00:34:05 Trena Wilkerson: Hello from Waco, TX!
00:34:07 Shashidhar Belbase: Hello from UAE
00:34:10 Lorie Huff: Hello from Fayetteville, Arkansas
00:34:11 Sheila Kirton-Robbins: Hi from Nashville, NC
00:34:11 Arlene Bachinela: Hello from Baltimore, MD
00:34:12 Kendra Edwards: Hi from Brooklyn, NY
00:34:14 Jorge Veloso: Hi from Angola AO.
00:34:17 Vanessa Stokes: Hello From Chicago Area!
00:34:18 Mary Truxaw: Hello from Storrs, CT
00:34:20 Valerie Vanderport: hello from Everett, WA
00:34:21 Jenny Sagrillo: Hello from Milwaukee, WI
00:34:21 Susan Danskin: Hi from Ithaca, NY
00:34:21 jacob waxenberg: Hi from Michigan
00:34:22 Ryan Ferree: Hi from Lexington, VA
00:34:22 Robin Harbour: Chico, California
00:34:22 Susie Hakansson: Hi from Venice, CA
00:34:22 Tamara Stewart: Hello from Bronx NY
00:34:23 Cindy Bryant: Welcome and hello from Springfield, MO. Please change your chat setting to All panelist and attendees so everyone can view your posts.
00:34:23 Catherine Bronikowski: Hello from Milwaukee, WI
00:34:23 Lakeisha Jones: Hello From Denton, TX
00:34:23 Emily Kavanagh: Hello from Columbia, MD
00:34:23 Lotalinda Castro-Anderson: Hello from Philly!!! :)
00:34:24 Angela Langenkamp: Hello from Louisviile, KY
00:34:25 Judy Radigan: Hi from Maine!
00:34:25 Margaret Sullivan: Hello from SF
00:34:26 Kaycee Aultman: Hello from Tifton, GA!
00:34:26 Darlene Tyler: Hi from Cleveland, Ohio
00:34:27 Melissa Campbell: Hello from Fort Payne, AL
00:34:28 Nora Ramirez: Hello, everyone from Tempe, AZ.
00:34:28 LaCreshia Batteast: Hello I am from Glen Burnie, MD
00:34:28 Pamela Goodwin: Hi from NJ
00:34:28 Esther Winikoff: hello from Pittsburgh, PA!
00:34:29 Laurie Walker: Hello from Northampton,MA
00:34:29 Wenny Liao: Hi from Portland, OR
00:34:29 Michele Ratcliffe: Hello from Aurora, IL
00:34:30 Kellie Hammett: Hi from IN
00:34:30 Charese Chambers: Nashville, TN
00:34:31 Viragni Chand: Hello, form california
00:34:31 Tanya Landry: Hi from Baton Rouge, LA
00:34:32 Masooma Razzak: Howdy from Houston, TX!
00:34:32 Laura Partridge: Hello from Alexandria VA
00:34:32 Kay Wohlhuter: Hello from Duluth, MN
00:34:33 LANY JAMERO: good morning from Philippines
00:34:33 Veronica Kwok: Hello from Queens, NYC!
00:34:33 India Puch: India from Columbia sc
00:34:33 Dominique Dawkins: Howdy from Houston, TX
00:34:34 Dalila Rivera: Hello from Kingsville,Tx
00:34:35 Katherine Garcia: Hello from Virginia

00:34:35 Dawser Al-Adhami: Hi from Ann Arbor, MI
00:34:36 Danielle Leger: hello from Danielle leger from Irmo sc!!!
00:34:37 Michelle Shirtcliff: Hi from Burbank, CA
00:34:37 Rhonda Homberg: Hello from Texas
00:34:37 John Halmi: Annapolis, MD
00:34:38 Amanda Mills: Hi from Kentucky!
00:34:38 Ambreen Ali: Hello from Houston Texas
00:34:39 Jim Buckley: hi from Phoenix AZ
00:34:39 Debra Cash: Hello from Troy, OH
00:34:39 michelle morison: The Sirerras, Californina
00:34:42 Margie Pearse: Hi! Margie from PA
00:34:42 Gloria Carrasco: Hi from Hollister, California
00:34:43 Pasino: Hello from Worcester, MA!
00:34:44 Christine Jones: Hello From San Rafael, CA
00:34:44 Patricia Johnston: Hi. Patricia from Laurel, Md.
00:34:45 Angelita Beltran: Hello from Waukegan, IL
00:34:46 Dave Hankin: Hello again from Globe, Arizona!
00:34:46 Ma. Lorena Aloquina: good morning! back from Phil
00:34:47 Stephenia Courtney: Hello from Las Vegas, NV
00:34:47 Taelor Webb: Hello from Detroit, MI
00:34:47 Anh Le: Good afternoon from San Leandro, CA
00:34:48 Brian Gavenda: Brian Gavenda from Central Michigan
00:34:48 Nell Thurlow: Lafayette, LA
00:34:49 Erica Talbot: Hi From Athol Ma
00:34:50 Teresa Kitchens: Teresa Kitchens in Ponder, Texas
00:34:51 Teresa Bulanda: Hello from Ct:))
00:34:51 Eileen Phillips: Hello from NH
00:34:51 Mark Fili: Hi from Queens, NYC
00:34:51 Gloria Flores: Hello from Texas
00:34:53 Gail Dean: Hello from Minneapolis, MN
00:34:53 Suzette Gibbs: Hello from Waldof, Md
00:34:54 Bertha Reyes-Pond: Hi from San Antonio Texas.
00:34:58 Olivia Cooper: Hello from Las Vegas, NV!
00:34:58 Chad Hale: from Scranton home of dunder mifflin
00:34:58 Olga Kosheleva: Hello from El Paso, TX
00:34:58 Lesly Brown: Hello from Knoxville, Tennessee, and Lesly Brown.
00:34:59 Faith Peddie: Hi everyone! Welcome to tonight's session!
00:35:01 Macobia Harris: Hi from Desoto, Tx
00:35:02 Dee Crescitelli: Hi from Kentucky!
00:35:02 Myrna Cabreros: Good evening to all from Maryland
00:35:02 Catherine VanNetta: Hello from hot & humid Baltimore!
00:35:04 Alberta Jarmon: Hello from Nashville Tn
00:35:04 Sharon Black-MacKinnon: Bonsoir from New Brunswick Canada
00:35:06 Glenda Escasinas: From Maryland
00:35:08 Danielle Bentley: Hello from Kansas City, Missouri!!!!
00:35:08 Zara Simpson: Hello from Laurel, MD
00:35:09 Kinya Beckwith: Hello from Virginia
00:35:10 Nicole Walden: Nicole from Ohio
00:35:12 Ysrael Sarmiento: Hi there! It's 7AM here in the Philippines!
:-)

