Introduction Part A:

BARBARA SHREVE: So on a new blank page, can you open up your note books please, and get today's date; it's the 10th of April, 4/10. And can you can title it with "Practice with Intercepts," please or "Personal Practice." Good morning Malina. The title today is "Practice with Intercepts, so happy day before spring break. It's nice to see you guys. Thank you for being on time. We want to make sure you guys have been working on quadratics and working on quadratics for three weeks in Algebra B, right? And we're about to go into spring break and I don't want you to lose any of what you've learned when you take some days off. So we're going to work today to really make sure that you feel confident with those things. Shall we get started? On that new blank page, just two problems today. So I see a fast start with Adam and I see a fast start with Guadalupe.

BARBARA SHREVE: You're off to a good start, perfect start. Good.

BARBARA SHREVE: Yes. Very good. How do you keep going?

STUDENT: I forgot.

BARBARA SHREVE: Well, you got this part right? So now you have to rewrite the rest of the equation. So you want to write plus 10x.

STUDENT: (Inaudible)

BARBARA SHREVE: Give me one second okay? Yup. And then how do you keep going? Can you simplify?

STUDENT: Um, yeah.

BARBARA SHREVE: Yeah. What are you going to do? What's five times zero?

BARBARA SHREVE: ...see if you can get the x's by themselves.

STUDENT: It's going to be a negative right?

BARBARA SHREVE: Why negative?

STUDENT: I mean positive.

BARBARA SHREVE: Why positive?

STUDENT: (Inaudible)

BARBARA SHREVE: Positive times a negative gives you a negative, you are right. Just because I'm asking you...I'm making sure you're not guessing, right? You can't assume you're wrong. Is that one going to be a positive or a negative?

STUDENT: Negative 3x.

BARBARA SHREVE: Yes.

STUDENT: A negative times a negative is going to be a positive.

BARBARA SHREVE: You got it. And don't forget to write your answer outside the rectangle.

BARBARA SHREVE: Looks beautiful. You remembered to write it with your zeros, I love it. You doing okay on the factoring one?

STUDENT: On the what?

BARBARA SHREVE: This one.

STUDENT: Um, I'm kind of stuck on it.

BARBARA SHREVE: You set it up correctly. So you have to find two numbers that are going to multiply to make -28 and add up to make -12. Alright guys, I'm going to give you two more minutes, two more minutes okay? Is this a math conversation?

STUDENT: Yes.

STUDENT: I was talking about how you find this.

BARBARA SHREVE: Yeah. What are your ideas?

STUDENT: Put a 2. 2 and a 7. 3 and a 7. I don't know.

BARBARA SHREVE: 2 works because it's an even number. So why don't you find what 2 multiplies by right? Do you know what I mean by an even number?

STUDENT: Yeah.

BARBARA SHREVE: Okay, so see if you can find what you multiply 2 by.

STUDENT: This right here. I put in a zero but then...

BARBARA SHREVE: Why? Putting a zero is exactly the right first step. Don't forget to write equals 10x. Hello David. Will you grab your notebook? Okay. So now how do you simplify? How can you rewrite that simpler?

STUDENT: Five times zero is zero, so zero plus 8 equals what?

BARBARA SHREVE: Equals 10x. So can you write that? Okay. And how do you get x by itself?

STUDENT: The x's and numbers on one side.

BARBARA SHREVE: Yes. So right now do you have all your x's on one side and all your numbers on the other? So you're ready to skip even to the next step?

STUDENT: What's the next step? Wait, don't I put a zero over here?

BARBARA SHREVE: Not until we finish this one. We're going to get x equals first and then we're going to go back to the beginning.

STUDENT: So 81=10x.

BARBARA SHREVE: 81=10x, so how do we get 1x? How do we get rid of the 10?

STUDENT: How? By divide.

BARBARA SHREVE: Yes. That's going to be your last step on this one okay?

STUDENT: Do I divide it by 81?

BARBARA SHREVE: Is that going to give you 1x?

STUDENT: No, I mean I divide by 10.

BARBARA SHREVE: Why did you change your mind?

STUDENT: Because you're supposed to divide by x.

BARBARA SHREVE: Because? Do you remember the big why? When you do 10 divide by 10, what do you get?

STUDENT: Zero. I mean a one.

BARBARA SHREVE: One right? And that will give you the 1x. Did you just bang your knee?

STUDENT: Yes.

BARBARA SHREVE: Ouch! Recover quickly, okay my friend?

STUDENT: I don't know what I do with this.

BARBARA SHREVE: So did you come up with any that you've tried or you're not sure what goes into 20 and...

STUDENT: Negative 4 and negative...I mean negative 4 and positive 4. I did 4 and negative 7. But I can't think of anything else that goes into this.

BARBARA SHREVE: So anytime it's an even number, like a 2, 4, 6, 8, two is going to go into it. So you can also try 2 times something. What's half of 28?

STUDENT: 14.

BARBARA SHREVE: Will that work? Okay. When it's time for the group work part, I will get you a group so you're not sitting here alone, okay?