

ERIKA ISOMURA: So girls and boys, we're going to start shutting down. So have one last conversation about one thing on your paper, and please, please, please, even if you're not done on the front side, please write in words "what did you do to help yourself solve these problems mentally?"

So what was going on in your brain that might help you or others do these in your head. Okay? Please, actually write. So I know Rosa Linda's group has done some writing down there. I know a couple of other people have done some talking about it but not necessarily writing. So side one, please talk about what you were thinking or doing that helped you in your heads.

STUDENT: The reason I get it wrong is, like, I get the answer, but I put it backwards. Like, if I make it backwards I would get the answer.

STUDENT: I agree with you because twenty-five times zero one, I thought it was one hundred point five, but I noticed how wrong it is. I did zero point twenty-five to correct myself. I don't know.

STUDENT: I...I should always get the answer and then turn it backwards, but I believe that'll work.

STUDENT: What helped us solve these problems mentally was, like, we discovered that when the divisor is smaller than the dividend, then the question shouldn't be a fraction.

STUDENT: Well, and, like, um, when...sometimes when we basically have, like, something written up there and it's kind of like almost the same as what you have on the paper, it can also give you a clue that it's going to have a pattern for you to, like, you could figure out.

STUDENT: It's like we got this one wrong but then I realized when we did this one, the number was in the hundredths place. So then that's why the answer for this one would be zero point twenty-five, but then for this it was the whole number two because there was no spot for the hundredths place. So that's why the number moved to the left.

STUDENT: Thinking it was going to be the same thing as the [inaudible], like for example, like this and this. Like, it's kind of like the same problem but they just had a zero. Yeah. So.

STUDENT: What I did was look at the divisor and take away a zero, and got the answer.

STUDENT: What I did was look at the pattern...I remembered the pattern from yesterday, how we were doing decimal, so I remembered the pattern. And then I tried to make function of my brain, and try to remember how this is ten. So I probably was going to get a zero point something.

ERIKA ISOMURA: All right, we're not going to have a big debrief of this one because we still need to get back to it. And there's a couple of big ideas that have come out of some of the groups that I'd like to discuss further next week. For now...Najee, why don't you sit over there and Jerry, sit over there also. For now, I'd like you to make sure that you're sitting next to somebody who was not your partner or in your group. So kind of make eye contact. Make sure

that you're kind of glancing at somebody and they know that you've made eye contact, so they know that you're going to work with them. Adam, sit down. Did everybody find somebody? Jerry over there with Patrell, and Najee with Jonathan please.

Okay. So let's see. Adam, you need somebody, so why don't you come up here and work with Antonio. Or no, not with Antonio. You two, you two, you two, you two, you two. Adam, talk to, um, Asia and Camila. We'll send you for your break in a moment. Okay?

All right, I'd like you to just share something from your chart, or what you were doing that made this either easier, or just something that came up as an interesting fact that you and your group noticed and discussed. Okay? Just a quick partner share.

STUDENT: I got zero zero two five point and then if you turn this backwards, you'll get the right answer.

STUDENT: Well, the weird thing that, like, Rosa Linda and I discovered was, like, whenever your divisor...wait. Yeah, when your divisor is, like, smaller than your dividend then that should mean...that's just like a tiny little hint that the answer should be, like, a fraction.

STUDENT: Away from the two thousand and then you times it...

STUDENT: By one, pretty much.

STUDENT: By one, pretty much and then you get the two hundred.

STUDENT: Does that work on everything.

STUDENT: I don't know.

STUDENT: Because, like, you just...it's like Alex's [inaudible] but you do this and then go over there, and then you go around.

STUDENT: That's kind of, like, interesting. What if we could do it, like, in other numbers?

STUDENT: Maybe, like, um...what's it called? Two thousand divided by two hundred, maybe.

STUDENT: Mm-hm.

STUDENT: Or maybe, like, numbers with zeroes. I don't know. We might have to test them.

STUDENT: Mm-hm.

STUDENT: So what did you find also interesting?

STUDENT: Um, interesting...that on this one on the zero.... This one...that, um, that you just...if you look closely, you could see that you just times the two and the one and you get the two, right?

STUDENT: But it looks like you added the two as well. I mean, like, the zero as well. So does that work? So is it like on whole numbers you take away but [inaudible] you add or what?

STUDENT: Um, kind of like that.

STUDENT: Since the dividend is smaller than the divisor, so that's why I looked up there and I saw also that has the dividend smaller than the divisor. So that gave me some of the clues to see that it could actually be a...that could be a fraction and a decimal, because you could turn decimals into fractions and fractions into decimals.

STUDENT: And I also saw that...I saw that it only works while you multiply it and it doesn't work when you divide.

STUDENT: I thought I was supposed to, like, multiply twenty with one and so I got this. Like, zero decimal...

STUDENT: Oh yeah, yeah.

STUDENT: Yeah but it was actually two. Like, me, and Ruchita, and Camila, we started talking, like, we were confused. Like, why is it two and not... So we started talking.

STUDENT: Well, like, I remember from the homework yesterday...

ERIKA ISOMURA: All right, [inaudible] for everybody and I noticed that there were places where people were not sure this way, not sure that way. I noticed quite a few groups connecting patterns back to our math talks, and I noticed several groups looking at new patterns that they were discovering on their own. All really excellent high-level thinking.

So Monday we'll continue on with another number talk that is going to...some of these ideas, I'm going to probably pull a couple of the ideas that came out of the discussions and put them up as number talks. Kind of like the Alex method where we had Alex's idea with dividing fractions, and then we investigate it to see if it was a true pattern that actually works all the time in math. There's a few ideas out there that I think we need to investigate. Okay. Good job.