanced assessments will involve not only computational skills but also critical thinking skills. Formative assessments are one way to determine what your students — especially those who are at risk — know and still need to learn. In this session, we will learn how to create formative assessments that mimic the assessments using the TI-Nspire™ CX Navigator™ system. These assessments will be in the form of Quick Polls and/or documents. Information will also be provided on the Smarter Balanced digital library.

#### 11:00 a.m. - noon

**Location: Omni Hotel** Fort Worth Ballroom 2

60-Minute Lecture/Demonstration

**ASSESSMENT** 

CCSS

### 266 Discovering Euler's Line in Triangles: Using the TI-84 Plus C Silver Edition Graphing Calculator and Cabri™ Jr. Geometry App

TI-84 Plus C Silver Edition Graphing Calculator

Mary A. Brese, t3mbrese@gmail.com, @OUmathdoctor, Brink Junior High School, Moore Public Schools, Moore, Oklahoma, United States

Every triangle has four points of concurrency, each dependent upon the intersection of very specific segments. Discover which properties are special enough to create the Euler Line. Using the Cabri™ Jr. geometry app on a TI-84 Plus C Silver Edition or TI-84 Plus Silver Edition graphing calculator, students have the opportunity to discovery important concepts that relate the special segments and measures of triangles. With a clearer understanding of these concepts, these properties can easily be applied within other diagrams.

### 11:00 a.m. - noon

**Location: Omni Hotel** Fort Worth Ballroom 3

60-Minute Hands-On **GEOMETRY** 

# 268 Building Essential Understandings of Function Within TEKS and CCSS Using **TI-Nspire™ Technology**

TI-Nspire<sup>™</sup> CX Handheld

Jon Davis, jon.davis@wmich.edu, Western Michigan University, Kalamazoo, Michigan, United States

This presentation will provide participants with TI-Nspire™ activities that will help their students develop and deepen their understanding of essential and big ideas of function (e.g., covariation) that appear within both the Texas Essential Knowledge and Skills (TEKS) process standards and the Common Core State Standards (CCSS). These activities will involve a variety of different function families. Activity design, essential understandings of function and question types (e.g., reversibility, flexibility, and generalization) will also be discussed.

### 11:00 a.m. - noon

**Location: Omni Hotel** Fort Worth Ballroom 6

60-Minute Hands-On

**GENERAL INTEREST** 

CCSS/TEKS







### **269** Got TI-Nspire™ CX Navigator™ System Questions?

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Jeff McCalla, jmccalla@stmarysschool.org, @jmccalla1, St. Mary's Episcopal School, Memphis, Tennessee, United States

Co-Presenter: Ellen Browne

Using TI-Nspire  $^{\infty}$  CX Navigator  $^{\infty}$  system in your classroom can revolutionize the way students learn and the way you teach. If you want formative assessment ideas that you can implement in your class, come to this interactive session. Learn with  $T^{3\infty}$  Instructors who use TI-Nspire  $^{\infty}$  CX Navigator  $^{\infty}$  system everyday in their own classrooms. Use this web link, **tinyurl.com/T32015Nav** to submit your questions in advance. Or, just show up and we'll find the answers you have been looking for.

### 11:00 a.m. - noon

Location: Omni Hotel
Fort Worth Ballroom 7

60-Minute Hands-On
GENERAL MATH

### 270 Parameters, Variables, Functions and Graphs

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Yew Fook Chan, yewfook@hotmail.com, School of the Arts, Singapore, Singapore, Singapore

Participants will gain an understanding on the rationale and considerations in designing appropriate learning experiences for students using TI-Nspire™ technology and ready-made lessons. The workshop will provide opportunities for teachers to help students discover the relationships between different parameters and the graphical features of elementary functions. In addition, students will also be exposed to basic data and statistical modelling concepts and skills.

#### 11:00 a.m. - noon

Location: Omni Hotel Fort Worth Ballroom 8

60-Minute Hands-On ALGEBRA 1

## 271 Building Student Understanding Through Problem-solving Tasks

TI-84 Plus C Silver Edition Graphing Calculator

Lynda Vincent, lyndav53@optonline.net, North Salem Consolidated School District, North Salem, New York, United States

Co-Presenter: Mary Lou Giannetto

In this hands-on workshop, participants will use problem-solving tasks to lead learning and assess student understanding through questions and discussions. Participants will take away problem-solving tasks appropriate for Algebra, Geometry, Algebra 2 and Precalculus. STEM applications will be included.

#### 11:00 a.m. - noon

**Location: Omni Hotel** 

Stockyards 2

60-Minute Hands-On

CONNECTING SCIENCE AND MATH/STEM

# 272 Creating Your TI-84 Plus CE Graphing Calculator Classroom Using TI-SmartView™ CE Emulator Software and the TI Connect™ CE Software App

TI-SmartView™ CE Emulator Software

Margo Lynn Mankus, margo.mankus@ti.com, Beacon, New York, United States

Experience how to create your customized classroom using computer software from the TI-84 Plus CE graphing calculator classroom solution. Use TI-SmartView™ CE Emulator Software for the TI-84 Plus graphing family for presentations and investigations along with the TI Connect™ CE software application to manage calculator files.

# 11:00 a.m. - noon

**Location: Omni Hotel** 

Sundance 2

60-Minute Hands-On

ALGEBRA 1

#### **273 Exploring Basic Geometric Constructions**

Martin Sanchez, ticoach.martinsanchez@outlook.com, @MsanchezVaron, Houston, Texas, United States Co-Presenter: Mark Arguijo

This session will explore geometric constructions using the line, circle, compass and others geometric tools. The activities are designed to help you become familiar in building different geometric figures. Join us as we experience TI-Nspire™ technology as we incorporate authoring concepts into this activities.

### 11:00 a.m. - noon

**Location: Omni Hotel** 

Sundance 3

60-Minute Hands-On

**GEOMETRY** 

@TICalculators Session Details 10

#### 274 Make'em or Break'em

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Tammy Casey, twager5875@yahoo.com, @tcaseylp, Lake Placid High School, Lake Placid, New York, United States

Co-Presenter: Robyn Poulsen

In my flipped classroom, students have time to explore quadrilateral properties with TI-Nspire™ technology. Then, using the properties, they construct (not draw) the quadrilaterals. I will share my lesson and documents. Come ready to explore.

### 11:00 a.m. - noon

**Location: Omni Hotel** 

Sundance 4

60-Minute Hands-On

**GEOMETRY** 

### 275 Using the TI-84 Plus C Silver Edition Graphing Calculator to Meet CCSS Math **Practices and TEKS Process Standards**

TI-84 Plus C Silver Edition Graphing Calculator

Karen Campe, skcampe@optonline.net, New Canaan, Connecticut, United States

Use the TI-84 Plus C Silver Edition graphing calculator (or your old favorite, whether that's a TI-83 Plus graphing calculator or any model in the TI-84 Plus family of graphing calculators) to meet the Common Core State Standards (CCSS) or the Texas Essential Knowledge and Skills (TEKS) process standards. Get strategies on how to best leverage your classroom technology to guide students toward deeper mathematical understanding. We will use multiple representations to explore linear, quadratic and polynomial functions and investigate real-context optimization problems with geometric models. Go home with classroom-ready activities that promote higher-level thinking and support the CCSS and TEKS.

# 11:00 a.m. - noon

**Location: Omni Hotel** 

**Sundance 5** 

60-Minute Hands-On

ALGEBRA 2

CCSS/TEKS

### 276 TI-84 Plus Family of Graphing Calculators, Line Designs and Patterns in **Linear Functions**

TI-84 Plus C Silver Edition Graphing Calculator

Deobra Solomon, mathiscool\_chick@yahoo.com, @deobra, Sparks, Nevada, United States

Participants will explore line designs on the coordinate plane by looking for patterns in linear equations and slope via x- and y-intercepts. They will explore the Common Core State Standards (CCSS) and the Texas Essential Knowledge and Skills (TEKS) process standards during the hands-on lesson.

#### 11:00 a.m. - noon

**Location: Omni Hotel** 

Texas Ballroom H

60-Minute Hands-On

ALGEBRA 1

CCSS/TEKS

### 277 Geometry Constructions: Fun and Easy Using the TI-Nspire™ App for iPad®

TI-Nspire<sup>™</sup> CAS App for iPad<sup>®</sup>

Vicki Cable, vcable1@comcast.net, District of Columbia Public Schools, Washington, District of Columbia, **United States** 

The TI-Nspire™ App for iPad® makes geometry constructions come alive and proves math really can be fun. This will be a hands-on session and all participants will receive a copy of classroom ready instructions for each construction. I will also model a lesson using questions that can be used with the constructions in class to further student understanding.

### 11:00 a.m. - noon

**Location: Omni Hotel** 

Texas Ballroom I

60-Minute Hands-On

**GEOMETRY** 

### 278 Using the TI-Nspire™ App for iPad® to Enhance a Rich Task in Advanced Algebra and Precalculus

TI-Nspire<sup>™</sup> CAS App for iPad<sup>®</sup>

Art Mabbott, art@mabbott.org, Scholars Online, Woodinville, Washington, United States

We will take a simple but open-ended paddle wheel river boat problem and push it to its limits by using the TI-Nspire™ App for iPad® to explore and graph the possible solutions; adding pictures to clarify and expand our understanding of the parameters; comparing and contrasting our various solutions. How are they different and how are they the same? Are they just transformations or are they truly different functions? We will focus on the following Mathematical Practices: Make Sense, Reason Abstractly, Model, Construct Argument, Look for Structure & Maintain Precision.

### 11:00 a.m. - noon

**Location: Omni Hotel** 

Texas Ballroom J

60-Minute Lecture/Demonstration

**PRECALCULUS** 

CCSS/TEKS





#### **280 Creative Solutions**

Jean McKenny, jmckenny@together.net, Northeast Kingdom Learning Services, Hardwick, Vermont, United States Implementing the eight Common Core State Standards (CCSS) math practices and Texas Essential Knowledge and Skills (TEKS) process standards will involve changes in how students learn. Interesting investigations, modeling-using real world data, interdisciplinary problems, content rich activities and abundant technology can facilitate these changes. This session will share some examples that will engage students and motivate them to enjoy this way of learning. Participants will engage with the problems using the TI-84 Plus C Silver Edition graphing calculator or TI-Nspire™ technology.

# 1:00 p.m. - 2:00 p.m.

**Location: Convention Ctr.** 

Meeting Room 103 A

60-Minute Hands-On

**GENERAL INTEREST** 

CCSS/TEKS

### 281 An Introductory Tour of TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Ron Kennedy, kennedy.ronj@gmail.com, @Kennedyronj, Edmonton Catholic Schools, Edmonton, Alberta, Canada Co-Presenter: Stephanie MacKay

This presentation for first-timers will provide a rapid start up implementing TI-Nspire™ technology in the mathematics classroom. The focus will be on the document-based approach and different operational modes emphasizing the capabilities of the technology to create and teach for greater depth and understanding, an essential aspect of the vision for successful Common Core State Standards (CCSS).

## 1:00 p.m. - 2:00 p.m.

**Location: Convention Ctr.** 

**Meeting Room 103 B** 

60-Minute Hands-On

**GENERAL INTEREST** 

CCSS

### 282 CCSS Statistics? Let the Math Nspired Program Help

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Lee Kucera, lekucera@cox.net, @leekucera, Capistrano Unified School District, San Juan Capisrano, California, **United States** 

Unsure how to deal with the Common Core State Standards (CCSS) Statistics components? Come spend 60 minutes exploring ready-made Math Nspired statistics activities to use in your classroom. Become familiar with the Math Nspired website and how use activities to demonstrate topics such as univariate and bivariate data, sampling and inference.

## 1:00 p.m. - 2:00 p.m. **Location: Convention Ctr.**

**Meeting Room 104** 

60-Minute Hands-On

**STATISTICS** 

CCSS

# 283 Explore the New Mathematics TEKS Using the TI-84 Plus Family of Calculators

TI-84 Plus C Silver Edition Graphing Calculator

Mayra Chao, mayravchao@gmail.com, Austin, Texas, United States

In this session you will be able to analyze the Texas Essential Knowledge and Skills (TEKS) process standards and discover how the TI-84 Plus Silver Edition graphing calculator can help your students better understand those hard to teach concepts. Let's celebrate the fact that our eighth grade students are allowed to use a calculator in the STAAR® test.

# 1:00 p.m. - 2:00 p.m.

**Location: Convention Ctr.** 

Meeting Room 201 A

60-Minute Hands-On

MIDDLE GRADES MATH

**TEKS** 

### 284 The TI-84 Plus C Silver Edition Graphing Calculator and TEKS: The Perfect Match

TI-84 Plus C Silver Edition Graphing Calculator

Beth Smith, bethinghamsmith@gmail.com, @bismith60, Jacksonville, Florida, United States

Learn how the TI-84 Plus C Silver Edition graphing calculator can be used in the mathematics classroom to help students gain a better understanding of mathematics. We will explore how proper usage of the TI-84 Plus aligns with the Texas Essential Knowledge and Skills (TEKS) process standards and can help your students be more successful on the EOC. This will include using the TI-84 Plus as a calculator and graphing handheld. We will also explore the following apps: transformation graphing; inequality graphing; conics; polynomial root finder; and simultaneous equation solver. Leave with the knowledge needed to help your students become better learners.

### 1:00 p.m. - 2:00 p.m.

**Location: Convention Ctr.** 

Meeting Room 201 B

60-Minute Hands-On

ALGEBRA 1

**TEKS** 

Session Details (107) @TICalculators

### 285 Data Dancing With TI-Nspire™ Technology

TI-Nspire™ CX Navigator™ System

Margaret Bambrick, ndbambrick@att.net, @ndbambrick, University High School, Orange City, Florida, **United States** 

Co-Presenter: Ruth Casey

Participants will use TI-Nspire™ technology's Lists & Spreadsheet and Data & Statistics applications to create and explore data displays. Participants will investigate data sets and share ideas to encourage student discussion and comparison to draw conclusions about the data. This session will include mathematics topics from Common Core State Standards (CCSS) and Texas Essential Knowledge and Skills (TEKS) process standards.

1:00 p.m. - 2:00 p.m. **Location: Convention Ctr.** 

Meeting Room 201 C

60-Minute Hands-On

MIDDLE GRADES MATH

CCSS/TEKS

### 287 Functions, TI-Nspire™ Technology and Process Standards, United

TI-Nspire<sup>™</sup> CX Handheld

Andi Parr, aparr@esc12.net, @mathparr, Education Service Center Region 12, Waco, Texas, United States Join in as we investigate the process standards that will be part of the TEKS implemented at the high school level next year by exploring functions and the TI-Nspire™ technology.

1:00 p.m. - 2:00 p.m. **Location: Convention Ctr.** 

**Meeting Room 202 B** 

60-Minute Hands-On ALGEBRA 1

## 288 Translations, Reflections, Rotations: Transformational Fun on TI-84 Plus Silver Edition **Graphing Calculators**

TI-84 Plus C Silver Edition Graphing Calculator

Valerie Roebuck, k-vroebuck@sbcglobal.net, Houston, Texas, United States

Come experience an activity-based lesson that can be used to engage your students as they learn how to algebraically represent translations, rotations and reflections using the TI-84 Plus Silver Edition graphing calculator.

1:00 p.m. - 2:00 p.m. **Location: Convention Ctr.** 

Meeting Room 202 C

60-Minute Hands-On

MIDDLE GRADES MATH

### 289 TI-84 Plus CE Graphing Calculator ProbSim App: A Powerful Tool for Estimating **Probability and Enhancing Understanding**

TI-84 Plus CE Graphing Calculator

Gloria Barrett, barrett818@gmail.com, North Carolina School of Science and Mathematics, Pittsboro, North Carolina, United States

In this session, we will look at several problems where the Probability Simulation app (available for the TI-83 Plus graphing calculator and the TI-84 Plus family of graphing calculators) can be used to estimate probabilities, help students develop understanding of probability as a long-run relative frequency and help develop understanding of probability distributions and expected value. Problems and activities are appropriate for middle grades through high school and address some of the Common Core State Standards (CCSS) probability standards.

1:00 p.m. - 2:00 p.m. **Location: Convention Ctr.** 

Meeting Room 202 D

60-Minute Hands-On **STATISTICS** 

**CCSS** 

# 290 Underwhelming Resources: Finding and Adapting Resources for Your TI-Nspire™ Technology

Rafael Raya, rafael.raya.a@gmail.com, @rayainclass, Fort Worth Independent School District, Fort Worth, Texas, United States

From linear regressions to zombie outbreaks, the TI-Nspire™ CX CAS handheld can do amazing things. However, finding lessons or easy-to-follow directions can be daunting — even before getting it to work itself. If you or a coworker can never seem to make it to TI training or have lost the manual, this session is all about finding resources and making ideas work.

