

AMY BURKE: I want to really appreciate how you are all engaging in conversation around the graphical representation that we have of our data set. And then of the model that I see you guys have put into Desmos. I wish we had more time because I have more things planned for us to discuss, but we have only a few minutes left in class. I'm going to actually use all of the minutes for us to talk together. You don't need to stress about putting the computers away or even stacking the papers. I will handle all that. What I want is for the next four minutes, full participation please.

So, we gathered our own data set. There was one mistake that a group had caught with the 6, right? And we didn't go through and double check everyone else's data. So really we're using some data that, had we had maybe a bit more time, we might've double checked everything together. We then represented our data set with a table, and found the maximum from our table. And we then represented the data about the volume on two Desmos with a graph. And you guys have been using your model to determine what is the maximum volume and what does that mean? I was just in an interesting conversation over here regarding the  $x$  intercepts for a model. And I'm going to ask Linette, for you to speak really loud about your group's question because I think this is something for us all to think about.

STUDENT: -- cubic equation. But I thought because our data doesn't necessarily hit the  $x$  intercept, that, why would we record the equation when it's not our actual data? So I was asking what is our  $x$  intercept?

AMY BURKE: And I thought there was something in particular about the 2 that showed up on your model, right? Wasn't there one that was more concerning from your model?

STUDENT: What do you mean?

AMY BURKE: An  $x$  intercept?

STUDENT: Well, what I thought in the  $x$  intercept was the parabola, where it ends off in the  $x$  intercept, which was like 9.286. So for that the volume will be 0 centimeters cubic, but it didn't really hit off in our table that we brought it in. So I don't know if we should write the parabola that hit the  $x$  intercept or the table in our data.

AMY BURKE: So I'm hearing the question I think from this table is, can we use the model to answer this question or do we need to stick with just what we gathered as a class? Is that your question? What do other tables think about that question? Can we use the model to talk about what might happen, or do we need to just stick with our actual data that we found?

Okay. That's one thing I want us to think about. The second thing that I wanted to share, I'm not able to for some reason get it up there, but would the front group share what you guys found, how you modeled your data and what happened?

STUDENT: The 2-centimeter cut size, the volume was wrong. It's not 798, it's actually 630, and we entered it into the Desmos. The cubic model, the regression line fit perfectly with the points that we entered in.

AMY BURKE: Awesome. Okay. So there was a mistake that you found in our data and when you corrected it, you noticed that the cubic function fit the data much better. Okay. Interesting. You guys, thank you so much. Have a wonderful long break.