

00:23:52 Trena Wilkerson: Hello from Waco, TX!  
 00:24:05 Megan Riley: Hello from Canton, Ohio  
 00:24:08 Lesly Brown: Hello from Tennessee.  
 00:24:12 Leslie Texas: Hi from Louisville, KY.  
 00:24:17 Mark Phipps: DAY 76!!!!  
 00:24:17 LANY JAMERO: good morning from philippines  
 00:24:18 Catherine Bronikowski: Hi from Milwaukee, WI  
 00:24:19 Kathleen Bliss: Hello from Albany, CA  
 00:24:21 Linda Koval: Hello from Bealeton, VA!  
 00:24:26 Kathleen McFadden: Hi from Queens NY  
 00:24:26 Wayne De almeida: Hello from Katy, TX  
 00:24:29 Marissa Heitman: hello from Everett WA  
 00:24:31 Karen Pritchett: Hello from Venice Beach, CA!  
 00:24:32 Viragni Chand: Hi from CA  
 00:24:36 Sharon Black-MacKinnon: Hello from NB Canada  
 00:24:38 Chonda Long: Hello from Springfield, VA  
 00:24:39 Michael Farina: hi from the adirondacks!  
 00:24:41 dana dulzo: hello from dana novi mi  
 00:24:43 Alana Roberts: Racine, WI  
 00:24:43 Elmer Mayol: Hello from Cebu Philippines  
 00:24:44 Rosalyn Bantay: hello from Philippines  
 00:24:50 Megan Smith: Hello from Mesa, AZ  
 00:24:52 Leslie Texas: I've attended 35 sessions  
 00:24:53 Bryan Duffey: Let's go Flyers!  
 00:24:54 Wendy Kraft: Hi from WA. More than 20  
 00:24:54 Mark Phipps: Mesa, AZ 76 LIVE  
 00:24:56 Ben Sinwell: Hey to Angola!!  
 00:24:56 Westley Mildenhall: Watched 1 recording, first live, from NYC  
 00:24:57 Sharon Black-MacKinnon: this is my 76th webinar  
 00:25:02 dana dulzo: 61  
 00:25:02 PALANISAMY KATHIR VELOO: 30  
 00:25:04 Marissa Heitman: I am on # 35  
 00:25:04 Olga Kosheleva: This is my 76th webinar, hello from El Paso, TX!  
 00:25:04 Roberto Marquez: Hello from Los Angeles, CA, probably  
 attended 8 sessions  
 00:25:04 Viragni Chand: 70  
 00:25:05 Vicente Lopez: From Chicago 4 sessions  
 00:25:08 Karen Pritchett: Attended 4, viewed 3!  
 00:25:09 Rose Hutcherson: 20  
 00:25:10 Angela Ensminger: Seattle, WA area - about 10 sessions  
 00:25:11 John DeWitt: Joseph, Oregon 2 sessions  
 00:25:11 Wanda Parker: Hi from Halifax Co., VA  
 00:25:16 David Morrow: 13  
 00:25:17 Peta-Gaye Benjamin: 11th from Edenton NC  
 00:25:19 Theresa Houston: Attended 2 sessions  
 00:25:19 Mikko Bojarsky: Hello from Santa Rosa, CA. Second session.  
 00:25:20 Linda Koval: This is my 19th one.  
 00:25:23 Darlene Tyler: Cleveland, Ohio  
 00:25:24 Amy Cole: Hi from Massachusetts, 2 sessions  
 00:25:26 Georgina Coffin: Hello from Fircrest, Washington - 4

00:25:26 Ana Alcaraz: Hi from Atlanta, GA -- ~25 sessions  
00:25:27 Darlene Tyler: 20 sessions  
00:25:27 Wayne De almeida: I viewed 7 this far. This is my 8th.  
00:25:29 Francis Kisner: Another beautiful day in Pennsylvania. I have not  
kept track of my viewing. Not 76 but probably more than 20  
00:25:29 Nora Marasigan: Hello from Philippines.  
00:25:31 Patricia Johnston: Hello from Laurel, Md. I've attended or  
viewed approx. 30 sessions.  
00:25:32 Wanda Parker: 16th session  
00:25:34 Laura Semian: Hey from Sarasota, FL  
00:25:38 Beth Kobett: Hi All from Maryland! :)  
00:25:38 William Luke: Good Evening from Central Texas  
00:25:39 Laura Semian: This is my #5  
00:25:39 Bruce Grip: Bruce Grip, California (Third)  
00:25:40 David Morrow: David from Arizona, 13 sessions  
00:25:41 Sue Womack: From Springville, UT  
00:25:43 Carole Bamford: 50+ in Montreal Canada  
00:25:43 Rose Hutcherson: Hello from New York  
00:25:43 Cheryl Ann Doyle E Barran: hi from Cheryl in boogie down Bronx  
00:25:44 Eunice Dimasangal: Morning.. ☺  
00:25:47 Michael Farina: on my 7th session  
00:25:51 Ma. Lorena Aloquina: goodmorning from the Philippines! 20th  
session...  
00:25:54 Denise Griffiths: Over 65 sessions  
00:25:55 Natasha Gambarov: Hello from Boston, MA :)  
00:25:55 Melanie Carter: Hi, from St. Louis, MO  
00:25:57 Carolina Napp-Avelli: Hello from Greenbelt, MD! I have attended or  
watched between 20 and 30 sessions  
00:25:58 Estelito Reyes: Hello from Baltimore, MD  
00:25:58 f8d1aaf2: hello everyone from india  
00:25:58 Ann Marcellin: Hi from Corning, NY. I have been to 6 sessions.  
00:26:04 Victoria Gradel: Hello from Philly.  
00:26:07 Kathy Rubendall: Hello from Hoboken NJ; about 50 sessions  
00:26:09 Gladys Okugbeni: Gladys from Maryland & DC  
00:26:14 Justin Klinger: Hello From IL  
00:26:16 Laura Semian: What number out of 100 is this presentation?  
00:26:17 Ocella Davis: Hello This is Ocella from Port St Lucie, FL. 4  
sessions  
00:26:20 Melonie Smith: Hello from Chicago  
00:26:20 Bryan Bagala: Hello from Westchester, NY  
00:26:21 Mark Phipps: I've been to ALL of them live. I'd never watch them  
after the fact. I hope to see them all!!  
00:26:22 Maria Padiernos: Hello from Detroit, MI  
00:26:23 Denise Walston: hello from Chesapeake, Virginia  
00:26:24 Abdul Razak Othman: Hi from Malaysia  
00:26:25 Todd Smallcanyon: southern Utah, 25 +  
00:26:29 Randolph Chapman: Hello from NYC  
00:26:30 Nithya Soundararajan: Hello  
00:26:30 Christine Friberg: Hi from NH  
00:26:31 LIANFANG LU: Hello from Little Rock AR

00:26:36 Patti Scharschmidt: Hello from Port Lavaca, TX  
00:26:44 Emerlina Binuya: Hello! From Petersburg, VA  
00:26:44 Deborah Lira: Hi from Richmond, Ca.  
00:26:45 MaryJo Swann: Hello from Kansas!  
00:26:47 Ray Mark Cariquez: Hello from AZ.  
00:26:48 Susan Danskin: Hi from Ithaca NY more than 30 sessions  
00:26:51 Geraldine Hayden: Hello everyone  
00:26:52 GRACE HARRIS: Hello from Glen Burnie, MD  
00:26:57 Lance Brauchla: Lance from IN about 25  
00:27:04 Isabel Arcaya: Hello from Sunrise, Fl  
00:27:08 Nitin Malviya: Hello from India  
00:27:09 Cherish Alberts: Hi from Virginia :-)  
00:27:13 Carol Watson: FCPS in Reston, VA  
00:27:13 Robin Dubiel: Hello from Saskatchewan, Canada!  
00:27:13 Brian Chalmers: Hello from Shanghai  
00:27:14 Joyce Meier: Hi from Illinois!  
00:27:18 Betsy Smith: Hello from South Carolina!  
00:27:19 India Puch: India from Columbia, SC day 62  
00:27:20 William Speer: Hello from Bill Speer in Las Vegas  
00:27:23 Pauline Oji: From Baltimore MD  
00:27:26 Ben Sinwell: He Bill Speer!  
00:27:29 belkis ceri: Hi from San Jose Ca  
00:27:30 peter zirnis: Hi from Ontario Canada  
00:27:31 Jacqueline Colbourne: Hi from MD  
00:27:31 Catherine Abbott: Hello from Maryland.  
00:27:31 Ben Sinwell: Hey Bill SPEer  
00:27:32 Nicole Krysa: Hi from Madison, NJ!  
00:27:39 Elizabeth Pacheco: Hello from East Providence, RI  
00:27:39 Regina Williams: From Camden, AL  
00:27:46 Janet Bernard: Hello from Florida.  
00:27:50 W Tad Johnston: Hi from Tad in DC, only 42 of the 100 years teaching  
algebra  
00:27:51 Patrick Montague: Hi from Weslaco, Tx 22+  
00:27:52 Margaret Thomas: Hi from Boston, MA  
00:27:53 Honey Sacro Swem: Hello from Redlands, CA  
00:27:56 Henry Kepner: hi. hank  
00:27:58 Shashidhar Belbase: Hello from the UAE !  
00:28:04 Jeff Shih: hi from las vegas!  
00:28:06 Barbara Post: Hi from Orange, CA (10 sessions)\  
00:28:12 Aya Zvaigzne: Cheers from Nashville, TN - lost count of how many  
sessions.... so many jewels  
00:28:19 Abigail Santiago: Hi from KY  
00:28:34 Paula Fendley: Regina Williams, I grew up in Thomasville!  
00:28:38 LeAnna Deveaux-Miller: GOOD EVENING FROM: New Providence, The  
Bahamas  
00:29:00 Kathy Medrick: Hello from Cleveland  
00:29:01 Leslie Texas: yes  
00:29:02 India Puch: Yes  
00:29:02 Linda Koval: Yes.  
00:29:04 W Tad Johnston: yes

