MELISSA NIX: So, I see lots of hands going. But I think at this point, can you turn around and chat as a group of four? And then I'm gonna start pulling a couple examples to move the thinking forward. But let's see if now, collectively, your four-pods can come up with even more movement.

STUDENT: All the dimensions for these. And then what we did was we decided to, um, add these together and then get, we got 6.5 and then we divided them into each of the [crosstalk] dimensions.

STUDENT: We divided 6.5 by 26 and 6.5 by 13.

STUDENT: And we got 2*x* plus 4*xy*.

STUDENT: Um.

STUDENT: We just got, like, all the, like, dimensions of, like, all the sides.

STUDENT: We also were trying to figure out how, like, *x* equals, uh, *y* equals *x*. So we found out that 1.75*y* equals 3.25*x*.

MELISSA NIX: Ooh. Fascinating. Fascinating.

STUDENT: So that might help us find *z*.

STUDENT: The areas of the other ones.

STUDENT: And ultimately find the actual number.

STUDENT: *X* like over here. Then it equals the 15.

STUDENT: Ohhh yeah. Okay.

STUDENT: If you were gonna convert it to the area.

STUDENT: So what [crosstalk] if the 3.5 helped with the 26.

STUDENT: I wonder if the 3.5 comes over the 26. Like if you do that times, like, whatever that length is.

STUDENT: It'd have to be an *x* though. Because you get *xy* eventually, right?

STUDENT: Yeah.

STUDENT: Yeah.

STUDENT: Well, but you have *x* -- no, because that goes there.

STUDENT: Yeah. No, no, no. This one, it multiplies by 2 so you keep just the 1x. But this length would have to have a *y* in it. I mean. No, it'd have to have an *x* in it. Because, um, your answer's 26*xy*.

STUDENT: Yeah.

STUDENT: That means that you had an, um, this is your *y* you get. So this one is something *x*.

STUDENT: Yeah.

STUDENT: 5 and then we, um, divided it into the area. I think that's half of it. But I'm … I don't know.

STUDENT: Oooh.

STUDENT: Divide 2. And then add that 26*xy*.

STUDENT: Okay.

STUDENT: 6 and a half times 2. 13 and then *x*.

STUDENT: Can you find the conversion from 1*x*?

STUDENT: Yeah.

STUDENT: I just run, uh, *x* equals.

STUDENT: It's equal.

STUDENT: You just explained to me that this, that this part, this portion, cut in half is this portion up here because 4 times 6 and a half would equal, would … So 6 times 4 would equal, um, 24. And then half of, half of 4 is 2. So 24 plus 6 is 26*xy*. And then he explained to me that 13 times 3 point, that ...

STUDENT: He explained to me that -- what'd he say, Ethan?

STUDENT: [inaudible] 13 times 3 point something. 5?

STUDENT: Something. Right? It was like 4 times, like ... no, it wasn't 4 times 3 and a half though, because then that will be 14. How'd he find the other one?

MELISSA NIX: First one has to do with Carni-Eats and finding the area of Carni-Eats. Okay. So can we all hear Heaven as she explains how she found the area of Carni-Eats? All right, so let's make sure that we're giving her the floor.

STUDENT: Um. Since you can't add 2*y* plus 3 since they're different, um, things, you took 2*y* plus 3 in parentheses, multiply that by 1.5*x*, and, um, you can distribute 1.5*x* into it. So I did 1.5*x* times 3 and that gives you 4.5*x*.

MELISSA NIX: So the first thing you do is 1.5*x* times, either way.

STUDENT: 1.5x times 2, 2*y*, that gives you 3. And you just blend that two, um, variables *x* and *y*. So, because you end up getting one, one side like would be an *x* and one side like would be a *y*, that's why you do that. So you get 3*xy*. Oh, yeah, I missed that.

MELISSA NIX: Do you have a gift? You have a gift. What should this be down here?

STUDENT: Uh, 3*xy*.

MELISSA NIX: All right. So this is 3*xy* here. What she's saying in her head is she's saying that she multiplies this and this.

Now do we agree that 1 and a half times 2 is 3? Who wants to explain that one to me? Go for it, Ben.

STUDENT: … of 2. Which gives you 2 and then half of 2 is 1. And then you add them together and it gives you 3.

MELISSA NIX: Okay. So 1 times 2 is 2, and half of 2 is 1, and I add those to get 3. So Heaven said, "All right. This gets me 3." And *x* times *y*, does that seem reminiscent of what we did with those algebra tiles and when we looked at the activity of Rectiles that we had *x* and we had *y* and we had an *xy*? And what about 1 and a half times 3?

STUDENT: That gives you 4.5.

MELISSA NIX: 4.5.

STUDENT: And one of them doesn't have the, another extra variable, so it's just *x*.

MELISSA NIX: So because this one doesn't have an *x* you still need to recognize that *x*, and so you have an *x*.

Anyone else come up with that same area for that? If you didn't, see if you can, somebody else who got that too.