Ashante: It will be 25. Because it's going to be the same number because you're just switching the numbers around, you're not adding any more numbers or taking away any numbers, you're just changing them around.

So are you sure that we can do it with all these numbers here?

Ashante: [Nods yes].

You think that if we switch them around, any number that we have here that makes 25, we can switch them around?

Ashante: Yes.

Well suppose that I ask someone in the class here to prove that, could you do something or show me something that could prove it or explain it better to me that it does work? … Here's a question. It's about changing numbers around [puts 23 cubes on the floor; 1 tower of 10 yellow cubes, a tower of 10 red cubes and one tower of 3 red cubes]. **We had the equation 23 and 2 more** [puts out 2 blue cubes] **and someone gave us that equation and said it was 25. So we're wondering if you take the 2 and you put it first and you say 2 plus 23, do you still get 25?** <Yes.>

Amira: It doesn't matter.

It doesn't matter, why?

Amira: Because if you keep on switching it around it would still make 25.[Moves the tower of 2 cubes back and forth from the right of the 23 cubes to the left several times while she speaks]. Cause you're just changing one, you're not taking anything away [takes away the tower of 2 cubes and the tower of 3 cubes] or adding nothing to it [places the tower of 3 cubes to the right of the 2 towers of 10 and the tower of 2 cubes to the left of the 2 towers of 10] so it will still be the same number.

Later in the discussion, the teacher presents some problems with numbers that are too large for these second graders to add up easily.

So I'm going to go back to this one. What if I take the 266 and put that first and then put the 175 second? Let's just take a little survey, how many people think that if I put the 266 first and the 175 second that my answer is still going come out to this 441? How many people think that will happen? (Most students raise their hands.) **Does anyone want to say what they're thinking? And then we are going to move onto something else. Somebody I haven't heard from, Anab?**