BECCA SHERMAN: Let's hear some sharing out of… maybe something your partner said, or maybe something that you thought… Something about multiplication. Any ideas? I heard lots of talking. Thank you.
STUDENT: It's adding.
BECCA SHERMAN: How is it adding?
STUDENT: Cause, like, 2 times 8 equals 16, so you just add 8 plus 8.
BECCA SHERMAN: times 8 equals 16, and that's the same as, you said adding 8 plus 8. Is that what you said? Okay. Does anyone else agree with that?
STUDENT: Yes.
BECCA SHERMAN: You don't agree with that?
STUDENT: I do.
BECCA SHERMAN: Tell us about it. If you agree or disagree. What can you add to that. Yeah.
STUDENT: I agree.
BECCA SHERMAN: So can you tell us more. Give us, maybe, another example. Why do you agree with that, if that's true?
STUDENT: Uh, 5 times 2 equals 10 and 5 times, 5 plus 5 equals 10.
BECCA SHERMAN: So it works if you take, instead of 8 times 2, let's see…We could say, I'm gonna just turn these around so it looks the same. We know that those could be the same. So we could do… 5 times 2, that's 10, and that's the same thing as… that? So that's how it's addition? So in this case, we both did times 2. Does it work if we do it times something else?
STUDENT: Mm hmm.
BECCA SHERMAN: Give us another one?
STUDENT: Like, um, 8 times… um, 8 times, 2?
BECCA SHERMAN: Okay, we have that one up here. Or you maybe want to show it a… go ahead.
STUDENT: 9 times 2, you have 2 groups of 9, so then it would be like adding.
BECCA SHERMAN: So it would be adding 2 groups of 9. So you added a new word. You said this was like 2 groups of 9, is the same thing as 9 times 2.
STUDENT: Yeah.
BECCA SHERMAN: 9 times 2? Even though I put that 2 first? And you also said that's the same thing as adding 9 and 9?
STUDENT: Mm mm.
BECCA SHERMAN: Okay. Derek, do you disagree? Do you want to say something different?
STUDENT: Um, it seems like only they plus when you add 2 times. But, like 2 times stuff. But, I mean the numbers. But when you put another times, maybe it will not be the number that you think it will be.
BECCA SHERMAN: Could we try it? With a different number?
STUDENT: Like 3.
STUDENT: Uh, 3, 3 times 3 equals 9. And 6 plus 3 equals 9.
STUDENT: Because there's 3 groups.
STUDENT: Where'd you get the 6 from?
STUDENT: 3 plus 3.
BECCA SHERMAN: So I heard a couple things. I heard, because there's 3 groups, so that idea of groups came back up again, because… there's 3 groups. Okay. And then there was a question, and actually, I think I was in here, but maybe that wasn't your classroom…This idea of 6 plus 3. Is that… someone said, "Where'd you get that 6 from?" Is this part of our multiplication idea here? So some people are saying no, some people are saying yes, what do you guys think? Yeah.
STUDENT: Can you do 3 plus 3 plus 3?
BECCA SHERMAN: Okay.
STUDENT: Yes!
BECCA SHERMAN: So, people seem to like this idea, of 3 plus 3 plus 3. Why does that seem like multiplication to you? Or you can call on someone else to add to your thinking.
STUDENT: 'Cause 3 plus 3 equals 6, adding another 3 equals 9.
BECCA SHERMAN: Oh! You said… wait. Say that again? Sorry. You said, 'cause 3 plus 3 plus 3 equals

STUDENT: …equals 9, and there's 3 groups, 3 groups of 3 equals 9.

BECCA SHERMAN: Okay. So I'm gonna draw a picture, 'cause we're gonna be thinking about pictures for 3 groups of 3. So I might say, here's 3… here's a group. Here's 3… here's a group. How many groups of 3 do I have?

STUDENT: 6.

BECCA SHERMAN: How many groups of 3 do I have. Show me on your fingers. Some people are showing me. And I just showed you! Two groups of 3? So, how many groups of 3 do we want?

STUDENT: …3

BECCA SHERMAN: 3 groups of 3 for this one. So here's 3 groups of 3. Okay. I'm gonna try another picture. Instead of circle groups, what if I make a box. And instead of dots, I'm gonna put a number in there. 3. Let's say that's 1 group of 3. How could I finish that picture to show 3 groups of 3? What would you do?

STUDENT: Another box, and put it 3.

BECCA SHERMAN: Okay. So now what do we have? What does this show?

STUDENT: 6.

BECCA SHERMAN: So it equals 6, what does it show with multiplication? Can we write it in multiplication? How many groups of 3, and how would we write that as multiplication? What do you think?

STUDENT: 3 times 3?

BECCA SHERMAN: 3 times 3? What do you guys think about that? Do we see 3 groups of 3 in here?

STUDENT: Hmm-mm.

BECCA SHERMAN: how many groups of 3 do you see?

STUDENT: 2.

BECCA SHERMAN: 2 groups of 3. So could we write this as 2 times 3? 2 groups of 3? So, anyone want to try and write 3 groups of 3? With the bar model? Tell me how to do it? Yeah. How would you do it in this way? You want to come up and try it? Okay.