1:00 p.m. - 2:00 p.m. **Location: Convention Ctr.** 

Meeting Room 203 B

60-Minute Hands-On **GENERAL MATH** 





# 291 Using Algebra TI-Nspire™ Applets in CCSS-based Courses

Wade Ellis, wellis@ti.com, West Valley College, Saratoga, California, United States

Co-Presenter: Tom Dick

Student success in Common Core State Standards (CCSS) Algebra 1 and Algebra 2 rests on a deep understanding of the notions of variable, expression and equation and of the meaning of equivalence for expressions and for equations. This presentation will demonstrate an active learning approach to promote student understanding of these notions using TI-Nspire™ applets. Special attention will be given to the kinds of learning environments and inquiry questions that promote students' critical thinking and sense-making skills.

# 1:00 p.m. - 2:00 p.m. **Location: Convention Ctr.**

Meeting Room 203 C

60-Minute Lecture/Demonstration ALGEBRA 1

CCSS

# 292 Explore TI-Nspire™ Technology's Power and Range via AP\* Calculus, Ch 1 Activities

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Dan Kennedy, dankennedy.stem.ed@gmail.com, Tuscon Unified School District, Tucson, Arizona, United States

New TI-Nspire™ technology users can quickly explore its power, range and intuitive interface through activities often found in Ch 1 of an AP\* Calculus AB text. Beginning in Algebra 2, and even in mid-year Algebra 1, students may be surprised that the technology can help them work through activities in the Calculus AB.

# 1:00 p.m. - 2:00 p.m.

**Location: Convention Ctr.** 

**Meeting Room 204 A** 

60-Minute Hands-On GENERAL INTEREST

# 294 Dancing With Lua: Using Lua to Enhance Constructions Made on TI-Nspire™ Technology's Graphs Page

TI-Nspire™ Teacher Software

Adam Pennell, pennella@greensboro.edu, @apennell 1, Greensboro College, Greensboro, North Carolina,

This interactive session is designed to show you how to choreograph the dance between Lua and the TI-Nspire<sup>™</sup> technology Graphs app. Using guided experimentation, we will discover things such as how to use Lua to animate objects and create interactive buttons. We will discuss how these interactions enhance the lessons that we prepare for our classrooms. No Lua programing experience is necessary. This session can only be done using a laptop with the TI-Nspire™ Teacher or Student software.

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** Texas Ballroom A

60-Minute Hands-On **AUTHORING** 

### 295 What Line Are You On?

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Philip Magner, mathman@sbcglobal.net, @mathman49, California State University, Stanislaus, Turlock, California, United States

Most students know about the Euler Line, but can you find the Simson Line and the DelGrande Line for any point on the circumscribed circle for any triangle? Common Core State Standards (CCSS) geometry content standard HSG.C.A.3 states that students should construct the inscribed and circumscribed circles of a triangle and prove properties of angles for a quadrilateral inscribed in a circle. This activity will take these properties to a new level and you'll discover which line you are on.

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** 

**Texas Ballroom B** 

60-Minute Hands-On

**GEOMETRY** 

CCSS

# 296 Want to Talk About Making Connections With Extended Family?

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Monique Chatman, monique.chatman@fortbendisd.com, @msmayschatman, Fort Bend Independent School District, Fresno, Texas, United States

This session will combine the use of math discussions and TI-Nspire™ technology to make connections among multiple representations by extending parent functions. Lessons will emphasize Texas Essential Knowledge and Skills (TEKS) process standards from Algebra I and Algebra II and process standards to probe and deepen student understanding and push them to think. Participants will leave with strategies to incorporate math discussions in their classroom and TI-Nspire™ lessons that can be used in the classroom to promote student comprehension.

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** 

Texas Ballroom C

60-Minute Lecture/Demonstration

ALGEBRA 2

Session Details (109) @TICalculators

# 297 Precalculus Activities for TI-Nspire™ CAS Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Richard Parr, rparr@rice.edu, Rice University School Mathematics Project, Houston, Texas, United States

Unleash the power of a computer algebra system in your precalculus classroom. We'll share activities for TI-Nspire<sup>™</sup> CX CAS technology that can help students explore polynomials, conic sections, trigonometry and sequences and series. The impact of CAS on instruction and assessment will be discussed.

### 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** 

**Texas Ballroom D** 

60-Minute Hands-On **PRECALCULUS** 

# 298 Building A Digital School Culture

Susan Horowitz, susan\_horowitz@allenisd.org, Ford Middle School, Allen Independent School District, Allen, Texas, United States

We will share our experience of moving a very traditional middle school campus to one with a digital campus culture. You will leave this session recognizing that your school is OK where it is — as long as it does not stay there. You will have received at least one idea to add to your plan of action for moving your own campus to one with a digital culture. TI-Nspire™ technology, the TI-Nspire™ App for iPad® and other devices have been implemented

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel Texas Ballroom G** 

60-Minute Hands-On

**ADMINISTRATOR** 

# 299 Enhancing Formative Assessments, Lessons and Question-formulating Techniques Using TI-Nspire<sup>™</sup> Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

RuthieAnn Trujillo, ruthieann.trujillo@aps.edu, @ruthieann14, Highland High School, Albuquerque Public Schools, Albuquerque, New Mexico, United States

Learn how to engage students in their learning process by using question formulating techniques (QFT) in addition to daily formative assessment lessons. The process is designed to support the instructional changes, rigorous standards and high expectations required by Common Core State Standards (CCSS). Participants will be provided with five techniques of formative assessment and how to use them with the TI-Nspire™ CX Navigator™ System. They will leave with an Algebra 1 math collaborative design formative assessment lesson that can be used in their classroom and other resources.

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 2

60-Minute Hands-On **ASSESSMENT** 

CCSS

# **300** Learn About the Cabri™ Jr. Geometry App on the TI-84 Plus Silver Edition **Graphing Calculator in Your Geometry Class**

TI-84 Plus Silver Edition Graphing Calculator

Naomi Kokason, mrskoke@rocketmail.com, @mrskoke13, Los Angeles Unified School District, Los Angeles, California, United States

Wish you could have your students draw and construct using a dynamic geometry platform? The Cabri™ Jr. geometry app available for the TI-83 Plus graphing calculator and the TI-84 family of graphing calculators can help them do it. Learn how to use Cabri™ Jr. to have students explore theorems about parallel and perpendicular lines, triangle centers and more. We will also see how to take data collected through measurements and use the TI-84 Plus Silver Edition to connect to some algebra. If time permits, we will explore some of the other apps for the TI-84 Plus family.

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 3

60-Minute Hands-On **GEOMETRY** 

# 302 Interfacing With Students Through TI-Nspire™ Technology: Meshing Old Activities With New Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Sarah Schmitz, sarah.schmitz@aps.edu, Highland High School, Albuquerque Public Schools, Albuquerque, New Mexico, United States

No need to reinvent the wheel when it comes to writing lessons. This session will focus on how to take a pre-existing lesson and transform it into an TI-Nspire™ document that you can use alongside or in place of the old activity. We will explore how to maximize your authoring time with minimal effort with emphasis on Mathematics Design Collaborative (MDC) Geometry Lessons that I have taught in my classroom.

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 6

60-Minute Hands-On

GENERAL INTEREST





# 303 Using the PublishView™ Feature as a Presentation Tool

TI-Nspire™ Teacher Software

Dawn Easter, deaster@dallasisd.org, Dallas Independent School District, Garland, Texas, United States

This session will cover the basics of the PublishView<sup>™</sup> feature and how to incorporate it into a classroom lesson. Dallas ISD has used the feature as a presentation tool for Algebra 1 and Algebra 2 math classrooms. It is a dynamic tool that can eliminate the need for PowerPoint<sup>®</sup>.

### 1:00 p.m. - 2:00 p.m.

Location: Omni Hotel
Fort Worth Ballroom 7

60-Minute Lecture/Demonstration

**GENERAL INTEREST** 

# 304 Geometry Investigations Using the Cabri™ Jr. Geometry App

TI-84 Plus Silver Edition Graphing Calculator

Todd Steckler, tsteckler@southtexascollege.edu, La Joya Independent School District, McAllen, Texas, United States

We will work through three or four activities from the EXPLORATIONS™ Series Activity Book for the Cabri™ Geometry app. This will be for beginning TI-84 Plus Silver Edition graphing calculator users. If time permits, we will also investigate how these activities can be modified for TI-Nspire™ technology users.

# 1:00 p.m. - 2:00 p.m.

Location: Omni Hotel
Fort Worth Ballroom 8

60-Minute Hands-On

**GEOMETRY** 

# 305 Crime Scene Analysis With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Barbara Ward, bward@misd.org, @docward, Montgomery Independent School District, Montgomery, Texas, United States

Drugs, soil, shoe prints, killer coffee: What do they have in common? Join this hands-on session where participants will collect crime scene data and analyze it using Tl-Nspire™ technology. A variety of forensic science activities that use pH, conductivity, temperature and colorimeter sensors will support instruction in both forensic science and chemistry. Simulations will also be used for blood spatter and shoe impression analysis. The Tl-Nspire™ CX Navigator™ System will be used for instruction. Come explore forensic files Tl style.

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** 

Stockyards 2

60-Minute Hands-On
CHEMISTRY

# 306 Using TI-Nspire™ Technology's PublishView™ Feature to Empower Teachers Through Ongoing Personal Professional Development

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Melfried Olson, melfried@hawaii.edu, University of Hawaii, Kalaoa, Hawaii, United States

Co-Presenter: Judith Olson

This session addresses making professional development sustainable, with teachers becoming authors of their own professional development. The digital format of materials in the PublishView™ feature allows teachers to co-author their own professional documents by making adaptations, writing questions, creating presentations, adding links and archiving records and products of lessons for future use. These features are critical to effective teaching and learning and support ongoing, self-sustaining professional development. Participants will engage with tasks from materials that support modeling in Algebra 1, examine the teacher materials and interact with them by adding their own notes, photos, and questions.

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** 

**Sundance 2** 

60-Minute Hands-On

ALGEBRA 1

# 307 Rich Tasks for the CCSS in Middle Grades Math

TI-84 Plus C Silver Edition Graphing Calculator

Deb Nutt, koalanut@bright.net, @nuttdeb, Celina, Ohio, United States

See and use classroom-ready lessons that are aligned to the Common Core State Standards (CCSS) and are rich in helping students learn, understand and remember difficult math concepts. Specific lessons for middle grade CCSS using the TI-84 Plus C Silver Edition graphing calculator will be demonstrated. You will be able to take these ideas back to your classroom and use them next week. You may even learn something new about the calculator.

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** 

Sundance 3

60-Minute Hands-On

MIDDLE GRADES MATH

CCSS

@TICalculators Session Details

# 308 TI-Nspire™ Technology: Scout Camping the CCSS Way

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Jean Annette Jones, jeanjones@mail.kana.k12.wv.us, @mathtrjones, Herbert Hoover High School, Clendenin, West Virginia, United States

Come visit our Scout Camp and explore the equation of a circle through investigation.

1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** 

Sundance 4

60-Minute Hands-On

**GEOMETRY** 

# 309 Next Steps in a TI-Nspire™ Technology Algebra Adventure

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Valerie Hudson, vhudsonmath@gmail.com, @vhudson\_math, Arlington Independent School, Colleyville, Texas, **United States** 

Have you been using TI-Nspire™ technology and want to know how to better utilize this powerful tool with your algebra students? If so, then this session is for you! Come learn how the technology can be used in Algebra I and Algebra II classes beyond the basics of button pressing. Learn how to encourage deeper levels of student understanding. All activities are correlated to Texas Essential Knowledge and Skills (TEKS) process standards and will be provided so you can use them with your students right away.

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** 

**Sundance 5** 

90-Minute Hands-On

ALGEBRA 2

**TEKS** 

# 310 CCSS 2 Go: Developing Apps for In- and Out-of-School Learning

Irina Lyublinskaya, irina.lyublinskaya@gmail.com, @ilyublin, College of Staten Island (CUNY), Staten Island, New York, United States

Usually access to educational software for students is limited to the school computer lab. In contrast, practically each student has a personal tablet, smart phone and/or laptop. Learn how you can generate interactive apps for your students for different mobile platforms to explore mathematic concepts and practice skills outlined in Common Core State Standards (CCSS). The goals of this presentation are to demonstrate that teachers do not need special knowledge or abilities to generate mobile apps for teaching and learning the mathematics concepts and skills outlined in CCSS. We'll share teaching approaches with apps for in- and out-of-class instruction, including strategies for differentiated instruction.

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** 

Texas Ballroom H

60-Minute Lecture/Demonstration **GENERAL MATH** 

CCSS

# 311 Using the TI-Nspire™ App for iPad® to Explore Circles

TI-Nspire<sup>™</sup> App for iPad<sup>®</sup>

Ray Fox, rayisfox@gmail.com, Mount Juliet, Tennessee, United States

Co-Presenter: Johnny Ashurst

Use the TI-Nspire™ App for iPad® to enable students to discover the relationships of a circle. Learn the skills needed to perform lines, segments, shapes and measurements. Learn how to use a text box to calculate and understand relationships. The activity is dynamic and interactive. Animation and data capture are used to stimulate participant's interest and understand concepts. The use of interlinked apps for Geometry, Lists & Spreadsheet and Data & Statistics — which we'll use to observe multiple variables simultaneously — will be demonstrated.

# 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** 

Texas Ballroom I

60-Minute Hands-On

**GEOMETRY** 

### 312 Geometry Goodies on the TI-Nspire™ App for iPad®

TI-Nspire™ CAS App for iPad®

Jon Lepeska, lepeskaj@newtrier.k12.il.us, New Trier Township High School, Winnetka, Illinois, United States

Co-Presenter: Peggy Stetsko

What happens when all geometry students have the TI-Nspire™ App for iPad® in their hands? In our case, it has allowed for some serious investigation, exploration and discovery. Participants will work through and discuss a few of our favorite student-tested examples and walk away with ready-to-use activities. Topics to include transformations, constructions, triangle congruence (by transformations) and centers of a triangle.

### 1:00 p.m. - 2:00 p.m.

**Location: Omni Hotel** 

**Texas Ballroom J** 

60-Minute Hands-On

**GEOMETRY** 



# 314 TI-Nspire™ CAS Technology Takes on the CCSS (+) Standards and Wins

TI-Nspire™ CX CAS Handheld

Joe Fiedler, jfiedler@csub.edu, California State University, Bakersfield, Bakersfield, California, United States

TI-Nspire<sup>™</sup> CAS technology allows one to use complex numbers and parametric graphing to unify the study of conics with the Common Core State Standards (CCSS) rigid motions. Any of the three motions can be realized in the arithmetic of the complex numbers and the rotation of axes can be put on a logically sound and comprehensible basis.

# 2:15 p.m. - 3:45 p.m.

Location: Convention Ctr.
Meeting Room 103 A

90-Minute Hands-On

CAS

CCSS

# 315 Around The World In 80 Days (Or 90 Minutes): A Function Exploration

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Stephen Julian, julian.stephen@cathednet.wa.edu.au, Mandurah Catholic College, Singleton, Washington, Australia

Have you ever wondered which functions could be used to model the outline of the Sydney Opera House? Join a real Aussie in exploring the use of function transformations and restricted domains in displaying combined graphs with TI-Nspire™ CAS technology. These graphs will be used to form the outline of some of the great manmade and natural structures of the world. This session will use the TI-Nspire™ CX Navigator™ System with sliders and imported images.

# 2:15 p.m. - 3:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 103 B

90-Minute Hands-On

CAS

# 316 I Can Do Statistics on the TI-84 Plus Silver Edition Graphing Calculator: How Do I Do It on TI-Nspire™ Technology?

TI-Nspire™ CX Handheld

Chris True, ctrue1@ix.netcom.com, University of Nebraska-Lincoln, Lincoln, Nebraska, United States
In this session, participants will work through rich statistics problems and simulations that can be done
on the TI-84 Plus family of graphing calculators. We will learn how to solve the same problems and

# 2:15 p.m. - 3:45 p.m.

**Location: Convention Ctr.** 

**Meeting Room 104** 

90-Minute Hands-On STATISTICS

### 317 So, TEKS Eighth Grade Can Use TI-Nspire™ Technology: Now What?

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Corina Srygley, mrssrygley@gmail.com, @ccsrygle, Amarillo Area Center for Advanced Learning, Amarillo, Texas, United States

Struggling with implementing TI-Nspire™ technology with the new eighth grade Texas Essential Knowledge and Skills (TEKS) process standards? Come experience activities you can use in your classroom tomorrow to enrich student learning. Find out where to get TI-Nspire™ activities and how to gain confidence in teaching with them.

### 2:15 p.m. - 3:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 201 A

90-Minute Hands-On

MIDDLE GRADES MATH

TEKS

# 318 Seven-percent Grade Ahead: How Steep is It? Slope Concepts in the Real World

TI-84 Plus C Silver Edition Graphing Calculator

perform simulations using TI-Nspire™ technology.