00:35:14 Jennifer Connor: Jackson .NJ many EL's this year
00:35:15 Michael Lanstrum: Hello from Cleveland, OH
00:35:15 Ma.Cecilia Cueva: good morning from Philippines
00:35:17 Martha Atilano: La Palma, California
00:35:17 Karoulin Aljoris: hi Michigan
00:35:18 Rodney Cooper: Greetings from Killeen, Texas
00:35:18 Noe Eugenio: Hello from Philippines!
00:35:19 Sheila Bishop: Hi from Hooksett, NH
00:35:20 Lisa Caudle: Hello, from Moses Lake, Washington
00:35:22 Jacqueline Colbourne: Maryalnd
00:35:25 Marvin Respicio: Hello from New York City
00:35:29 Kavana Williams: Hello from Wellington, Florida
00:35:31 Rosalyn Bantay: Good day from Philippines
00:35:33 Lynda Ginsburg: Hi from Yardley, PA
00:35:36 Natasha Gambarov: Hello from Boston, MA
00:35:41 Julie Shively: Hi from
00:35:43 Aya Zvaigzne: Philippines and Jakarta You All Rock :-)
00:35:45 Eduardo Enjambre: hello from Maryland
00:35:46 megan miller: Hello from Georgia!
00:35:47 Abdul Razak Othman: Abdul Razak from Malaysia
00:35:47 George Roy: Hi from Columbia, SC
00:35:48 Daniel Irving: Hello from North Providence, RI!
00:35:48 Kelli Freiwald: hello from PA
00:35:49 Julie Shively: Dover,DE!
00:35:53 Abigail Santiago: Hi from Lexington, KY
00:35:55 Dave Hankin: Lynda - from Holland, PA - Council Rock
00:36:00 Nora Marasigan: Hello from Philippines
00:36:01 Ana Guerrero: Hello from IL
00:36:05 Rolando II Delos Reyes: Good morning from Manila Philippines! PH
00:36:09 Heather Ruiz: from San Antonio
00:36:13 Deborah Gemoets: Hello from Gloucester, VA
00:36:14 Aya Zvaigzne: Nashville, TN Music City represents ! Kindest regards to all!
00:36:15 Diane Tual: Hi from Peekskill NY
00:36:19 Amelia Castro: Hello from Miami, FL
00:36:20 Beth Nalker: Hi from Arlington, VA
00:36:25 PALOMA CARRERA-ANDINO: HI from El Paso, Tx
00:36:35 Nely Ara-is: Hi from Norfolk, VA
00:36:35 Mary France Imperial: hello from Philippines
00:36:37 LaDonna Allison: Hello from Durham NC
00:36:39 Portia Rombaoa: 7:00am in the Philippines :-) July 8 Hello!
00:36:41 Carrie Caldwell: hello from SLC, UT
00:36:43 LaDonna Schwab: Hello from Farmers Branch, Texas
00:36:44 Sara VanDerWerf: Hello everyone! Sara VDW, I am enjoying a late day coffee in Minneapolis, MN
00:36:46 Beth Kobett: Hello Wonderful Math Community from Eldersburg, MD!
00:36:49 Margarito Valdez: Hello to all from Illinois
00:36:53 KEISHA SMITH: Keisha Smith, Montgomery AL
00:36:54 Jet Yeung: Hello Everyone--Jet from Henderson, Nevada
00:36:55 Chris DiGrazia: NSU 687?

00:37:02 David Barnes: Handout for tonight's session is at https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/July7WebinarHandout.pdf
00:37:05 Lance Brauchla: Hello from Ege, IN
00:37:07 Christiana Emmanuel: Hi from Atlanta, GA
00:37:09 Jerra Wood: Hi from Kentucky!
00:37:09 Caron White: Hello from Michigan
00:37:11 Leah McCombs: hello from Georgetown, Ky
00:37:15 SANDRA TROTMAN: Sandra Trotman from S.Florida
00:37:19 Saul Gonzalez: Hello from Bakersfield, CA. It is nice outside at 98F
00:37:20 lmohlman: Hi from Lehi, Utah
00:37:23 Adam Mietelski: Hello from Reading, Pennsylvania
00:37:24 Masooma Razzak: Howdy from Houston, TX
00:37:33 Faith Peddie: Hi All, here is the link to the handout for tonight's session: https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/July7WebinarHandout.pdf

00:37:34 Patricia Posey: Hello form Hattiesburg, MS
00:37:50 Nuria Linares: Hello from Denver Colorado
00:38:02 Susan Budde: Hi. From Connecticut
00:38:05 Justin Klinger: Hello from IL
00:38:07 Skip Fennell: Hi from Westminster, MD
00:38:20 Sheryl Rivera: Hello from Austin, TX.
00:38:23 Jill Johnson: hi from Wake Forest, NC
00:38:25 Shashidhar Belbase: Nice to see Rick from UWYO...!
00:38:30 Jennifer Heldenbrand: Hello from Provo, Utah
00:38:30 Susan Bartle: Hi from Florida.
00:38:32 Patricia Trafton: Hello from Chicago!
00:38:34 Erika Hassay: Hi from Austin, TX!
00:38:35 David Barnes: Our apologies. We were not able to get the close captioning working tonight.
00:38:42 Patricia Posey: Welcome!
00:38:42 Chonda Long: Here is the handout for the session - https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/July7WebinarHandout.pdf

00:38:43 Shashidhar Belbase: Hello Rick
00:38:46 Brynna Fisher: Indianapolis, Indiana
00:38:53 Shashidhar Belbase: Nice to find you here.
00:38:58 amanda Helgerson: Hi from Mass. 8th grade math teacher
00:38:58 LeAnna Deveaux-Miller: Good Evening From New Providence, THE BAHAMAS
00:39:03 Valerie Adams: Hail from Delaware
00:39:06 Cecilia Lopez: Hi! CA
00:39:12 W Tad Johnston: Tad from DC
00:39:27 Sara VanDerWerf: amen, amen, amen
00:39:28 Jeanne Simpson: Good evening from Alabama!
00:39:32 Todd Smallcanyon: Southern Utah

00:39:35 Andrea Chew: Hello from Spotsylvania, VA
00:39:39 Mohamed T: Greetings and thanks from Mohamed, CT.
00:39:40 Renee Parsley: Hello from Delaware!
00:39:43 Margarito Valdez: Keep politics out of this
00:39:44 Melissa Campbell: Glad you made it Simpson
00:39:44 Chonda Long: https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/July7WebinarHandout.pdf

00:39:47 Aya Zvaigzne: More than 50 percent of my classes are WIDA level 1 and 2
00:39:51 Susan Papert: hello from San Jose ca
00:39:56 David Barnes: https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/July7WebinarHandout.pdf

00:40:10 Martha Atilano: no
00:40:12 Jonathan Marcovitz: Greetings from Fort Lauderdale
00:40:15 Chonda Long: Here is the handout he is referencing - https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/July7WebinarHandout.pdf

00:40:52 W Tad Johnston: Hi Tad from DC
00:41:11 Helene Alalouf: Hi from NYC Thank you so much!
00:41:17 Taryn Brown: Good evening all. Taryn here from Jackson, MS.
00:41:22 Victoria Campbell: Hi from Tucson, AZ
00:41:23 Rita Modrzynski: What is the todos hashtag to use tonight? I missed that!
00:41:48 Jose Colipano: Hello from West Palm Beach, FL.
00:41:57 Genesis Docena: Hello from Washington, DC
00:42:34 Vanson Nguyen: Please remember to select "To: All panelists and attendees" for your chat.
00:42:54 Maria Woehl: Hi from San Diego, CA!
00:42:55 Veronica Galbreath: Hi from Kingwood, TX
00:43:00 Margaret Chavez: Hello from New Mexico
00:43:06 Brian Lawler: Hello everyone, from Athens, Georgia
00:43:11 Zackary Beach: hello from Greenville, South Carolina!
00:43:16 lredmond: Hello from Biloxi, MS
00:43:21 Maria Zavala: Love + Light from Oakland, CA
00:43:25 De Zhang: Hello from Minneapolis, MN
00:43:39 Tammy Williams: Hello! Tammy Williams from California.
00:43:40 Gricelda Monroy: Hello from Chicago!
00:44:09 Shashidhar Belbase: Mathematical and Quantitative Reasoning was one of the focal areas of research program at UWYO .
00:44:14 Susan Bardenhagen: Hey, California- it's beautiful in northern Virginia; I'm 35 miles from DC
00:44:26 Aya Zvaigzne: Rock the Register
00:44:35 Denise Beavers: Hello. from Denise in Tennessee
00:44:48 Kathy Rubendall: Hello from NYC
00:44:51 Cindy Bryant: Please change your chat setting to All panelist and

