ERIKA ISOMURA: Interesting! I like that.
STUDENT: It's just two plus two plus two because there's no common denominator.
ERIKA ISOMURA: All right, that looks good. Now, since you guys put...let's be honest, kind of easy problems for these two, can you give us something really crazy to give us either the threetenths or the thirty-hundredths? Well first of all, do you think this is more than three-tenths or the thirty-hundredths?

STUDENT: Hm?
ERIKA ISOMURA: Do you think this one is more matching the three-tenths or the thirtyhundredths?

STUDENT: Thirty-hundredths.
ERIKA ISOMURA: Thirty-hundredths? Okay, so can you give me something really puzzling that would be a challenge for the other kids to be the three-tenths blue card?

STUDENT: A thousand.
ERIKA ISOMURA: Maybe.
STUDENT: A thousand and then like a three hundred.
ERIKA ISOMURA: Three hundred and a thousand. So write something out. Not just the fraction though. Make sure you write it out as an expression. Okay?

STUDENT: So like that one?
ERIKA ISOMURA: Make something challenging. Make something that the other kids are going to be like [inaudible]. And then after they think about it, like, "Oh yeah, I got it," but give them a little bit of a push. Okay?

ERIKA ISOMURA: Of four. So, any thoughts? Have you seen problems like this before? Onefourth of four, one-sixth of something? Have you seen problems like that, where we ask onefourth of this, one-half of this, one-fifth of this? No?

STUDENT: I think we have learned it in class but we didn't, like, remember.
ERIKA ISOMURA: So I know that I was trying to give you guys some time to do this when we did the Camila and Jesus problems. Do you remember those? So when we had Jesus's problems, we had things like, "Everybody gets half of this and there's six people, so there's six halves." Or for Camila's, we said we had, "[Inaudible] piece of string that's six feet long but we're only going to take one-sixth of it." Anything?

STUDENT: I think more like Jesus's problem.

ERIKA ISOMURA: More like Jesus's problem? So you're going to do one-fourth how many times?

STUDENT: [Inaudible]
ERIKA ISOMURA: One-fourth, one-fourth times?
STUDENT: Yeah.
ERIKA ISOMURA: Okay. Write it out or draw it out. Show me what it would look like if it's a Jesus problem.

STUDENT: [Inaudible]
ERIKA ISOMURA: So draw it out or write it out. Either one, Sofia.
STUDENT: I think, like, you mean like...you have like one-fourth of four. I think you're talking about, um, one-fourth of four... Like, you do the one-fourth of the four.

ERIKA ISOMURA: Okay, so show me.
STUDENT: Like...
ERIKA ISOMURA: Najee, do you need to go take a break?
STUDENT: I think you're talking about there's like four and there's one-fourth of each.
ERIKA ISOMURA: Okay. So can you see that, Asia, how she has the four boxes and she took one-fourth of each of those boxes?

STUDENT: Yeah.
ERIKA ISOMURA: So how much would that be all together, Sofia?
STUDENT: One-fourth of each box will be one whole.
ERIKA ISOMURA: One whole.
STUDENT: One-four fourths.
ERIKA ISOMURA: One-four fourths? So what do you think one-fourth of four would be on this card?

STUDENT: Right here because sixteen over sixteen is a whole and right here, one is a whole and there's nothing [inaudible].

ERIKA ISOMURA: Did she convince you?
STUDENT: Yeah.

ERIKA ISOMURA: Yes? Good, Sofia. So remember when we get stuck, we can always go back to drawing it out, talking it out, acting it out. There's [inaudible] methods you can always use. Right? Do you guys have an envelope to store your extra cards if we don't finish?

STUDENT: Yeah, we're going to get it.
ERIKA ISOMURA: Really really nice job of not giving up...to the fifth graders. Fourth graders, thank you for working on something new. I noticed a lot of coding going on. That was awesome!

Number two, fifth graders who are all stressed out because there might be some mistakes. We like mistakes because it gives us something to learn from. And...stop. And Najee had a really good suggestion: think of this as your prototype, this is our test run, we're trying it out. Once we learn a little bit more, once we become more experts, we could always go back and make some changes. Okay?

So if you think about some of the number talks, there were times when we said, "Question mark, we're not sure what we're doing here," and then we try it again a few days later and, "Oh yeah, we get it!" Do you remember when I first gave you guys -- and this is both grades -- this problem and I said, "Go think about it?" And a whole bunch of you were saying, "Think about it? Think about it? It's impossible." And then it turned out it wasn't impossible, and it was actually something you knew.

STUDENTS: Yeah.
ERIKA ISOMURA: That or that. So let's stop stressing about perfect because there's very little that ever is perfect. And if it's perfect, really, it's because you already know it and you're not learning. So when it's messy it means we're learning. When we tear things off and we put them back on, it means we're learning. When we say, "Oh! Oh!" it means we're learning, and that's the whole point of being in school. Right?

