

00:20:59 Jacob Peterman: Hello from Raton New Mexico!
00:21:03 Michael Lanstrum: Hello from Cleveland, Ohio
00:21:06 Bee Lim: Seattle WA
00:21:09 Crista McGowan: Hello from Marietta, Georgia!
00:21:11 Joseph Lally: Howdy from NY!
00:21:13 Cynthia Lee: Aloha from Hawaii =)
00:21:15 Ralph Mason: Winnipeg Canada
00:21:18 Daniel Irving: Hello from North Providence, RI!
00:21:18 Aimee Green: Dayton, Ohio
00:21:19 Julian Laferrera: hello from massachusetts
00:21:22 Mary Velez: New Paltz NY (Hudson Valley)
00:21:27 Gabriela Samayoa: Guatemala
00:21:29 Francis Kisner: Another Beautiful Day in Pennsylvania
00:21:33 Laura Kaplan: Chicago suburbs
00:21:36 Cynthia Lee: Yes 2pm you got it
00:21:36 Lai Fong Wong: Good morning from Singapore
00:21:38 Diana Tolton: Tucson, Az
00:21:38 Aya Zvaigzne: Hello from Nashville, TN and wrapping up the
end of this semester.
00:21:42 Lynn Rakatansky: Hello from Providence, RI.
00:21:46 Joanie Funderburk: hello from Colorado
00:21:49 Jami Riley: Madison, Wisconsin!
00:22:07 Diana Tolton: rain in the Sonoran Desert
00:22:21 Connie Gamez: Monterrey, Mexico
00:23:04 Bob Allen: Hello from Tracy, CA
00:23:27 Carole Bamford: Hi from Montreal Canada
00:23:29 Beverly Bailey: Hello from Diamond, Ohio
00:24:45 Trena Wilkerson: Hello from Waco, TX!
00:25:11 Laurie Eyre: hello from Fairfield, Iowa
00:25:28 Trena Wilkerson: So great to 'see' so many friends and to make
new friends as well!
00:26:09 Lauren Wachter: Hey there from Las Vegas
00:26:19 Mary Velez: Should we put it in the chat?
00:26:22 Gabriela Samayoa: parallels because they never meet
00:26:26 Brendan O'Laughlin: 2nd because they don't intersect
00:26:26 Mary Velez: Hi!
00:26:28 Francis Kisner: They all belong but each in its own way is
different from the others.
00:26:36 Lai Fong Wong: 1 bec one is +ve & the other is -ve
00:26:38 Joseph Lally: Top right because the lines will never
intersect
00:26:39 Julian Laferrera: The bottom right one doesn't belong
because it's the only one with two of the same line
00:26:41 Ashley Thomas: the first one because all the others go in
the same direction
00:26:42 Daniel Irving: Top right: parallel
00:26:42 Bee Lim: Top Left because one has positive slope and the other
one negative slope
00:26:43 Jacob Peterman: I don't like #3 because there aren't two
separate lines

00:26:44 Crista McGowan: The bottom left doesn't belong because the lines are not unique/different

00:26:45 Diane Tepylo: Bottom left- the same line

00:26:47 Mary Velez: NE because it is the only pair that doesn't actually ever touch

00:26:51 Lai Fong Wong: 2 bec there is no intersection

00:26:53 Elizabeth Engle: Is our video or audio on?

00:26:55 Laura Kaplan: top right. No points in common

00:26:55 Ralph Mason: They all belong. We're inclusive.

00:26:59 Aimee Green: The bottom right because it can look like it will be parallel and never touch

00:27:01 Aya Zvaigzne: bottom right - not independent

00:27:04 Lai Fong Wong: 3 bec both lines are the same

00:27:08 Ashley Thomas: 3 because they are the same line

00:27:09 Bob Allen: Bottom Left because they're coincident

00:27:10 Rebecca Carrigan: top right because they are parallel so no intersection

00:27:21 Diana Tolton: parallel because no intersection or common point

00:27:25 Daniel Irving: Top right: 2 lines with negative slopes

00:33:36 Ashley Thomas: entry for all

00:33:41 Diane Tepylo: tasks elicits prior understandings

00:33:46 Jacob Peterman: Students need to defend their choices, low floor-high ceiling

00:33:59 Diane Tepylo: Making connections between solutions

00:34:03 Eileen Erisman: There is not one right answer.

