## Transcript

Hey, It's day two. And so I dug in a little more to Learn to Code 1. I went and played with Spirals, and there were so many things that I saw. So I really want to show you that. Spirals is a lot of fun. It really speaks to the math side of me.  I was seeing a lot of really neat and interesting things. So as you look, the radius here is six. And the wheel radius is one, and it gives you six spokes. But then, if I change the radius to two, and rerun it, it'll give me three spokes. And I started seeing the fractions pop up in there. And that was a lot of fun to just make that realization and be able to see the math happening. If I make the radius three, I should get two spokes. And of course, it gives me a line that bisects the circle.  Again, a lot of neat things happening that we can see. I saw those same relationships happening when I moved it to the outside with the epicycloid. Then we could play with the numbers and instead of using whole numbers and even fractions. I started thinking about the least common denominators and those common numbers between two numbers and what would happen if I really got some strange numbers and what would happen.  And we can see that.

It doesn't match up and it's not actually in half, and you start to see it coming off. So there's gonna be a really big number that's common between those.  I also got to play with the draw speed. And that was really neat because I had a really nice line right here, going through. I got curious.  What would happen if I put the speed at 10 and what happened? And it looks a little jagged. So I was curious. Could you go to 30? Again I got to play. I got to try things out and that's what we want from the kids and see what happens.