Stuart Moskowitz, stuart@humboldt.edu, Humboldt State University, Arcata, California, United States

Use highway signs to introduce slope in beginning algebra. Motorists often see signs such as 7% Grade Ahead. But just how steep is that? The TI-84 Plus C Silver Edition and TI-84 Plus CE graphing calculators allow us to put photographs on the graph screen. Beginning pre-algebra and beginning algebra students can use this feature to perform analyses that help them connect algebra with the real world and give them a useful reason to learn about slope.

# 2:15 p.m. - 3:45 p.m.

**Location: Convention Ctr.** 

**Meeting Room 201 B** 

90-Minute Hands-On ALGEBRA 1

@TICalculators Session Details (1

# 319 Exploring Equations and Relationships With TI-Nspire™ Technology in **Junior High Math**

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Sarah Bauguss, sarahbauguss@katyisd.org, @sbauguss, Katy Independent School District, Katy, Texas, **United States** 

Participants will experience TI-Nspire™ activities that build student understanding of the expressions, equations and relationships Texas Essential Knowledge and Skills (TEKS) strand. Participants will leave with ideas for how to use TI-Nspire™ technology in the 5E instructional model and knowledge of where to find resources.

2:15 p.m. - 3:45 p.m. **Location: Convention Ctr.** 

Meeting Room 201 C

90-Minute Hands-On

MIDDLE GRADES MATH

### 320 Catch a STAAR® ... or EOC ... or Other State Assessment

TI-84 Plus Silver Edition Graphing Calculator

Kathy Hale, khale@esc14.net, Abilene, Texas, United States

How can you make preparation for high-stakes assessments easier with graphing technology? In this hands-on session, participants will use the TI-84 Plus Silver Edition graphing calculator to explore strategies and activities designed to help better prepare students for state assessments, including eighth grade math and Algebra 1. Specific calculator features will be discussed, including tabular functions, graph formats and window settings that make questions easier for students.

2:15 p.m. - 3:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 202 A

90-Minute Hands-On

ALGEBRA 1

**TEKS** 

# 321 Constructing Algebra With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Pamela Harris, pharris@byu.net, @pwharris, The University of Texas at Austin, Austin, Texas, United States

How can technology help students construct algebra? How can we use the power of visualization, speed, and generalization made possible by powerful technology to help students mathematize important big ideas, models and strategies? Come and engage in examples of tasks using TI-Nspire™ technology to promote student structuring and schematizing.

2:15 p.m. - 3:45 p.m.

**Location: Convention Ctr.** 

**Meeting Room 202 B** 

90-Minute Hands-On

ALGEBRA 1

### 322 Thinking Algebraically About Geometry

TI-84 Plus C Silver Edition Graphing Calculator

Tammy L. Jones, tammyjones@tljconsultinggroup.com, @TLJCG, TLJ Consulting Group, Lebanon, Tennessee, **United States** 

Making connections between different mathematical concepts provides opportunities for students to develop deeper understanding of all the concepts involved. Participants will investigate several connections that naturally occur between traditional geometric and algebraic topics. Participants will also see how using the TI-SmartView™ Emulator Software for the TI-84 Plus graphing family supports connections between the various representations of mathematical topics. The Texas Essential Knowledge and Skills (TEKS) process standards and Common Core State Standards (CCSS) math practices will be covered. Student and teacher materials will be provided.

2:15 p.m. - 3:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 202 C

90-Minute Hands-On

MIDDLE GRADES MATH

CCSS/TEKS

### 323 Census-at-School Statistics

TI-84 Plus C Silver Edition Graphing Calculator

Kymn Van Dyken, kvandyken@connectionseducation.com, International Connections Academy, Raynesford, Montana, United States

Engage statistics students with lessons using Census at School data and the TI-84 Plus C Silver Edition graphing calculator. Session participants will create lists, compare box and whisker plots and make histograms with the TI-84 Plus. This session will also include the standard deviation and displaying data. Activities are perfect for middle school and algebra and can be expanded for higher grades and TI-Nspire™ technology. Ready to use handouts and activities will be provided. Teachers will also learn how to obtain their own Census at School data to modify the activities in their classrooms.

2:15 p.m. - 3:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 202 D

90-Minute Hands-On

**STATISTICS** 





# 324 Using TI-Nspire™ Technology Quizzes and Quick Polls for TEKS Assessment

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Sukhhbir Singh, sukhisa@yahoo.com, Corpus Christi Independent School District, Corpus Christi, Texas, United States

Come explore dynamic ways to collect evidence of learning using TI-Nspire™ technology. Participants will learn how to create a variety of assessments, including quizzes, tests and quick polls. Teachers can leverage the collection and analysis of this high-quality evidence to inform and improve teaching and student learning.

# 2:15 p.m. - 3:45 p.m. Location: Convention Ctr.

Meeting Room 203 B

90-Minute Hands-On
GENERAL MATH

# 325 Algebraic and Statistical Thinking, Reasoning and CCSS Performance Standards

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Ron Armontrout, ronarmontrout@gmail.com, Oxford, Maine, United States

Participants will model activities appropriate for students in all levels of high school Algebra and Statistics. Explore single-variable data using dot plots, histograms and box plots, as well as two measures of variability: the MAD statistic and standard deviation. Participants fit movable lines and regression models to linear data gathered from CIA.gov. What is the real-world significance of the slope, the y-intercept, and the correlation constant? This workshop is appropriate for teachers of Common Core State Standards (CCSS) curricula.

# 2:15 p.m. - 3:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 203 C

90-Minute Hands-On ALGEBRA 1 CCSS

# 326 Using Technology as an Accommodation for Students With Disabilities

TI-84 Plus Silver Edition Graphing Calculator

Gayle Warmbrodt, warmbrodtg@cfbisd.edu, Dan F. Long Middle School, Carrollton-Farmers Branch Independent School District, Dallas, Texas, United States

Participants will receive a general overview of how to integrate technology into daily lessons using TI-84 Plus Silver Edition graphing calculators, TI-SmartView™ Emulator Software for the TI-84 Plus graphing family, TI-Nspire™ technology and Geometer's Sketchpad®. We'll also explore how to adapt technology to particular disabilities and make recommendations for students at special education/504 meetings, as well as learn what technological advances are allowed as accommodations. Discover the innovative methods teachers are using to advocate for their students with disabilities in the regular education and special education classrooms.

# 2:15 p.m. - 3:45 p.m.

**Location: Convention Ctr.** 

Meeting Room 204 A

90-Minute Hands-On
GENERAL INTEREST

# 327 Persevering through Algebra 1 and Geometry Problems Using TI-Nspire™ Technology

TI-Nspire™ CX Navigator™ System

Katie Martinez, ksallard20@yahoo.com, Canyon Crest Academy, San Diego, California, United States

Experience challenging problems that demonstrate how students persevere through tasks in order to deepen their understanding of concepts. Participants will practice justifying their reasoning and discuss the use of technology during each activity.

# 2:15 p.m. - 3:45 p.m. Location: Convention Ctr.

**Meeting Room 204 B** 

90-Minute Hands-On ALGEBRA 1

# **328** Real-World Problem-solving Using Programming and the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Juan Manuel Gonzalez, jmgonzalez004@laredoisd.org, Laredo Early College High School, Laredo, Texas, United States

Who should work harder, the teacher or the students? We'll use the programming capabilities of the TI-84 Plus C Silver Edition graphing calculator to expose students to real-world problem-solving situations where the students do the work and the teacher does the checking. They'll work on problems dealing with vertical motion (quadratic functions), day of the week when they were born (greatest integer function), patterns and inductive reasoning (quartic polynomials), the life guard problem (optimization and derivatives) and the baseball problem (related rates).

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** 

**Texas Ballroom A** 

90-Minute Hands-On PROGRAMMING

@TICalculators Session Details (1

# 329 Transformational Geometry Activities Leading to Proof of Congruence and Similarity

TI-Nspire™ CX CAS Handheld

Charles Vonder Embse, vonde 1cb@cmich.edu, Central Michigan University, Mt. Pleasant, Michigan, United States

The Common Core State Standards (CCSS) for high school Geometry call for a transformational approach to the proof of triangle congruence and similarity. Dynamic geometry explorations on TI-Nspire™ technology or using Cabri™ Jr. geometry app on the TI-84 Plus C Silver Edition graphing calculator can bring deeper student understanding of how transformations can be used as the integral link between congruence and their proofs. Participants will do hands-on explorations of several dynamic activities during session.

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** 

Texas Ballroom B

90-Minute Hands-On

**GEOMETRY** 

CCSS

### 330 Standard Deviation vs. Mean Absolute Deviation (M.A.D.)

TI-84 Plus C Silver Edition Graphing Calculator

Jeff McCalla, jmccalla@stmarysschool.org, @jmccalla1, St. Mary's Episcopal School, Memphis, Tennessee, **United States** 

Statistics have crept into many mathematics courses. The Common Core State Standards (CCSS) put MAD in middle school mathematics and standard deviation in high school mathematics. What is the difference between the two concepts? Bring your TI-84 Plus family graphing calculator or TI-Nspire™ technology and hear from the author of TI-84 Plus Silver Edition Graphing Calculator for Dummies and TI-Nspire<sup> $\mathsf{TM}$ </sup> for Dummies.

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** Texas Ballroom C

90-Minute Hands-On

ALGEBRA 2

CCSS

# 331 Fostering a Math Practices Mindset

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Lynn Adsit, lynn.adsit@mercerislandschools.org, @ladsit76, Mercer Island School District, Mercer Island, Washington, United States

Co-Presenter: Kim Schjelderup

If you know how to implement the Common Core State Standards (CCSS) curriculum but are not sure how to get your students to know and use the math practices, then this session is for you. Using old school (paper and pencil, whiteboards, etc.) and new school (TI-Nspire™ technology, Google Forms, etc.) techniques, guide your students to learn and masterfully use mathematics through the CCSS math practices. Experience a variety of classroom tested activities that foster your students' mindset to recognize, expertly use, reflect upon, value and internalize the eight CCSS math practices.

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** 

Texas Ballroom D

90-Minute Hands-On

**PRECALCULUS** 

CCSS

# 332 Reinforcement through the StudyCards™ App

TI-84 Plus Silver Edition Graphing Calculator

Leanne Barbour, Ibarbour@martinsville.k12.va.us, @square\_peg72, Martinsville City Public Schools, Martinsville, Virginia, United States

Ever wonder how to use the StudyCards™ app? Let's talk about it. Participants will practice creating study cards for TI-83 Plus and TI-84 Plus Silver Edition graphing calculators and using them in the classroom. Participants will get a chance to play with created study cards. Bring your standards and a flash drive so we can get started.

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** 

Texas Ballroom G

90-Minute Hands-On

GENERAL INTEREST

# 333 Using the TI-Nspire™ CX Navigator™ System as a Formative Assessment Tool

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Amanda Roble, roble.9@osu.edu, The Ohio State University, Columbus, Ohio, United States

In this session, participants will see a minimum of seven different question types that teachers can ask using the TI-Nspire™ CX Navigator™ System to support the process of formative assessment during mathematics instruction. This includes different types of questions that are unplanned or planned and are assessed using quick polls, documents or screen capture. Additionally, participants will consider how feedback received from students can be used to inform instruction.

### 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** 

Fort Worth Ballroom 2

90-Minute Lecture/Demonstration **ASSESSMENT** 





# 334 Let's Lasso some TI-Nspire™ Circle Activities

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Judy Hicks, judy.hicks.ti@comcast.net, @judyhicks58, Arvada, Colorado, United States

Co-Presenter: Jane Damaske

Yee haw! We'll be pardnering up to explore activities that support the newest circle standards in geometry. These investigations will apply to Common Core State Standards (CCSS) and Texas Essential Knowledge and Skills (TEKS) content. Interactive lessons for the geometry and algebra classroom will be used. Bring your handheld.

# 336 Wow, I Could Teach Algebra Even Better if I Knew More Physics, She Replied

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Sean Bird, covenantbird@gmail.com, @covenantbird, Covenant Christian High School, Indianapolis, Indiana, **United States** 

This has been the response when explaining to mathematics teachers about the sensors their school already owns. Tips on making science connections in your mathematics class — from algebra to calculus will be explained and explored with TI-Nspire™ technology, including the TI-Nspire™ Lab Cradle. Data collection and context rich problems are crucial to many state standards. Learn more about what makes the computer algebra system a great tool for the mathematics and science classroom.

# 337 Chemical Equilibrium: A Matter of Balance

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Ray Lesniewski, chemquy65@yahoo.com, Jones College Prep, Chicago, Illinois, United States

The concepts of chemical equilibrium and Le Chatelier's principle are extremely difficult for students to grasp. Come learn how a hands-on TI-Nspire™ activity using M&M's® and a free computer simulation from the Connected Chemistry Curriculum will help students bridge the macroscopic and particle worlds of chemistry. We will also explore a simulation using the power of data aggregation with TI-Nspire™ CX Navigator™ System to understand the relationship between equilibrium concentrations and the equilibrium constant. This workshop is appropriate for teachers of both first-year and advanced chemistry classes.

### 338 Do the STEM Boot Scootin' Boogie With TI-Nspire™ Technology and Data Collection

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Linda Antinone, linda.antinone@sbcglobal.net, @Linda.Antinone, R.L. Paschal High School, Fort Worth Independent School District, Fort Worth, Texas, United States

Deep in the heart of Texas, you'll learn to engage students in deeper thinking about connections between physics and mathematics through data collection with motion. We'll keep the momentum going as we create collisions to examine impulse using force sensors. Finally, things heat up as we examine relationships in temperature graphs. We are fixin' to have a great time in my town, Fort Worth. I hope to see y'all.

### 339 Gathering, Processing and Applying Data in a Science Classroom

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Robert Reniewicki, rreniewicki@susd.org, @rreniewicki, Scottsdale Unified School District, Phoenix, Arizona, **United States** 

Participants will use TI-Nspire™ technology to gather information with various sensors, data aggregation and manual entry. The information will be rapidly processed and analyzed to allow classroom discussion of the data. Application of the information will be explored through the use of modeling and assessment.

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 3

90-Minute Hands-On

**GEOMETRY** 

CCSS/TEKS

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 6

90-Minute Hands-On

CONNECTING SCIENCE AND MATH/STEM

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 7

90-Minute Hands-On

**CHEMISTRY** 

# 2:15 p.m. - 3:45 p.m.

Location: Omni Hotel Fort Worth Ballroom 8

90-Minute Hands-On **PHYSICS** 

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** 

Stockyards 2

90-Minute Hands-On **PHYSICS** 

@TICalculators Session Details (117)

# 340 Sliders, Conditionals and Active Math Boxes: Spice Up Your Documents With Interactivity

TI-Nspire<sup>™</sup> Teacher Software

Mark Arquijo, mrarquijo@gmail.com, @MaArquijo, San Benito, Texas, United States

Want to make your TI-Nspire™ documents more interactive and snappier? Come find out how to add some spice to your documents and get your students to be more engaged and self-motivated when exploring math concepts. Participants will explore using sliders, conditional statements and active Math Boxes feature. Participants will also create short interactive documents to strengthen and add pizzazz to their lessons.

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** 

Sundance 2

90-Minute Hands-On

**AUTHORING** 

# 341 Why Does the TI-84 Plus CE Graphing Calculator Give That Result? What Can be Blocked for an Exam?

TI-84 Plus CE Graphing Calculator

Margo Lynn Mankus, margo.mankus@ti.com, Beacon, New York, United States

Come join a two-part chat about calculator tips and numerical calculator facts along with setting up a calculator for an exam. What is Asymptote Detection? Why does the graph of that semi-circle not plot to the x axis? What result is expected for 1/2X? Why is there a negation key? And for exam setup, what are the Press-to-Test and the TestGuard™ apps? What questions do you have?

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** 

Sundance 3

90-Minute Hands-On

ALGEBRA 1

# 342 Functions, Equations, and Matrices – Oh My!

TI-Nspire™ CX CAS Handheld

Kathleen McKinley, kmcki10063@aol.com, @domath4all, Temple University, Philadelphia, Pennsylvania, **United States** 

Participants will engage in three inquiry-based activities where they will determine the nth term in a pattern from provided pictures utilizing lists operations and given graphs and determine the regression equation for its path utilizing graphing and matrix features. Addressed Common Core State Standards (CCSS) will be identified and discussed as well as student engagement strategies. Connections to 5E instructional model will also be shared. TI-Nspire™ CAS technology will be used to conduct the investigations, which can be modified to run on TI-84 Plus family of graphing calculators.

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** 

Sundance 4

90-Minute Hands-On

ALGEBRA 2

CCSS

### 343 Create Graphing Calculator Art Using Piecewise Functions

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Sarada Toomey, saradatoomey@gmail.com, @saradatoomey, Andre Agassi College Preparatory Academy, Las Vegas, Nevada, United States

Generate a picture by graphing equations and inequalities with restrictions. This activity can be used to review functions in a fun, artistic way using TI-Nspire™ technology. This session is for both beginner and intermediate users. The instructor will share samples of student work.