00:29:05 Laura Semian: yes  
00:29:09 PALOMA CARRERA-ANDINO: Hi from El Paso, Tx  
00:29:09 Elmer Mayol: Yes  
00:29:09 Catherine Abbott: yes  
00:29:09 f8d1aaf2: yes  
00:29:09 Wanda Parker: yes  
00:29:10 Lawanda Mahomes: Hi everyone! Chicago, Illinois  
00:29:11 Faith Peddie: Yes we can hear you :-)  
00:29:12 PALOMA CARRERA-ANDINO: yes  
00:29:12 GRACE HARRIS: yes  
00:29:13 Sharon Black-MacKinnon: yes  
00:29:15 India Puch: Wow!  
00:29:21 PALANISAMY KATHIR VELOO: yes  
00:29:36 Faith Peddie: @Janet, yes!!  
00:29:38 Kathy Kamaau: yes  
00:29:44 Catherine Abbott: Great Job on the NCTM100Days  
00:29:46 Arelys Arenas: Hi to everyone from New York  
00:29:54 Babette Benken: Glad everyone's here...yes, love the slide rule  
00:30:03 Jet Yeung: Hello Everyone --Jet from Henderson, Nevada  
00:30:14 Catherine Abbott: I distantly remember slide rules.  
00:30:20 Ellen Metzger: Hello from Newton, MA  
00:30:32 Genesis Docena: Hello from Washington DC  
00:30:39 SHANKAR SARKAR: Hi everyone!  
00:30:39 maria centeno: Texas  
00:31:01 Grace Weissmann: Hello from Baltimore  
00:31:02 Eduardo Enjambre: Hello from Upper Marlboro, Maryland.  
00:31:09 Sage Moore: Oakland here.  
00:31:18 Cindy Bryant: Greetings all! Audio issues resolved!  
00:31:20 Babette Benken: Happy to see so many states represented!  
00:31:22 Nicole Walden: Oakland? Smokin?  
00:31:42 Catherine Abbott: Reasons sound very familiar. Show the human  
experience, then and now, is still human.  
00:31:43 Walter Shaner: Hi from Auckland, New Zealand [We're back in the  
lockdown again. :-)]  
00:32:08 Cindy Bryant: Please set your chat to "All panelists and  
attendees" so everyone can see your posts! :-)  
00:32:21 Laura Semian: funny how word problems have always been ugly in  
student eyes...  
00:32:42 Mary France Imperial: hello from Philippines  
00:32:52 Saul Gonzalez: Proportional Reasoning!  
00:32:53 W Gary Martin: What a wonderful problem!  
00:32:58 W Gary Martin: (Ha)  
00:33:00 Gisela Vivanco: Pythagorean theorem or trig  
00:33:01 Kaye Stacey: And hello from Melbourne, Australia. Also again in  
lockdown.  
00:33:07 Amanda Jimerson: This is so nerdy and historical I already  
love it.  
00:33:08 GRACE HARRIS: ratio and proportion  
00:33:08 Natasha Gambarov: Pythagorean theorem and trig  
00:33:09 Jolene Peterson: similar triangles!

00:33:11 W Gary Martin: Similar triangles  
 00:33:13 Sage Moore: kilometers to miles!  
 00:33:14 Rachell Scott: Ratio and proportional reasoning  
 00:33:15 Arelys Arenas: pythagorean  
 00:33:20 dana dulzo: 5 is to 8 as the unknown is to 1267 ft  
 00:33:22 Laura Semian: similar triangles  
 00:33:25 Eduardo Enjambre: Pythagorean Theorem  
 00:33:27 Arelys Arenas: proportionality  
 00:33:28 Nicole Walden: google  
 00:33:29 Patrick Montague: 791.875 feet  
 00:33:30 Denise Walston: use similar triangles; proportions  
 00:33:32 Kimberly Rivera: 791.875  
 00:33:33 Mikko Bojarsky: 791.9 ft  
 00:33:34 Deborah Lira: proportions  
 00:33:34 dana dulzo: several wasys to solve  
 00:33:36 Bryan Duffey: 792 feet  
 00:33:36 Angela Ensminger: 792 ft  
 00:33:36 Chad Hale: Similar triangles- proportions  
 00:33:36 Theresa Houston: set up a proportion  
 00:33:37 Randolph Chapman: Proportion  
 00:33:38 Jolanta Sobolewska: proportional relationship  
 00:33:38 Viragni Chand: 791.875  
 00:33:41 Carol Watson: land surveying  
 00:33:44 Walter Shaner: 791.875 ft  
 00:33:45 Catherine Abbott: Is this 1923 book during the Dewey  
 revolution where Mastery Learning was prized. Where the amount of time to learn a  
 concept was flexible and the amount of learning was fixed (student learns before  
 moving on)?  
 00:33:46 Rachell Scott: Similar triangles  
 00:33:46 Gladys Okugbeni: PROPORTION  
 00:33:47 Theresa Houston: 791.875 ft  
 00:33:48 Michael Gougis: 791.875  
 00:33:53 Marquise Andrews: 791.875 ft  
 00:33:53 Laurie Sparling: Building is 791.875 ft tall.  
 00:33:54 Arelys Arenas: many ways to get the answer  
 00:33:54 Barb Chapin: 791 7/8  
 00:34:02 Leslie Texas: 791.875 ft  
 00:34:05 Cherish Alberts: I got 791.875, too.  
 00:34:05 Linda Koval: ratio  
 00:34:09 Isabel Arcaya: 791.87  
 00:34:12 Betsy Smith: 792 using proportions  
 00:34:16 Nithya Soundararajan: proportion  
 00:34:19 W Tad Johnston: 792, 800 with significant digits to match the  
 situation, 790 ft if to nearest inch  
 00:34:26 Mark Phipps: Use the News  
 00:34:27 Jet Yeung: proportions and there are many ways to do this  
 problem  
 00:34:30 Michael Gougis:  $5/8 \times 1267 = 791.875$   
 00:34:32 Melanie Weston: 791.875  
 00:34:36 Laura Semian: got to put it on their level...

00:34:36 Justin Klinger: 792 ft  
00:34:37 Rachell Scott: Great hook!  
00:34:39 Linda Koval: 791 feet 10.5 inches  
00:34:39 Debbie Fries: 791 7/8  
00:34:42 GRACE HARRIS: 791.87  
00:34:45 Ellen Metzger: Just under 792 feet  
00:34:47 Jolanta Sobolewska: 791.88 ft  
00:34:50 Rosanne Marino: My friend lives in Surrey!  
00:35:03 taimi paadre: 791 7/8  
00:35:04 maria centeno: 791.8  
00:35:16 Catherine Abbott: Algebra Tiles  
00:35:19 pliegl: Hi from Streator, IL, Just got power back. Been out since storm on Monday.  
00:35:23 Laura Semian: I have NEVER understood some of these manipulatives... sorry!  
00:35:30 Debbie Fries: Exactly the same!  
00:35:50 Linda Koval: When I was in school, I never used algebra tiles.  
00:35:51 Arelys Arenas: Tiles great manipulative for this concept  
00:35:52 Mohamed T: awesome  
00:35:52 W Tad Johnston: Need to shout out to Henri Picciotto and Algebra Lab Gear in the 80s and 90s  
00:35:53 Laura Semian: making something abstract concrete?  
00:36:16 Laura Semian: how about hands on equations?  
00:36:23 Sage Moore: still use Lab Gear!  
00:36:25 Eduardo Enjambre: Triangle Similarity: height of the bldg.: 791.88 ft  
00:36:27 Laura Semian: THAT is handy (no pun intended ;))  
00:36:33 W Tad Johnston: Too bad teachers of math are not considered THE educational reformers  
00:36:39 Denise Walston: The Greeks used a similar drawing to algebra tiles to look at the dimensions. was so great because it reminded me of algebra tiles  
00:36:42 Catherine Abbott: I wasn't taught completing the square to solve quadratics. We didn't use algebra tiles. When I used tiles with my students, they preferred completing the squares over other solution methods.  
00:36:49 Ellen Metzger: W Tad Johnston, yes! I was just referencing Henri Picciotto's blog this morning!  
00:37:04 W Tad Johnston: @Ellen - great stuff  
00:37:08 Denise Walston: it was used to show completing the square  
00:37:11 W Gary Martin: NICE!!!  
00:37:30 Melanie Weston: Great stuff  
00:37:31 Rosanne Marino: That's a great quote for Day 1 of school!  
00:37:32 Linda Koval: So true.  
00:37:46 Cindy Bryant: Love this!  
00:37:57 Jolene Peterson: great reminders...100 years later!  
00:38:10 W Tad Johnston: The more things change, the more they stay the same  
00:38:20 Laura Semian: that's the cool thing about math... still math... 100 years later!!!  
00:38:27 Linda Koval: I agree with you, W Tad.  
00:38:35 Beth Kobett: Such a great perspective!  
00:38:38 Rosanne Marino: BUT it was done without calculators then!!