00:34:05 Daniel Irving: Every choice could be correct; explaining their reasoning in a non-judgmental way as anonymous.

00:34:13 Mary Velez: I like it because everyone could offer something up and defend their thought. There was no "right " answer

00:34:26 Martha VanderWolk: There's no right answer, which is always a challenge for students, so having to explain their answers makes it possible for them to see that there are multiple "right answers".

00:34:28 Diana Tolton: identify behavior of lines in a way that can be meaningful

00:34:30 Jacob Peterman: I like having my students choose a second that doesn't belong but for a different reason

00:34:34 Jami Riley: Lesson builds on the students' ideas

00:34:37 Jacob Peterman: shifting perspective

00:35:03 Aimee Green: Students may be able to convince another student to switch answers based on understanding and explaining

00:35:20 Aimee Green: if you can explain it, you understand it

00:36:30 Mary Velez: This is a great cross-curricular task since they all have to defend positions for ELA and SS

00:36:46 Jacob Peterman: @Mary what is SS?

00:37:02 Ralph Mason: Why is the abbreviation WWDB?

00:37:05 Mary Velez: Social studies

00:37:07 Rebecca Carrigan: great point, Mary

00:37:18 Fred Dillon: Because I spelled one as Won!

00:40:00 Daniel Irving: I love the idea of which one is "special" to them!

00:40:33 Trena Wilkerson: Excellent opportunity to engage them in mathematical language development as well!

00:40:51 Daniel Irving: This idea reminds me of the game Guess Who!

00:41:01 Anthony Bokar: That's how I tend to use Polygraphs @Trena

00:41:14 Aya Zvaigzne: quadrants

00:41:15 Jacob Peterman: What are characteristics of line segments?

00:41:23 Mary Velez: I would ask students to group the functions and defend the why

00:41:23 Crista McGowan: What questions allowed you to narrow down your choices best?

00:41:54 Emily Cunningham: what data could be graphed

00:41:55 Bee Lim: what is most helpful in deciding on the graph

00:41:59 Diane Tepylo: is the range infinite

00:42:11 Diana Tolton: positive range graphs

00:42:56 Diana Tolton: yes

00:43:23 Emily Cunningham: what real-life scenario could this represent?

00:43:31 Anthony Bokar: Yes! ^^

00:43:46 Amy Dahl: I did that activity last week! students loved it!

00:44:50 Crista McGowan: Transformation golf was great for introducing these concepts to my EL students and thinking about composition of transformations for later in the unit. <3

00:45:20 Fred Dillon: Great to hear about this being used for EL

00:46:36 Diane Tepylo: Do you allow students to share their screens

00:48:33 Anthony Bokar: What are some things you would ask these students?

00:48:44 Amy Dahl: which slide are they on where they can't get it?

00:49:03 Diane Tepylo: What line did you reflect the L over?

00:49:11 Crista McGowan: "I wonder what the least amount of steps you need to do to line up the shapes." (Golf, remember)

00:49:44 Diana Tolton: what is your point of reference to begin?

00:49:47 Mary Velez: What one motion could you do to move the second one?

00:49:57 Fred Dillon: Least amount of steps is an interesting way to push students who rush through things

00:50:05 Laurie Eyre: I wonder how far you translated the L?

00:50:35 Rebecca Carrigan: least amount of transformations

00:51:05 Crista McGowan: Can you explain your transformations more specifically?

00:51:16 Martha VanderWolk: smallest number, not least amount!

00:51:32 Rebecca Carrigan: real life connections are always good

00:55:05 Emily Cunningham: interesting discussion on language—does it help you as a teacher reflect on your own presentation given students are not fluent yet?