attendees so everyone can view your posts.
00:45:02 Emily Kavanagh: I agree with that
00:45:12 Kristin Randall: Hello from California
00:45:25 Tammy Williams: I would love to visit Virginia one day.
00:45:29 Catherine Abbott: Thanks for the reminder about changing audient to "All panelists and attendees"
00:45:49 Shashidhar Belbase: Language is a carrier of the students' thought processes. Language deficiency can hinder their learning.
00:46:27 Kyndall Brown: We are trying to get away from terms like “deficiencies”.
00:46:38 Shashidhar Belbase: Polya's Problem Solving stages.
00:46:58 Luz Maldonado Rodriguez: Thanks Kyndall! Agreed!
00:47:02 Shashidhar Belbase: Nice to this framework in language (ELs)
00:47:05 Linda Pritchett: Hello!
00:47:05 David Barnes: Here is the handout for the session - https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/July7WebinarHandout.pdf
00:47:07 Maria Zavala: What about, looking back and looking forward? Cycles of problem solving, what question can I ask now.
00:47:29 Iraima Reyes: Hi from Texas! I teach middle school math.
00:47:38 Shashidhar Belbase: Yes, Maria, I agree, I also add look ahead with look back.
00:48:33 Helene Alalouf: Stage 1 is the Three Read Protocol from Stamford Language Routines in Math
00:48:34 Catherine Abbott: I like that as a way to ask students to approach and retell the problem as a "story".
00:48:57 Catherine Abbott: Using drawings
00:49:36 Virginia Hill: Lesh Model- using all 5 representations
00:49:43 Aya Zvaigzne: Even function both arms up. Odd function one arm up one arm down. Don
00:49:47 TYRONICA CHAMBERS: From Tyronica
00:49:51 Aya Zvaigzne: Don’t be shy !!!!
00:49:51 Shashidhar Belbase: Revoicing sounds good idea.
00:50:15 Leah McCombs: How do you do this with level 1 EL students?
00:50:15 Catherine Abbott: In our area most of the Spanish speaking EL students come from Central America. We also have many students from Africa, South Asia and East Asia.
00:50:31 Linda Fulmore: Greetings from AZ, a balmy 111 degrees today!
00:50:54 Catherine Abbott: @Leah For Level 1 students, try to pair them with students who speak the same Home Language.
00:50:54 Jorge Veloso: EL stands for…?
00:51:03 Veronica Kwok: English learners I believe
00:51:04 Robin Harbour: English Learners
00:51:04 Kyndall Brown: English Learners
00:51:09 Aya Zvaigzne: @Leah McCombs I promise you can do this with WIDA level 1 successfully. As many representations including your body language will work. I promise
00:51:10 Jorge Veloso: Thanks
00:51:12 TYRONICA CHAMBERS: From Tyronica: I like the recall with one to one

00:51:39 Susan Bardenhagen: Hmm, 68% from Mexico as an average- in northern Virginia most Latinex are from other than Mexico- central and South America. Any one know why this is?
00:51:48 Shannon Hammond: A great resource for problems which are great for all students, but particularly ELs is James Tanton's "Without Words"
00:52:04 Catherine Abbott: 3-Act Math Problems and scaffolded "Diamond Math Problems" work well for this
00:52:12 Christiana Emmanuel: Will this powerpoint be shared with us
00:52:38 Catherine Abbott: Yes, the powerpoint and the chat will be available on the NCTM website.
00:52:39 TYRONICA CHAMBERS: From: Tyronica: How effective with SPED students?
00:52:42 Aya Zvaigzne: @Christian Emmanuel the ppt will be posted tomorrow along with the video replay
00:52:46 Shannon Hammond: Every child can problem solve in mathematics, it's how we scaffold their expression that aligns with this training.
00:53:36 Catherine Abbott: @Tyronica....many of the strategies that support EL students will also help SPED students who struggle with reading.
00:53:37 Susan Bardenhagen: Leverage works- a lever is a simple machine to do work. =)
00:54:07 Jennifer Connor: How do I help students who speak no English if I a, the only teacher in the room?
00:54:39 Aya Zvaigzne: For any human being, your voice matters and your ideas matter, just as a person. To truly ask sincerely and to truly listen makes all the difference in the world. No matter how small that pebble is, it makes a difference.
00:54:41 Shashidhar Belbase: Mathematics register, good idea.
00:54:41 Catherine Abbott: Comparing different solution path....how are they similar and how the solution path are different.
00:55:11 Christiana Emmanuel: @Aya Zvaigzne Great, thank you
00:55:14 Myra Absin: Good morning from Philippines.
00:55:33 Catherine Abbott: Developing rough draft revision to a better draft (not necessarily a "final" draft)
00:55:34 Susan Papert: @jennifer I use Google Translate. I have also used a Microsoft app on my phone that lets me speak English and auto translates to the student's native language (and vice versa)
00:55:49 Natasha Gambarov: What is meant by a mathematics register?
00:55:57 Librada Aspiras: Good morning Myra Absin I am from the Philippines too teaching here now in the US.
00:56:04 Shashidhar Belbase: Will think aloud help in DAP?
00:56:14 Rachel Smith: google translate is often inaccurate.
00:56:29 Catherine Abbott: @Natasha mathematical register ….words, symbols, structures for understanding and explaining mathematical ideas.
00:56:44 Natasha Gambarov: Thank you @Catherine Abbott :)
00:56:49 Jose Colipano: @Librada Aspiras I came from the Philippines too. Been teaching here in Palm Beach for 20 years now.
00:56:57 Emily Kavanagh: I do not trust Google Translate
00:57:01 Aya Zvaigzne: For the write-up, if you have students that have only one or two weeks in the country, and two weeks of English exposure, give them word bands WITH PICTURES, and a partner who is at least WIDA level 3.

00:57:02 Susan Papert: @rachel I agree. I use a transaction app for Vietnamese.
00:57:05 Deborah Gemoets: @Jennifer I too use Google Translate. I also try and get with them one-on-one and speak slowly to where they can understand.
00:57:52 Jennifer Connor: what is a word band
00:58:18 Charese Chambers: Do you have another recommendation other than Google Translate?
00:58:35 Dawser Al-Adhami: Dictionary.com
00:58:42 Mark Fili: The mathematics register refers to the forms of meaning and styles of communication
characteristic to the mathematics disciplinary community. An important role of teachers is to
support students in developing facility with the mathematics register in order to support
students' learning.
00:59:03 Jose Colipano: Every Math teacher's goal is to let students become self-regulated learners.
00:59:14 Catherine Abbott: @Emily..... Students and families will put up with Google Translate if you make it clear that you are not perfect. Also, Translate from English to Target Language THEN translate the translation back to English. If the translation back to English is close to your original meaning, then your pretty safe with the Google Translation.
00:59:25 Librada Aspiras: @Jose Colip, Hope to get in touch with you after this webinar
00:59:47 Aya Zvaigzne: @charese chambers when all else fails, use Talking Points - free to teachers
01:00:24 Luz Maldonado Rodriguez: I recommend https://www.spanishdict.com/
01:00:35 Charese Chambers: thanks
01:00:36 Susan Papert: @Charese. I use an app called Translator. The commercial from a couple of years ago.."you can speak reindeer"
01:00:37 Emily Kavanagh: @Catherine--I am fluent in Spanish and just have seen to many inaccuracies on there.
01:00:38 Masooma Razzak: Can we get the active link, please, so we can check out this resource.
01:00:38 Sharon Black-MacKinnon: Jerry has 20 baseball cards. He has decide to share 1/5 of them with his brother. How many cards will his brother receive?
01:00:43 Erika Hassay: hi Luz!
01:00:48 Myrna Cabreros: can we download this webinar to hear again Mr. Kirchen's presentation?
01:00:51 Aya Zvaigzne: @catherin Abbott plus one + reverse translation to verify the English actually conveyed
01:00:53 Luz Maldonado Rodriguez: Hi Erika! :)
01:00:54 Susan Bardenhagen: I can't see two different shadings; is there a better way to show this?
01:00:56 Stephenia Courtney: I love the Multiplcation story!
01:00:56 Shashidhar Belbase: Skip counting using table helps in multiplication.
01:01:01 Sharon Black-MacKinnon: missed the 3 out of 4 shading
01:01:02 Valerie Adams: 20 students in a class four were able to solve the

problem one of those students were correct.
01:01:22 SANDRA TROTMAN: I can't see two different shadings; is there a better way to show this?