00:38:49 Barbara Post: Tad, I was just ready to type the same  
thought/quote.

00:39:05 Linda Koval: Yes, and our students can do it without calculators!

00:39:06 William Luke: Paper and pencil only then,

00:39:13 W Tad Johnston: @Barbara P - great minds

00:39:27 Mark Phipps: Guide Instruction

00:39:27 Natasha Gambarov: monitor student progress

00:39:30 Alana Roberts: To determine student understanding

00:39:31 Margaret Thomas: Inform the student of their progress

00:39:31 Darlene Tyler: To collect data to drive your teaching

00:39:32 Amanda Jimerson: Gain data and gauge understanding to guide  
instruction

00:39:32 Kimberly Rivera: Assessment helps drive instruction

00:39:32 Gisela Vivanco: Check students understanding

00:39:32 India Puch: I like this presentation. So refreshing to know  
this information. I could use this to explain to my students where math information  
is coming from!!!!

00:39:33 Gladys Okugbeni: To evaluate my teaching

00:39:34 Kozeta Seferi: No calculators, mental math

00:39:34 Wendy Kraft: to see student growth towards learning a standard

00:39:35 William Willman: validity

00:39:36 Jennifer Dougherty: to gauge understanding

00:39:36 W Tad Johnston: To let the student teacher where they are and where  
they go next

00:39:37 Cherish Alberts: Verify learning

00:39:37 John DeWitt: check for understanding

00:39:38 Kathleen Bliss: student check-in

00:39:39 Leslie Texas: Understand student thinking

00:39:39 Garry Marshall: Formative - to help adjust my teaching. Summative -  
mastery.

00:39:40 Ellen Metzger: To find out how well students are learning what you  
are teaching

00:39:40 Melanie Weston: to gauge a student's progress

00:39:40 Ray Mark Cariquez: to gauge where the learners are.

00:39:41 Justin Klinger: Measure a students level of learning

00:39:41 Eduardo Enjambre: Checking for understanding

00:39:41 Michael Gougis: Inform instruction

00:39:42 kim Dang: To know where your students' learning to move  
forward.

00:39:43 Beth Lewis: I use assessments for understanding and mastery

00:39:43 Yini Wang: checking

00:39:44 Arelys Arenas: reflecting over teaching

00:39:44 Sharon Black-MacKinnon: guide instruction

00:39:44 Laura Semian: figure out what they got/didn't get

00:39:44 Alyssa Grivakis: Checks for understanding

00:39:45 Deborah Lira: To inform all of the progress

00:39:45 Barb Chapin: help determine what to teach next

00:39:45 Jacqueline Colbourne: to check for understanding

00:39:46 staci brock: to check progress

00:39:47 Wenny Liao: Check student understanding

00:39:47 dana dulzo: check for understanding  
00:39:49 maria centeno: To monitor mastery  
00:39:49 Ann Marcellin: Determine students understanding of the material  
taught.  
00:39:49 Linda Koval: Check for understanding.  
00:39:51 Gisela Vivanco: Students can assess themselves too  
00:39:51 Todd Smallcanyon: understanding  
00:39:51 Imelda Valencia: To monitor academic progress and use it for  
improving instructions  
00:39:52 Ocella Davis: Guide instruction  
00:39:52 Terri Jacobs: To see the students progress  
00:39:53 Jolanta Sobolewska: to give feedback  
00:39:55 Wendy Janerico: checking for understanding  
00:39:55 Cherish Alberts: Where do I need to change something?  
00:39:58 Denise Walston: sorting and selecting; checking for understanding  
00:39:58 Viragni Chand: Inform instruction  
00:40:00 Wanda Parker: check understanding  
00:40:01 William Luke: how to change teaching for each student  
00:40:02 Rosanne Marino: To gauge student confidence level, interest, or have  
they checked out and given up...  
00:40:03 Cristina Milano: check progress and understanding  
00:40:03 Janet Bernard: to guide instructions  
00:40:04 Walter Shaner: For improvement of future teaching  
00:40:10 Allison Cato: to check for understanding to adjust lesson  
00:40:11 Faith Peddie: This is honestly amazing to see how much has and has  
not changed in the past 100 years of mathematics education.  
00:40:12 Arelys Arenas: plan for further instruction  
00:40:15 Skip Fennell: To provide feedback to the teacher and to students  
Formative Assessment is very much connected to Feedback  
00:40:23 Emerlina Binuya: Diagnose students learning  
00:40:24 Rommel Daz: to improve future strategies  
00:40:33 Jolene Peterson: it is cyclical!  
00:40:50 Skip Fennell: The older model was deficient based - rather than  
strength connected.  
00:40:54 Laura Semian: nowadays? seems like all that matters is how the  
students score on state assessments  
00:41:09 Denise Clarke: To showcase student thinking  
00:41:18 W Gary Martin: @Skipper Good point  
00:41:51 Cindy Bryant: Right on Skip!  
00:42:27 Laura Semian: riddle math? FUN!!! however, get the kids who get  
the answer and work backwards ;)  
00:42:34 Ocella Davis: I've used crossword & cross # puzzles  
00:42:37 Sharon Black-MacKinnon: love it  
00:42:40 Arelys Arenas: I love this idea of puzzles  
00:42:44 Faith Peddie: In case you didn  
00:42:56 Faith Peddie: In case you didn't see, Ben shared a handout for  
tonight's session  
[https://www.nctm.org/uploadedFiles/Conferences\\_and\\_Professional\\_Development/Webinars\\_and\\_Webcasts/Webcasts/Aug12WebinarHandout.pdf](https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/Aug12WebinarHandout.pdf)  
00:43:07 W Tad Johnston: Shout out to Skip, et al and the Formative 5 - look



if you haven't  
00:43:08 Laura Semian: tracking BIG TIME  
00:43:10 Barbara Post: Used many Math Teacher activities in the the 60s  
00:43:40 Laura Semian: however? drill/kill is sometimes good... if you  
don't know 7x8? you're toast  
00:43:52 Babette Benken: Thank you, Faith  
00:43:53 Nicole Walden: nothing new under thee sun  
00:43:59 Laura Semian: 7x8 = the barometer  
00:44:05 Nicole Walden: lol  
00:44:23 W Gary Martin: Film strips!  
00:45:03 Linda Koval: Foundation is important. Agree with Laura Semian.  
00:45:08 Nicole Walden: privilege to be the person who got to advance slides  
00:45:26 W Tad Johnston: dittos - the pencil shows up on the purple print  
00:45:49 Justin Klinger: I have seen this before.  
00:45:49 Gisela Vivanco: LOVE IT!!!! That was totally new for me yey!!!  
00:45:53 W Tad Johnston: ellipse - way fun, but takes a few tries to get it  
right  
00:45:56 Bethany Morton: fun stuff!  
00:46:00 W Gary Martin: Don't forget the great smell of the dittos!  
00:46:05 Laura Semian: yes... students get a LOT out of drawing ellipse  
with foci, etc  
00:46:17 Denise Walston: love it  
00:46:23 Jolene Peterson: ha! so funny! love it.  
00:46:25 Babajune Banihashemrad: Can u do a circle w/o string  
00:46:26 Laura Semian: you are such nerds... but I LOVE IT!!!!  
00:46:28 Beth Kobett: YES! Love this!  
00:46:32 Rosanne Marino: Math Nerds out in public - love it!  
00:46:33 Cindy Bryant: Oh yeah, Gary Martin, dittos smell...  
00:46:33 Wanda Parker: love this!  
00:46:37 W Tad Johnston: @Gary - I probably lost a lot of brain cells  
00:46:39 Nicole Walden: yes  
00:47:00 Betty Stallings: To Neat. The kids would really have a great  
time with this  
00:47:12 Debbie Fries: Great real- life experience!  
00:47:14 Laura Semian: pretty cool how it's PRACTICAL...  
00:47:29 Laura Semian: that's awesome with the overlay and the equation,  
etc  
00:47:43 Laura Semian: LOVE desmos  
00:47:43 Cindy Bryant: Please set your chat to "All panelists and attendees  
so everyone can see your posts!  
00:47:58 Arelys Arenas: great real life connection, fun and a different way  
to engage students  
00:48:23 Laura Semian: I LOVE this example with the table... however...  
better have no adult bevs on the table ;)  
00:48:24 Sharon Black-MacKinnon: cool  
00:48:28 Jolene Peterson: great idea!  
00:48:29 Tamara Stewart: that is nice  
00:48:38 Galaxy J2 Core: Excellent .  
00:48:38 Catherine Abbott: Post-WWII led to many innovations in  
training. This is the period that led to Maslow's Human Motivation Pyramid and