00:56:04 Fred Dillon: Math Pact

00:56:04 Emily Cunningham: seems this is so helpful and benefits eliciting what students know when we assess

00:56:12 Crista McGowan: When sharing the google doc, you can delete the /edit?stuff at the end of the url and replace it with /copy to force the person who clicks it to make a copy. If you want to do that. :)

00:56:20 Jacob Peterman: I started using the structure of an equation intentionally, and it has started to rub off and its been nice

00:56:30 Mary Velez: One thing I would do with this is I would start with the figures and pick someone to give me directions . . . they learn precision quickly

00:57:46 Aimee Green: I've done and activity of students giving directions on how to make a PBJ before order of operations

00:58:19 Anthony Bokar: I think using the technique Mary mentioned is very effective. I've used that technique frequently.

00:58:28 Crista McGowan: They're not wrong! :)

00:58:38 Aimee Green: Why did you sort them that way

00:58:42 Aya Zvaigzne: why dd you choose to sort them that way

00:58:49 Martha VanderWolk: Is there any other way to sort them?

00:58:51 Mary Velez: Tell me what you were using to group everything

00:58:59 Jami Riley: Do each of these representations show the same relationship?

00:58:59 Julian LaFerrera: do you think a classmate sorted the same way as you?

00:59:06 Mary Velez: Does order matter?

00:59:11 Ashley Thomas: is there another wY you could sort them?

00:59:15 Rebecca Carrigan: what are the characteristics of each group?

00:59:30 Aimee Green: Could you group them differently

00:59:39 Ralph Mason: What do the cards in the first set have in common?

01:00:09 Jacob Peterman: How can you describe the three groups? Their categories they represent

01:00:12 Diana Tolton: Yes what does each of the three in the category represent in the other formats

01:00:28 Emily Cunningham: do you ever include the learning goal in writing on these activities

01:00:37 Anthony Bokar: I always include goals

01:01:01 Anthony Bokar: Usually as part of my lesson at the beginning (whether slides, Desmos, Google Docs, etc.)

01:01:23 Mary Velez: Balanced :)

01:01:26 Diane Tepylo: I need to see it again

01:01:31 Diane Tepylo: The process

01:01:35 Jacob Peterman: Process of elimination for the tables

01:01:39 Crista McGowan: They were more confident about the graph/ equation relationship and did the tables last

01:01:42 Martha VanderWolk: S/he is a visual learner.

01:01:46 Mary Velez: methodical

01:01:49 Diane Tepylo: they started with the graphs

01:01:58 Diane Tepylo: Then the equations
01:02:05 Diana Tolton: The students identified the most obvious pattern first
01:02:36 Martha VanderWolk: Why do we have tables?
01:02:48 Aimee Green: How do you know the equations matched the graph
01:03:21 Todd Smallcanyon: visual display easier to see what is going on vs tables
01:04:06 Martha VanderWolk: They also need time to type.
01:04:09 Jami Riley: We need the three little dots in the chat like on iPhones!
01:04:50 Aimee Green: we use goguardian and I can monitor when students are typing in the chat
01:05:11 Mary Velez: Is it killing you? It is killing me
01:05:25 Anthony Bokar: We have started to use GoGuardian too.
01:06:07 Jacob Peterman: 3 preps for a first year. I'm really lost about how to implement this ahead of time. It looks awesome, but how can we start doing this as we go on through zoom, supposing that these are synchronous.
01:06:39 Fred Dillon: Synchronous is tough. I have really liked Pear Deck
01:08:00 Crista McGowan: Find a teacher in your PLC who has similar goals of integrating technology in this way. Make a goal to just do one thing like this per unit or something.
01:08:18 Fred Dillon: Thanks Crista. Good suggestion
01:09:21 Jacob Peterman: I'm in a tiny school, and I'm the tech guru.. I like that idea, but its not super realistic for me. I've tried pre-recording my dry lesson bits and doing group work through synchronous time (2 hrs a week).

