MOLLY MCNINCH: We only have a piece of it, right? Part of it, yeah.

STUDENT: Why can't we have the slant length of the cone?

MOLLY MCNINCH: Oh, we do have the slant length of the cone. Yeah. So the slant length is equal to the roll radius for the cone, right? For each?

STUDENT: Mm-hmm [affirmative].

MOLLY MCNINCH: And so for this one --

STUDENT: Mm-hmm [affirmative].

MOLLY MCNINCH: -- we don't have the roll radius, but we have the slant length. But, because it's not a cone, we're missing this little piece down here.

STUDENT: Right. Mm-hmm [affirmative].

MOLLY MCNINCH: Okay? So flip your paper over. Your pink one. So this right here, I really like this diagram, but think about it -- so you just have angles on this, but think about if it were rolling …you can roll it out… what would it be like if you kind of did what they did in the video where it had like, here, here, and here. And think about what it would look like if you rolled a cone. Okay, where would the tip of the cone be?

STUDENT: The same place.

MOLLY MCNINCH: Same place. Yeah, center of the circle, just kind of go around like that. Yeah? You guys feel like you have a greater starting point?

STUDENT: Maybe.

MOLLY MCNINCH: Maybe?

STUDENT: Maybe.

MOLLY MCNINCH: Maybe? Start thinking about some cones? No? Okay? Maybe?

STUDENT: And also --

MOLLY MCNINCH: Yeah.

STUDENT: -- I'm realizing, so we're back to like trying to find the pattern where if you multiply slant length times the wide diameter, you get double the roll radius, but only for four of them?

MOLLY MCNINCH: Okay. So if it only works for four of them would that be – would it be a valid solution?

STUDENT: No.

MOLLY MCNINCH: No, because it only works for some of them. So use that idea though, and see how you can kind of alter that same idea to fit the rest of the values. Okay? And so you have all the answers because we're trying to find the roll radius and we need these three. So you can test it using all of these values.

STUDENT: Okay.

Molly McNinch -- 9th-Grade Lesson --
Modeling Through Geometry: Circumference of A Cup's Roll
Video transcript from Lesson Part 1C,

MOLLY MCNINCH: All right, so ladies and gentlemen ...