Blooms Taxonomy,

00:48:51 f8d1aaf2: great idea  
00:48:52 Justin Klinger: I like that for DESMOS  
00:49:00 Laura Semian: no math after 8th grade? WOW  
00:49:04 W Gary Martin: Can do this in Geogebra as well... and also overlay the geometryperspective.  
00:49:05 Ellen Metzger: Very cool with Geogebra and Desmos!  
00:49:10 Rosanne Marino: Not all completed high school back then.  
00:49:45 Laura Semian: well... always has been/always will be (hope not!) cool to say you "can't do math"  
00:49:47 Cindy Bryant: Very unfortunate and true Rosanne.  
00:49:52 William Luke: College is not for everyone. VO Tech needs to be promoted.  
00:50:03 Ocella Davis: How can students receive a degree without high school math credit?  
00:50:15 W Tad Johnston: Hesitate to mention it, but to 8th grade math really important and many don't have it because they were racing through to higher math  
00:50:17 Amanda Jimerson: Gutstein's book Rethinking Mathematics is an amazing resource FYI  
00:50:27 Natasha Gambarov: This year will be my first year teaching  
00:50:29 Laura Semian: we need to teach practical stuff, however... kids who aren't collegebound (and even those who are!) need to know how to easily figure a tip, no prob  
00:50:31 Barbara Post: 1966, 7th and 8th grade math  
00:50:34 Roberto Marquez: 2007, 7th grade math, overhead projector  
00:50:35 Laura Semian: 4 preps?  
00:50:37 Viragni Chand: Algebra 1 in 1984  
00:50:38 Marquise Andrews: Im student teaching Foundations of Math 1  
00:50:38 Wendy Kraft: 1997 German and math  
00:50:39 Garry Marshall: Life Science and Physical Scinece in 2001.  
00:50:40 William Speer: 1969 Seven sections of general math  
00:50:43 Dominador Guillermo: I taught algebra 1  
00:50:46 Deborah Lira: 7th grade math and geometry  
00:50:47 Gisela Vivanco: 2015 I taught Algebra 2 trig two sessions and geometry  
00:50:47 MaryJo Swann: I had Geometry and Algebra 2.  
00:50:47 W Tad Johnston: 1979, grade 6, Algebra 1, Geometry, senior math elective  
00:50:48 W Gary Martin: 1978 – algebra II and “career math.” Overhead projector  
00:50:48 Chonda Long: 1998  
00:50:48 Margaret Thomas: 2002 Math computer lab  
00:50:50 Amy Cole: 1999, paper!  
00:50:50 Cacho Mariella: This is my first year teaching... I am using zoom lol!  
00:50:50 Amanda Jimerson: 2013, 7th Grade Math, Overhead Projector because my smartboard shot out sparks  
00:50:52 Laura Semian: 7th grade math all slammed together... high/low...  
00:50:53 Patrick Montague: 1990 Algebra 1 Geometry  
00:50:55 Skip Fennell: 1966, 5th and 6th grade, Overhead Projector

00:50:55 Linda Koval: 2004 Algebra I  
 00:50:56 Natasha Gambarov: 2020!!  
 00:50:57 Justin Klinger: 98-99 Precalc, low level math  
 00:50:58 Jim Buckley: 1999 geometry  
 00:50:58 Denise Walston: algebra one and general math ( algebra skills and topics) -1976  
 00:50:59 Lois Hertz: 1996, math 6  
 00:50:59 Debbie Fries: I had an algebra and a pre-algebra class, as well as a 1st and K math class  
 00:50:59 Mark Phipps: 2015 Algebra II and Geometry after 20 years in construction  
 00:51:00 Jennifer Rubiano: 1995 Alg 1 7/8 math  
 00:51:00 kim Dang: 204 Algebra 2  
 00:51:01 Catherine Abbott: I taught Math 5, 6, 7 and 8 plus Science 5. Clearly I did not know what I signed up for in 2001  
 00:51:01 Ocella Davis: General math  
 00:51:02 Jennifer Dougherty: 2014  
 00:51:02 Janet Bernard: 1986 1st grade  
 00:51:03 Jolene Peterson: 2005 8th grade math.  
 00:51:03 Delphine Stallworth: 3rd Grade all subjects 1996  
 00:51:03 Babette Benken: 1989 grades 6-12  
 00:51:05 Kimberly Rivera: 2018, 7th grade Accelerated  
 Pre-Algebra/Algebra 1  
 00:51:07 Nicole Walden: 2005 7th grade  
 00:51:07 Veronica Kwok: Geometry 2016  
 00:51:08 Gisela Vivanco: ppt  
 00:51:09 Florentia Spires: 1985, 6 and 7th grade math in southern Africa  
 00:51:09 Nithya Soundararajan: 2020 Algebra and Geometry  
 00:51:10 Marissa Heitman: 2019 kinder  
 00:51:11 Bryan Duffey: 1995 - 8th/9th grade - overhead projector, transparencies  
 00:51:11 Leslie Texas: 1991 Algebra  
 00:51:12 Angela Corona: i was teaching gen math and Algebra, 2006  
 00:51:12 John DeWitt: 1st year had 4 sections of Alg 1 + 1 math applications  
 00:51:12 Chonda Long: 1998, Algebra 1, Personal and Financial Math  
 00:51:12 Arelys Arenas: 2001, Chemistry, 6th - 9th  
 00:51:13 Saul Gonzalez: 2018 Foundations of Algebra. Station Teaching.  
 00:51:14 Beth Lewis: I have taught 4th, 5th, 6th grade math for 12 years, this is my first year to teach 7th & 8th grade math  
 00:51:15 Ruqayah Zuhair: 2019 algebra 1  
 00:51:15 Vicente Lopez: 1992 )verhead projector  
 00:51:16 Madeline Quinn: First year!  
 00:51:20 Wendyk Kraft: overhead projector  
 00:51:20 Emerlina Binuya: 1979, Algebra 1 - Slide rule  
 00:51:20 Ellen Metzger: 1989 -90 Elementary math. Used a traditional textbook with lots of pages of practicing basic procedures.  
 00:51:21 pliegl: 1974 7th and 8th chalkboards  
 00:51:21 Cherie Bridgforth: 1987 Geometry

00:51:22 MICHAEL KAROLEWICZ: 2010 8th grade Geometry and 7th grade Pre-Algebra

00:51:22 Alyssa Grivakis: 2014 Integrated 2, two levels, smartboard/PowerPoint

00:51:23 Wendy Janerico: 1994 Alg 1 and consumer math

00:51:25 Debbie Fries: 26 years!

00:51:25 Justine Henning: A fun way to help kids see the ways math can help them build careers and learn about people like them who went into STEM: Math4Science.org

00:51:26 Galaxy J2 Core: 1987 Algebra and Geometry

00:51:26 Dominador Guillermo: Started teaching 1996, Algebra 1 with the overhead projector.

00:51:26 Mark Keller: 2015 Intensive Algebra (double classes) for deeper understanding

00:51:26 Regina Williams: Since 1987

00:51:27 Maria Padiernos: Uncertified, 2001 4th grade Math, certified 2006 Algebra 2 and Calculus

00:51:28 Betty Stallings: 1994 Basic Math to 7 & 8th graders

00:51:28 Christine Friberg: 2004 overhead

00:51:29 Catherine Abbott: I came back to teaching in 2008 and taught Math 6.

00:51:30 Melissa McDaniel: 1999 algebra 1

00:51:31 Kozeta Seferi: Geometry 2010

00:51:35 Rosanne Marino: 2005 6th grade but kids ate it up! Used some Pizzazz and a paper text book

00:51:36 Linda Koval: I had to go back to overhead projector when one of my cords to the tablet wouldn't work.

00:51:37 Alana Roberts: 2004, 2 advanced middle school algebra classes (7th grade and 8th graders) and 2 remedial classes.

00:51:37 maria centeno: 2003 Middles school 6 - 8 gen math

00:51:39 Cherish Alberts: 1998 Special ed Geometry, World History, and US History. Not using overheads projectors much any longer.

00:51:40 Nicole Walden: I was taught how to use a mimeograph in my college curriculum.

00:51:41 Kathy Kamau: 1979

00:51:41 Laura Semian: the most challenging? Alg2 w/ students who didn't know Alg1...

00:51:45 Emily Morgan: 2000 Math 5, 6, 8 Geometers Sketchpad

00:51:50 Arelys Arenas: overhead projector and that FAMOUS black board

00:51:50 Wanda Parker: 1999 - 7th grade math

00:51:53 Rochelle Lake: I was teaching in a small high school with a graduating class of about 35. I was the math department pre-algebra to precalculus. I started in 1989

00:51:54 Catherine Abbott: I LOVED teaching Grade 8 Algebra 1 in 2013 to 2016.

00:52:01 W Tad Johnston: really had it going in the 90s when I had 2 overhead projectors - one for the TI-81 panel and 1 for me

00:52:03 Theresa Houston: 2003 Algebra 1, overhead projector

00:52:13 Cindy Bryant: Chalkboard (which I was allergic to...1977; 7th & 8th grade math and high school consumer math.

