**Mauricio Square Spinner**

Mauricio: On that spinner, what outcome’s got the greatest chance of occurring?

Student: 1.

Mauricio: What’s going to happen most likely?

Student: 1.

Mauricio: Angelo you say one? Explain why.

Student: Looks like he has [*inaudible*] looks pretty even, equal to 2.

Mauricio: Okay, and about what chance do you think that is of occurring? Think about the geometry model. What part of the square is a success?

Student: 2/8ths?

Mauricio: So 2/8ths maybe? Or one-fourth? Very good. The probability of spinning a 1 is one-fourth and Sami, what do you want to add?

Sami: 2 and 4.

Mauricio: 2 and…

Sami: 4.

Mauricio: Have the same amount?

Sami: Yeah, as 1.

Mauricio: Oh, as 1.

Sami: Yeah.

Mauricio: Okay, so…

Sami: 2, 1 and 4.

Mauricio: Oh, as I see, all three of them you’re saying. Okay, good. Interesting. So I see that 2 looks like the same shape. Why are you picking 4?

Sami: Well I divided them into equal sizes, like the same size as 5 and 3 and there’s 2 in the 1, there’s 2 in the 2 and then there’s 2 in the 4.

Mauricio: Yeah, I like it. Angelo I think talked about it being in eighths. If you could visually imagine dividing this thing into 8 congruent right triangles, does 1 take up 2 of those? Does 2 take up two of them? And how about 4?

Student: Yeah.

Mauricio: Different shape, but yeah, it sure does. It sure does. Interesting. It is one-fourth of the square, correct? What if I asked you this question? A fair game or not a fair game? Give me your reasoning and thinking about this. I’m going to spin the spinner once. If I spin a 1 or a 2, you win the game; a 3, 4, 5, I win the game.

Student: That’s fair.

Mauricio: Fair, Chai? You were quick with that one. Tell me why.