Lita Briscoe: Norman OK

Kirsten Bohl: Durham, North Carolina

Dave Ebert: Dave from Wisconsin :-)

Sunil Singh: Hello, Everyone!

Carin DeClute: King George, VA

Kevin Dykema: Welcome from southwest Michigan- so excited to learn tonight!

Toni Galassini: Hi from Chicago!

Trena Wilkerson: Hello from Waco, TX!

Maria Reiss: Lynn, MA

Ann Hall: Charleston, WV

Ken Krehbiel: Hello from Washington, D.C.

Charles Wallis: Hello from Brevard, North Carolina.

Stacie Kyhn: Hello from AZ!

Jada Pearson: Hi, this is Edmond from Hong Kong

Richard Pieper: Idaho

Latrenda Knighten: Greetings from Baton Rouge, LA!

Emily Kavanagh: Hello from Columbia, MD

Christine Royce: Good evening -- Christine from Pennsylvania

Monique Cabellon: Renton, WA

Amy Perrault: Hello from Boston!

Dave Ebert: Hello from Wisconsin!

Charles Wallis: Hello from Brevard, North Carolina.

Richard Pieper: Idaho

Ann Hall: Hello I’m in Charleston, WV. Good evening!

Trena Wilkerson: Hello from Waco, TX!

Kelci Pike: Hi, I'm joining from New Mexico

Tabetha Cochran: Moore, Ok

Ryan Lesh: Hi from Florida

Ryan Ferree: Hello from Virginia

Hope Phillips: Greetings from Columbus, GA

Trena Wilkerson: HI Latrenda!

Marleah Hannaford: Bentonville, Arkansas

Tracy Manousaridis: Hi from Massachusetts!

Margaret Dreier: NY, Hudson River Valley

Sunil Singh: <--Toronto, Ontario

Myah Dewitt: Hello from New York

Angie Stika: from Kansas

Trena Wilkerson: HI Kirsten! So glad you are here!

Kirsten Bohl: :

Mary Ellen Ryan: Good morning from Hong Kong

Jeny Dohrer: Hello from Minnesota

Kanita DuCloux: Good evening from Kentucky

Toni Galassini: Go Golden Eagles!

Kristina Barnaby: This is Kristina from CT!

Stacie Kyhn: 3,7,12,18

Kristina Barnaby: 3, 7..

