HILLARY LEWIS: Triangle two, we're going to go through something similar, but for this one I'm just going to put up one placement at a time rather than all three. And so with each one I want you to think, what did this student understand? What did they get mixed up? So some students put this here. Think to yourself, what did they understand? What did that student understand? What -- hang on. Or what did they get mixed up? Or maybe they didn't understand anything or maybe they understood everything and didn't get mixed up. What's going on here? What do you think?

You think that one's correct? And why do you think that one is correct?
STUDENT: Because it only has two sides equal, and isosceles has two equal.
HILLARY LEWIS: I see people want to respond, and I can't see -- Sarina.
STUDENT: I think the student got it right. It should be isosceles because it has two equal sides, but it should be obtuse because you can't make a triangle have two obtuse angles. It's impossible.

HILLARY LEWIS: One of us said it was acute, but you're saying no, that it's ...
STUDENT: It's isosceles.
HILLARY LEWIS: It is isosceles. But it should be obtuse. Hmm. Hmm. What else do you want to say about that? Bennett, what did you want to say about that?

STUDENT: I believe that where he got mixed up was that he knew that maybe, like, to have an acute angle -- sorry to have, like, an acute triangle, he knew that all three angles had to be acute. But, like, to have a right or an obtuse you only need to have one angle that's right or obtuse because you can't make a triangle -- like, you can't really make a triangle that has more than one right angle or more than one obtuse angle.

## HILLARY LEWIS: Aarav?

STUDENT: Actually, I'm pretty sure that both sides are acute, but I think the top one, the one at the top, is right. So I think it should be in the right one.

HILLARY LEWIS: He thinks this should be in a right triangle. Michela?
STUDENT: I actually disagree because in math when it's a right angle they always put, like, the square. So it might be obtuse or, like, acute but just, like, a little bit tinier or bigger and somebody might have, like, misunderstood that. I think it might be obtuse isosceles.

HILLARY LEWIS: You think it might be obtuse?
STUDENT: I agree with Sarina.
HILLARY LEWIS: Emmanuel, did you want to add on to that?

STUDENT: It might be a right angle, I disagree with Aarav because a right angle has to have a square at one of the angles and now you can't, you have to be like a crooked square. You can't do a square with like, like that, it has be like bumpy. I disagree with her. I don't think it can be right.

HILLARY LEWIS: You don't think it can be right? What do we thinK? Juju?
STUDENT: I think it should be an isosceles because two sides are equal, and put it in right because the point is going directly up to 90 degrees.

HILLARY LEWIS: So you're saying this is 90 degrees? I am going to move it down there just to see because a couple of you said ... I'm not saying it's right or wrong ... I see some of you wrinkling your brow at me and some of you happy about this. Suyash, what do think? What do you want to say?

STUDENT: It looks more like obtuse, because it's right angled to the obtuse. So I think we should call it obtuse.

HILLARY LEWIS: So you're thinking it needs to go to obtuse. I know a number of you still think it needs to go to obtuse, but are we convinced of whether or not that's ... I don't know that everybody's convinced that's where it goes. Neel, what do you want to say?

STUDENT: I want to say that it's not a right angle and what he said before that usually if it's a right angle there will be one going directly up and one going that way.

HILLARY LEWIS: Do you want to jump back into the conversation?
STUDENT: I have it in my head to say this, but I'm not too sure, but I think it would be easier to identify if it was a right angle if you could just turn the triangle so ...

HILLARY LEWIS: You want to?
STUDENT: Yeah, so that ...
HILLARY LEWIS: So you want it ...
STUDENTS: [crosstalk]
HILLARY LEWIS: What do you think? What do you think? What do you think? Mia, what do you think?

STUDENT: I don't think so because you could see that one of the sides was a little slanted, like this way. If it was straight then it would be a right angle.

HILLARY LEWIS: Bennett, what do you think?
STUDENT: The way we can check is like somewhere on that graph for example, you can tell that those corners are right angles. You could hold it up to that corner and we can figure it out. See how it goes a little bit to the left? It's very close to a right angle, but it's not quite right.

HILLARY LEWIS: Can you guys see that? I'm not able to hold it. Interesting. You think it would go obtuse. Juju, what did you want to say?

STUDENT: Now that it is turned around, I think it would go obtuse because one of the sides is more that way and it would be going diagonal up.

HILLARY LEWIS: Okay, one of the sides is coming out more? Is that what you said? Kellen, what did you want to add?

STUDENT: I think it's obtuse now because it looks bigger than a right angle.
HILLARY LEWIS: Oh, okay, it looks bigger than a right angle. Are you convinced? You are convinced now.

