HILLARY LEWIS: I want to go back to a quick thing that Juju said. Juju said that when you turn it like this, and correct me if I'm wrong Juju, you said now it is acute. Did I understand you? He says that when we turn it like this it is now acute. Turn and talk to your partner about that.

STUDENTS: [crosstalk]

STUDENT 1: So I think like if someone different might have done that they might have not known the rule that if, like, one angle is obtuse or a right angle, that means one side of the triangle is that. So if they put it in the acute isosceles, they might have -- they know that is an isosceles, but they don't know that it's really obtuse because one angle is obtuse. And if there were two obtuse angles, like Max said, it would be over 180 degrees and that's [inaudible].

STUDENT 2: What I forgot, is if you turn it more that way or this way it would be an acute or obtuse. Then if you flip it to its normal point then it would be a right angle.

STUDENT 1: Also, they might have forgotten that an acute triangle has to have all angles be acute. Like this angle, this angle, that angle.

STUDENT 3: It could be acute or obtuse because like, if you see, those two angles are both acute. Then the middle one goes out and is obtuse.

STUDENT 1: Yeah, but if you have like two obtuse or right angles, that would be over 180 degrees. So that's what he got wrong, but you're still correct.

STUDENT 3: It could be both if you look at it at an angle.

HILLARY LEWIS: All right, if you can wrap up your conversations, what do you think about Juju's placement with triangle two? Suyash?

STUDENT: I think it's obtuse.

HILLARY LEWIS: You still think it's obtuse.

STUDENT: Yeah, because it's not even a right angle. How can it be less than a right angle? But it's not even a right angle, it's like 95 degrees.

HILLARY LEWIS: So which angle are you talking about when you said that it's not a right angle?

STUDENT: The obtuse.

HILLARY LEWIS: Which one is obtuse? The top one, the left one, or the right one?

STUDENT: Probably right.

HILLARY LEWIS: The right, bottom one? So you are saying this one's obtuse? Right there? I'm going to mark that one with a star. You're saying that one right there is obtuse. Why do you think that one's obtuse?

STUDENT: It's more than a right angle.

HILLARY LEWIS: Because it looks more than a right angle. Did you want to add on to that?

STUDENT: The extra part is still sticking down from underneath, it's like slanting down. It's not exactly straight. If it were exactly straight, that would make it a right angle, and it's not really close to an acute angle. I think it's more of an obtuse angle.

HILLARY LEWIS: What did you want to say, Neel?

STUDENT: It's not acute because if it was acute then it would probably have to be all angles acute because one of the angles would either be a right angle or an obtuse angle. Then for a right angle or an obtuse angle, you only need one of them. It would have to be an acute triangle -- you need all of the sides acute.

HILLARY LEWIS: For an acute triangle, we need all the angles acute, so less than 90. I think that's what we were talking about here. Juju, would you want to respond to that?

STUDENT: If it was obtuse, the sides of them would not be obtuse either.

HILLARY LEWIS: Say that one more time. If it was obtuse ...

STUDENT: If you switch the triangle the other way, it wouldn't be obtuse either because all the sides are obtuse.

HILLARY LEWIS: Do you guys want to respond to that? Juju, why don't you call on somebody who wants to respond to you.

STUDENT: I disagree with Juju because even though the angle is obtuse, if we place it there and we can place it again to the corner, to the right corner, we see that the angle can be bigger. Even if you flop the triangle, the angle will keep the same. The angle will stay the same; it's the same triangle. You're just putting it different ways to look. It's the same triangle. So if we figure that it's obtuse, any way you swap it, it is going to be still obtuse. There is no way you can swap an obtuse into an acute triangle because they are totally different.

HILLARY LEWIS: What did you want to add, Aarav?

STUDENT: Actually, if those are all acute then wouldn't it be an equilateral triangle?

HILLARY LEWIS: Say that again.

STUDENT: Like if all the sides were acute or if we know all the angles were acute, wouldn't it be an equilateral triangle?

HILLARY LEWIS: If all the angles were acute wouldn't it be an equilateral? Well, we have other triangles over here that are all acute. Are they all equilateral, also? Juju's saying that rotating this makes it acute. So, Natasha, what did you want to say about that?

STUDENT: I think it's obtuse because you only need one obtuse angle. If you have two obtuse angles, it won't be a triangle.

HILLARY LEWIS: So as long as we have that one obtuse angle. Are you convinced yet? So ask her to repeat it.

STUDENT: Because you only need one obtuse angle to make a triangle. If you have two obtuse angles, it won't be a triangle.

STUDENT: Okay. Now I'm convinced.

HILLARY LEWIS: Now you're confused?

STUDENT: No, convinced.

HILLARY LEWIS: Oh, convinced. What are you convinced of?

STUDENT: What Natasha said.

HILLARY LEWIS: What Natasha said? So, you're convinced of what? Where does two belong? You're convinced that it's obtuse? Is that what you're pointing to? So I can take this off of here? Yeah? Did you have one more thing before we move on to our next activity?

STUDENT: Kinda. Like Natasha said, it's impossible to have an acute triangle that has all acute angles because then it wouldn't be a triangle. It's impossible.