00:52:19 Debbie Fries: I definitely started on the overhead projector in the mid-90s

00:52:22 Jolanta Sobolewska: 1989 8th grade in Poland and from 2004 8th grade math in the USA.

00:52:39 W Gary Martin: Slide rule anyone???

00:52:40 Catherine Abbott: I love math club MATHCOUNTS.

00:52:41 Linda Koval: I've never seen a vertical abacus.

00:52:46 Laura Semian: no more "you go to the board and do #2... you do #3... you do #4?" lol

00:52:53 Babajune Banihashemrad: I grew up watch my father using it all the time

00:52:57 Cindy Bryant: I was so thrilled to have my first overhead and loved the different colored markers for it.

00:53:01 Linda Koval: My husband has to use a slide rule.

00:53:05 Jolanta Sobolewska: blackboard for long time

00:53:14 Laura Semian: actually miss my overhead sometimes...

00:53:15 W Tad Johnston: slide rule was pretty much a black box - did "build" one in junior math elective in the 80s

00:53:18 Delphine Stallworth: I also use MathCounts

00:53:22 Catherine Abbott: We are using the distance learning technology to support our students.

00:53:22 Rosanne Marino: What keeps middle schools' interest now? Tougher and tougher...

00:53:24 Roberto Marquez: twitter

00:53:24 Denise Walston: overhead projector

00:53:25 Sage Moore: still love overhead projectors with transparencies and wet erase pens

00:53:25 Mark Phipps: Twitter

00:53:25 Debbie Fries: Foe sure!

00:53:26 Melanie Weston: I have gone from overhead to a touch screen.

00:53:30 Margaret Thomas: common planning teams

00:53:31 Wendyk Kraft: Slack

00:53:32 John DeWitt: peers

00:53:32 Natasha Gambarov: Webinars

00:53:36 Mark Keller: PLC meetings

00:53:38 Amanda Jimerson: Just moved up to high school. I will miss MathCounts

00:53:39 Mark Phipps: MY KIDS

00:53:41 Justine Henning: My fav abacus: the Japanese one (soroban). Works like our # system (base 10). So cool to watch kids figure it out.

00:53:41 Ellen Metzger: twitter

00:53:41 Nicole Walden: hall duty

00:53:43 Melanie Weston: Common planning

00:53:45 Denise Walston: NCTm and other math people

00:53:48 W Gary Martin: Here??

00:53:49 Amanda Jimerson: PLC and conferences

00:53:50 Laura Semian: hallway

00:53:51 Linda Koval: Meetings

00:53:51 Yini Wang: colleagues

00:53:51 Sage Moore: math circlez

00:53:53 Cherish Alberts: Here!  
00:53:53 Catherine Abbott: I have my MathGirls (colleagues who love math for math sake)>  
00:53:55 Jolanta Sobolewska: textmessages  
00:53:56 maria centeno: Math department PLCs  
00:53:56 Emerlina Binuya: Messenger  
00:53:57 Regina Williams: NCTM, Conferences, Coworkers, My preservice teachers, District personnel  
00:53:57 Jennifer Dougherty: FB  
00:53:58 MICHAEL KAROLEWICZ: State math teacher associations  
00:54:03 Mark Phipps: ANYONE WHO WILL LISTEN AND PLAY ALONG  
00:54:04 W Tad Johnston: when it's a bar the term is "hydraulic seminars"  
00:54:04 Ocella Davis: Math resources; different areas  
00:54:05 Todd Smallcanyon: workshop  
00:54:06 Laura Semian: pinterest is good  
00:54:08 William Luke: TI navigator and calculators  
00:54:10 Justine Henning: I meet with friends who do similar work  
00:54:13 Cherish Alberts: Colleagues in my school  
00:54:20 Laura Semian: teachers pay teachers...  
00:54:23 Emerlina Binuya: Teacher pay teacher  
00:54:34 Laura Semian: Ermerlina :)  
00:54:46 Laura Semian: schoology is good  
00:54:54 MICHAEL KAROLEWICZ: You will LOVE Schoology  
00:54:54 Ocella Davis: TPT is a good resource  
00:54:59 Pujiyanto Pujiyanto: I used schoology last semester  
00:55:01 India Puch: You are going to love it!!  
00:55:04 Justin Klinger: Schoology is very much like Facebook  
00:55:08 Linda Koval: I've never heard of schoology.  
00:55:21 Laura Semian: I love the technology... and not having to spend forever graphing it by hand...  
00:55:42 Laura Semian: remember all the paper stuff? lol  
00:55:43 India Puch: schoology.com Very user friendly. Lots of videos on YouTube  
00:55:45 Laura Semian: those were the days  
00:55:46 Justin Klinger: I like it, but we went to Google after 2 years  
00:55:58 W Tad Johnston: Really nice incorporation of chat in this session!  
00:56:01 Laura Semian: copied homework = useless  
00:56:10 Laura Semian: DO NOT APPLAUD COPIED HOMEWORK  
00:56:11 Catherine Abbott: I love the DESMOS function art projects....especially for Algebra II. You can do it with Algebra 1. It is just more limited.  
00:56:16 W Gary Martin: Which subReddits anyone?  
00:56:23 Babette Benken: On behalf of Ben, thank you Tad!  
00:56:38 W Tad Johnston: Homework - one of the greatest inequities in education  
00:56:38 William Luke: process more important than answer  
00:56:47 Laura Semian: photomath!!!!  
00:57:00 Pujiyanto Pujiyanto: Lol photomath  
00:57:02 Laura Semian: "I can do it at home... but I freeze on tests"  
00:57:08 Garry Marshall: I was taught math by memorizing rules and applying

them in practice. I can't say I benefited from long term memory.

00:57:12 Nicole Walden: yes laura

00:57:38 Amanda Jimerson: I utilize homework choice boards. Lots of prep for me, lots of freedom and engagement from students. They choose how to demonstrate learning

00:57:58 Gisela Vivanco: yup

00:57:58 Jolene Peterson: if photomath can solve it, it's not worthwhile to assign it!

00:58:04 Garry Marshall: Choice boards are the way to go. Great idea

00:58:07 Laura Semian: "I'm not a good test taker" OVER THAT

00:58:21 Mark Keller: Easy to catch by asking them what is the slope and what does it mean in context.....

00:58:23 Laura Semian: yes... there is a time and place... but beautiful homework? no good tests?

00:58:26 Laura Semian: something's up

00:58:33 Catherine Abbott: Yes if your homework with mathhomeworkanswers.org and other homework help sites, then the homework is too trivial.

00:58:48 Ben Sinwell: <https://student.desmos.com/join/8pb2a5>

00:58:52 Ellen Metzger: omg that ad! with the hammer going towards the girls head!! Awful!

00:58:54 Ben Sinwell: <https://student.desmos.com/join/8pb2a5>

00:59:19 Ben Sinwell: The ad is awful.

01:00:00 Faith Peddie: Here is the handout for tonight's session if you would like to see all of the referenced resources  
[https://www.nctm.org/uploadedFiles/Conferences\\_and\\_Professional\\_Development/Webinars\\_and\\_Webcasts/Webcasts/Aug12WebinarHandout.pdf](https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/Aug12WebinarHandout.pdf)

01:00:15 Laura Semian: how many people? 500?

01:00:25 W Tad Johnston: Why doesn't the turtle turn around?

01:01:03 Mark Phipps: Is there a group sharing Desmos activities for duplication and customizing for their own use? I've really wanted to go much deeper into Desmos.

01:01:03 Laura Semian: this is cool... can use for distance learning, easily

01:01:05 Catherine Abbott: That was cool. I wound up with 3 turtles at one t;ime.

01:01:08 Justine Henning: It does go backwards

01:01:14 Laura Semian: yes... this is GREAT!!!

01:01:17 taimi paadre: computer keeps freezing...

01:01:18 jill brown: no turtle if discrete!

01:01:30 Laura Semian: LOVE desmos

01:01:44 Todd Smallcanyon: neat

01:01:50 W Gary Martin: Step function – teleportation!

01:01:53 Bethany Morton: I love demos. i use their activities whenever i can and I've even created some of my own. you can make your creations public or private.

01:01:54 Garry Marshall: Shallow answers - BIG problem

01:02:08 Laura Semian: this is awesome

01:02:25 W Tad Johnston: @Gary - deep thought

01:02:34 Laura Semian: love linear... points...

01:02:34 Garry Marshall: I'm going to show this to my Science teachers as well - we can use this when teaching speed!! Tie in to math. Boom

01:02:37 Justin Klinger: I have done similar lessons with a CBR

01:02:39 Ellen Metzger: That's really fun. I made multiple turtles

01:03:02 Denise Walston: yes @Justin- using the CBR

01:03:11 Amanda Jimerson: I love teacher.desmos.com. I use them at least once per segment.

01:03:19 Lois Hertz: my students love this activity

01:03:28 Angela Corona: do you create accounts for students?

01:03:36 jill brown: @Ellen thanks so cool

01:03:38 Amanda Jimerson: Students can log in with google

01:03:41 Wendyk Kraft: @angela - no, give them a class code

01:03:46 Catherine Abbott: (1) Positive and negative and 0 slopes. (2) Is it a function?

01:04:00 Amanda Jimerson: This really goes with qualitative graphs from 8th grade.