### 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** 

Sundance 5

90-Minute Hands-On

ALGEBRA 2

# 345 Geometric Transformations: Brand New Dynamic Investigations Using TI-Nspire™ Teacher Software

TI-Nspire™ App for iPad®

Tom Reardon, tom@tomreardon.com, @ tomreardon3, Youngstown State University, Youngstown, Ohio, **United States** 

Bring your laptop or iPad® mobile digital device. Reflect images about the x- and y-axes as well as lines you customize, like x = 3, y = -2, y = x, y = 2x - 1. Grab and move the line of reflection and uncover ideas about the image and pre-image. Translate images using vectors or by describing the horizontal and vertical components. Rotate images about a point by grabbing a point on circle of rotation. Dilate figures by clicking sliders. Discover what properties the images and pre-images have, including coordinates, side lengths, measures of angles, perimeters, areas, ratios and more.

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** 

Texas Ballroom I

90-Minute Hands-On

**GEOMETRY** 



# **346** Finding the Sweet Spot Between PBL and PBA Using the TI-Nspire™ App for iPad and Other Resources

TI-Nspire<sup>™</sup> App for iPad<sup>®</sup>

Stephanie Ogden, stephanie.ogden@knoxschools.org, @SoSogden, L&N STEM Academy, Knoxville, Tennessee, United States

For many creative algebra teachers, the challenge is not to find engaging, authentic problems on which to base learning but to create problem-based lessons that also address standards and prepare students for performance-based assessments. Participants will learn strategies and resources that will empower them to create engaging lessons that find the sweet spot between PBL (Problem-Based Learning) and PBA (Performance-Based Assessment). The TI-Nspire<sup>™</sup> App for iPad<sup>®</sup> will be used to demonstrate proven strategies, but the session is appropriate for TI-Nspire<sup>™</sup> technology and TI-84 Plus family of graphing calculators.

# 2:15 p.m. - 3:45 p.m.

**Location: Omni Hotel** 

Texas Ballroom J

90-Minute Hands-On ALGEBRA 1

# 348 Setup, Installation and First-day Usage of the TI-Nspire™ CX Navigator™ System

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Daryl Ewry, dewry@ti.com, Dallas, Texas, United States

Are you new to the TI-Nspire™ CX Navigator™ System? Still trying to get the basics down? What do you do if you run into trouble? The TI-Cares™ customer support team will cover installation of the software, as well as configuring the network manager and class rosters. They'll also cover the association of the handhelds and the placement of the TI-Nspire™ CX Navigator™ access point. Finally, they'll cover first-day usage, which includes system features like Quick Poll, Live Presenter and Class Capture.

4:00 p.m. - 5:30 p.m.

**Location: Convention Ctr.** 

Meeting Room 103 A

90-Minute Lecture/Demonstration
GENERAL INTEREST

# 349 Navigating the Central Limit Theorem

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

David Kohmetscher, davidkohmetscher@claytonschools.net, Clayton High School, Clayton, Missouri, United States

Co-Presenter: Kurt Kleinberg

Understanding the central limit theorem is essential to the statistical concepts of hypothesis testing and confidence intervals. This presentation will use Tl-Nspire™ technology to explore the powerful characteristics of this theorem. Participants will see a visual of the distribution of sample means approaching normality and use regression analysis to see how sample size impacts the standard deviation of the sample means. In addition to collecting and distributing data, participants will see the technology used for random sampling, developing list and spreadsheets, displaying data, capturing screens and doing regression analysis.

4:00 p.m. - 5:30 p.m. Location: Convention Ctr.

**Meeting Room 103 B** 

90-Minute Hands-On STATISTICS

# 351 Dealing With Data in Middle Grades Using Multiple Representations and the TI-84 Family of Graphing Calculators

TI-84 Plus C Silver Edition Graphing Calculator

Jane Barnard, janebarnard@charter.net, Milledgeville, Georgia, United States

Our world is full of interesting data. Students gravitate toward mathematics they can use it with information from their own world. Activities and tasks related to data appropriate for middle grades will be shared as participants build a real-life box-and-whisker plot by-hand and using the TI-84 Plus C Silver Edition graphing calculator handheld to reinforce the five-number summary of data. Students learn mathematics by doing mathematics, and these tasks ensure student engagement and motivation. Additionally, data graphed in a coordinate plane will be examined by-hand and with the graphing calculator to make connections among middle grades topics.

4:00 p.m. - 5:30 p.m.

**Location: Convention Ctr.** 

Meeting Room 201 A

90-Minute Hands-On

MIDDLE GRADES MATH

@**TICalculators** Session Details (1:

# 352 Lining Up to Use the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Debbie Sheridan, dsher77175@aol.com, @Sheridan6Debbie, Frassati Catholic High School, Archdiocese of Galveston-Houston, Spring, Texas, United States

Explore topics related to linear functions in Algebra 1. Engaging, classroom-ready activities will be used to develop the concepts of rate of change, y-intercept, domain and range, linear transformations using the TI-84 Plus C Silver Edition graphing calculator.

4:00 p.m. - 5:30 p.m. **Location: Convention Ctr.** 

Meeting Room 201 B

90-Minute Hands-On

ALGEBRA 1

# 353 Safe Driving Studies (Experimental Design) for the AP\* Statistics and STEM Classroom

TI-84 Plus C Silver Edition Graphing Calculator

Robert Hanchett, roberth@springisd.org, Spring Independent School District, Houston, Texas, United States

Teach experimental design and maybe save a life. Fatal Vision® Impairment Goggles simulate the physical effects of alcohol intoxication and give students the experience of intoxication without actually imbibing alcohol. Students collect data conducting two field sobriety tests, one wearing goggles and one without them, to conduct a paired t test using the TI-84 Plus C Silver Edition graphing calculator to determine the validity of their hypotheses. The presentation also will use the Distract-A-Match®2, a simple shape and color matching game that helps demonstrate the impact of cognitive, visual, and manual distractions on reaction time and judgment. Students make histograms on the TI-84 Plus C Silver Edition graphing calculator of number of mistakes made while matching shapes with distraction and without.

4:00 p.m. - 5:30 p.m. **Location: Convention Ctr.** 

Meeting Room 201 C

60-Minute Hands-On

**STATISTICS** 

# 354 TI-84 Plus C Silver Edition Graphing Calculator Makes Algebra More Colorful and More Memorable

TI-84 Plus C Silver Edition Graphing Calculator

Marian Prince, marian.prince50@amail.com, Andrews University, Berrien Springs, Michigan, United States

Meaningful mathematical tasks in color appeal to today's students and make concepts clearer for them. Leave with activities that will give your Algebra students a good foundation for Common Core State Standards (CCSS) exams.

4:00 p.m. - 5:30 p.m. **Location: Convention Ctr.** 

Meeting Room 202 A

90-Minute Hands-On

ALGEBRA 1

CCSS

### 355 Getting to Know the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Pam Littleton, littleton@tarleton.edu, Tarleton State University, Stephenville, Texas, United States

During this hands-on session, participants will use the TI-84 Plus Color Silver Edition graphing calculator to explore a variety of algebraic concepts to support instruction of the Texas Essential Knowledge and Skills (TEKS) process standards in middle school and Algebra 1 classrooms. This session is intended for beginning users.

4:00 p.m. - 5:30 p.m.

**Location: Convention Ctr.** 

**Meeting Room 202 B** 

90-Minute Hands-On

MIDDLE GRADES MATH

**TEKS** 

# 356 Exploring Integer Operations With the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Patti Nicodemo, pnicodemo@esc4.net, @PattiNicMath, Education Service Center Region 4, Houston, Texas, **United States** 

Experience an activity using the TI-84 Plus C Silver Edition graphing calculator that allows students to find patterns and discover the rules for integer operations.

4:00 p.m. - 5:30 p.m.

**Location: Convention Ctr.** 

Meeting Room 202 C

90-Minute Hands-On

MIDDLE GRADES MATH





# 357 Don't Stop Until You Get Enough? Beyond Getting The Right Answer

TI-84 Plus Silver Edition Graphing Calculator

Bernadette Salgarino, bernadette\_salgarino@sccoe.org, @salg274, Santa Clara County Office of Education, San Jose, California, United States

The goal of problem-solving isn't just finding the right answer. Students are encouraged to justify and explain their mathematical thinking to determine the source of misconceptions and modify instruction accordingly. In this session, participants will be led through several strategies using TI-84 Plus family of graphing calculators that support deeper understanding of the habits-of-mind students exhibit to engage in tasks at a higher level. Focus will be given to enhancing discourse to create a language-rich learning environment to foster a culture of problem solving, reasoning and collaboration.

4:00 p.m. - 5:30 p.m. Location: Convention Ctr.

Meeting Room 202 D

90-Minute Hands-On

MIDDLE GRADES MATH

# 358 Everyday Statistics for Middle School Students

TI-84 Plus C Silver Edition Graphing Calculator

Gail Gallitano, ggallitano@wcupa.edu, West Chester University of Pennsylvania, West Chester, Pennsylvania, United States

This hands-on session will address descriptive and inferential statistics, including frequency tables, graphs, mean, median, mode, standard deviation, confidence intervals and hypothesis testing. The TI-84 Plus C Silver Edition graphing calculator will be used. Activities will be most appropriate for middle school students and early high school students.

4:00 p.m. - 5:30 p.m.

**Location: Convention Ctr.** 

Meeting Room 203 B

60-Minute Hands-On STATISTICS

# 359 Differentiation in the Algebra 1 Classroom Using TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Handheld

Rachael Smilowitz, rachael\_smilowitz@charleston.k12.sc.us, Charleston County School District, Charleston, South Carolina, United States

Have you ever wondered how to meet the needs of students who are at different instructional levels? Come learn how to use the Tl-Nspire™ CX Navigator™ System to send different documents to different groups of students at the same time. This activity will have students in your classroom working toward a common standard while supporting them at their individual levels. Transport yourself into the mind of an Algebra 1 student as you complete this hands-on activity.

4:00 p.m. - 5:30 p.m.

**Location: Convention Ctr.** 

Meeting Room 203 C

90-Minute Hands-On ALGEBRA 1

# **362** Getting Started on Authoring TI-Nspire™ Documents

TI-Nspire<sup>™</sup> Teacher Software

Jerry Scherer, jscherer@vianet.ca, Thornhill, Ontario, Canada

In this session, we will dissect some action-consequence activities to learn how piecewise functions, conditional formatting and programming techniques were used to create special effects. Participants will receive interactive tutorials on authoring well-designed TI-Nspire™ documents.

4:00 p.m. - 5:30 p.m.

Location: Omni Hotel

**Texas Ballroom A** 

90-Minute Hands-On AUTHORING

### 363 Exploring Circle Geometry: Functions Emerging From Data Capture

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Roger Wander, rdwander@unimelb.edu.au, Melbourne Graduate School of Education, Melbourne, Victoria, Australia

In this workshop session, participants will use TI-Nspire™ CAS technology to explore relationships among measurement data that emerge when a previously static diagram becomes dynamic. Based in familiar circle geometry concepts, the rich set of data will be analysed for functional trends. The various features of the technology used in the workshop will allow participants to develop ways their own classes might engage in meaningful formative assessment.

4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** 

**Texas Ballroom B** 

90-Minute Hands-On

GEOMETRY

@TICalculators Session Details (12

# 365 Mathematical Modeling on TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Pat Mara, mathmara@comcast.net, Pueblo, Colorado, United States

We will model such diverse areas as the Chicago Bulls, the wolves of Yellowstone, the solar system, sunspots and the generation of electricity by the wind. Come and receive some interesting data sets. 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** 

Texas Ballroom D

90-Minute Lecture/Demonstration

**PRECALCULUS** 

# 366 Help Struggling Math Students and First-time Calculator Users be Successful

TI-30XS MultiView™ Calculator

Kerry Burross, kerry.burross@carrollcountyschools.com, Temple High School, Temple, Georgia, United States

Co-Presenter: Tara Whittington

Participants will learn strategies to help students gain confidence through the utilization of the TI-30XS MultiView™ scientific calculator, which is the approved calculator for the new GED. Activities will focus on algebra, geometry and statistics topics. Participants will walk away with activities that can immediately be implemented in their classroom to help first-time calculator users be successful.

# 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** 

**Texas Ballroom G** 

90-Minute Hands-On

**GENERAL INTEREST** 

# 367 Best Student Success Strategy: Formative Assessment With and Without the **TI-Nspire™ CX Navigator™ System**

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Katie England, katie.england@comcast.net, @EnglandKatie, Montgomery County Public Schools, Rockville, Maryland, United States

For years research has told us that effective formative assessment processes give us the biggest gains in student achievement — more than any intervention or program. Come explore a variety of effective strategies both with and without the use of TI-Nspire™ technology and other systems. We'll examine interactive activities in middle grades, algebra and statistics, reflect on assessment processes and discuss how to support each other while planning for assessment. Discussions will be great for teachers and administrators. You'll walk away with activities and strategies that can be implemented on Monday.

# 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 2

90-Minute Hands-On **ASSESSMENT** 

### 368 Proportional Panting: Proportional Reasoning With Dogs

TI-84 Plus C Silver Edition Graphing Calculator

Mary Beth Murrell, marybethmurrell@gmail.com, Burlington Community School District, Burlington, Idaho, **United States** 

Explore how scaling affects surface area, volume and the ratio of surface area to volume. What implications does this ratio have for heat loss in dogs and other organisms? We will use snap cubes to build puppies and dogs and explore proportional relationships with the TI-84 Plus C Silver Edition graphing calculator. The lesson emphasizes science connections and Standards for Mathematical Practices for modeling, using appropriate tools strategically, constructing viable arguments, and reasoning abstractly and quantitatively.

### 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 3

90-Minute Hands-On

**GEOMETRY** 

CCSS

# 370 Nspiring a Green Revolution

TI-Nspire™ CX CAS Handheld

Christina Middlebrook, cmiddlebrook@brit.org, @middlechristina, Botanical Research Institute of Texas, Fort Worth, Texas, United States

Co-Presenter: Tracy Friday

Allowing students to make connections with the environment using local data provides an opportunity to create an exploration that could change the role they play in improving our world's natural systems. Join us in a sixth-12th grade scalable exploration using Tl-Nspire™ technology and Vernier sensors to develop student pathways for designing solutions to environmental problems. Come examine ways to develop innovators through environmental Project-Based Learning. Participants will develop questions and ideas to ignite critical thinking skills and engagement. Participation in Environmental STEM activities and 21st century skills will be included to authenticate the experience.

# 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 6

90-Minute Hands-On

CONNECTING SCIENCE AND

MATH/STEM





# 371 Climate Change With TI-Nspire™ Technology

TI-Nspire™ CX Navigator™ System

Marc Drougel, drougel@hotmail.com, Detroit Country Day School, Beverly Hills, Michigan, United States

Participants will TI-Nspire<sup>™</sup> and Vernier sensors to explore the changes in carbon dioxide, oxygen, relative humidity and temperature that accompany the burning of a hydrocarbon and the relationship to climate change. Indicators and causes of climate change will be discussed, and web-based resources from NASA will be shared.

### 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** Fort Worth Ballroom 7

90-Minute Hands-On **GENERAL SCIENCE** 

# 373 Project- and Problem-based Learning With TI-Nspire™ Technology

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Michelle Bonds, Iil\_bitmic@hotmail.com, @mibonds, Bald Knob Public Schools, Bald Knob, Arkansas, United States

Improve student motivation in your classroom by using projects and problems that have real-world connections. This session will help you create activities for every unit, no matter if you are using Common Core State Standards (CCSS) or another curriculum. Resources and free examples will be provided. TI-Nspire™ technology will be provided during the session but feel free to BYOD.

# 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** 

Stockyards 2

90-Minute Hands-On

CONNECTING SCIENCE AND MATH/STEM

# 374 Programs and Sliders and Conditions, Oh My!

TI-Nspire<sup>™</sup> Teacher Software

Dennis Donovan, ddhawk1@yahoo.com, @ddhawk1, Xaverian Brothers High School, Westwood, Massachusetts, **United States** 

This session is for those who have experience with TI-Nspire™ technology and wish to go to the next level by creating their own interactive documents. We will explore the dynamic nature of the technology by creating documents containing small utility programs, sliders and conditions. Participants will use TI-Nspire™ Teacher Software to create several example documents. The step-by-step exercise will demonstrate many of the authoring techniques used in more advanced documents.

