Problem 1 Part C:

BARBARA SHREVE: If these folks later, two people are arguing over the answers they get when they do these problems, and one person gets answers that look like points (5,0) and (2,0), and another person gets answers that look like x equals, whose would make sense? Who's correct? You have thirty seconds in your group to decide because you have a fifty-fifty chance.

STUDENT: They're both correct.

BARBARA SHREVE: Twenty seconds.

STUDENT: They're both right. They're both right because it says x, so for the x, you plug in zero for the y.

STUDENT: So Katie and Miguel are right.

STUDENT: Yeah. But on the bottom one you divide it 2.

STUDENT: I'm not understanding Katie's one though.

STUDENT: The bottom one?

STUDENT: No, the middle one.

BARBARA SHREVE: All right, ladies and gentlemen, quick decisions. Can I have your eyes up here? Raise your hand if you think Carla's correct. Two people think Carla's correct. Raise your hand if you think Carla's correct. Two people and more, I like it. Okay, tell me more. Robert, tell me why you think so.

STUDENT: Uh, because when it's for the x, you plug in zero for the y.

BARBARA SHREVE: Okay. So does that make...tell me more about what...you've made a good statement and a true statement. When we're trying to find an x-intercept, we put zero in for y. But how does that tell you one of these is correct? Or both of them are correct?

STUDENT: Because it's telling the same thing.

BARBARA SHREVE: This one is telling us x=5 and x=2, and this one is also? Has he convinced you? Elizabeth, but not really? Why were you thinking no? You originally said just Shirley, right? Why'd you say just Shirley? So I have a question because Robert was pretty convincing. What is this first question originally asking us to find?

STUDENT: Solve for x.

BARBARA SHREVE: Just solve for x, right? Is there any y there?

STUDENTS: No.

BARBARA SHREVE: No. So that makes this a little bit of an interesting answer because this has x's and y's in the answer, right? So if this had said "Find the x-intercepts" and we had -- you'd put in zero, we'd had a y here, then Carla's answer would make more sense because then it would be a point. When it just says, "Solve for the equation," we're really just looking for an x equals answer. So we're going to be able to stop when we get something like what Shirley said. And I don't know if that's what was going through your head Elizabeth, or you were thinking about that differently. So we want to be careful when we go back and look at what's the question asking us for. Is it asking us for a point? Is it asking us just for an x equals? Okay?

STUDENT: So these answers are connected to these problems here?

BARBARA SHREVE: Yes. Oh, no. They're the same kind of directions, different numbers.

STUDENT: So what, down here, what is it exactly asking?

BARBARA SHREVE: Hang on. So since we didn't do these problems all the way through, we have to take a look, right? These are actually going to help us get answers to these problems, I believe, yes. So this -- these answers are for answers to this equation.

STUDENT: But they both – if they'd both given us the x numbers, would they both be right though?

BARBARA SHREVE: They're both giving us the x numbers and Carla's giving us even more. She's giving us a y, that isn't part of the problem.

STUDENT: Ohhh!

BARBARA SHREVE: Make more sense?

STUDENT: Yeah.

BARBARA SHREVE: Yeah. So she's going further and saying like, "Oh, if this was this kind of problem, this is what my answer would look like." But she's actually doing more work than she needs to. Okay?