

MIA BULJAN: Um, girl, boy, I need a girl. Enmy, what did you do?

STUDENT: I counted by fives.

MIA BULJAN: Oh, tell me a little bit about that.

STUDENT: So I counted, I counted by fives like 5...

MIA BULJAN: How many times did you count by 5?

STUDENT: Fourteen.

MIA BULJAN: Fourteen times? Boys and girls if we look at her picture do we see fourteen 5's?

STUDENT: Yes. That's what I did.

MIA BULJAN: Do we see fourteen 5's or do we see five 14's?

STUDENT: Five 14's.

MIA BULJAN: So Enmy, how did you know that you could also do fourteen 5's instead?

STUDENT: Because...maybe it was easier.

MIA BULJAN: So it was easier to count by fives. So you made your problem easier, but does anybody remember the name of the thing in math that lets us switch it around like that?

STUDENT: You can add the 5 and the 5 to make it a double.

MIA BULJAN: Okay. So you're talking about a strategy, I'm talking about an idea. Hold on one second Monique I want to hear about that. Uh-huh?

STUDENT: I kind of did the same thing.

MIA BULJAN: Okay but how did you know you could do that?

STUDENT: Because you could just say like...you could count it by 5's?

MIA BULJAN: Mm hmm. I understand your strategy but I'm wondering how did you know that you could also think of it like this? This is what you did, you did 14 groups of 5.

STUDENT: All the same answer.

MIA BULJAN: It is going to be the same answer but what's that thing in math that gives us the same answer? Andrea. We have it for addition too.

STUDENT: The...that you can, you can do, you can do addition and multiplication in like different ways and switch them.

MIA BULJAN: And switch them. Do we have to do them in order when we're adding and multiplying?

STUDENT: No.

MIA BULJAN: No. Can we switch them around in subtraction? Can we just switch it in subtraction?

STUDENT: No.

MIA BULJAN: Okay, so subtraction does not have this but multiplication and addition do have this. Do you remember the math name for it?

STUDENT: Um...

MIA BULJAN: You're going to kick yourself when I write it. You want to hear it? Commu...

STUDENT: Commutative.

MIA BULJAN: Commutative, that's right. The commutative property of multiplication says if it's easier for me to get the answer, once we understand what it's saying, if it's easier for me, I can do it in any order.

MIA BULJAN: Rogelio, how many people counted by fives to solve this problem? Excellent. Enmy, what did that look like for you? Tell me what you did. Chase you're going to have to put that away sweetheart, at your desk, not in your pocket, at your desk. Please don't let me see that again, okay? Go ahead.

STUDENT: 5

MIA BULJAN: Count with her.

STUDENT: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, right there.

MIA BULJAN: How did you know to stop? Who said right there and how did you know to stop?

STUDENT: Because I waited until you get to 14.

MIA BULJAN: Were you counting on your fingers like 5, 10, 15?

STUDENT: 5, 10, 15, 20, 25, 30, 45, 50.

MIA BULJAN: 35, 40... (laughs)

STUDENT: 55, 60, 65, 70.

STUDENT: 5, 10, 20, 30.

MIA BULJAN: Count it out loud so we can hear her. Listen to her count. Do it again.

STUDENT: Uh, 5, 10, 15, 20, 25, 30, 35.

MIA BULJAN: It's probably a parent. Sorry, hold on.

MIA BULJAN: Could you hear her counting?

STUDENT: No.

MIA BULJAN: Okay. Enmy, nice and loud. But listen, listen. Shhh. What? No. Nice and loud.

STUDENT: 5, 10, 15, 20, 25, 30, 35, 50, 55, 60, 65, 70.

MIA BULJAN: Hold on. Did anybody hear her make a mistake in her counting?

STUDENT: Yes, yes, yes.

MIA BULJAN: And she heard it too. So everybody let's count together again.

STUDENT: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70.

MIA BULJAN: And did it work out that time?

STUDENT: Yes.