

LISA HENNEFARTH: The lesson today is going to be asking students to write a commentary on a swim meet. So students are going to be asked to look at a graph that's got a race of three people. I think it- I believe it's a freestyle race. And they are going to have to interpret a graph and then write a commentary as if they were commentating on the radio. So they're gonna have to kind of pull on their prior knowledge of, do they know what a swim meet is? Do they know what a freestyle swim meet is? Can they- I feel fairly confident that they know how to read a graph. We've been- we're currently in a unit on functions, so we've been reading graphs in preparation, learning, you know, what does lines mean, what does it mean when things intersect or cross over, so I'm fairly confident that they should enjoy this task because it's something that's a little bit different.

So the learning goals for them are going to be to be able to read a graph on the coordinate plane, and from there be able to interpret the graph looking at various things like steepness. I'm not asking them to- to look at rates of change, but we're looking at where do the lines intersect? Where do they cross? Where does certain, um, swimmers could potentially be like ahead of the other person? What's the finish? Who wins the race at the end? What- um, in terms of building and the excitement of it, like, can they look at the steepness of the graph? Are they gonna look at where- where it starts? I want them to be able to interpret the graph and apply their knowledge because we're in functions. Be able to apply their function knowledge looking at the graph to be able to interpret and describe in detail what is going on in the graph. So looking at things like intersecting points, looking at the finish, looking at where the gr- race starts, and whether, you know, things are climbing steadily. Does- in one case, we've been working on graphs; does anybody notice that nobody stops? Because we've seen graphs like that where, you know, all of a sudden it goes horizontal. And so they- they've learned and they've practiced what that means.

So that's what this is getting them to do, is to write a commentary. So this is a little bit out of the norm too because it's gonna be very heavy on the writing component. I'm hoping that students will be able to walk away being able to determine, um, who wins the race will- will be ideal, um, what do the various intersecting points mean on the graph? So looking at three swimmers, at their rates, why, you know, they're gonna hopefully notice that none of them are a straight line. Um, I'll be interested to see if any student attempts to try to figure out the rate, um, based on the fact that we just finished Unit 3, which was on bivariate data, and we did a lot of work around lines of best fit. So it'll be interesting to see if anybody teases out or pulls any of that information, prior knowledge, um, from last semester into this work. It'll be interesting to see um, in terms of vocabulary, um, you know, increasing, decreasing, intercept, maximum, minimum. These are all function-related words that we've been practicing. I'm hoping that students are going to be utilizing vocabulary that we've been practicing throughout this unit.

So I know that some students may struggle because this is a heavy writing assignment. We're gonna ask students to- to write a first draft on a whiteboard and then go through and do successive pair shares, strengthening their writing as they go or trying to get ideas as they- as they talk to individual students.