01:01:31 Maria Zavala: one fifth of my pan of cupcakes is gluten free. 3/4 of that is covered in dairy-free icing. How much of my total batch is dairy-free and gluten free?
01:01:34 peter zirnis: great simple question for all
01:01:50 Claudia Sever: Juan
01:01:50 Gail Dean: I am not seeing the shading properly.
01:01:59 Danielle Leger: I had 20 chick fil a nuggets. 1/5 of them were grilled. How many were grilled? 3/4 of those grilled nuggets were seasoned. How many were seasoned?
01:02:04 Cynthia Schultz: if you zoom in you can see it
01:02:04 Susan Papert: I cannot see the 2nd shading
01:02:05 Librada Aspiras: shading are not clear
01:02:07 Shashidhar Belbase: if four students in blue boxes jump three times along the white boxes to the write, how many boxes they will step on?
01:02:16 lmohlman: 3 of the 4 purple boxes are shaded, for those that can't tell
01:02:17 Rozelta Boyd: Jay had 1/5 of a cake left after the party. His sisters ate ¾ of the leftover cake. How much of the total cake does Jake get?
01:02:22 Heather Ruiz: I had to super zoom to see shading
01:02:22 Aya Zvaigzne: The 20 percent that lies fallow is the part of your garden you are using for ground soil health by composting and allowing the microbes to regenerate without disturbance.
01:02:34 Rachel Smith: Maria, I love your problem.
01:02:34 Sharon Black-MacKinnon: Jerry has 20 baseball cards. He has decide to share 1/5 of them with his brother. How many cards will his brother receive? Both of the brothers like 3 of the cards Jerry gave to his brother. How many of the shared cards do they both like?
01:02:42 Erica Talbot: I only see one column shaded. Is it ok just to use the information that I see
01:02:44 Katy Long: I have 1/5 th of a pan of brownies left. My aunt wants to buy 2/4 of the whole pan. What fration of the pan did she buy?
01:02:52 Valerie Adams: Richard I love your turquoise.
01:02:52 Virginia Hill: you buy 1/5 yard of plywood and only need to use 3/4 of it for your project. How much of the plywood, in yards, did you use on your project?
01:02:52 Masooma Razzak: Nice job @maria!
01:02:57 Jeanne Simpson: I had 1/5 of a pan of brownies left after the party this afternoon. When my husband came home from work, he ate ¾ of what was remaining. What fraction of a pan of brownies did he eat?
01:02:57 Katy Long: oops, 3/4
01:03:09 Gail Dean: I still cannot see the shading properly after zooming.
01:03:09 Nora Ramirez: Jose had 1/5 pf a cake. He cut that into 4 equal parts and ate 3 of those parts.So he ate 3/ 20 of the whole cake..
01:03:12 Laura Cranmer: Mary has 20 blocks. She wants to divide the blocks to give 1/5 to her friend Sarah. She lays the blocks on the table in five columns.

How many blocks belongs in each column?
01:03:30 Sheila Kirton-Robbins: 20 problems on a test, Student a has 4 incorrect answers:. 3 multiple choice, 1 essay. What % of problems consists of incorrect MC answers?
01:03:32 Lance Brauchla: 20% of all free throws were made. How many shots taken?
01:03:32 Zorica Lloyd: 1/5 of the class are supposed to wear glasses. Of that 1/5, 3/4 actually wear them glasses. What portion of the class actually wears glasses?
01:03:33 Linda Pritchett: Jan has 20 cupcakes. What percent has been eaten?
01:03:35 Dave Elbourne: 1/5 of the class of 20 are boys and 4/5 are girls

01:03:36 Masooma Razzak: Go @Jeanne
01:03:41 LaCreshia Batteast: Jade got 20 pieces of candy from her mom. She ate 1/5 of them. How many pieces of candy does she have left
01:03:46 Shashidhar Belbase: Nice context to help students formulate several multiplication stories.
01:03:48 LaDonna Schwab: 1/5 of a pan of brownies is left over. Jamie ate 3/4ths of the remaining brownies. How much of the brownies did Jaime eat?
01:03:52 Stephenia Courtney: 1/5 of the class has an A in math. How many students do not have an A?
01:03:58 Karli Floyd: 1/5 of a class likes watching basketball. 3/4 of the class likes playing basketball. What fraction of the class likes both watching and playing basketball?
01:04:04 Claudia Sever: Juan's mom brought home 1/5 of a cake from a family gathering. Juan ate 1/4 of the cake that his mom brought. There are 3/20 pieces of the cake remaining in Juan's friedge.
01:04:04 Lauren Davenport: Maria has 4 out 5 sets of squares. Sorry, I do not see the double shading, just the 4 square shaded out of 20.
01:04:09 Justine Saavedra: there are 20 lizards in the museum enclosure, Juan has identified 16 females. What is the percentage of male lizards?
01:04:11 Susan Budde: My mother is planting a garden. She reserved spaces in her garden for me and my little sister. We have to share 3 of the little plots but I get to have one all to myself. my mother gets the remaining little plots in the 4 by 5 garden. How many plots are there (20). How many are for me and my sister (4). what fraction is that (1/5). how many plots do I get to myself (1) and what fraction is that (1/20)
01:04:11 Jose Colipano: Mrs. Santos bought a rectangular chocolate cake. She divided the cake into 20 equal pieces. SHe then told the class to leave 1/5 of the cake to give to another class. How many pieces will be given to the other class?
01:04:15 Rolando II Delos Reyes: Jose has a pile of blocks with him. He takes 1/5 of the blocks and shades 3/4 of them. How many are the blocks?
01:04:22 TYRONICA CHAMBERS: Ben and Tom share pizza. Between the both of them how many slices each?
01:04:26 Natasha Gambarov: There are 20 cupcakes. 15% have frosting, and 5% has a filling inside. How many cupcakes have frosting and how many has a filling inside?
01:04:38 Egypt Tobin: I have a class of 40 students. 1/5 of them are proficient in algebra 1. 3/4 of them received an A on their final. How many students

received an A?
01:04:39 Nicole Walden: In my classroom I have students divided into 5 groups with each group made up of 4 students. When the first group tried a question, three of them had it correct
01:04:41 Veronica Galbreath: There are 5 rows of desk vertically and 4 rows horizontally. Three desk have girls in them, one desk is empty. How many boys are there?
01:04:41 LaCreshia Batteast: There are 20 kids in a class. 1/5 of the students are boys and 4/5 are girls. How many girls are there in the class?
01:04:44 Zara Simpson: Cake was cut into 20 equal pieces. After the party, 4 pieces of the cake was leftover. I am taking a piece for me and a friend is taking enough cake for herself and her two sisters. How much cake should each person take so all the people get equal amounts of cake?
01:04:57 Librada Aspiras: There are 20 slices of cake. 4 slices were eaten. What part of the cake slices were eaten? what parts are left?
01:04:57 Catherine Abbott: @Emily....Google Translate is better than it was just a two years ago. When I have something longer than a few sentences or meaning must be very clear, then I find a native speaker to proof my work.
01:05:05 morgan bronson: While completing the tile for a kitchen, the worker said that he was able to finish 1/5 of the room by the end of the day. But she only finished 3/4 of the promised 1/5. How much was finished.
01:05:09 Renee Parsley: Joe has a cake. He cuts it into 20 pieces. He takes 4 pieces to his grandmother's house. Grandma and Pap love cake! What fraction of the whole cake is left for his family to enjoy?
01:05:11 julie Wankel: great story problems
01:05:16 Lynda Ginsburg: 5 of us split a cake. I ate 3/4 of my part. How much of the whole cake did I eat.
01:05:17 Susan Papert: I made 20 cupcakes. 1/5 are chocolate. 3/4 of those are have vanilla icing. How many of the not choc. cupcakes have a different icing?
01:05:34 Trena Wilkerson: What great scenarios! Excellent!
01:05:35 Nicole Walden: I liked that last one a lot
01:05:37 morgan bronson: nice ticket problem!!
01:05:47 Catherine Abbott: Food math is always fun.
01:05:54 Bertha Reyes-Pond: great idea!
01:05:58 Christiana Emmanuel: I like that last question a lot too
01:06:07 Beth Kobett: I am so impressed by these problems!
01:06:10 Veronica Galbreath: Students will love coming up with their own stories.
01:06:13 Zackary Beach: you have 5 teams of 4 players competing against each other. 1/4 of the winning team received all conference honors. How many members of the winning team did NOT receive all conference honors?