# 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** 

**Sundance 2** 

90-Minute Hands-On

**AUTHORING** 

### 375 No Handhelds, No Problem!

TI-Nspire<sup>™</sup> Teacher Software

Julie Riggins, julie.riggins@gmail.com, @jrigginsEFHS, East Forsyth High School, Winston-Salem, North Carolina, **United States** 

You may not have a class set of TI-Nspire™ handhelds yet, but don't let that stop you from using the power and flexibility of the TI-Nspire™ Teacher Software to lead your students using demonstration and discovery to make sense of difficult problems. I will show how I have used the software to enhance student understanding of topics such as linear programming, function transformations, radians, derivatives, and sine and cosine graphs. I'll also show you how to create a document.

# 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** 

**Sundance 3** 

90-Minute Hands-On

ALGEBRA 2

### 376 Flipping with the TI-Nspire™

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Brittney Sly, bsly@aisd.net, Arlington ISD, Arlington, Texas, United States

Co-Presenter: Valerie Hudson

Are you interested in flipping your high school math classroom but are not exactly sure how it works? Do you need effective strategies to help guide students through the extra time that a flipped classroom generates? If you answered yes to either question, come to this session to find out how we have used the flipped classroom model and TI-Nspire™ technology to actively engage students.

# 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** 

**Sundance 4** 

90-Minute Hands-On

ALGEBRA 2

@TICalculators Session Details

### 377 Dazzle them with Data Collection!

TI-Nspire<sup>™</sup> CX Navigator<sup>™</sup> System

Heidi Rudolph, hrudolph@orangecsd.org, @Heidirudolph95, Orange High School, Pepper Pike, Ohio, United States

There are several ways to use the Class Capture feature of the TI-Nspire™ CX Navigator™ System in the Algebra 2 classroom. Participants will interact with the handhelds to trace graphs and capture ordered pairs (data) to find inverses and reciprocals of certain functions. Participants will also drag a tangent line along a curve to graph a derivative.

### 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** 

Sundance 5

90-Minute Hands-On

ALGEBRA 2

# 378 Precalculus Activities Using the TI-84 Plus C Silver Edition Graphing Calculator

TI-84 Plus C Silver Edition Graphing Calculator

Jan Mitchener, jmitchen@ccs.k12.in.us, @janmitch2000, Carmel High School, Carmel, Indiana, United States

I will share my favorite Precalculus activities that I have used in my classroom. The TI-84 Plus C Silver Edition graphing calculator will be used to enhance student learning of the topics presented. Participants will leave with lessons ready to use in the classroom.

# 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** 

**Texas Ballroom H** 

90-Minute Hands-On

**PRECALCULUS** 

# 380 #LetMeTakeASelfie: TI-Nspire™ CAS App for iPad® Applications

TI-Nspire<sup>™</sup> App for iPad<sup>®</sup>

Tina Schisler, tina.alhashimi@waynetn.net, Collinwood High School, Waynesboro, Tennessee, United States

Embrace the selfie and use it to teach mathematics in your classroom. Participants will use selfies to explore mathematical concepts including functions, data capture, regression and the constant phi (golden ratio) through hands-on activities utilizing TI-Nspire™ technology. Participants will discover how to facilitate learning that promotes student engagement and fosters critical thinking.

# 4:00 p.m. - 5:30 p.m.

**Location: Omni Hotel** 

Texas Ballroom J

90-Minute Lecture/Demonstration

**PRECALCULUS** 







Presenter Index Join the Conversa Lon

Name	Subject	No.	Day	Time	Location	Room
Abel, Sherri	Middle Grades Math	17	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 201 A
Adsit, Lynn	Precalculus	331	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Texas Ballroom D
Allred, Gina	Algebra 1	20	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 202 A
Almon, Matt	Algebra 2	194	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Texas Ballroom C
Antinone, Linda	Physics	338	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Fort Worth Ballroom 8
Apicella, Linda	Algebra 1	91	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 202 A
Arguijo, Mark	Authoring	340	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Sundance 2
Armontrout, Ron	Algebra 1	325	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 203 C
Arnold, Stephen	CAS	29	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Sundance 2
Arterbury, Kristin	General Math	36	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Texas Ballroom J
Ashurst, Johnny	Geometry	227	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Texas Ballroom B
Atkin, Kyle	Statistics	159	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 102
Bambrick, Margaret	Algebra 1	126	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 202 A
Bambrick, Margaret	Middle Grades Math	285	Saturday	1:00 p.m 2:00 p.m.	Convention Ctr.	Meeting Room 201 C
Barbour, Leanne	General Interest	332	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Texas Ballroom G
Barnard, Jane	Middle Grades Math	351	Saturday	4:00 p.m 5:30 p.m.	Convention Ctr.	Meeting Room 201 A
Barrett, Gloria	Statistics	289	Saturday	1:00 p.m 2:00 p.m.	Convention Ctr.	Meeting Room 202 D
Barton, Ray	Calculus	73	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Texas Ballroom B
Bauguss, Sarah	Middle Grades Math	319	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 201 C
Bell, Murney	Statistics	180	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 104
Bellman, Allan	Algebra 1	182	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 201 B
Benzing, Andrew	General Interest	243	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Texas Ballroom I
Benzon, Maria	Connecting Science and Math/STEM	117	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Fort Worth Ballroom 7
Bertrand, Adrien	Authoring	260	Saturday	11:00 a.m noon	Omni Hotel	Texas Ballroom A
Beswick, Gloria	Middle Grades Math	187	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 202 D





Name	Subject	No.	Day	Time	Location	Room
Bird, Sean	Connecting Science and Math/STEM	336	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Fort Worth Ballroom 6
Boby, Corey	General Math	105	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Texas Ballroom I
Bonds, Michelle	Connecting Science and Math/STEM	373	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Stockyards 2
Bonneau, Jacklyn	Middle Grades Science	10	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Fort Worth Ballroom 6
Bonneau, Jacklyn	Biology	234	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Fort Worth Ballroom 6
Bourassa, Mary	General Math	60	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 203 B
Bower, Travis	General Interest	176	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Texas Ballroom J
Bowler, Johnson Pat	CAS	156	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 103 B
Brese, Mary A.	Geometry	266	Saturday	11:00 a.m noon	Omni Hotel	Fort Worth Ballroom 3
Bretthauer, James	Physics	153	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Fort Worth Ballroom 8
Bricker, Scott	Algebra 2	66	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Sundance 3
Broberg, Diane	Middle Grades Math	163	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 202 C
Broberg, Diane	Middle Grades Math	249	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 201 A
Brooks, Patricia	Calculus	74	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Texas Ballroom C
Brown, Russell	Geometry	244	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Texas Ballroom J
Browne, Ellen	General Math	132	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 204 A
Bruce, Sharon	Assessment	78	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Fort Worth Ballroom 2
Buescher, Michael	CAS	120	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 103 A
Burkholder, Marsha	Elementary Math	140	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Texas Ballroom I
Burkholder, Marsha	Elementary Math	230	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Texas Ballroom G
Burrill, Gail	Statistics	18	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 201 B
Burrill, Gail	Middle Grades Math	88	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 201 A
Burross, Kerry	Geometry	102	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Sundance 4
Burross, Kerry	General Interest	366	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Texas Ballroom G
Byer, Becky	Programming	204	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Sundance 2

Presenter Index (127) @TICalculators

Name	Subject	No.	Day	Time	Location	Room
Cable, Vicki	Geometry	277	Saturday	11:00 a.m noon	Omni Hotel	Texas Ballroom I
Caison, Rebecca	Algebra 1	218	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 202 A
Campe, Karen	Geometry	193	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Texas Ballroom B
Campe, Karen	Algebra 2	275	Saturday	11:00 a.m noon	Omni Hotel	Sundance 5
Carlson, Veronica	Algebra 1	27	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 204 B
Caroscio, Bill	General Interest	69	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Texas Ballroom H
Carson, Alice	Algebra 1	161	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 202 A
Carter, Vicki	Calculus	38	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Texas Ballroom B
Casey, Ruth	Algebra 1	216	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 201 B
Casey, Tammy	Geometry	274	Saturday	11:00 a.m noon	Omni Hotel	Sundance 4
Chan, Yew Fook	Algebra 1	270	Saturday	11:00 a.m noon	Omni Hotel	Fort Worth Ballroom 8
Chao, Mayra	Middle Grades Math	93	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 202 C
Chao, Mayra	Middle Grades Math	283	Saturday	1:00 p.m 2:00 p.m.	Convention Ctr.	Meeting Room 201 A
Chapman, Louise	Assessment	43	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Fort Worth Ballroom 2
Chatman, Monique	Algebra 2	296	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Texas Ballroom C
Chaves, Edward	Connecting Science and Math/STEM	104	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Texas Ballroom H
Cichocki, Sharon	Algebra 1	25	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 203 C
Cimino, Mike	Middle Grades Science	83	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Fort Worth Ballroom 8
Cockburn, Karen	General Math	167	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 204 A
Collins, Ken	Precalculus	110	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Texas Ballroom D
Conzemius, Lisa	Statistics	251	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 201 C
Corn, Jeff	Precalculus	139	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Texas Ballroom H







Name	Subject	No.	Day	Time	Location	Room
Cox, Mark	Geometry	147	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Fort Worth Ballroom 1
Craddock, Kari	Algebra 1	257	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 203 C
Cucci, Audrey	Connecting Science and Math/STEM	47	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Fort Worth Ballroom 7
Curran, Kristy	Algebra 1	57	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 202 B
Dahan, Jean-Jacques	Geometry	6	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Fort Worth Ballroom 1
Damaske, Jane	Middle Grades Math	53	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 201 A
Damaske, Jane	Middle Grades Math	125	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 201 C
Daniels, Hugh	Algebra 2	262	Saturday	11:00 a.m noon	Omni Hotel	Texas Ballroom C
Davidian, Ann	Algebra 1	21	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 202 B
Davis, Jon	General Interest	268	Saturday	11:00 a.m noon	Omni Hotel	Fort Worth Ballroom 6
Davis, Ronda	Administrator	264	Saturday	11:00 a.m noon	Omni Hotel	Texas Ballroom G
Day, Judy	Biology	81	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Fort Worth Ballroom 6
Day, Judy	Biology	203	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Stockyards 2
Decovsky, Fred	Middle Grades Math	23	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 202 D
Decovsky, Fred	Geometry	198	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Fort Worth Ballroom 3
Despain, Jared	General Math	190	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 204 A
Dick, Thomas	CAS	42	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Fort Worth Ballroom 1
Disher, Fan	Precalculus	208	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Texas Ballroom H
Disher, Fan	Algebra 2	150	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Fort Worth Ballroom 4
Dodd, Greg	Connecting Science and Math/STEM	11	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Fort Worth Ballroom 7
Dodd, Greg	Chemistry	202	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Fort Worth Ballroom 8
Donovan, Dennis	Authoring	374	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Sundance 2
Doty, Vincent	Middle Grades Math	58	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 202 C
Drougel, Marc	General Science	371	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Fort Worth Ballroom 7

@TICalculators Presenter Index (129)

Name	Subject	No.	Day	Time	Location	Room
Easter, Dawn	General Interest	303	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Fort Worth Ballroom 7
Ellis, Wade	Algebra 1	291	Saturday	1:00 p.m 2:00 p.m.	Convention Ctr.	Meeting Room 203 C
England, Katie	Algebra 1	189	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 203 C
England, Katie	Assessment	367	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Fort Worth Ballroom 2
Everding, Sherry	Algebra 1	185	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 202 B
Ewry, Daryl	General Interest	348	Saturday	4:00 p.m 5:30 p.m.	Convention Ctr.	Meeting Room 103 A
Fagan, Patsy	General Math	130	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 203 B
Falley, Brandi	Statistics	106	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Texas Ballroom J
Farahani, Beverly	Precalculus	40	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Texas Ballroom D
Fariss, Patrick	Assessment	231	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Fort Worth Ballroom 2
Ferneyhough, Fred	CAS	86	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 103 B
Ferneyhough, Lynda	CAS	246	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 103 A
Fiedler, Joe	CAS	314	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 103 A
Flynn, Peter	CAS	178	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 103 A
Fotsch, Fred	Connecting Science and Math/STEM	209	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Texas Ballroom I
Fox, Ray	Geometry	172	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Sundance 4
Fox, Ray	Geometry	311	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Texas Ballroom I
Fuller, Roger	Connecting Science and Math/STEM	152	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Fort Worth Ballroom 7
Gallitano, Gail	Statistics	358	Saturday	4:00 p.m 5:30 p.m.	Convention Ctr.	Meeting Room 203 B
Gapinski, Robin	Algebra 1	5	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Texas Ballroom G
Garneau, Marc	General Math	24	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 203 B
Gasque, Elizabeth (Betty)	General Interest	382	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Convention Ctr. Ballroo
Gasque, Elizabeth (Betty)	Middle Grades Math	128	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 202 C





Name	Subject	No.	Day	Time	Location	Room
Gasque, Elizabeth (Betty)	Middle Grades Math	221	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 202 D
Giannetto, Mary	Algebra 1	133	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 204 B
Godbold, Landy	Algebra 2	54	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 201 B
Goetz, Michelle	General Math	70	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Texas Ballroom I
Gonzalez, Juan Manuel	Programming	328	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Texas Ballroom A
Gorsuch, Rachael	Statistics	211	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 102
Gough, Sam	General Interest	71	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Texas Ballroom J
Griffith, Linda	General Interest	247	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 103 B
Guntharp, Marsha	Precalculus	141	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Texas Ballroom J
Hale, Kathy	Algebra 1	191	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 204 B
Hale, Kathy	Algebra 1	320	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 202 A
Hanchett, Robert	Statistics	353	Saturday	4:00 p.m 5:30 p.m.	Convention Ctr.	Meeting Room 201 C
Hanna, John	CAS	15	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 103 B
Hanna, John	Programming	205	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Sundance 3
Harris, Donna	Middle Grades Math	94	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 202 D
Harris, Donna	Middle Grades Math	220	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 202 C
Harris, Pamela	Algebra 1	321	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 202 B
Harrow, Chris	CAS	179	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 103 B
Haskins, Jim	Programming	37	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Texas Ballroom A
Heid, M. Kathleen	CAS	210	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Texas Ballroom J
Hess, Alice	Algebra 2	45	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Fort Worth Ballroom 4
Hicks, Judy	Geometry	334	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Fort Worth Ballroom 3
High, Jennifer	General Math	26	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 204 A

Presenter Index (131) @TICalculators

Name	Subject	No.	Day	Time	Location	Room
Highman, Della	Algebra 2	136	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Sundance 3
Hocutt, Sandra	Algebra 1	63	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 204 B
Hoffman, Shayla	Calculus	144	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Texas Ballroom C
Horowitz, Susan	Administrator	196	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Texas Ballroom G
Horowitz, Susan	Administrator	298	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Texas Ballroom G
Horstman, Sheila	Precalculus	174	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Texas Ballroom H
Howe, Susan	Middle Grades Math	254	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 202 C
Hudson, Valerie	Middle Grades Math	22	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 202 C
Hudson, Valerie	Middle Grades Math	183	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 201 C
Hudson, Valerie	Algebra 2	309	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Sundance 5
lacuone, Leann	Administrator	146	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Texas Ballroom G
Isaacs, John	Programming	107	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Texas Ballroom A
Jackson, Melissa	Middle Grades Math	181	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 201 A
Jensen, Lauren	Algebra 1	168	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 204 B
Johnson, Jody	Middle Grades Math	164	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 202 D
Johnson, Nancy	Algebra 1	96	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 203 C
Johnston, Ellen	Middle Grades Math	19	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 201 C
Jones, Jean Annette	Geometry	308	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Sundance 4
Jones, Tammy L.	Elementary Math	76	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Texas Ballroom G
Jones, Tammy L.	Middle Grades Math	322	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 202 C
Julian, Stephen	CAS	315	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 103 B
Kachur, Jessica	Geometry	79	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Fort Worth Ballroom 3
Kasitz, Christine	General Interest	41	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Texas Ballroom G
Kelly, Brendan	Algebra 2	173	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Sundance 5