01:04:01 Ann Marcellin: Very engaging activity!

01:04:04 Angela Corona: thank you

01:04:20 Catherine Abbott: 1960s ....the New Math era.

01:04:34 Ellen Metzger: I never saw a calculator until about 1974

01:04:42 W Tad Johnston: Really a US drive - Algebra-Geometry-Alg 2 - vsmaths

01:04:53 Laura Semian: students need to be taught how to use calcs efficiently... don't do 20% off... do times .8 THAT is useful, efficient math!!!

01:05:13 Barbara Post: Got my first calculator in 1969

01:05:25 W Gary Martin: Does "calculator" mean an adding machine (mechanical)?

01:05:27 W Tad Johnston: @Laura, depends on your calculator

01:05:29 Laura Semian: calcs hinder many kids... need a calculator for 2 x 5? booooooo

01:05:30 Catherine Abbott: Sputnik and the Cold WAR had a HUGE influence.

01:05:54 Laura Semian: W Tad? Now? just ask Siri! ;)

01:06:05 Laura Semian: lol @ fractions

01:06:14 Jennifer Dougherty: Yup!

01:06:15 MICHAEL KAROLEWICZ: that's today

01:06:26 Arelys Arenas: sounds familiar

01:06:32 Laura Semian: changing the slope 2/3 to .6666 helps NOBODY!!!

01:06:39 W Tad Johnston: Fraction weakness - Adding It Up 2001

01:06:53 Jennifer Dougherty: 1960!!!! Ugh...

01:06:54 Laura Semian: how about watering down algebra into 1A and 1B? yikes!!!

01:07:17 Skip Fennell: Fraction Issues - also National Math Advisory Panel Report 2008.

01:07:39 MICHAEL KAROLEWICZ: putting a square peg in a round hole....some is parent ego

01:07:48 Skip Fennell: Lots of parental pressure to move students to Algebra (sequence) early - still exists

01:08:23 Ellen Metzger: @Skip Absolutely, lots of pressure!

01:08:25 Laura Semian: the parent pressure is UNREAL

01:08:41 Denise Walston: it certainly still exists but hopefully more



districts like San Francisco Unified will push against it and show better practice  
01:08:46 Catherine Abbott: I started in my District the year they forced all Grade 8 students to take Algebra 1 and Algebra ADA (Light) because of a statistic that said "Students who complete Algebra 1 in 8th Grade are 75% more likely to graduate college in 4 years". Talk about not understanding the difference between correlation and causation.

01:08:48 Laura Semian: umm.... functions ain't fun! lol

01:09:12 Gisela Vivanco: Judy Lee 07:32 PM

so how do we teach math now that we are in an internet/informational age, where all the answer is online?

01:09:16 Gisela Vivanco: I am wondering the same

01:09:29 Laura Semian: these are GREAT for higher level thinking... rather than just crunching

01:09:44 Amanda Jimerson: Claim 2 and Claim 3 problems in 1970. I love it

01:09:52 Westley Mildenhall: describe the motion of the car

01:09:54 Carol Watson: you can tell the shift points

01:09:56 Garry Marshall: What do you think happened at B and C??

01:09:56 Catherine Abbott: @Laura....FUNCTIONS can be fun. Look at Jo Boaler's YouCubed.org.

01:09:56 Mark Phipps: What are the horizontal portions of the graph

01:09:58 Linda Koval: How fast is it increasing?

01:09:58 Bryan Duffey: When is the car traveling the fastest/slowest?

01:09:59 Ellen Metzger: What happened at points B and C?

01:10:03 Natasha Gambarov: At what time is the biggest speed?

01:10:05 David Morrow: What happens at points B and C

01:10:05 Janet Bernard: rate of change

01:10:08 ALEX QUYENVO: how long does it take to reach 60mph

01:10:08 Susan Danskin: what happened at b and c?

01:10:11 Denise Walston: is it constant over time

01:10:11 Mark Keller: is the acceleration increases or decreases from 0 to 18 secs

01:10:12 Jennifer Dougherty: What is happening at b & c?

01:10:13 W Gary Martin: What would it feel like to be sitting in the car?

01:10:13 dana dulzo: what happened at B and C

01:10:15 Catherine Abbott: Stop sign at B and C.

01:10:15 Laura Semian: why isn't it linear?

01:10:16 Todd Smallcanyon: rate of change

01:10:16 Betsy Smith: Why is the graph curved?

01:10:18 MaryJo Swann: Average rate of change between A/B and then B/C

01:10:19 Wendy Kraft: how long can this be sustained?

01:10:20 Rosanne Marino: Describe a scenario the car went through... and what music was the driver playing?

01:10:22 Melissa McDaniel: why would it be curved and not a straight line?

01:10:22 Margaret Thomas: Is the car travelling at a constant rate of speed?

01:10:24 Justin Klinger: Why is acceleration not a straight line?

01:10:24 Eduardo Enjambre: speed

01:10:26 Mark Phipps: When are you likely to get pulled over

01:10:27 Catherine Abbott: Did the driver get arrested for speeding?

01:10:27 Marissa Heitman: b and c are shifting points

01:10:28 Susan Danskin: why is the graph curved?

01:10:30 William Speer: If you start at 20mph will the shape change?

01:10:34 Terri Jacobs: In what way do you see the line increasing?

01:10:35 W Tad Johnston: Why does the rate of change slow?

01:10:36 Peta-Gaye Benjamin: Was that a flat road?

01:10:38 Gladys Okugbeni: Find the slope of each point?

01:10:41 Ocella Davis: speed

01:10:42 Madeline Quinn: How do the two axes interact?

01:10:43 Jolene Peterson: tell the rest of the story. what happens next?

01:10:45 Arelys Arenas: Explain the differences between A, B and C

01:10:46 pliegl: What happens in 30 seconds

01:10:47 Catherine Abbott: B and C the driver changes gears

01:10:48 Ann Marcellin: Describe the acceleration

01:10:49 Justin Klinger: Drag Racing is competed in quarter miles

01:10:50 Laura Semian: yes... AND you will get buy in from "car kids"

01:10:51 ALEX QUYENVO: what time of function is this

01:10:52 W Tad Johnston: Is this a real graph?

01:10:53 Sharon Black-MacKinnon: How fast were they going in 15 seconds

01:10:53 Imelda Valencia: Why does the graph look like a curve line?

01:10:53 MICHAEL KAROLEWICZ: How is this different from a straight line?

01:11:00 Jolanta Sobolewska: difference between rate of change and average rate of change

01:11:02 ALEX QUYENVO: type of function

01:11:05 Eduardo Enjambre: The driver got a ticket for overspeeding.

01:11:25 W Tad Johnston: Doesn't seem to match your driving experience, but I don't have a "hot" car.

01:11:26 Laura Semian: yayyy for the 100 years!

01:12:07 Laura Semian: know why many people don't actually end up graduating from college? the dang math requirement

01:12:15 MICHAEL KAROLEWICZ: Interesting, for all...even women?

01:12:33 Laura Semian: Oregon Trail!!!! lol

01:12:55 W Tad Johnston: I did Oregon Trail on the IIe

01:12:58 Catherine Abbott: Why do we spend so much time on mathematics that leads to calculus? As a citizen, should we not spend more time on statistics and algorithms?

01:13:00 Trena Wilkerson: Now we are talking! I started teaching high school in 1976!

01:13:13 Babajune Banihashemrad: Ti35

01:13:18 MICHAEL KAROLEWICZ: And now more women go to college than men!

01:13:23 Babajune Banihashemrad: Hp 11

01:13:46 Denise Walston: @ Trena - so did I! started in 1976

01:13:46 Ellen Metzger: @Catherine Abbott, yes, we should spend more time on data science.

01:13:53 Laura Semian: why is it not a problem for parents to say in conferences "it's okay... I was never good at math, either" WHAT!?!?!?!?

01:13:59 Rosanne Marino: I left my TI in Physics class in 1984 and someone

stole it!! It was my beloved first calculator!