3/4 * 4 = 3 players.
01:06:14 Arlene Bachinela: What is the area of the double shaded region?
01:06:21 Linda Fulmore: I want to lose 20 pounds; I’m 1/5 of the way there. How many more pounds do I have to go?
01:06:21 Susan Bardenhagen: Zorica, your problem is SO true and relevant. Love it!

01:06:27 Emily Kavanagh: I made 20 cookies. 1/5 are Chocolate Chip. 3/4 of those have Chocolate filling. How many do not?
01:06:32 Maria Zavala: @Morgan, I like yours. I had this situation, only I was tiling my own kitchen.
01:06:57 Aya Zvaigzne: The germination rate for your potatoes is not 100 percent. Please calculate how many potatoes you want to grow to feed a family of four in the remaining garden space, if part of it is used for a vermi-compost.
01:07:04 Myra Absin: Mary has 20 square meters of land . She wants to subdivide it into 5 and gives 1/5 of it to her son.
01:07:13 morgan bronson: I came in late.. what does DAP stand for?
01:07:21 morgan bronson: @maria HA! thanks
01:07:21 Virginia Hill: love your example Egypt
01:07:55 Catherine Abbott: @Egypt Tobin ...You can find the link in the Q&A tab. Just open so you can see all questions and scroll down.
01:08:03 Sheila Kirton-Robbins: Is the sound breaking up or is it just me?
01:08:06 Mary France Imperial: An ICU can accommodate 20 COVID patients , I/5 of the facility/or the beds where used. How many patients can they still accommodate?
01:08:31 Portia Felder: Should the 20 be referenced in the problem? What if the whole was one?
01:08:57 Natasha Gambarov: Morgan, here is the link: https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/July7WebinarHandout.pdf

01:09:08 Jeff Shih: @Morgan Discursive Assessment Protocol (DAP)
01:09:16 Maria Zavala: That’s a good observation, Portia. You could write the problem with the unit of 1. I think some people did.
01:09:18 Rachel Kuehnl: Portia Felder, I agree with you.
01:09:31 Shashidhar Belbase: Connection between diagram, problem, and discourse.
01:09:48 Jayson Sentinellar: Good day from Ph

01:09:56 morgan bronson: @jeff and @natasha Thank you!
01:10:12 Aya Zvaigzne: These beautiful children are way too aware of the camera. When I hear my students tasing their voices with each other in 8 different languages and arguing is when I know I did a decent job.
01:10:41 Aya Zvaigzne: *tsing = raising
01:10:51 Mark Phipps: Candy bars being sold by orchestra students are sold for $1. Each candy bar can be broken into five pieces evenly. Jose has four friends that buy a candy bar during first hour. He asks his friends each to share one piece with him. What percentage of the total candy purchased by his friends did Jose receive if three of his four friends shared a piece of their candy bar with him.
01:10:56 Zara Simpson: Portia - the slide actually did say "The diagram represents one whole." so that is interesting. I had originally said 1 cake and 1/5 was left and then people and it was difficult cause then I saw others use 20 so I wasn't sure.
01:11:35 Tammy Williams: We incorporate this strategy in what we call Math Talk.
01:12:12 Zara Simpson: ^ I feel like so many different strategies are

related / similar but have different names and nuances.
01:12:26 Catherine Abbott: Why don't you think she is thinking of overlap? I can see pepperoni and pineapple on the same slice. Ledo's Pizza is always cut into square.
01:12:26 Shashidhar Belbase: Juana's problem is good to begin thinking about fractions in different units (fifths and fourths). Needs more thinking in different units.
01:13:01 Virginia Hill: it’s critical that the math connects to the context for true understanding of concepts
01:13:25 Susan Papert: @Catherine I'm with you.
01:13:52 Helene Alalouf: Does Fernando miss anything by saying the 20 parts of the whole is an hour? 1/5 of 20 is not the same as 1/5 of an hour.
01:14:00 Masooma Razzak: I could tell which stories were correct, but had a hard time coming up with ny own.
01:14:03 Catherine Abbott: I think Juana just didn't use the word "of"
01:14:12 Zara Simpson: the original picture said "The diagram represents one whole." so I'm not sure
01:14:13 morgan bronson: So he no longer received ELD instruction in isolation (as some districts do)
01:14:21 Maria Zavala: I think our problems come back to our concept of fraction, whether we the see whole as 1 set or as 1 object.
01:14:32 Zara Simpson: Juana did not correctly verbalize the overlap... she sees the fractions but is missing that piece that would imply the 3/4 is part of the 1/5
01:14:43 Laurel Dietz: I am wondering if juana understands the problem but just needs some language supports with sentence frames to get to the fraction of a fraction (distributing)
01:15:03 Zara Simpson: I'm with you, Laurel.
01:15:09 Aya Zvaigzne: @Zara Simpson You are correct. It is our goal to take every single strategy and use it at the right time at the right place. That is the greatest gift and the greatest aspiration of any teacher. We give our children what they need at the moment to grow with tools into their future. BTW Polya is an undisputed genius.
01:15:11 Susan Papert: @maria. that is something we work on in 6th grade...
01:15:17 Catherine Abbott: @Maria....yes, the understanding of fractions is not clear for many 5th graders or 6th graders.
01:15:46 Laurel Dietz: fractions of fractions...is at the higher level of fractional understanding
01:15:49 Susan Papert: @Laurel. I am with you
01:16:08 Librada Aspiras: illustrations is very helpful in teaching fractions
01:16:10 Emily Kavanagh: I agree Laurel
01:16:27 morgan bronson: @laurel definitely! And to verbalize it is sophisticated.
01:16:32 Catherine Abbott: @Laurel....me too. fractions of fractions is challenging for many 6th grade students
01:16:42 Laurel Dietz: even for adults
01:16:46 Susan Papert: Many of my students will subtract instead of multiply in 6th grade
01:17:29 Aya Zvaigzne: @Laurel Dietz I am doing my best to figure out how

to make a Desmos for fractions of fractions. Our kiddos need hands on after AFTER they get the story line and the discovery part of the exercise and go into the practice section.
01:17:30 morgan bronson: @susan yes. stressing the importance of concrete understanding early on in 3rd 4th and 5th
01:17:43 Catherine Abbott: Just to make it even more complicated....fractions can be part of a collection of objects. Where the collection is "1" and the pieces are "part of 1".
01:17:55 Shashidhar Belbase: Nice problem, making same units (denominators).
01:18:03 Susan Papert: @Catherine. Right?!
01:18:54 Aya Zvaigzne: The student has to actually know what /1/6 and 2/3 means in real terms.
01:18:55 Laurel Dietz: Yes...Catherine!
01:19:11 Emily Kavanagh: That is true Catherine
01:19:12 Stephenia Courtney: parts of a whole and unlike denominators
01:19:13 Shashidhar Belbase: 1/6 - 2/3 = 1/6 - 4/6 = (1-4)/6 = -3/6 = -1/2, and also pictorially
01:19:14 Catherine Abbott: In Terry Jones' "The Story of 1" he shows how Egyptian laborers were paid with fractions of bread. I wonder what that kind of problem would be understood by students. (It's really addition of unlike denominators.)
01:19:14 Dave Elbourne: number/fraction line
01:19:15 Aya Zvaigzne: Have the guys split up the paycheck into those parts.
01:19:24 Ana Alcaraz: Number line with 1/6ths and 1/3rds
01:19:27 Sheila Kirton-Robbins: 1 square = 1/6; 4 squares = 2/3, subtract
01:19:28 Susan Troutman: pattern blocks
01:19:31 Natasha Gambarov: Either visually or (1/6)-(4/6)
01:19:36 Gloria Flores: Fraction Bars & Number Line
01:19:40 Dawser Al-Adhami: cross product after you move the second fration to the other side. the second way is the make the same denomator
01:19:46 Christiana Emmanuel: 1/6 - 2/3 = 1/6 - 4/6 = (1-4)/6 = -3/6 = -1/2