Name	Subject	No.	Day	Time	Location	Room
Kennedy, Dan	General Interest	292	Saturday	1:00 p.m 2:00 p.m.	Convention Ctr.	Meeting Room 204 A
Kennedy, Ron	General Interest	281	Saturday	1:00 p.m 2:00 p.m.	Convention Ctr.	Meeting Room 103 B
Kidwell, Antoinette	Algebra 2	80	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Fort Worth Ballroom 4
Kimball, Robert	Middle Grades Math	215	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 201 A
Klein, Ray	CAS	50	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 103 A
Knapp, Scott	Trigonometry	75	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Texas Ballroom D
Koehler, Mike	Statistics	55	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 201 C
Kohmetscher, David	Statistics	349	Saturday	4:00 p.m 5:30 p.m.	Convention Ctr.	Meeting Room 103 B
Kohout, Jessica	Biology	151	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Fort Worth Ballroom 6
Kokason, Naomi	Geometry	300	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Fort Worth Ballroom 3
Kucera, Lee	Statistics	282	Saturday	1:00 p.m 2:00 p.m.	Convention Ctr.	Meeting Room 104
Kwee, Tiow Choo	General Math	165	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 203 B
Lalani, Amin	Algebra 1	225	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 204 B
LaMaster, John	Precalculus	34	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Texas Ballroom H
Lancaster, Rick	Precalculus	229	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Texas Ballroom D
Lapp, Douglas	Algebra 1	166	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 203 C
Leaman, Kara	Algebra 2	67	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Sundance 4
Lee, Joyce	Algebra 2	32	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Sundance 4
Lepeska, Jon	Geometry	312	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Texas Ballroom J
Lesniewski, Ray	Chemistry	337	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Fort Worth Ballroom 7
Levine-Wissing, Robin	Statistics	124	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 201 B
Littleton, Pam	Middle Grades Math	355	Saturday	4:00 p.m 5:30 p.m.	Convention Ctr.	Meeting Room 202 B
Lobe, Randy	Algebra 2	9	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Fort Worth Ballroom 4
Long, Michael	Calculus	3	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Texas Ballroom C

@TICalculators Presenter Index 133

Name	Subject	No.	Day	Time	Location	Room
Longueira, Chris	Middle Grades Math	217	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 201 C
Lowe, Jim	General Math	256	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 203 B
Lyublinskaya, Irina	CAS	212	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 103 A
Lyublinskaya, Irina	General Math	310	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Texas Ballroom H
Mabbott, Art	Precalculus	278	Saturday	11:00 a.m noon	Omni Hotel	Texas Ballroom J
MacKay, Stephanie	General Interest	52	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 104
Maestas, Abel	Statistics	245	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 102
Magner, Philip	Geometry	295	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Texas Ballroom B
Mankus, Margo Lynn	Algebra 1	272	Saturday	11:00 a.m noon	Omni Hotel	Sundance 2
Mankus, Margo Lynn	Algebra 1	341	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Sundance 3
Mara, Pat	Precalculus	365	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Texas Ballroom D
Martinez, Katie	Algebra 1	327	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 204 B
McCalla, Jeff	General Math	269	Saturday	11:00 a.m noon	Omni Hotel	Fort Worth Ballroom 7
McCalla, Jeff	Algebra 2	330	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Texas Ballroom C
McKenny, Jean	Middle Grades Math	186	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 202 C
McKenny, Jean	General Interest	280	Saturday	1:00 p.m 2:00 p.m.	Convention Ctr.	Meeting Room 103 A
McKinley, Kathleen	Algebra 2	342	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Sundance 4
McSpadden, Dona	Geometry	44	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Fort Worth Ballroom 3
McVay, Peg	Algebra 2	65	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Sundance 2
Medrano, Noe	Middle Grades Math	255	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 202 D
Merriweather, Michelle	Precalculus	195	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Texas Ballroom D
Middlebrook, Christina	Connecting Science and Math/STEM	370	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Fort Worth Ballroom 6
Miltenberg, JoAnn	Connecting Science and Math/STEM	116	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Fort Worth Ballroom 6
Mitchell, Christopher	Programming	192	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Texas Ballroom A
Mitchener, Jan	Precalculus	378	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Texas Ballroom H





Name	Subject	No.	Day	Time	Location	Room
Mize, Josh	Statistics	214	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 104
Morstein, Todd	General Science	201	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Fort Worth Ballroom 7
Moskowitz, Stuart	Algebra 1	318	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 201 B
Moya, Frank	CAS	213	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 103 B
Murrell, Mary Beth	Geometry	368	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Fort Worth Ballroom 3
Nakamoto, Jim	General Interest	16	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 104
Nemeth, Karyn	Algebra 2	89	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 201 B
Nicodemo, Patti	Assessment	113	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Fort Worth Ballroom 2
Nicodemo, Patti	Middle Grades Math	356	Saturday	4:00 p.m 5:30 p.m.	Convention Ctr.	Meeting Room 202 C
Nutt, Deb	Middle Grades Math	307	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Sundance 3
Ogden, Stephanie	Algebra 1	346	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Texas Ballroom J
Olson, Judith	Algebra 1	219	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 202 B
Olson, Melfried	Algebra 1	306	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Sundance 2
Owens, Matthew	Algebra 2	100	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Sundance 2
Owusu, Osmond	General Math	171	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Sundance 3
Pappo, Stan	Geometry	137	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Sundance 4
Parr, Andi	Middle Grades Math	123	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 201 A
Parr, Andi	Algebra 1	287	Saturday	1:00 p.m 2:00 p.m.	Convention Ctr.	Meeting Room 202 B
Parr, Richard	Algebra 1	252	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 202 A
Parr, Richard	Precalculus	297	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Texas Ballroom D
Pennell, Adam	Authoring	294	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Texas Ballroom A
Perry, Bryson	Programming	1	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Texas Ballroom A
Peterman, Brenda	Algebra 2	138	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Sundance 5
Phegley, Sherri	Algebra 1	253	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 202 B
Phelps, Steve	Calculus	108	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Texas Ballroom B

Presenter Index (135) @TICalculators

Name	Subject	No.	Day	Time	Location	Room
Plein, Tami	Connecting Science and Math/STEM	237	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Stockyards 2
Poss, Debbie	Precalculus	4	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Texas Ballroom D
Poulsen, Robyn	General Math	224	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 204 A
Prince, Marian	Algebra 1	354	Saturday	4:00 p.m 5:30 p.m.	Convention Ctr.	Meeting Room 202 A
Raya, Rafael	General Math	290	Saturday	1:00 p.m 2:00 p.m.	Convention Ctr.	Meeting Room 203 B
Reardon, Tom	CAS	14	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 103 A
Reardon, Tom	General Math	222	Saturday	9:45 a.m 10:45 a.m.	Convention Ctr.	Meeting Room 203 B
Reardon, Tom	Geometry	345	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Texas Ballroom I
Record, Anthony	Calculus	143	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Texas Ballroom B
Reeves, David	Geometry	112	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Fort Worth Ballroom 1
Reniewicki, Robert	Physics	339	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Stockyards 2
Resendiz, Jonnathan	Calculus	39	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Texas Ballroom C
Reynolds, Shaun	Algebra 1	135	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Sundance 2
Rhodes, Matt	Geometry	239	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Sundance 3
Riggins, Julie	Algebra 2	375	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Sundance 3
Riker, Susan	Middle Grades Math	90	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 201 C
Roberts, Doug	Connecting Science and Math/STEM	82	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Fort Worth Ballroom 7
Roberts, Ed	General Science	64	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Stockyards 2
Robinson, Delbra	Connecting Science and Math/STEM	46	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Fort Worth Ballroom 6
Roble, Amanda	Assessment	333	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Fort Worth Ballroom 2
Roebuck, Valerie	Middle Grades Math	288	Saturday	1:00 p.m 2:00 p.m.	Convention Ctr.	Meeting Room 202 C
Ruda, Chris	Middle Grades Math	111	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Texas Ballroom G
Rudolph, Heidi	Algebra 2	377	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Sundance 5
Ryan, Joanne	CAS	162	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 202 B





Name	Subject	No.	Day	Time	Location	Room
Salgarino, Bernadette	Middle Grades Math	357	Saturday	4:00 p.m 5:30 p.m.	Convention Ctr.	Meeting Room 202 D
Sanchez, Abigail	Algebra 1	98	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 204 B
Sanchez, Martin	Geometry	273	Saturday	11:00 a.m noon	Omni Hotel	Sundance 3
Sanchez, Patrick	Algebra 1	238	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Sundance 2
Santana, Miriam	Algebra 1	56	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 202 A
Scherer, Jerry	Authoring	362	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Texas Ballroom A
Schisler, Tina	Precalculus	380	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Texas Ballroom J
Schjelderup, Kim	Calculus	2	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Texas Ballroom B
Schlemper, Ann	Precalculus	7	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Fort Worth Ballroom 2
Schlueter, Shawn	Biology	12	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Fort Worth Ballroom 8
Schmitz, Sarah	General Interest	302	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Fort Worth Ballroom 6
Scott, David	Statistics	177	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 102
Sheridan, Debbie	Algebra 1	352	Saturday	4:00 p.m 5:30 p.m.	Convention Ctr.	Meeting Room 201 B
Shirazi, Pareesa	General Interest	236	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Fort Worth Ballroom 8
Singh, Sukhhbir	General Math	324	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 203 B
Slate, Tracy	Assessment	30	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Sundance 3
Slobodnik, Ricci	Precalculus	101	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Sundance 3
Sly, Brittney	Algebra 2	376	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Sundance 4
Smeltz, Doug	Geometry	77	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Fort Worth Ballroom 1
Smilowitz, Rachael	Algebra 1	359	Saturday	4:00 p.m 5:30 p.m.	Convention Ctr.	Meeting Room 203 C
Smith, Beth	Algebra 1	284	Saturday	1:00 p.m 2:00 p.m.	Convention Ctr.	Meeting Room 201 B
Smith, Jason	General Interest	122	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 104
Smith, Michael	Connecting Science and Math/STEM	200	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Fort Worth Ballroom 6
Snow, Richard	General Interest	87	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 104

Presenter Index (137) @TICalculators

Name	Subject	No.	Day	Time	Location	Room
Solomon, Deobra	Algebra 1	170	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Sundance 2
Solomon, Deobra	Algebra 1	276	Saturday	11:00 a.m noon	Omni Hotel	Texas Ballroom H
Srygley, Corina	Middle Grades Math	59	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 202 D
Srygley, Corina	Middle Grades Math	317	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 201 A
St. John, Denny	Algebra 1	131	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 203 C
Stebbins, Vicki	Algebra 1	127	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 202 B
Steckler, Todd	Geometry	304	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Fort Worth Ballroom 8
Steinke, Tom	General Math	35	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Texas Ballroom I
Stern, Howard	Algebra 2	207	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Sundance 5
Suarez, Lisa	General Math	62	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 204 A
Sword, David	General Math	95	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 203 B
Terrill, Holly	General Math	97	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 204 A
Thibodeaux, Stacy	Biology	134	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Stockyards 2
Thomas, Kim	Algebra 2	103	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Sundance 5
Thomas, Sarah	General Interest	188	Saturday	8:00 a.m 9:30 a.m.	Convention Ctr.	Meeting Room 203 B
Timms, Tony	Algebra 2	33	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Sundance 5
Toomey, Sarada	Algebra 2	343	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Sundance 5
Trahan, Scott	Algebra 2	115	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Fort Worth Ballroom 4
Traylor, Kathy	General Interest	155	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 103 A
True, Chris	Statistics	316	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 104
Trujillo, RuthieAnn	Assessment	299	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Fort Worth Ballroom 2
Underwood, Becky	Programming	226	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Texas Ballroom A