Zuzka Blasi: 3,6,10

Maria Reiss: 1, 3, 6, 10
00:25:04  Kanita DuCloux: 3, 6, 10
00:25:05  Ann Hall: 3, 6, 10, 15
00:25:08  Tracy Manousaridis: 3, 6, 10, 15, 21 ...
00:25:10  Jessica Forrester: 3, 6
00:25:23  Mary Ellen Ryan: 1, 3, 6, 10
00:25:26  Lita Briscoe: 3, 6, 10, ...
00:25:29  Kristina Barnaby: 3, 6 (not 7), 10...
00:25:30  Jennifer Wall: 1, 3, 6, 10, 15 OR 1, 3, 6, 9
00:25:35  Stacie Kyhn: oops, 3, 6, 10, 15. Added wrong.
00:27:16  Trena Wilkerson: My favorite—wonder, joy and beauty of mathematics!
00:27:55  Kristina Barnaby: @Stacie, I cannot read my own handwriting and counted a dot that was a smudge on my paper
00:28:40  Dave Ebert: find this math timeline at mathigon.org
00:32:52  Kristina Barnaby: Is that Yoko? She does not look happy.
00:40:10  Angie Stika: Will these stories work for middle school?
00:40:28  Sunil Singh: Definitely some of them:
00:41:01  Kirsten Bohl: The book is aimed at high school (Eddie Woo is a high school teacher). The next book is aimed at middle schoolers!
00:41:28  Angie Stika: So I have to wait? :)
00:41:34  Kristina Barnaby: I like The Number Devil for middle school. Looking forward to hearing more about the Shelley Pearsall book. She’s a favorite of our grade level
00:42:21  Trena Wilkerson: It’s a Numberful world has many things that can be used in middle school as well. Pascal Triangle works very well in middle and high school.
00:42:35  Kirsten Bohl: Mathical / National Math Festival recently hosted a live event with Eddie Woo. The event was accessible to middle schoolers. Replay here: https://www.nationalmathfestival.org/news/online-event-author-educator-and-youtuber-eddie-woo-sept-21-2021
00:42:38  Tracy Manousaridis: We look for patterns in the triangle in 4th and 5th grade
00:42:48  Trena Wilkerson: Excellent @Tracy!
00:42:56  Tracy Manousaridis: 😊
00:43:02  Kristina Barnaby: I’ve done this with set theory and honor’s prealg. You def could use this in 4th and 5th
00:43:41  Ann Hall: Thank you for the link Kirsten!
00:44:18  Angie Stika: Thank you for all of the info. We do study patterns in middle school, so adding another is great!
00:45:50  Kirsten Bohl: Did Pascal learn it from others? Or are each of those separate discoveries?
00:46:15  Maria Reiss: 3rd row diagonal are triangular numbers
00:46:15  Charles Wallis: I notice a column of triangular numbers
00:46:24  Lita Briscoe: Row 7 has multiples of 7
00:46:25  Kristina Barnaby: I see the triangular numbers now!
00:46:31  Peter Sorensen: powers of 11
00:46:42  Maria Reiss: “hockey stick” sums
00:46:46  Kanita DuCloux: Relation to coefficients of (a+b)^n
00:46:47  Kirsten Bohl: The patterns in the triangle are beautiful.
00:46:59 Trena Wilkerson: Rows sum to powers of two
00:47:11 Margaret Dreier: Not counting the ones, first row is even, next is odd, then even, then odds with evens in the middle, then alternating odd and even
00:47:19 Ann Hall: I love the connection to probability within the rows. I use it to teach permutations.
00:47:24 Kanita DuCloux: Triangular numbers on diagonal
00:47:25 Trena Wilkerson: Lots of symmetry
00:47:41 Tracy Manousaridis: Triangular numbers!!!
00:47:52 Peter Sorensen: Sirpinski!
00:48:19 Maria Reiss: YES!
00:48:26 Kristina Barnaby: What is it??
00:48:28 Peter Sorensen: @Maria
00:49:21 Kevin Dykema: I don’t think I’ve ever seen that hockey stick pattern below- amazing!
00:49:49 Dianna Sopala: I never saw the hockey stick pattern before.
00:51:41 Kirsten Bohl: Does this pattern show up in nature?
00:52:15 Peter Sorensen: how would the ancients describe “zoom”?
00:52:58 Jennifer Wall: Get closer/further away?
00:56:22 Kirsten Bohl: In case you want to get your whole middle school reading this book: https://www.onebookoneday.com/
00:57:38 Angie Stika: Thank you Kirsten!
00:57:56 Kirsten Bohl: USA SEF ?
00:58:16 Trena Wilkerson: When NCTM MT turned 100? I think we built one?
01:02:18 Kirsten Bohl: Wow! Very cool.
01:10:32 Dianna Sopala: I never thought about extending it to negative numbers. This is great!
01:11:59 Kirsten Bohl: If you are looking for more Mathical books: https://www.mathicalbooks.org/portfolio/books/
01:13:30 Trena Wilkerson: Many NCTM resources that relate to the topics in both books at https://www.nctm.org/classroomresources/ For example do a search for Pascals Triangle and you will find some fascinating instructional ideas!
01:13:59 Tracy Manousaridis: Wonderful! Thank you
01:14:53 Kirsten Bohl: Wonderful, how do we follow along?
01:14:54 Angie Stika: That would be awesome Sunil!!
01:15:16 Trena Wilkerson: More at: https://www.nctm.org/online-learning/Webinars/Details/533 webinar and handouts included
01:15:28 Sunil Singh: rightanglemath@gmail.com
01:15:42 Sunil Singh: (although I like righttriangle as well;))
01:15:46 Trena Wilkerson: Also check out the MyNCTM Math and Literature Community!
01:15:47 Peter Sorensen: Yes! Thank you!!!
01:16:17 Kirsten Bohl: Thank you very much. This was a lot of fun.
01:16:17 Daniel Irving: Thank you!
01:16:24 Jill Moore: Thank you for your insight and expertise, Dave and Sunil!
01:16:24 Myah Dewitt: Thank you so much!
01:16:27 Kevin Dykema: Thanks for the wonderful ideas and for inspiring us!
Latrenda Knighten: Thank you so much!!!
Trena Wilkerson: Thank you Dave and Sunil!
Edmond Lau: Thank you so much!
Jeny Dohrer: Very informative, thank you so much!
Tabetha Cochran: Thank you!!
Ann Hall: Yes thank you!
Tabetha Cochran: Thank you!!
Kristina Barnaby: Thank you!!
Kanita DuCloux: Thank you!
Lita Briscoe: Thank you!
Charles Wallis: Thank you very much. Great session!
Dave Ebert: Thanks all!
Angie Stika: Thank you so much for your time!!
Sunil Singh: Thank you, Everyone!:
Emily Kavanagh: Thanks
Mary Jones: This was awesome....Thank you!
Maria Reiss: Thank you!
Latrenda Knighten: Come to New Orleans!
Trena Wilkerson: Cannot wait for New Orleans!
Latrenda Knighten: Yes!!
Trena Wilkerson: https://www.nctm.org/nola2022/
Sunil Singh: I will be there in both New Orleans and Indianapolis:
Dave Ebert: Dave: dde@oregonsd.org
Sunil Singh: @Mathgarden
Trena Wilkerson: Yeah Sunil! See you there!
Kevin Dykema: Looking forward to seeing many of you in New Orleans and in Indianapolis!
Trina Ford: Thank you!