I like the private chat concept

01:09:29 Amy Dahl: i am a first year teacher with 4-5 math preps (alternative school where we offer all math classes every semester). i use powerpoint to organize my activities. i follow the same routine everyday: entry task, lesson/practice, exit task. most of my activities are in desmos.
01:09:39 Mary Velez: We are teaching synchronously to remote and in person . . .
01:09:49 Jacob Peterman: Thank you everyone.
01:10:01 Aimee Green: I've started doing some NearPod activities and making the student work anonymous gets me a lot more responses
01:11:15 Aimee Green: interactive lessons
01:11:20 Lauren Wachter: nearpod is like peardeck
01:11:34 Fred Dillon: Write questions on comments in the Chat
01:12:42 Diane Tepylo: I like to monitor group work in google docs or google jam - I can monitor without interrupting
01:12:54 Crista McGowan: Yes!
01:13:05 Jacob Peterman: I like the idea of balancing private chat responses versus the collaborative google doc to see both aspects of the thought process.

01:13:38 Ralph Mason: Thanks Anthony and Fred.
01:13:54 Crista McGowan: Private chat is awesome, but participant icons are useful as well
01:13:58 Anthony Bokar: I find that too much group time has not been effective during this learning, but it is valuable.
01:13:59 Amy Dahl: how do we get the links?
01:14:19 Mary Velez: No private chat in google :(
01:14:25 Jacob Peterman: This has been super helpful, thank you!
01:14:28 Aimee Green: How do you start asking the in depth questions with students that have never had that before
01:14:32 Trena Wilkerson: Thank you Fred and Anthony for sharing such great ideas and experiences! Wonderful discussions in the Chat box, too!
01:15:13 Amy Dahl: DATA TALKS what do you wonder? what do you notice?
01:15:41 Bob Allen: WWDB: What Would Dillon/Bokar Do?
01:15:50 Fred Dillon: Bob – Yes!
01:16:40 Mary Velez: My favorite part of notice-wonder is that it opens my mind from the “answer” to what kids actually see
01:16:51 Amy Dahl: any successes at getting students to talk to each other?
01:17:05 Trena Wilkerson: Check out the latest zoom background on notice and wonder you can get! <https://www.nctm.org/store/nwsnowman/>
01:17:40 Chonda Long: You can also check out the site – <https://www.nctm.org/noticeandwonder/>
01:18:01 Amy Dahl: how?
01:18:09 Aimee Green: we don't use zoom. google meets for all our live classes
01:18:31 Jacob Peterman: Thank you Anthony and Fred, so helpful
01:18:37 Aimee Green: Thank you for your help everyone, Fred, and Anthony
01:18:41 Trena Wilkerson: Love it!~ Lots to Notice and Wonder and I recently purchase some of the fun items as well! OH—and the background they are working on for various platforms.
01:18:45 Cecilia Arias: thank you so much!
01:18:45 Anthony Bokar: You're welcome!
01:18:58 Amy Dahl: thank you!! great stuff!
01:18:59 Diane Tepylo: So much valuable thinking in an hour
01:19:03 Cynthia Lee: Fabulous Anthony and Fred! Thank you for your time and expertise, encouragement and ideas.
01:19:07 Diana Tolton: definitely going to use this activity
01:19:12 Daniel Irving: Thank you for such an incredibly informative session!!!
01:19:39 Aya Zvaigzne: Thank you very much, really great ideas on how to use the activities for virtual classes
01:19:45 Mary Velez: I need to see the previous slide again
01:20:00 Trena Wilkerson: Check out www.nctm.org/pta for more resources online.
01:20:27 Trena Wilkerson: <https://www.nctm.org/virtual2021/> So excited!
01:21:25 Joseph Lally: Thanks! Take care!

01:21:44 Mary Velez: What were the details for Robert's talk?
01:21:50 Maria de Hoyos: Thank you all!
01:21:52 Chonda Long: Next Tuesday at 7
01:21:55 Rebecca Carrigan: Thank you