01:19:50 Eduardo Enjambre: first of all students may begin by equivalent fractions
01:19:51 Ana Alcaraz: double number line
01:19:54 Susan Papert: double # lines
01:20:00 Erica Talbot: LCM's and numberlines
01:20:12 Erica Yarbrough: Yes number line I like, what about a ruler?
01:20:16 Julie Shively: So, when I see fraction problems my first thought is to represent it via the Singapore math method with boxes. Anyone else use that method to teach operations using fractions?
01:20:27 Justin Klinger: use plastic circular pie pieces
01:20:59 Tanya Landry: Dozen eggs
01:21:03 Jet Yeung: 1/6-1/3=2/12-8/12=-6/12=-1/2
01:21:10 Macobia Harris: Using two number lines with different denominators
01:21:10 Michele Ratcliffe: Fraction bars, double number line, use of same units (common denominator)

01:21:12 Aya Zvaigzne: Have the students figure out their own visual representations.
01:21:14 Jose Colipano: Use a number line.
01:21:20 Danielle Bentley: Nice, Erica!
01:21:21 Maria Zavala: What if I take the distance between -2/3 and 0, and slide it to the right 1/6 on a number line. Now I'm at -1/2 on the line.
01:21:23 Zara Simpson: yeah I did the numberline comparison
01:21:35 Catherine Abbott: I would have to carefully time this problem. The negative fraction would throw most of my 6th graders for a loop. I could do this with my accelerated math students after doing integer operations. Then do rational number operations.
01:21:47 ABDUL OTHMAN: First, we draw 6 columns. Take 1 column then draw 3 equal parts and take out 2/3 of i/6
01:21:47 Christiana Emmanuel: Clap clap clap
01:21:48 Susan Bardenhagen: Love Erica's thinking, that can be shown using manipulative fraction pieces!!!
01:21:50 Trena Wilkerson: Thank you @Erica!
01:21:50 Justin Klinger: What if students do no have a handle of the concept of negative values?
01:21:54 Zorica Lloyd: Picture with a rectangle split into 6 boxes. 1 is shaded in (that's 1/6). I want to remove 2/3 from that.so that is 4 of the boxes in my pic (2/3 = 4/6). But there are 3 too few boxes, since I only have 1. So I need 3 (out of the 6) more boxes.
01:21:59 Laurel Dietz: I would do it on a number line ...and skip counting 2 for every third
01:22:02 Tammy Williams: Good job Erica.
01:22:04 Catherine Abbott: Clap-clap Woop Erica
01:22:11 Bertha Reyes-Pond: woo hoo ..clapping
01:22:15 Justin Klinger: I would rather switch the fractions
01:22:23 Zorica Lloyd: Nice job Erica.
01:22:25 Natasha Gambarov: Very nice Erica :D
01:22:26 Linda Pritchett: great
01:22:40 David Barnes: Thanks Erica!
01:22:45 NITIN MALVIYA: great
01:22:46 Librada Aspiras: Thumbs up Erica
01:22:57 Myra Absin: I used cross multiplication. Where (3-12)/)(3×6)=-8/18=-1/2
01:23:05 Renee Parsley: Using a 6 by 3 array, I found 1/6 then tried to take away 2/3. I saw that I did not have enough to take away 2/3-- that I needed 9 additional pieces out of 18. So I am 9/18 short. The answer must be -9/18 or -1/2.
01:23:14 Amanda Lawrence: I would draw out a pie chart divided into 6ths and shade one, then draw one divided into 3rds with a minus sign between them. I would then explain that the difference between the two is 3/6 or 1/2 and since the first one is smaller, the solution would be negative 1/2.
01:23:33 Susan Papert: loving this!!
01:23:47 Zara Simpson: he understands how fractions denominator gets bigger so fraction is smaller
01:23:54 Emily Kavanagh: Number lines are a good way to show understanding
01:24:21 Aya Zvaigzne: Someone did a Really Great Job teaching him how to do a number line. KUDOS to all the elementary teachers. We owe you.

01:24:43 Linda Pritchett: number lines are great tools
01:24:58 Catherine Abbott: The student recognizes the relative position of the 1/x fractions. (I assume this was videotaped at the back of the class that was doing something else.]
01:25:04 Sheila Kirton-Robbins: Andres has a good grasp of fractions on the number line! Impressive
01:25:18 Kristin Randall: He understands that if he takes away more than he has, his answer will be less than zero.
01:25:27 Valerie Adams: When do you stop a student if their thinking is not correct? Do you let them continue to confuse themselves?
01:25:37 morgan bronson: also critical importance to understand subtraction as distance on a number line!
01:25:38 Zara Simpson: this part is a little confused... because he wouldn't take away enough. but he's letting it go.
01:25:50 Zara Simpson: he KNOWS the answer will be negative
01:26:01 Kyndall Brown: He understands benchmark fractions, like 1/2, 1/4, 3/4
01:26:02 Abdelaziz Dalil: the student is great in ordering fractions
01:26:03 Catherine Abbott: The student has not related 1/6 to 2/3.
01:26:20 Ana Alcaraz: he understands that subtraction shows distance between numbers
01:26:22 Laurel Dietz: He is understanding that subtraction is really distance problem
01:26:25 Kristin Randall: He understands that if you add, you go to the right on the number line and if you subtract, you go to the left on the number line (and that the number line extends to the left of zero).
01:26:34 Maria Zavala: Valerie, what’s wrong with confusion? I like that this person is getting into the pit of confusion with the student. How else would we get to new understanding?
01:26:35 Tammy Williams: Yes, he dies understand how fractions denominators work. He used the number line. Great job! The teacher is acting as a coach. Allowing the student to come up with the answer.
01:26:39 Catherine Abbott: I love the use of reflection to understand the negative numbers on the number line.
01:26:41 Zorica Lloyd: He’s estimating. He knows he’s not going a full 1. So he’s estimating something less than 2/3.
01:26:49 Nicole Walden: I like his brackets. He needed to position from 0 to 2/3 instead of 1/6 t0 2/3
01:26:50 Gerlynn Montiel: It is neat to see the teacher allowing time for the students to share his idea with the continuous use of purposeful questions.
01:26:50 Rachell Scott: I agree, the students is great with ordering fractions on the number line.
01:26:55 SANDRA TROTMAN: The student has showed mastery with ordering fractions.
01:26:56 Erica Talbot: I think that he understands benchmark fractions however, these two fractions are causing some confusing
01:27:01 Mary Truxaw: I love the idea of matching the distances - even if he’s having trouble getting the exact fractional amount. The questions the teacher is asking are great
01:27:06 Linda Pritchett: awesome