Van Dyken, Kymn         Statistics         323         Saturday         2:15 p.m3:45 p.m.         Convention Ctr.         Meeting Room 202 D           Veater, Carl         Algebra 1         259         Saturday         11:00 a.m noon         Convention Ctr.         Meeting Room 204 B           Vincent, Lynda         Connecting Science and Math/STEM         271         Saturday         11:00 a.m noon         Omni Hotel         Stockyards 2           von Rosenberg, Mark         Geometry         149         Friday         4:15 p.m 5:15 p.m.         Omni Hotel         Fort Worth Ballroom 3           Vonder Embse, Charles         Geometry         329         Saturday         2:15 p.m 3:45 p.m.         Omni Hotel         Texas Ballroom B           Ward, Barbara         Algebra 1         92         Friday         1:45 p.m 2:45 p.m.         Convention Ctr.         Meeting Room 202 B           Ward, Barbara         Chemistry         305         Saturday         1:90 p.m 2:200 p.m.         Omni Hotel         Texas Ballroom C           Wares, Arsalan         Geometry         8         Friday         1:00 p.m 2:200 p.m.         Omni Hotel         Fort Worth Ballroom 3           Warmbrodt, Gayle         General Interest         326         Saturday         2:15 p.m 3:45 p.m.         Convention Ctr.		Name	Subject	No.	Day	Time	Location	Room
Vincent, Lynda Connecting Science and Math/STEM 271 Saturday 11:00 a.m noon Omni Hotel Stockyards 2  von Rosenberg, Mark Geometry 149 Friday 4:15 p.m 5:15 p.m. Omni Hotel Fort Worth Ballroom 3  Vonder Embse, Charles Geometry 329 Saturday 2:15 p.m 3:45 p.m. Omni Hotel Texas Ballroom B  Wander, Roger Geometry 363 Saturday 4:00 p.m 5:30 p.m. Omni Hotel Texas Ballroom B  Ward, Barbara Algebra 1 92 Friday 1:45 p.m 2:45 p.m. Convention Ctr. Meeting Room 202 B  Ward, Barbara Chemistry 305 Saturday 1:00 p.m 2:00 p.m. Omni Hotel Stockyards 2  Wares, Arsalan Geometry 8 Friday 1:00 p.m 2:00 p.m. Omni Hotel Fort Worth Ballroom 3  Warmbrodt, Gayle General Interest 326 Saturday 2:15 p.m 3:45 p.m. Convention Ctr. Meeting Room 204 A  Washburn, Scott Algebra 2 228 Saturday 9:45 a.m 10:45 a.m. Omni Hotel Texas Ballroom C  Watson, Tracy Geometry 240 Saturday 9:45 a.m 10:45 a.m. Omni Hotel Sundance 4  Welch, Peggy Statistics 13 Friday 10:00 a.m 11:30 a.m. Convention Ctr. Meeting Room 102  Welch, Peggy General Science 118 Friday 10:00 a.m 11:30 a.m. Convention Ctr. Meeting Room 102  Welch, Peggy General Science 118 Friday 3:00 p.m 4:00 p.m. Omni Hotel Fort Worth Ballroom 7  West, Stephen Geometry 114 Friday 3:00 p.m 4:00 p.m. Omni Hotel Fort Worth Ballroom 7  West, Stephen Geometry 114 Friday 3:00 p.m 4:00 p.m. Omni Hotel Fort Worth Ballroom 7  Wheeler, Ann Algebra 1 175 Friday 4:15 p.m 5:15 p.m. Omni Hotel Fort Worth Ballroom 8  Wheeler, Judy Middle Grades Math 129 Friday 3:00 p.m 4:00 p.m. Convention Ctr. Meeting Room 202 D  Whitecotton, Cassie General Science 48 Friday 12:30 p.m 1:30 p.m. Omni Hotel Fort Worth Ballroom 8  Whittington, Tara Algebra 1 206 Saturday 8:00 a.m 9:30 a.m. Omni Hotel Sundance 4  Wilkie, Daniel Precalculus 145 Friday 4:15 p.m 5:15 p.m. Omni Hotel Sundance 4	,	Van Dyken, Kymn	Statistics	323	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 202 D
vincent, Lynna         Math/STEM         271         Saturday         1130 a.m noon         Omni Hotel         Sockyards 2           von Rosenberg, Mark         Geometry         149         Friday         4.15 p.m 5:15 p.m.         Omni Hotel         Fort Worth Ballroom 3           Vonder Embse, Charles         Geometry         329         Saturday         2:15 p.m 3:45 p.m.         Omni Hotel         Texas Ballroom B           Ward, Barbara         Algebra 1         92         Friday         1:45 p.m 2:45 p.m.         Convention Ctr.         Meeting Room 202 B           Ward, Barbara         Chemistry         305         Saturday         1:00 p.m 2:00 p.m.         Omni Hotel         Stockyards 2           Wares, Arsalan         Geometry         8         Friday         10:00 a.m 11:30 a.m.         Omni Hotel         Fort Worth Ballroom 3           Warbordt, Gayle         General Interest         326         Saturday         2:15 p.m 3:45 p.m.         Convention Ctr.         Meeting Room 204 A           Washburn, Scott         Algebra 2         228         Saturday         9:45 a.m 10:45 a.m.         Omni Hotel         Texas Ballroom C           Welch, Peggy         Statistics         13         Friday         10:00 a.m 11:30 a.m.         Convention Ctr.         Meeting Room 102 <td></td> <td>Veater, Carl</td> <td>Algebra 1</td> <td>259</td> <td>Saturday</td> <td>11:00 a.m noon</td> <td>Convention Ctr.</td> <td>Meeting Room 204 B</td>		Veater, Carl	Algebra 1	259	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 204 B
Vonder Embse, Charles Geometry 329 Saturday 2:15 p.m 3:45 p.m. Omni Hotel Texas Ballroom B  Wander, Roger Geometry 363 Saturday 4:00 p.m 5:30 p.m. Omni Hotel Texas Ballroom B  Ward, Barbara Algebra 1 92 Friday 1:45 p.m 2:45 p.m. Convention Ctr. Meeting Room 202 B  Ward, Barbara Chemistry 305 Saturday 1:00 p.m 2:00 p.m. Omni Hotel Stockyards 2  Wares, Arsalan Geometry 8 Friday 10:00 a.m 11:30 a.m. Omni Hotel Fort Worth Ballroom 3  Warmbrodt, Gayle General Interest 326 Saturday 2:15 p.m 3:45 p.m. Convention Ctr. Meeting Room 204 A  Washburn, Scott Algebra 2 228 Saturday 9:45 a.m 10:45 a.m. Omni Hotel Texas Ballroom C  Watson, Tracy Geometry 240 Saturday 9:45 a.m 10:45 a.m. Omni Hotel Sundance 4  Welch, Peggy Statistics 13 Friday 10:00 a.m 11:30 a.m. Convention Ctr. Meeting Room 102  Welch, Peggy General Science 118 Friday 3:00 p.m 4:00 p.m. Omni Hotel Fort Worth Ballroom 8  Welch, Peggy Connecting Science and Math/STEM 235 Saturday 9:45 a.m 10:45 a.m. Omni Hotel Fort Worth Ballroom 7  West, Stephen Geometry 114 Friday 3:00 p.m 4:00 p.m. Omni Hotel Fort Worth Ballroom 7  Wheeler, Ann Algebra 1 175 Friday 4:15 p.m 5:15 p.m. Omni Hotel Fort Worth Ballroom 1  Wheeler, Judy Middle Grades Math 129 Friday 3:00 p.m 4:00 p.m. Convention Ctr. Meeting Room 202 D  Whitecotton, Cassie General Science 48 Friday 12:30 p.m 1:30 p.m. Omni Hotel Fort Worth Ballroom 8  Whittington, Tara Algebra 1 206 Saturday 8:00 a.m 9:30 a.m. Omni Hotel Sundance 4  Wilkie, Daniel Precalculus 145 Friday 4:15 p.m 5:15 p.m. Omni Hotel Sundance 4		Vincent, Lynda	_	271	Saturday	11:00 a.m noon	Omni Hotel	Stockyards 2
Wander, RogerGeometry363Saturday4:00 p.m 5:30 p.m.Omni HotelTexas Ballroom BWard, BarbaraAlgebra 192Friday1:45 p.m 2:45 p.m.Convention Ctr.Meeting Room 202 BWard, BarbaraChemistry305Saturday1:00 p.m 2:00 p.m.Omni HotelStockyards 2Wares, ArsalanGeometry8Friday10:00 a.m 11:30 a.m.Omni HotelFort Worth Ballroom 3Warmbrodt, GayleGeneral Interest326Saturday2:15 p.m 3:45 p.m.Convention Ctr.Meeting Room 204 AWatson, TracyGeometry240Saturday9:45 a.m 10:45 a.m.Omni HotelTexas Ballroom CWelch, PeggyStatistics13Friday10:00 a.m 11:30 a.m.Convention Ctr.Meeting Room 102Welch, PeggyGeneral Science118Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 8Welch, PeggyConnecting Science and Math/STEM235Saturday9:45 a.m 10:45 a.m.Omni HotelFort Worth Ballroom 7West, StephenGeometry114Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 7Wheeler, AnnAlgebra 1175Friday4:15 p.m 5:15 p.m.Omni HotelFort Worth Ballroom 1Wheeler, JudyMiddle Grades Math129Friday3:00 p.m 4:00 p.m.Convention Ctr.Meeting Room 202 DWhitteotton, CassieGeneral Science48Friday12:30 p.m 1:30 p.m.Omni HotelF		von Rosenberg, Mark	Geometry	149	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Fort Worth Ballroom 3
Ward, Barbara Algebra 1 92 Friday 1:45 p.m 2:45 p.m. Convention Ctr. Meeting Room 202 B  Ward, Barbara Chemistry 305 Saturday 1:00 p.m 2:00 p.m. Omni Hotel Stockyards 2  Wares, Arsalan Geometry 8 Friday 10:00 a.m 11:30 a.m. Omni Hotel Fort Worth Ballroom 3  Warmbrodt, Gayle General Interest 326 Saturday 2:15 p.m 3:45 p.m. Convention Ctr. Meeting Room 204 A  Washburn, Scott Algebra 2 228 Saturday 9:45 a.m 10:45 a.m. Omni Hotel Texas Ballroom C  Watson, Tracy Geometry 240 Saturday 9:45 a.m 10:45 a.m. Omni Hotel Sundance 4  Welch, Peggy Statistics 13 Friday 10:00 a.m 11:30 a.m. Convention Ctr. Meeting Room 102  Welch, Peggy General Science 118 Friday 3:00 p.m 4:00 p.m. Omni Hotel Fort Worth Ballroom 8  Welch, Peggy Connecting Science and Math/STEM 235 Saturday 9:45 a.m 10:45 a.m. Omni Hotel Fort Worth Ballroom 7  West, Stephen Geometry 114 Friday 3:00 p.m 4:00 p.m. Omni Hotel Fort Worth Ballroom 3  Wheeler, Ann Algebra 1 175 Friday 4:15 p.m 5:15 p.m. Omni Hotel Fort Worth Ballroom 2 D  Whitecotton, Cassie General Science 48 Friday 12:30 p.m 1:30 p.m. Omni Hotel Fort Worth Ballroom 8  Whittington, Tara Algebra 1 206 Saturday 8:00 a.m 9:30 a.m. Omni Hotel Sundance 4  Wilkie, Daniel Precalculus 145 Friday 4:15 p.m 5:15 p.m. Omni Hotel Sundance 4		Vonder Embse, Charles	Geometry	329	Saturday	2:15 p.m 3:45 p.m.	Omni Hotel	Texas Ballroom B
Ward, BarbaraChemistry305Saturday1:00 p.m 2:00 p.m.Omni HotelStockyards 2Wares, ArsalanGeometry8Friday10:00 a.m 11:30 a.m.Omni HotelFort Worth Ballroom 3Warmbrodt, GayleGeneral Interest326Saturday2:15 p.m 3:45 p.m.Convention Ctr.Meeting Room 204 AWashburn, ScottAlgebra 2228Saturday9:45 a.m 10:45 a.m.Omni HotelTexas Ballroom CWatson, TracyGeometry240Saturday9:45 a.m 10:45 a.m.Omni HotelSundance 4Welch, PeggyStatistics13Friday10:00 a.m 11:30 a.m.Convention Ctr.Meeting Room 102Welch, PeggyGeneral Science118Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 8Welch, PeggyConnecting Science and Math/STEM235Saturday9:45 a.m 10:45 a.m.Omni HotelFort Worth Ballroom 7West, StephenGeometry114Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 3Wheeler, AnnAlgebra 1175Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom 1Wheeler, JudyMiddle Grades Math129Friday3:00 p.m 4:00 p.m.Convention Ctr.Meeting Room 202 DWhitecotton, CassieGeneral Science48Friday12:30 p.m 1:30 p.m.Omni HotelFort Worth Ballroom 8Whittington, TaraAlgebra 1206Saturday8:00 a.m 9:30 a.m.Omni HotelSun	7	Wander, Roger	Geometry	363	Saturday	4:00 p.m 5:30 p.m.	Omni Hotel	Texas Ballroom B
Wares, ArsalanGeometry8Friday10:00 a.m 11:30 a.m.Omni HotelFort Worth Ballroom 3Warmbrodt, GayleGeneral Interest326Saturday2:15 p.m 3:45 p.m.Convention Ctr.Meeting Room 204 AWashburn, ScottAlgebra 2228Saturday9:45 a.m 10:45 a.m.Omni HotelTexas Ballroom CWatson, TracyGeometry240Saturday9:45 a.m 10:45 a.m.Omni HotelSundance 4Welch, PeggyStatistics13Friday10:00 a.m 11:30 a.m.Convention Ctr.Meeting Room 102Welch, PeggyGeneral Science118Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 8Welch, PeggyConnecting Science and Math/STEM235Saturday9:45 a.m 10:45 a.m.Omni HotelFort Worth Ballroom 7West, StephenGeometry114Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 3Wheeler, AnnAlgebra 1175Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom IWheeler, JudyMiddle Grades Math129Friday3:00 p.m 4:00 p.m.Convention Ctr.Meeting Room 202 DWhitecotton, CassieGeneral Science48Friday12:30 p.m 1:30 p.m.Omni HotelFort Worth Ballroom 8Whittington, TaraAlgebra 1206Saturday8:00 a.m 9:30 a.m.Omni HotelFort Worth Ballroom BWilkie, DanielPrecalculus145Friday4:15 p.m 5:15 p.m.Omni Hotel </td <td></td> <td>Ward, Barbara</td> <td>Algebra 1</td> <td>92</td> <td>Friday</td> <td>1:45 p.m 2:45 p.m.</td> <td>Convention Ctr.</td> <td>Meeting Room 202 B</td>		Ward, Barbara	Algebra 1	92	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 202 B
Warmbrodt, GayleGeneral Interest326Saturday2:15 p.m 3:45 p.m.Convention Ctr.Meeting Room 204 AWashburn, ScottAlgebra 2228Saturday9:45 a.m 10:45 a.m.Omni HotelTexas Ballroom CWatson, TracyGeometry240Saturday9:45 a.m 10:45 a.m.Omni HotelSundance 4Welch, PeggyStatistics13Friday10:00 a.m 11:30 a.m.Convention Ctr.Meeting Room 102Welch, PeggyGeneral Science118Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 8Welch, PeggyConnecting Science and Math/STEM235Saturday9:45 a.m 10:45 a.m.Omni HotelFort Worth Ballroom 7West, StephenGeometry114Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 3Wheeler, AnnAlgebra 1175Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom IWheeler, JudyMiddle Grades Math129Friday3:00 p.m 4:00 p.m.Convention Ctr.Meeting Room 202 DWhitecotton, CassieGeneral Science48Friday12:30 p.m 1:30 p.m.Omni HotelFort Worth Ballroom 8Whittington, TaraAlgebra 1206Saturday8:00 a.m 9:30 a.m.Omni HotelSundance 4Wilkie, DanielPrecalculus145Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom D		Ward, Barbara	Chemistry	305	Saturday	1:00 p.m 2:00 p.m.	Omni Hotel	Stockyards 2
Washburn, ScottAlgebra 2228Saturday9:45 a.m 10:45 a.m.Omni HotelTexas Ballroom CWatson, TracyGeometry240Saturday9:45 a.m 10:45 a.m.Omni HotelSundance 4Welch, PeggyStatistics13Friday10:00 a.m 11:30 a.m.Convention Ctr.Meeting Room 102Welch, PeggyGeneral Science118Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 8Welch, PeggyConnecting Science and Math/STEM235Saturday9:45 a.m 10:45 a.m.Omni HotelFort Worth Ballroom 7West, StephenGeometry114Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 3Wheeler, AnnAlgebra 1175Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom IWheeler, JudyMiddle Grades Math129Friday3:00 p.m 4:00 p.m.Convention Ctr.Meeting Room 202 DWhitecotton, CassieGeneral Science48Friday12:30 p.m 1:30 p.m.Omni HotelFort Worth Ballroom 8Whittington, TaraAlgebra 1206Saturday8:00 a.m 9:30 a.m.Omni HotelSundance 4Wilkie, DanielPrecalculus145Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom D		Wares, Arsalan	Geometry	8	Friday	10:00 a.m 11:30 a.m.	Omni Hotel	Fort Worth Ballroom 3
Watson, TracyGeometry240Saturday9:45 a.m 10:45 a.m.Omni HotelSundance 4Welch, PeggyStatistics13Friday10:00 a.m 11:30 a.m.Convention Ctr.Meeting Room 102Welch, PeggyGeneral Science118Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 8Welch, PeggyConnecting Science and Math/STEM235Saturday9:45 a.m 10:45 a.m.Omni HotelFort Worth Ballroom 7West, StephenGeometry114Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 3Wheeler, AnnAlgebra 1175Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom IWheeler, JudyMiddle Grades Math129Friday3:00 p.m 4:00 p.m.Convention Ctr.Meeting Room 202 DWhitecotton, CassieGeneral Science48Friday12:30 p.m 1:30 p.m.Omni HotelFort Worth Ballroom 8Whittington, TaraAlgebra 1206Saturday8:00 a.m 9:30 a.m.Omni HotelSundance 4Wilkie, DanielPrecalculus145Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom D		Warmbrodt, Gayle	General Interest	326	Saturday	2:15 p.m 3:45 p.m.	Convention Ctr.	Meeting Room 204 A
Welch, PeggyStatistics13Friday10:00 a.m 11:30 a.m.Convention Ctr.Meeting Room 102Welch, PeggyGeneral Science118Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 8Welch, PeggyConnecting Science and Math/STEM235Saturday9:45 a.m 10:45 a.m.Omni HotelFort Worth Ballroom 7West, StephenGeometry114Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 3Wheeler, AnnAlgebra 1175Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom IWheeler, JudyMiddle Grades Math129Friday3:00 p.m 4:00 p.m.Convention Ctr.Meeting Room 202 DWhitecotton, CassieGeneral Science48Friday12:30 p.m 1:30 p.m.Omni HotelFort Worth Ballroom 8Whittington, TaraAlgebra 1206Saturday8:00 a.m 9:30 a.m.Omni HotelSundance 4Wilkie, DanielPrecalculus145Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom D		Washburn, Scott	Algebra 2	228	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Texas Ballroom C
Welch, PeggyGeneral Science118Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 8Welch, PeggyConnecting Science and Math/STEM235Saturday9:45 a.m 10:45 a.m.Omni HotelFort Worth Ballroom 7West, StephenGeometry114Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 3Wheeler, AnnAlgebra 1175Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom IWheeler, JudyMiddle Grades Math129Friday3:00 p.m 4:00 p.m.Convention Ctr.Meeting Room 202 DWhitecotton, CassieGeneral Science48Friday12:30 p.m 1:30 p.m.Omni HotelFort Worth Ballroom 8Whittington, TaraAlgebra 1206Saturday8:00 a.m 9:30 a.m.Omni HotelSundance 4Wilkie, DanielPrecalculus145Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom D		Watson, Tracy	Geometry	240	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Sundance 4
Welch, PeggyConnecting Science and Math/STEM235Saturday9:45 a.m 10:45 a.m.Omni HotelFort Worth Ballroom 7West, StephenGeometry114Friday3:00 p.m 4:00 p.m.Omni HotelFort Worth Ballroom 3Wheeler, AnnAlgebra 1175Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom IWheeler, JudyMiddle Grades Math129Friday3:00 p.m 4:00 p.m.Convention Ctr.Meeting Room 202 DWhitecotton, CassieGeneral Science48Friday12:30 p.m 1:30 p.m.Omni HotelFort Worth Ballroom 8Whittington, TaraAlgebra 1206Saturday8:00 a.m 9:30 a.m.Omni HotelSundance 4Wilkie, DanielPrecalculus145Friday4:15 p.m 5:15 p.m.Omni HotelTexas Ballroom D		Welch, Peggy	Statistics	13	Friday	10:00 a.m 11:30 a.m.	Convention Ctr.	Meeting Room 102
West, Stephen Geometry 114 Friday 3:00 p.m 4:00 p.m. Omni Hotel Fort Worth Ballroom 3  Wheeler, Ann Algebra 1 175 Friday 4:15 p.m 5:15 p.m. Omni Hotel Texas Ballroom I  Wheeler, Judy Middle Grades Math 129 Friday 3:00 p.m 4:00 p.m. Convention Ctr. Meeting Room 202 D  Whitecotton, Cassie General Science 48 Friday 12:30 p.m 1:30 p.m. Omni Hotel Fort Worth Ballroom 8  Whittington, Tara Algebra 1 206 Saturday 8:00 a.m 9:30 a.m. Omni Hotel Sundance 4  Wilkie, Daniel Precalculus 145 Friday 4:15 p.m 5:15 p.m. Omni Hotel Texas Ballroom D		Welch, Peggy	General Science	118	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Fort Worth Ballroom 8
Wheeler, Ann Algebra 1 175 Friday 4:15 p.m 5:15 p.m. Omni Hotel Texas Ballroom I  Wheeler, Judy Middle Grades Math 129 Friday 3:00 p.m 4:00 p.m. Convention Ctr. Meeting Room 202 D  Whitecotton, Cassie General Science 48 Friday 12:30 p.m 1:30 p.m. Omni Hotel Fort Worth Ballroom 8  Whittington, Tara Algebra 1 206 Saturday 8:00 a.m 9:30 a.m. Omni Hotel Sundance 4  Wilkie, Daniel Precalculus 145 Friday 4:15 p.m 5:15 p.m. Omni Hotel Texas Ballroom D		Welch, Peggy		235	Saturday	9:45 a.m 10:45 a.m.	Omni Hotel	Fort Worth Ballroom 7
Wheeler, Judy Middle Grades Math 129 Friday 3:00 p.m 4:00 p.m. Convention Ctr. Meeting Room 202 D  Whitecotton, Cassie General Science 48 Friday 12:30 p.m 1:30 p.m. Omni Hotel Fort Worth Ballroom 8  Whittington, Tara Algebra 1 206 Saturday 8:00 a.m 9:30 a.m. Omni Hotel Sundance 4  Wilkie, Daniel Precalculus 145 Friday 4:15 p.m 5:15 p.m. Omni Hotel Texas Ballroom D		West, Stephen	Geometry	114	Friday	3:00 p.m 4:00 p.m.	Omni Hotel	Fort Worth Ballroom 3
Whitecotton, Cassie General Science 48 Friday 12:30 p.m 1:30 p.m. Omni Hotel Fort Worth Ballroom 8  Whittington, Tara Algebra 1 206 Saturday 8:00 a.m 9:30 a.m. Omni Hotel Sundance 4  Wilkie, Daniel Precalculus 145 Friday 4:15 p.m 5:15 p.m. Omni Hotel Texas Ballroom D		Wheeler, Ann	Algebra 1	175	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Texas Ballroom I
Whittington, Tara Algebra 1 206 Saturday 8:00 a.m 9:30 a.m. Omni Hotel Sundance 4  Wilkie, Daniel Precalculus 145 Friday 4:15 p.m 5:15 p.m. Omni Hotel Texas Ballroom D		Wheeler, Judy	Middle Grades Math	129	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 202 D
Wilkie, Daniel Precalculus 145 Friday 4:15 p.m 5:15 p.m. Omni Hotel Texas Ballroom D		Whitecotton, Cassie	General Science	48	Friday	12:30 p.m 1:30 p.m.	Omni Hotel	Fort Worth Ballroom 8
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Whittington, Tara	Algebra 1	206	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Sundance 4
		Wilkie, Daniel			•	4:15 p.m 5:15 p.m.	Omni Hotel	Texas Ballroom D

