**Julia: Solving Algebraic Equations**

Teacher: The third problem, wowser look at that guy. Ok

Student: Wowser

Teacher: Wowser. On this one we have some bubbles already. Okay, I’d like somebody, Mrs. Creamery, uh, a volunteer, to come through and Anthony’s going to read the bubbles and he’s going to point and talk us through what Morgan and Alex are doing, which, by the way – excuse me, it’s very complicated, so Anthony, go slow, okay, cause I’d like even for people who didn’t do this one we need our full attention to take a look at the complexities in this one. Okay, go ahead.

Student: Alright, first, he distributes, uh, four to x and three and he gets four x, but this is negative four. So negative four times negative three is twelve, so then you do adding. Which we had a problem with. And then, yeah then he um, then he combines the like terms, which is 12 and 8, and that equals 20. And then subtracted 20 on both sides and got negative four x equals twenty. And then divded, uh, negative four x by negative four, and negative twenty by negative four and got x equals negative five. On this side, first they subtracted eight from both sides, and was left with negative four. And then divided both sides by negative four and got left with x minus three equals negative 8, and then they added 3 to both sides, and that gets rid of that, you get left with x and negative 5.

Teacher: Okay, ssshhhh. What’s similar on this problem…

Student: Um

Teacher: Wait, wait, it’s a different question, hold on. You guys didn’t have it. There’s something similar about the comparison on, for this problem that was going on for that problem. What similar thing was happening? Celine.

Student: Both ways of doing it they both got the correct answer

Teacher: Okay, can you talk a little more about the big difference between the two ways?

Student: Um, Alex did the distributive property first so he got 4x plus twelve

Teacher: Okay

Student: Morgan, she did the first operation first and she substracted 8 and got 32 on the solution side, the solution, the right side of the equation, and negative four on the left.

Teacher: Okay, what was her next inverse operation

Student: Uh…

Teacher: What did she do instead of the distributing?

Student: She, uh

Teacher: Instead of distributing. Miles?

Student: She Divided

Teacher: Divided by, divided by that factor, that number that’s in front of the parenteses, with the second factor. Okay, so you guys notice of course that one of the similarities is that the solution is the same. Did you check to make sure that your negative five.

Student: Yup.

Teacher: What were some of the things that confused you at first on this problem.

Student: Um, on this problem, this part, they get the distribute the properties right but um, instead of doing subtracting, they do adding. But then, after we after we talked to you, we figured out that it was a negative times a negative which equals adding

Teacher: So this is a positive there. Okay, um, I think we talked about maybe, oh my last question for you guys at that table: is there one way that you liked better than the other on this problem, Anthony?

Student: Well, for this kind of problem we like the right side.

Teacher: Okay

Student: Because, there’s less steps that you have to take. But like, if it was a lot more, if it was harder division, the left side would be easier

Teacher: Okay, everybody follow that? If there’s harder division, Alex’s way would be easier.

Student: Okay, plus the end of this one, you’re always going to get rid of the 8 and -4. so either way you do it, you’re going to get rid of those two numbers on each side.

Teacher: On each side. Okay, that’s good. Thank you.