01:27:10 Stacey Solomon: He is using the concept of subtraction as distance so if the distance between 1/6 and2/3 is in one way then you would use it the other direction.
01:27:21 Egypt Tobin: I love his intense focus in what he is doing. No frustration or giving up
01:27:21 Nicole Walden: yes - I like his matching distances
01:27:23 Sheila Kirton-Robbins: The teacher is great at guiding the student, using questions
01:27:23 Rozelta Boyd: If he labeled both sides of the number line, his method would have worked perfectly the first time out
01:27:24 Justin Klinger: He is understand general concept of subtraction on a number line.
01:27:32 amanda Helgerson: benchmark fractions
01:27:42 Shashidhar Belbase: He appears to know the position of the number he wanted.
01:27:47 morgan bronson: distance on a numberline as subtraction
01:27:49 Dominique Dawkins: he knew his benchmark fractions
01:27:50 Nicole Walden: rozelta - I agree
01:27:51 Zara Simpson: yeah he definitely did really well with the fractions and understanding fractions becoming smaller
01:27:52 Sheila Kirton-Robbins: benchmark fractions
01:27:57 Danielle Leger: he knows how to order fractions
01:27:58 Linda Pritchett: distance
01:28:00 Maria Zavala: The analogy “say this is 5 inches” is such a useful discourse move he makes, to communicate his meaning.
01:28:01 Zara Simpson: when the denominator gets bigger
01:28:02 Rolando II Delos Reyes: He is able to relate fractions to its relative position in the number line
01:28:03 Gloria Flores: He understands his benchmark fractions.
01:28:06 Shari Kaku: Knows his unit fractions and fractions between 0 and 1.
01:28:06 Aya Zvaigzne: @Valerie Adams Yes, you let the student follow their path of thinking, and you can guide them with inquiry, but just like in the video, you are ALWAYS asking the student to walk the path of their thinking and explaining. When they get it wrong, they will discover how it is wrong, even if you are the one to ask them to prove it with your gentle, guided questions. I hope that made sense. They will see where they went off the path.
01:28:16 Stacey Solomon: By asking questions he is developing his understanding.
01:28:18 Gloria Flores: He knows the concept of subtraction.
01:28:24 Danielle Bentley: Go, Morgan!
01:28:36 Portia Rombaoa: He knows where to plot the fractions on the number line
01:28:37 Elba Howington: He knows how to place numbers on the number line, subtractions
01:28:57 Trena Wilkerson: Thanks Morgan!
01:28:58 Rebecca Strom: I loved his visual with the rotation of his hand about the “shift” to subtract the 2/3
01:29:01 morgan bronson: lol! no worries!
01:29:02 Maria Zavala: Subtraction as traveling a direction (to the left)

on the number line is also evident.
01:29:03 Catherine Abbott: Discourse....as the student tries to explain, he recognizes when something does not make sense he modifies and tries other ideas to explain.
01:29:10 Rachell Scott: Allowing him to talk his way through the problem is good discourse.
01:29:22 Danielle Bentley: Yay, Sheila!
01:29:26 Linda Fulmore: Thank you Erica!
01:29:36 Danielle Bentley: I love hearing voices!
01:29:37 Maria Zavala: Yes, Sheila!
01:29:44 Myra Absin: He knows concept of integers and operation of fractions.
01:29:48 Stacey Solomon: if a student is developing their thinking and trying to construct mathematical ideas then I would let them continue down whatever path they are going down and use critically planned questions to help student explain their thinking and explain why they are thinking it.
01:29:51 Erica Talbot: sorry i lowered my hand but i was going to spak about his knowledge of benchmark fractions
01:29:52 morgan bronson: He did a cool flip with his hands of the distance! Loved that
01:29:58 Linda Fulmore: Great comment Shelia!
01:30:01 Catherine Abbott: The student has not reached the final answer, however he has shown a lot of math understanding.
01:30:33 Linda Pritchett: mathematics standard practice
01:30:47 morgan bronson: "let's write that down so we don't forget" excellent

01:30:59 amanda Helgerson: discourse: celebrated his strategies as a starting point
01:31:04 Rolando II Delos Reyes: Yes I like how the teacher highlighted the student’s idea! Need a lot of patience and questioning skills
01:31:17 Stephenia Courtney: understanding the process
01:31:24 morgan bronson: she kept asking "what about that 1/6?"
01:31:32 Viragni Chand: He has great understanding of fractions and also knew how to do subtraction on the number line, although he wasn't able to get the correct answer.
01:31:51 Catherine Abbott: Maybe the student could ask the student to pivot his positive 1/6. Then mark off more negative sixths.
01:32:00 Portia Rombaoa: The teacher provided scaffolding by means of good questioning and trying to make the student elaborate his process.
01:32:15 Shashidhar Belbase: Very good visualization of fractions on a number line.
01:32:17 Maria Zavala: Yes, Portia!
01:32:41 Zara Simpson: IB Learner Profiles whoa
01:32:48 Catherine Abbott: I can see that this students is a "risk taker"
01:32:50 morgan bronson: @Richard Kitchen we are all guilty of that!
01:33:11 Lorie Huff: Thank you for sharing that observation.
01:33:21 Jose Colipano: This is unique because he started with 1/6 and measure the distance between the 2 coordinates(-1/2 and 2/3)
01:33:22 Laurel Dietz: Teacher needs to be cognizant that students may have

a strong math background just need language supports to explain/support their thinking
01:33:23 Aya Zvaigzne: YAY for growing more and more risk taking voices that are not afraid to speak up even if they only have a few words with a heavy accent. Jump up and down with enthusiasm.
01:33:26 Viragni Chand: He should have been asked to write down the fractions on the left of zero also and then do the subtatraction, he might get it correct
01:33:26 Cindy Bryant: Why it's so important for students to share their thinking!
01:33:27 Sheila Kirton-Robbins: Are the whole videos available for us to watch?
01:33:27 Danielle Bentley: Thank you for your presentation!
01:33:49 Patricia Posey: How well does this work in the high school classrooms?
01:33:54 Masooma Razzak: Great problems and presentation!
01:34:04 Ana Guerrero: Thank you!!! I really enjoyed today's presentation.
01:34:07 Emily Kavanagh: Thanks for a great presentation
01:34:11 Kendra Edwards: Thank you. This was a very informative presentation!!
01:34:18 Natasha Gambarov: Thank you for this very informative presentation
01:34:20 Gloria Flores: Thank You:)
01:34:21 Linda Pritchett: Thank you!
01:34:22 Nadine Richards-Ramsey: Thank you!! Great presentation!
01:34:22 Honey Sacro Swem: Thank you so much for sharing your expertise. Learned so much from you!
01:34:23 Shashidhar Belbase: Wow Vedauu Rocks !
01:34:25 Viragni Chand: Thanks for the presentation.
01:34:25 Laura Partridge: Thanks for your presentation and information.
01:34:25 Dawser Al-Adhami: Thank you I wish your presentation was longer
01:34:27 Stacey Solomon: Thank you
01:34:28 Catherine Abbott: It will be so hard to establish relationships in the Fall if we are still distance learning. Any ideas?

01:34:30 Tammy Williams: Thank you!
01:34:30 Pamela Goodwin: Thank you...great webinar!
01:34:31 Ma. Lorena Aloquina: This is refreshing dealing with fractions to students in different ways...thank you.
01:34:35 Caron White: Thank you!
01:34:40 Lauren Davenport: Thank you for your presentation.
01:34:40 Kristie Chandler: Thank you!
01:34:41 LaDonna Allison: Thank you for this wonderful information
01:34:41 Anh Le: Thank you for another amazing webinar!!!!!
01:34:44 Saul Gonzalez: Wow, I lost track of time! Thanks for the awesome presentation.
01:34:53 Stephenia Courtney: Thank you.
01:34:57 Denise Beavers: Thanks for your presentation!

01:34:57 Glenda Escasinas: thank you!
01:35:00 Kavana Williams: Thank you for a great presentation.
01:35:04 Zackary Beach: Thank you for this!! Great webinar!
01:35:09 Veronica Galbreath: That hour went by fast! Thank you so much!