@TICalculators Presenter Index (139)

Name	Subject	No.	Day	Time	Location	Room
Williams, Ray	CAS	85	Friday	1:45 p.m 2:45 p.m.	Convention Ctr.	Meeting Room 103 A
Wilson, Dennis	Calculus	142	Friday	4:15 p.m 5:15 p.m.	Omni Hotel	Texas Ballroom A
Wilson, Robb	General Interest	157	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 104
Wingert, Tracy	Geometry	261	Saturday	11:00 a.m noon	Omni Hotel	Texas Ballroom B
Woldmar, Jan Erik	Programming	72	Friday	1:45 p.m 2:45 p.m.	Omni Hotel	Texas Ballroom A
Woods, Neale	CAS	121	Friday	3:00 p.m 4:00 p.m.	Convention Ctr.	Meeting Room 103 B
Worcester, Don	Statistics	248	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 104
Xin, Zhongyi	Middle Grades Math	160	Friday	4:15 p.m 5:15 p.m.	Convention Ctr.	Meeting Room 201 C
Young, David	Assessment	197	Saturday	8:00 a.m 9:30 a.m.	Omni Hotel	Fort Worth Ballroom 2
Zbiek, Rose Mary	CAS	51	Friday	12:30 p.m 1:30 p.m.	Convention Ctr.	Meeting Room 103 B
Zelkowski, Jeremy	General Math	258	Saturday	11:00 a.m noon	Convention Ctr.	Meeting Room 204 A
Zeydel, Kim	Assessment	265	Saturday	11:00 a.m noon	Omni Hotel	Fort Worth Ballroom 2







Join the Conversa Tion **Exhibitors** 

# **Exhibitors**

# **EXHIBIT HOURS**

**LOCATION** 

Friday, March 13, 2015: 10:00 a.m. – 6:00 p.m. Saturday, March 14, 2015: 8:00 a.m. – 5:30 p.m.

**Omni Hotel - 2nd Floor Foyer Omni Hotel - 2nd Floor Foyer** 

Please take time to visit our friends in the exhibit hall and learn about their great products and services.

# **The BACH Company**

Founded in 1973, The Bach Company is one of the largest educational dealers in the US. Products include calculators and related software, calculator accessories, storage, data collection equipment and other classroom supplies.

# Brendan Kelly Publishing Inc.

We publish mathematics books and DVDs that teach high school mathematics using TI-Nspire™, TI-84 and TI-89 calculators. Our website at http://www.mathacademy.org provides free e-lessons in algebra using TI-Nspire™.

### **BRIT SEED School**

The Education programs at BRIT link global issues to local experiences by educating the public about the importance of biodiversity and sustaining our environment.

# **D&H Distributing Company**

D&H is the Nation's #1 Distributor of Calculators to Schools.

# **Fisher Science Education**

Fisher Science Education provides products, materials, resources and services for STEM educators.

### **KEMTEC™**

Kemtec<sup>™</sup>, a proprietary line of AquaPhoenix Scientific, is committed to enhancing teacher instruction by providing exceptional STEM-inspired K-12 kits. Kemtec™ kits are sold by the industry's leading educational distributors.

### M Folz

The world's most wonderful math and science t-shirts (and jewelry...)

### **Norland Research**

Calculator Controlled Robot Kit. Use your TI handhelds to control a robot in your classroom. Download a free NASA book for classroom activities. For more information, visit www.TiRobot.com.

# **Perot Museum of Nature and Science**

STEM Professional development opportunities for teachers; in and out of school time STEM enrichment experiences for students. All school programs support TEKS.

### **School Savers**

Classroom calculators distributor featuring Texas Instruments and more. Top Rhino calculator storage, Vernier sensors and probes.

### TeacherTube.com

TeacherTube is an online educational resource community for Teachers. TeacherTube is of the fastest growing flipped classroom resource environments for teachers. It's easy, fast and FREE!

### **Texas Instruments**

Stop by the Texas Instruments booth to see what's new, update your handheld or calculator operating system, speak to a TI representative or sign up for our pilot program.

# **Valley Business Machines**

Instructional Product Dealer for Texas Instruments products. Serving the educational market since 1972, offering competitive pricing and excellent customer service.

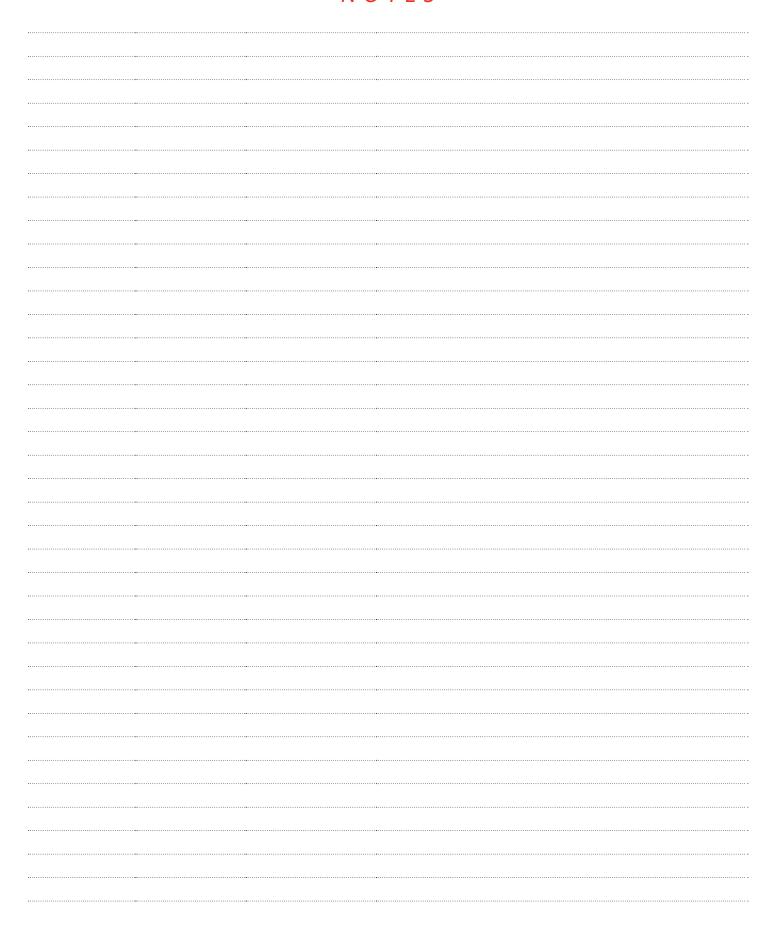
# Vernier Software & Technology™

Vernier Software & Technology™ will be exhibiting data collection equipment, software and lab manuals for math and science curriculum. Come by and see how easy it is to bring real world data into your classroom.

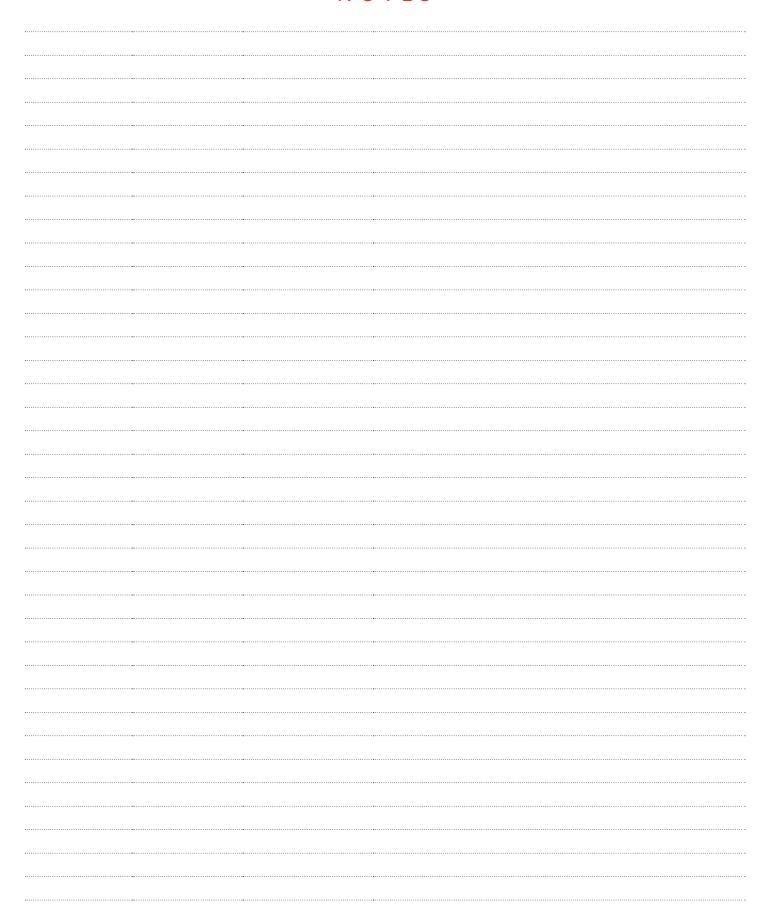




# NOTES



# NOTES









# NOTES

Angry Birds, Blackboard Collaborate, Cabri, Fatal Vision, Google Drive, M&M's, Omni Hotel, PowerPoint, Sketchpad, SMART Board, Solo, TeacherTube, Vernier Go Wireless and Vernier Video Physics are registered trademarks or trademarks or trademarks of their respective owners.

 $\label{policy} \mbox{Apple TV and iPad are trademarks of Apple Inc., registered in the U.S. and other countries.}$ 

Texas Instruments (TI) presents, as accurately as possible, its current products and services, including hardware, software, screen shots and related support offerings. TI reserves the right to modify or discontinue products or services at any time without prior notice. TI reserves the right to modify or cancel conference sessions and events without prior notice.

<sup>\*</sup>AP is a registered trademark of the College Board, which was not involved in the production of and does not endorse TI products.

 $<sup>\</sup>label{lem:B} IB is a registered \ trademark \ of the \ International \ Baccalaure at e \ Organization.$ 

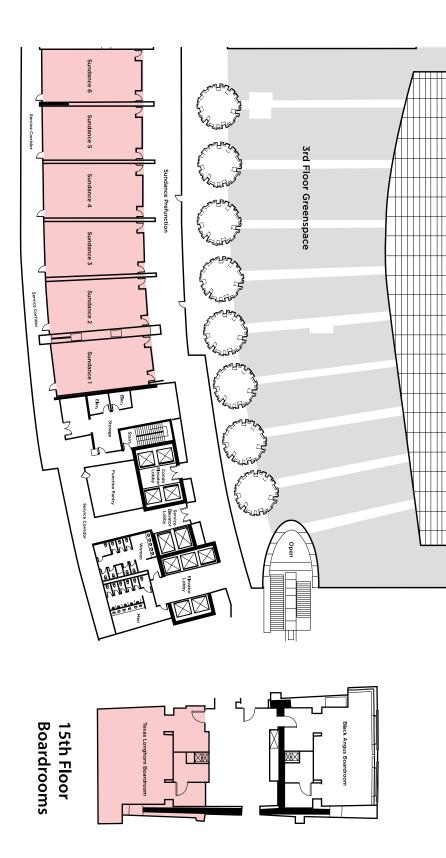
STAAR is a registered trademark of the Texas Education Agency.



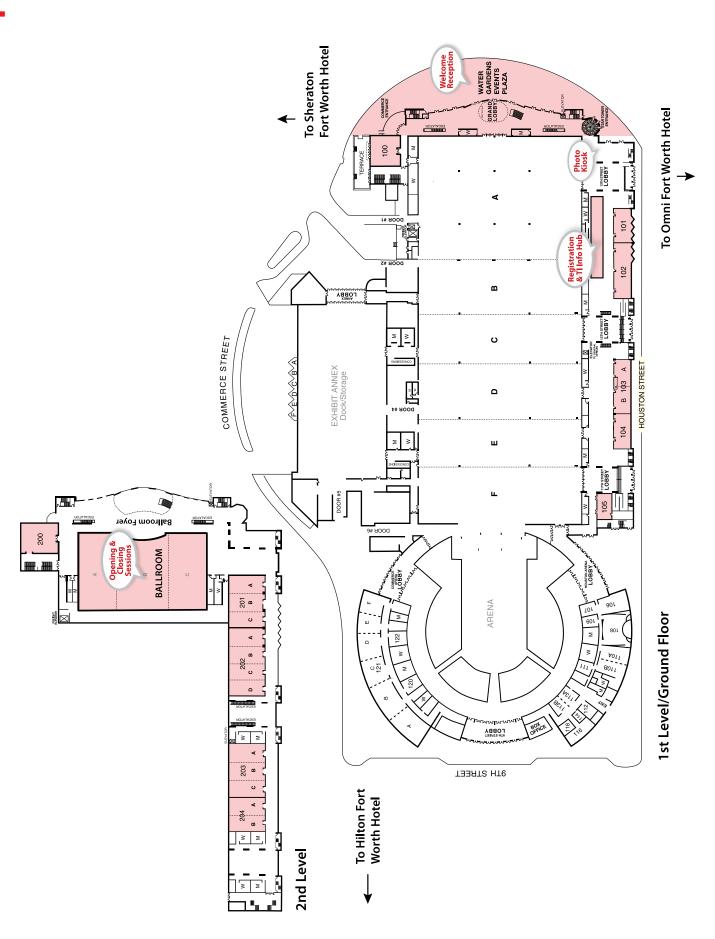




# Omni® Fort Worth Hotel Conference Area Map



3rd Floor







# scienIst

# in the classroom, lab and field



With TI, you can now offer every student a one-to-one learning experience, every day of the year, from middle grades to high school. TI offers free classroom activities for Biology, Chemistry and Physics, as well as Earth and Space Sciences. TI-Nspire™ CX handhelds support nearly 60 Vernier Software & Technology™ sensors for data collection in the lab and field. TI-Nspire™ CX handhelds are also permitted on many college entrance and AP\* science exams.

Discover all of TI's Science offerings including:

- » Subject-specific featured activities
- » Professional development opportunities
- Tl technology information

Visit education.ti.com/go/sciencensta.





# THE COUNTRY'S #1 DISTRIBUTOR

OF TEXAS INSTRUMENTS TECHNOLOGY TO SCHOOLS!



# TI-*nspire*



# **BRING SOME**

INTO THE CLASSROOM!

TI-84 Plus CE



\*TI-Nspire™ CX & TI-Nspire™ CX CAS Handhelds features:

Backlit Color LCD Display · Thin Design · 3D Graphing TI Rechargeable Battery · Teacher Kits Available





\*TI-73 Explorer" TI73FXPI ORFR



TI83PLUS



NEW!

\*TI-84 Plus TI84PLUS



\*TI-84 Plus C Silver Edition TI84PI LISCSIIVER



Available



TI30XIIS



TI30XSMULTIVIEW



TI36XPRO



\*TI-34 MultiView TI34MULTIVIEW

# WHY D&H?

BEST PRICE GUARANTEED FREIGHT

**Please** come visit D&H at T³™!

\*\* Applies to existing accounts and in-stock orders; for terms and conditions visit buycalcs.com.



800.340.1006

Fax: 717.255.6750

Call for pricing and to receive your free catalog.

www.buvcalcs.com

Atlanta, GA · Chicago, IL · Fresno, CA · Harrisburg, PA