TRACY SOLA: … heard some people say at the beginning they were thinking about using a number line model. Is this kind of like a number line model?

STUDENTS: Yep. Yeah. Not really.

TRACY SOLA: Not really? Not really?

STUDENT: It looks like it.

TRACY SOLA: A little bit?

STUDENT: Yep.

TRACY SOLA: Except it's, uh, straight up and down instead of across, maybe? And then these people both used cubes stacked on top of each other. This team used cubes stacked on top of each other and this team used cube, pencil, cube, pencil, cube, pencil. And this team built a number line. Which one do you think would be the most accurate, and why? You remember what accurate means?

STUDENTS: Yep. No. No.

TRACY SOLA: Accurate means --

STUDENT: Something that you have to be careful.

TRACY SOLA: Something that you have to be careful with, very precise. Just --

STUDENT: Like fragile.

TRACY SOLA: Uh, well, it's a little different than fragile. Fragile means it might break. Right. I think if we're going to be accurate … what?

STUDENT: Like glass.

TRACY SOLA: Yeah, that's fragile. If we're accurate, then we wouldn't … Remember when we were walking on the number line and we said that we didn't want gaps between our footsteps?

STUDENT: Yeah.

TRACY SOLA: Because we wanted it to be very accurate, we wanted to know exactly.

STUDENT: Mm-hmm. [affirmative]

TRACY SOLA: So which one of these do you think would be the most accurate, and why? Santiago?

STUDENT: Um, counting numbers, drawing the numbers.

TRACY SOLA: The numbers? Well, let me ask you a question, then. Do you think that one right there is the same size as that eight? Do you think --

STUDENT: No.

TRACY SOLA: No. Do you think it's important, uh, for the numbers to be all the same size, or do you think it really matters --

STUDENT: It matters.

TRACY SOLA: If you're using that strategy. It does matter. Why does it matter?

STUDENT: Because if you do this -- if you do the same strategy but if you don't get the same answers, then, then, then, if, if, if, if ...

TRACY SOLA: That's okay. I appreciate your thinking. I appreciate your thinking. So do we think it's okay for the numbers to be different sizes?

STUDENTS: Yep. Yes.

TRACY SOLA: We do. Okay. Are the cubes different sizes here?

STUDENT: Yes.

TRACY SOLA: They are?

STUDENT: No.

TRACY SOLA: Well I don’t know.

STUDENT: Yes.

TRACY SOLA: How come? The cubes are different -- this is a different size every time?

STUDENT: Yes.

TRACY SOLA: Is it?

STUDENT: No.

TRACY SOLA: No?

STUDENT: Yeah, it is.

TRACY SOLA: Why?

STUDENT: I cannot see it straight and it doesn't look like a square, it looks like a cube.

TRACY SOLA: Oh, depending on how you hold it? Hm.

STUDENT: It depends on how you hold it.

TRACY SOLA: Okay. Well, who do you think is the, uh, tallest giraffe?

STUDENTS: The top one. The bottom one.

TRACY SOLA: The bottom one?

STUDENTS: Jerry. George.

STUDENT: I think it's this one.

TRACY SOLA: You think it's that one? Well, Bryan seems to think they're the same size. Um, we've got a twelve here and a ten here. We've got a six here and a five here. I think we are still thinking about George and Jeff, aren't we? We're not really sure? Um, but are we certain about Jerry? Is Jerry the tallest?

STUDENTS: No. No.

TRACY SOLA: Is he the shortest?

STUDENTS: Yes. Yes.

TRACY SOLA: We know he's the shortest, we're still not sure about those two. That, that's something for us to keep thinking about. Yes?

STUDENTS: Yes.

TRACY SOLA: I would like to thank you so much for working with me today, it's been just a …

STUDENT: You're welcome.

TRACY SOLA: … a pleasure working with such dedicated mathematicians. You guys are, are great thinkers. Will you continue to work really hard about thinking in math?

STUDENT: Yes!

TRACY SOLA: Wonderful. Thank you so much.