01:14:00 Trena Wilkerson: Yeah Denise!  
01:14:03 Wendy Kraft: YES to data science!!!  
01:14:16 Margaret Thomas: @Catherine yes...  
01:14:18 Catherine Abbott: Has anyone read, "Weapons of Math  
Destruction: How Big Data Increases Inequality and Threatens Democracy" by Cathy  
O'Neil ? Scary stuff.  
01:14:25 Arelys Arenas: Low and achievers???? what a horrible idea to make  
students love math!  
01:14:34 Babajune Banihashemrad: Yesss  
01:14:34 Denise Walston: really admired Ross Taylor  
01:14:58 Skip Fennell: Ross Taylor - long time NCSM Leader.  
01:15:00 David Barnes: @Denise - Yes! Ross was true leader.  
01:15:19 Laura Semian: love this Pepsi example  
01:15:27 Catherine Abbott: Benjamin Banneker wrote/recorded many, many  
math puzzles.  
01:15:36 Sandra Bagadiiong: Yeah  
01:15:45 Laura Semian: well... you know? 1/3 lb burger is smaller than a  
1/4lb burger... because 3 is less than 4! ;)  
01:15:51 Denise Walston: loved Iris Carl and Dorothy Strong  
01:16:19 Catherine Abbott: @Laura..... LOL Try "Math illiteracy affects  
5 out of 7 people"  
01:16:20 Babette Benken: And NCSM has the Iris Carl annual travel award!  
01:16:24 Bethany Morton: now transformations are 8th grade standards!  
01:16:40 Skip Fennell: @Denise - Me too, both Iris and Dorothy  
01:16:47 Bethany Morton: and, I love teaching transformations. another great  
time to use geogebra.  
01:16:56 Laura Semian: this is cool with the transformations... yes... a  
fish is MUCH better than some lame retangle  
01:17:07 W Gary Martin: @Denise and Skip - great leaders and great people  
01:17:08 Cindy Bryant: Ben, this is such a great presentation!!!  
01:17:11 Laura Semian: lol @ demo disk  
01:17:32 Catherine Abbott: When did No Child Left Behind start?  
01:17:38 MICHAEL KAROLEWICZ: have students expand a cartoon using graph  
paper and the dilation factor  
01:17:43 Sharon Black-MacKinnon: I agree with you 100% Cindy Bryant  
01:17:45 Rachell Scott: Yes, Ben, this is an awesome presentation!  
01:17:45 Roberto Marquez: NCLB was during the W's admin.  
01:17:49 Laura Semian: I remember using the whole Y2K thing to teach  
metric...  
01:17:51 Ellen Metzger: I studied with Carol Findell, too. Love her!  
01:17:53 Cindy Bryant: NCLB around 2002???  
01:17:54 Justin Klinger: I have a copy of this. Somewhere  
01:17:58 W Tad Johnston: 2000 or 2001 for NCLB depending on how you count'  
01:17:59 Ann Marcellin: I carried that book everywhere!  
01:17:59 maria centeno: I still have my copy.  
01:18:02 Skip Fennell: @Gary Martin major writer of PSSM!  
01:18:02 Jolene Peterson: I still have one!  
01:18:06 Barbara Post: Still have my copy  
01:18:13 Denise Walston: NCLB will occur around now (2000) with Bush/Cheney

01:18:15 W Gary Martin: @Skip Fennell grumpy writer of PSSM  
 01:18:17 Babette Benken: I still use the 2000 Standards in one of my graduate  
 courses!  
 01:18:27 Angela Corona: specially now!  
 01:18:28 Faith Peddie: Fast forward to 25 years later and we go from color  
 to an INTERACTIVE journal. So cool!  
 01:18:32 W Tad Johnston: Right next to my 1989 C&ESSM  
  
 01:18:35 Laura Semian: key words = "strong support"  
 01:18:40 David Barnes: @Skip & @Gary - YES!  
 01:18:50 Cindy Bryant: @Faith Interactive Journal, very cool!  
 01:18:51 Gisela Vivanco: >>>my eye is twitching just thinking about how the  
 heck am I gonna teach 150 kids online in september  
 01:18:54 Carol Watson: invisible math  
 01:18:56 Catherine Abbott: This is too early for me. I use the Take  
 Action: Implementing Effective Mathematics Teaching Practices.  
 01:18:57 Laura Semian: this is SO hard for some... just don't get it  
 01:19:09 Betsy Smith: One of our local teachers calls these "onesies"  
 01:19:13 Catherine Abbott: YAY TODOS!  
 01:19:13 Amanda Jimerson: I call it invisible one....  
 01:19:27 Debbie Fries: Wahooooo!  
 01:19:27 MICHAEL KAROLEWICZ: what dumb mathematicians decided the 1  
 coefficient or exponent is unnecessary?  
 01:19:32 Arelys Arenas: The imaginary 1 is necessary in every math class  
 01:19:45 Ann Marcellin: I call the one(s) the "silent e" of math  
 01:19:49 Laura Semian: it's not an imaginary 1...  
 01:19:54 Laura Semian: don't start messing with that  
 01:20:05 Susan Danskin: I use invisible 1 instead of imaginary 1.  
 01:20:06 Ellen Metzger: Paul Goldenberg – I learned a lot from him.  
 01:20:14 Gisela Vivanco: What are you talking about, those are unnecessary  
 01:20:16 W Gary Martin: Implied 1?  
 01:20:21 Melissa McDaniel: imaginary makes it something totally  
 different.  
 01:20:25 Arelys Arenas: "invisible" the same idea  
 01:20:26 Laura Semian: INVISIBLE...  
 01:20:35 Gisela Vivanco: Bottom right  
 01:20:36 Catherine Abbott: I love WODB!  
 01:20:37 maria centeno: multiple representation  
 01:20:40 Laura Semian: yes... needs to be invisible if you want to go that  
 route  
 01:20:43 Cindy Bryant: LOVE WODB!!!  
 01:20:50 Amanda Jimerson: I'm so glad I'm not alone lol. :)  
 01:21:00 Laura Semian: yes... this is GREAT!!!  
 01:21:02 Laura Semian: love it  
 01:21:05 MICHAEL KAROLEWICZ: also learned about "would you rather.....?"  
 01:21:19 Amanda Jimerson: I have never seen would you rather  
 01:21:44 Henry Kepner: Ben: great review of our history. I started  
 teaching in 1962. hank.  
 01:22:03 Laura Semian: Ben? You're doing GREAT! :)  
 01:22:10 Maria Knuth: Would You Rather is great for math conversations in

class or even online.

01:22:28 Daniel Irving: I love that idea of using a WODB on a test/quiz, and require explaining to receive credit.

01:22:29 W Tad Johnston: @Hank - glad you are on, big influence on me

01:22:29 W Gary Martin: <https://www.wouldyourathermath.com>

01:22:31 Barbara Post: Great session,

01:22:33 NOURA ALSOFIANI: can we please get the presentation ?

01:22:37 Rachell Scott: Yes Ben, YOU ROCK this presentation.

01:22:42 W Gary Martin: @Hank Howdy!

01:22:51 Laura Semian: Thank YOU!!!

01:22:55 Imelda Valencia: Thank you so much. You did a great job with the history of algebra 1. Keep safe

01:22:57 Regina Williams: Thank you, great presentation.

01:23:02 Genesis Docena: Thank you!!!

01:23:02 Cherish Alberts: Thank you so much!!!

01:23:03 Florentia Spires: Wow, what a great presentation. Thank you!

01:23:04 Marquise Andrews: Thank you!!

01:23:04 Janice Moore: Thank you!

01:23:04 Rachell Scott: Thank YOU!!

01:23:06 Amanda Jimerson: Thank you @Gary!

01:23:06 Betsy Smith: So many great ideas!

01:23:06 Denise Walston: thank you- great presentation

01:23:06 Lois Hertz: I learned a lot.

01:23:07 jill brown: great talk, many thanks

01:23:08 Jolene Peterson: thanks so much!

01:23:09 Jennifer Dougherty: Thank you!!

01:23:09 W Gary Martin: Great presentation! Memory lane...

01:23:10 Grace Weissmann: Thank you, this was fascinating.

01:23:10 Sharon Black-MacKinnon: Thank you so much!! Wonderful webinar

01:23:12 Wendyk Kraft: thank you for sharing!!!

01:23:12 Maria Padiernos: 'wow,,,,,the more things change, the more still remains the same

01:23:13 Susan Danskin: Thank you , a great walk down memory lane

01:23:14 Viragni Chand: Thank you so much

01:23:16 William Luke: thank you great session

01:23:17 Daniel Irving: Thank you for this incredible presentation!

01:23:17 Kathleen McFadden: Thank you Ben. Great presentation.

01:23:18 Yini Wang: Thank you!

01:23:18 Kathy Rubendall: Thank you!

01:23:19 Carol Watson: thank you for the trip down memory lane

01:23:19 GRACE HARRIS: thank you

01:23:20 Theresa Houston: Thank you, this was great.

01:23:20 Kathy Kamauu: Mahalo, Thank you - can't wait to go back through this powerpoint. It is packed with a wealth of information

01:23:20 Arelys Arenas: Another great presentation, thank you so much for your time.

01:23:22 Marissa Heitman: thank you

01:23:23 Nithya Soundararajan: Thank you very much

01:23:23 Christine Friberg: Thank you!

01:23:23 Walter Shaner: Thank you very much.

