ANTOINETTE VILLARIN: So the next activity, you guys are doing really well, okay, I'm really proud of you! I want to show you a couple ways Robbie tried to solve this problem. Okay? So he looked at the same problem I just showed you, and here's a couple ways that he solved it. Okay? When I show it to you, I would like you to think, let's see if I can... I'd like you to think about what he did, and what advice would you give him, or what would you tell him? Okay? So he took the same problem here, and that was his first try. So look at what he did and study it. All right. When you're ready, tell your partner what you think he did, what he was thinking, and what you would tell him. Okay? ANTOINETTE VILLARIN: What time does the bell ring?

PATTY FERRANT: 15 minutes.

ANTOINETTE VILLARIN: Oh my god! So should we just?

PATTY FERRANT: Just kind of fast... ANTOINETTE VILLARIN: Okay.

PATTY FERRANT: and then I would get on to that, 'cause they should do that.

ANTOINETTE VILLARIN: Okay.

PATTY FERRANT: They're gonna know this. I wouldn't even give them that much time.

ANTOINETTE VILLARIN: Okay.

ANTOINETTE VILLARIN: When you're ready, look up at me, so I know you're ready. Who'd like to tell me, really quickly, 'cause we have other posters that we want to get to today. What was Robbie thinking, and what would you tell him? Okay? Mmmm, Julian?

STUDENT: He was thinking that, he was confused with area and perimeter

ANTOINETTE VILLARIN: Okay, why?

STUDENT: He was actually getting the perimeter by adding 9 plus 9 plus 9 plus 9.

ANTOINETTE VILLARIN: Uh huh, so he was getting 9 plus 9 plus 9 plus 9. And he got 36. So he thought this 36 square units, instead of being the area, the way Jericho said, what was he, he thought it was the..

STUDENT: He thought it was the perimeter.

ANTOINETTE VILLARIN: The perimeter. Okay? Do you guys agree with Julian? Yeah, okay. He tried it a second time, and we're gonna go through this quickly. Study what he did. And then tell your partner really quickly what you think he did, and what you would tell him.

STUDENT: I think that he, um, that he added 36, and 36, and 36, four times, because he's confused a lot.

STUDENT: That would mean that, he multiplied 36 by 4?

STUDENT: Yeah.

STUDENT: So he thought that one side was 36?

STUDENT: Yeah.

ANTOINETTE VILLARIN: All right. Um... Angelique? STUDENT: He could have looked at 36 on the outside?

ANTOINETTE VILLARIN: On the outside? So instead of it being the area? When you say "outside," what does that mean?

STUDENT: Maybe, maybe he looked at the edge.

ANTOINETTE VILLARIN: He-- the edges? So maybe he thought 36 was the whole edge? or just one of the edges.

STUDENT: Around the whole

ANTOINETTE VILLARIN: The whole edge? Okay. How did he get 1296?

STUDENT: Maybe he added that. Plus the area.

ANTOINETTE VILLARIN: He added that plus the area? Okay, that's one possibility. Any other ideas that he might have done? Might

have done? Jericho?

STUDENT: He multiplied 36 by the edges of it. ANTOINETTE VILLARIN: He multiplied 36 by...

STUDENT: The edges

ANTOINETTE VILLARIN: How many edges? So, by 4? Maybe 36 by 4 to get that? Okay. Any other ideas? Any other ideas? Okay? Alex?STUDENT: He probably thought that 36 was the length and the width, so he multiplied 36.

ANTOINETTE VILLARIN: He multiplied 36 by 36? Yeah, and if I had given you more time, I saw a couple of you writing on your paper, testing whether or not 36 times 36 would have been that. I wish I gave you calculators, so you could have checked it. But yeah, this student actually did 36 times 36. Okay? Or, not "this student," Robbie. Okay? His third try. Okay? His third. Third try, he decided to try again, 'cause he's a

good math student, he's hard working, and he knows that if he doesn't get it right the first time, he's gonna try a different strategy So this is his third strategy. Think about it, and tell your partner.

PATTY FERRANT: This one is the same, so you could probably show them both, or

ANTOINETTE VILLARIN: Okay, yeah. I'll actually show you both, so talk about both with your partner. What's going on? What was he thinking, what would you tell him? Is he on the right track?

STUDENT: That doesn't make sense.

STUDENT: And in the fourth try... the fourth try he made the 9, he changed 9 into 6 to make it easier, but then, he's gonna make it wrong. Then he's gonna think that, he's gonna multiply 6 by 6, and he'll get 36. But, but it has 4 sides, so...

PATTY FERRANT: What do you guys think the 6 means? What does the 6 mean?

STUDENT: On the fourth try? PATTY FERRANT: The 6 inches.

ANTOINETTE VILLARIN: When you're ready, look up at me...

STUDENT: That, um...

ANTOINETTE VILLARIN: Anyone that can tell me what Robbie was trying to do on the third and fourth try? And what advice you would give him. How about Cassie?

STUDENT: Um, he was trying to, find the main-- he finally understood that the 36 inches was the AREA, and he had to find the perimeter, so he found the... since it's a square, he found the square root of 36, which is 6, and he checked it, and he got 6. So he thinks that the sides are 6 inches.

ANTOINETTE VILLARIN: Okay, so where would, where would this...so, he got the square root of that, okay? Where would the 6 be here? What would it represent?

STUDENT: Uh, on every single side.

ANTOINETTE VILLARIN: On every single side there was a 6? Okay. Is there anyone else that wants to add to what Cassie shared? How does that picture, then, somebody different. How does that picture show me what Cassie just said? That Robbie thinks that this is 6, 6, 6, and 6. How does the picture show it? Okay? Julian?

STUDENT: The picture proves that 6 times 6 equals 36.

ANTOINETTE VILLARIN: 36? Okay, how do we know, how many squares are in there?

STUDENT: 36.

ANTOINETTE VILLARIN: There's 36. okay? Is he close to the answer?

STUDENT: He is!

ANTOINETTE VILLARIN: He is? Who can tell me why? Why. Did you talk about that actually with your partner? Okay. Talk about it with your partner, really quickly, is he close to the answer?

STUDENT: He is close to the answer because, it's the length and the width, then plus and plus until he got 36.

STUDENT: But, then..

ANTOINETTE VILLARIN: When you're ready, look up at me. I would like you to share either what you said or what your partner talked about. Okay? How about Brandon?

STUDENT: Um, 'cause 6 times 6 would equal 36, but for perimeter, it's 6 plus 6 plus 6.

ANTOINETTE VILLARIN: Why?

STUDENT: Um, 'cause, um, 'cause he's got to add the four sides, and they're all 6 ANTOINETTE VILLARIN: Okay. What would that be? 6 plus 6 plus 6?

STUDENT: 24.

ANTOINETTE VILLARIN: 24? Okay? Do you guys agree with Brandon? Brandon, right? Okay, all right.