01:35:10 Sheryl Rivera: Thank you!
01:35:12 Catherine Abbott: Encourage students to have study buddies.
01:35:18 julie Wankel: Thank you
01:35:20 Portia Felder: Excellent information
01:35:21 Librada Aspiras: Thank you for sharing this wonderful presentation.
01:35:22 Jeff Shih: So great to learn from you again!
01:35:23 Kathie White: This was great...wish it was longer!
01:35:25 Vicki Pace: Thank you... Awesome webinar!
01:35:32 Sarah Roberts: Thank you!
01:35:36 Bertha Reyes-Pond: Thank you, great information!
01:35:54 Trena Wilkerson: Thank you to Richard and also participants for sharing ideas and thoughts!
01:35:57 Catherine Abbott: We are told to NOT use breakout rooms with our middle school students.
01:35:59 Elba Howington: Thank you, great webinar.
01:36:05 Angie Cole: thank you
01:36:09 Michele Ratcliffe: Great webinar! I wish the presentation was longer. Thank you!
01:36:10 Jennifer Eaton: Thank you!
01:36:10 Gyasi Daniel: Thank you!!
01:36:11 Patricia Posey: Thanks this was great!
01:36:12 Kyndall Brown: Thank You!
01:36:12 Helene Alalouf: Very informative, with examples urging us to listen to students thinking and to question for deeper understanding and precision, and student self-correction. Thanks! Stay safe!
01:36:14 SANDRA TROTMAN: Awesome webinar! Great examples.
01:36:16 Maria Zavala: Thank you, Rick! Great to see you!
01:36:17 Lorie Huff: Thank you Richard! This was great information.
01:36:18 Zara Simpson: Thanks!
01:36:20 Maria Woehl: Thank you!
01:36:22 Beth Nalker: Thank you!!
01:36:22 Valerie Adams: Thank you Rick
01:36:23 Robin Harbour: THANK YOU!
01:36:24 Gail Dean: Interactions of the discourse provides a rich way to interact and see math from the student perspective.
01:36:25 Catherine Abbott: Thank you Rick
01:36:25 Gricelda Monroy: Thank you!
01:36:25 Beth Kobett: Outstamdomg session!!
01:36:26 Danielle Leger: thank you!!!
01:36:27 Michelle Hall: Thank you for the wealth of information provided
01:36:28 Justin Klinger: Thank you
01:36:28 Danielle Grenader: Thank you!
01:36:31 Shashidhar Belbase: Thank you Rick for your wonderful presentation.

01:36:32 Vanessa Stokes: Thanks!
01:36:32 Susan Danskin: Thank you. Great sample problems.
01:36:33 Cynthia Schultz: thank you!
01:36:36 JERRAME IBABAO: thank you
01:36:38 Chris DiGrazia: This was amazing! Thank you
01:36:38 Erica Talbot: thank you
01:36:40 Rodney Cooper: Thank you!!!
01:36:40 Erika Hassay: Thank you so much!
01:36:41 Olga Kosheleva: Thank you!
01:36:41 Maral Aznavour: thank you!
01:36:42 Jet Yeung: Thank you for all the information and skills
01:36:42 Amelia Castro: Great seminar! Thank you so much for your knowledge on this topic!
01:36:44 Sharon Black-MacKinnon: Thank you so much! Wonderful webinar:-)
01:36:45 Nora Ramirez: Thank you. Rick. It was good “seeing” you.
01:36:46 India Puch: Thank you this has been very helpful
01:36:47 Ryan Ferree: Very cool. Thank you
01:36:48 Wenny Liao: Thank you so much!
01:36:50 Victoria Campbell: Thank you
01:36:51 Macobia Harris: Thank you. Great examples, videos, and explanations
01:36:54 Rolando II Delos Reyes: Thank you for this session! It will be a challenge to have enough time for discourse PH
01:36:54 SANDRA TROTMAN: Thank you for an informative session. Well received.
01:36:55 Maria Padiernos: Muchas Gracias from SW Detroit
01:36:56 Abigail Santiago: Awesome presentation!!
01:36:57 Mary France Imperial: Thank you so much
01:36:58 Valerie Vanderport: thank you
01:37:00 Rachell Scott: Thank you!!!
01:37:01 Amanda Lawrence: Thank you
01:37:02 Noe Eugenio: Thank you very much!!! Great webinar!
01:37:03 Justin Klinger: How many did not get the BATMAN reference?
01:37:04 Brian Gavenda: Thank you!
01:37:04 Jim Buckley: another great webinar from NCTM/TODOS
01:37:06 LeAnna Deveaux-Miller: THANK YOU...GREAT PRESENTATION
01:37:11 NITIN MALVIYA: thank you
01:37:14 Dominique Dawkins: Thank you!
01:37:15 Myra Absin: Thank you. Excellent presentation.
01:37:16 Lance Brauchla: Thanks!!!!!
01:37:17 Nicole Walden: No Way!!! Same Bat time. Same Bat channel! I say that, too!!
01:37:18 Carolina Napp-Avelli: Thank you, Rick! Greetings from Maryland
01:37:24 Lorie Huff: Thank you, Richard, Vanson, Chonda, Dave, Faith, Cindy, Trena, and NCTM Staff.
01:37:25 Andrea Chew: Thank you!
01:37:30 Alberta Jarmon: Great Webinar. Thank You!
01:37:30 NITIN MALVIYA: is there is any Certificate of Participation.
01:37:31 Tanya Landry: Thank you. I plan to use these strategies with my dyslexic students.
01:37:33 Kathy Rubendall: Thank you. This was excellent!
01:37:35 megan miller: Awesome presentation! Thank you!

01:37:49 Pamela Stark: Thank you
01:37:52 Mary Truxaw: Thank you!
01:37:59 Ana Alcaraz: Thank you!
01:38:01 Rita Modrzynski: Thank you, Rick!
01:38:02 Laurel Dietz: Could you please put that slide back up for Friday's presentation
01:38:05 Karoulin Aljoris: thank you
01:38:06 Nicole Walden: certificate will come to your email tomorrow
01:38:06 Derrick Johsnon: Thank you! Great presentation!
01:38:15 Nora Marasigan: Thank you so much!
01:38:16 Jose Colipano: Thanks...
01:38:29 Zara Simpson: How do I check if I am a member of NCTM?
01:38:30 Eduardo Enjambre: Thank you so much!
01:38:35 Dave Hankin: Thank you again from Globe, Arizona!
01:38:40 Nuria Linares: Thank you!!!
01:38:42 LaCreshia Batteast: Thanks so much!
01:38:42 Patricia Trafton: Great presentation! Thanks so much! This pairs well with the ELL certification classes I've been taking.
01:38:42 Justine Saavedra: thakyou
01:38:44 Stephenia Courtney: GREAT! Thanks again.
01:38:45 Suzette Gibbs: Thanks
01:38:45 Debra Cash: Thanks!
01:38:46 Egypt Tobin: Thank you
01:38:48 Gail Dean: Thank you!
01:38:48 Harold Miles: Awesome
01:38:49 Deborah Gemoets: Can we get a copy of the slides?
01:38:50 Craig Witte: Thank you
01:38:51 Marvin Respicio: Thank you!
01:38:52 Todd Smallcanyon: thank you
01:38:52 Diane Tual: Thank you!!
01:38:52 Linda Pritchett: Thank you!
01:38:53 Rebecca Strom: Thank you!
01:38:54 Susan Papert: thank you to all!
01:38:57 Karen Mittelstaedt: Thanks you
01:38:58 Tammy Williams: Thanks!
01:39:00 Anna Elizondo: thanks!
01:39:00 India Puch: thank you!
01:39:04 Aya Zvaigzne: @Catherine Abbott The only way to connect sometimes is to call them on the phone, unless you can FaceTime. If you have 150 students and 4 of the 5 numbers are disconnected and you call the uncle of the kid who is in the same building with the same last name on a wild guess.. when you hear them, speak in happiness when you called it works