01:23:24 Gladys Okugbeni: Thank you  
01:23:25 Amy Cole: Thank you! This was great!  
01:23:26 Babajune Banihashemrad: We love NCTM  
01:23:28 Skip Fennell: Thanks very much. A very nice, well-planned walk  
back into the history of our field and NCTM!  
01:23:28 Leslie Texas: Loved this session! So fun looking back,  
particularly because I have been teaching for 30 of these years :)  
01:23:29 MICHAEL KAROLEWICZ: It's been a great time...good luck to  
everyone!  
01:23:29 Amanda Jimerson: Thank you, Ben. This is by far my favorite I  
have attended. Thank you everyone in the chat!  
01:23:31 W Tad Johnston: Ben, you rocked it for us old timers and probably  
the others as well  
01:23:31 dana dulzo: thank you, this was really interesting !  
01:23:32 Cindy Bryant: Thank you for serving on our Centennial/100 Days  
program committee Ben!  
01:23:32 Eduardo Enjambre: Awesome. Thank you so much.  
01:23:32 Lance Brauchla: Thank you....love the perspective!  
01:23:33 Ellen Metzger: Loved this historical perspective!  
01:23:34 Wanda Parker: Thank you! Great presentation!  
01:23:35 Laura Semian: yes... best to everyone. Stay safe  
01:23:36 Laurie Sparling: Thank you Ben. NCTM is superb  
01:23:36 Jolanta Sobolewska: thank you  
01:23:37 Terri Jacobs: Thank you  
01:23:39 Mary Dugas: thank u  
01:23:41 Kathy Medrick: Great review!  
01:23:42 Patrick Montague: Thank You Ben and NCTM  
01:23:45 Sandra Bagadiong: Thanks a bunch ben  
01:23:45 Megan Riley: awesome  
01:23:45 Rachell Scott: Thank you!!!  
01:23:45 Estelito Reyes: Thank you.  
01:23:46 Linda Koval: This has been an amazing. Thank you!  
01:23:46 Catherine Abbott: Can you put the link to "moving forward" in  
the chat?  
01:23:46 Natasha Gambarov: Thank you very much for this fascinating  
session :D  
01:23:48 Emerlina Binuya: Thank you! Great presentation!  
01:23:49 Debbie Fries: Thank you, Ben! An exciting session...you're giving me  
strength to engage this year.  
01:23:49 Ocella Davis: Thank you Ben. Very enlightening presentation  
01:23:50 pliegl: Ben, this was great! So much fun. Always love the history  
of mathematics (or math education). Since I missed the first few minutes, I  
promise to watch the repeat!  
01:23:53 Lynn Lafferty: thank you.  
01:23:57 Maria Knuth: Great Presentation! Thank you!  
01:23:59 Babajune Banihashemrad: Thank you  
01:24:00 Georgina Coffin: Thank you!  
01:24:01 Ruqayah Zuhair: Thank you for a great session  
01:24:02 Peta-Gaye Benjamin: Thank you, very enlightening  
01:24:08 Patti Scharschmidt: Thank you

01:24:09 Maria Padiernos: Muchas Gracias, Thanks from Detroit, MI  
01:24:10 Cheryl Ann Doyle E Barran: Thank you it was informative and fun  
at the same time  
01:24:11 Melanie Carter: Love this presentation, could talk about math  
non-stop for as long as I live.  
01:24:12 David Barnes: Ben's Handout is available at  
[https://www.nctm.org/uploadedFiles/Conferences\\_and\\_Professional\\_Development/Webinars\\_and\\_Webcasts/Webcasts/Aug12WebinarHandout.pdf](https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/Aug12WebinarHandout.pdf)  
01:24:14 maria centeno: Thank you. Enjoyed the presentation!  
01:24:14 Olga Kosheleva: Thank you!  
01:24:15 Jet Yeung: Thank for your information on math timeline. Enjoyed  
your presentation.  
01:24:19 Melissa McDaniel: Thank you!  
01:24:19 Isabel Arcaya: super interesting, thanks  
01:24:26 Kaye Stacey: Thank you, Ben. Excellent presentation.  
01:24:32 Ellen Metzger: <https://www.wouldyourathermath.com>  
01:24:49 Margarito Valdez: Thanks  
01:24:49 Jolene Peterson: would you rather get one penny that doubles  
every day OR \$5 each day. maybe this is a "would you rather?"  
01:24:50 Rosanne Marino: Loved the turtle open ended probs! Thanks for all  
the ideas!!  
01:25:06 Jennifer Rubiano: Would you rather win \$1,000,000 all at once  
of \$500 a week for life?  
01:25:19 Wendyk Kraft: What animal would be cutest if scaled down to the  
size of a cat - this is an example of would your rather  
01:25:19 Laura Semian: yes... how do you use the "old wheel" most  
effectively?  
01:25:22 Ulysses Cendejas: Would you rather 50% of a cookie or 3/4 of a  
cookie?  
01:25:46 Justine Henning: use the profiles at Math4Science.org to show  
kids the diversity of people working in STEM and encourage them to learn math to  
build cool careers  
01:25:48 ALEX QUYENVO: I'd take the million dollars, not sure how long I'll  
live with times like this hhaa...  
01:25:51 PALANISAMY KATHIR VELOO: Thank you Ben Sinwell super  
01:25:55 W Tad Johnston: With a nod to children of the 60's - we keep  
reinventing the wheel because we want to roll our own.  
01:25:56 Lesly Brown: Thank you!  
01:26:01 Laura Semian: so funny how math is almost timeless...  
01:26:04 Ann Marcellin: Very intriguing presentation!  
01:26:05 Ellen Metzger: I remember Geometers Sketchpad. Is that still  
around?  
01:26:11 Catherine Abbott: 100 years later we are still humans.  
01:26:11 John DeWitt: nice history- thanks  
01:26:13 Babajune Banihashemrad: Ty  
01:26:14 Laura Semian: Thank YOU!  
01:26:14 W Gary Martin: @Ellen - yes!  
01:26:16 David Barnes: Why do we keep reinventing the wheel?  
Maybe it is not that we need more wheels, but need more inventors.

01:26:17 Nicole Walden: Would you rather pay this for this amt of time or that for that amt of time?

01:26:18 Justin Klinger: Thank you. I loved seeing that some ideas from long ago are still true today!!!

01:26:18 Mark Phipps: Does anyone know how to create that awesome timeline that is on nctm

01:26:19 Elba Howington: Thank you!!

01:26:21 Cacho Mariella: Thank you!

01:26:23 Francis Kisner: Thank you for the survey.

01:26:24 Karen Pritchett: Thank you, Ben!

01:26:26 Todd Smallcanyon: thank you

01:26:35 f8d1aaf2: thank you so much Ben

01:26:38 Catherine Abbott: Thank you. Terrific presentation.

01:26:45 Bill Hudson: Thank you

01:26:51 Rose Hutcherson: Thank you

01:26:52 Nicole Walden: Does anyone know how to create that awesome timeline that is on nctm

01:26:58 Marissa Heitman: and how we still use the same tools for math

01:27:02 Ellen Metzger: Thank you so much NCTM and Ben!

01:27:04 Rachell Scott: I really enjoyed this presentation. Thank you!

01:27:05 Cindy Bryant: Yes, 76 today!

01:27:06 Kathy Kamauu: We are starting full in-class teaching with boarding students from around the world, It can be done!!

01:27:07 W Gary Martin: Great to see the Seniors at the presentation!

01:27:17 W Gary Martin: (You know who you are)

01:27:19 Trena Wilkerson: So awesome to reflect on the past and also see things connected to today and looking toward our future! Thank you!

01:27:20 Mary France Imperial: thank you so much.. wonderful session! loved looking the history.

01:27:22 Justine Henning: Thank you. Especially enjoyed the forays into tech and concepts you use in your teaching

01:27:23 Chonda Long: <https://www.nctm.org/change/>

01:27:30 Ben Sinwell: Hey Gary Martin

01:27:35 Kathy Kamauu: We are starting full in-class teaching in a private school in Hawaii with boarding students from around the world, It can be done!!

01:27:39 Maria Padiernos: I really enjoyed listening to you and I agree that we must model about being fearless and hopeful....we can overcome, we have to be the standard on emotional learning, otherwise....I don't even bring my thinking in that direction....I chose HOPE!

01:27:42 Faith Peddie: Here is a link to this month's INTERACTIVE and COLORFUL journal, MTLT  
[https://www.nctm.org/uploadedFiles/Conferences\\_and\\_Professional\\_Development/Webinars\\_and\\_Webcasts/Webcasts/MTLT\\_eTOC\\_Aug.pdf](https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/MTLT_eTOC_Aug.pdf)

01:27:52 W Gary Martin: Hey Ben! Great session!

01:27:57 Daniel Irving: Registration for the Virtual NCTM conference begins on September 1st! Very excited for that!

01:28:05 Joyce Meier: Thank you!

01:28:15 Gisela Vivanco: Great session

01:28:18 Gisela Vivanco: Thank you so much



01:28:23 Laura Semian: thanks to all... this was great. Stay safe and be well~

01:28:39 Mohamed T: thanks so much!

01:28:40 Trena Wilkerson: <https://www.nctm.org/virtual2020/>

01:28:43 Juan C Morales: Gracias. Excelente presentación.

01:28:48 LeAnna Deveaux-Miller: Thank you for a great session

01:28:48 Ocella Davis: Thank you panelists

01:28:49 Ulysses Cendejas: ty

01:28:58 Nora Marasigan: Thank you so much! Stay safe and healthy.

01:29:09 Galaxy J2 Core: Awesome presentation. Thank you.

01:29:13 India Puch: it was great!

01:29:32 ALEX QUYENVO: thank you

01:29:33 India Puch: yes

01:29:40 Betty Stallings: Thanks, it was great !!!!

01:29:45 Angela Corona: Thank you!

01:29:49 Sandra Bagadiong: Great presentation

01:29:54 Trena Wilkerson: <https://www.nctm.org/virtual2020/>

01:29:57 Sandra Bagadiong: Thank u so much

01:30:04 Sandra Bagadiong: Sandz

01:30:09 Sandra Bagadiong: From philippines