Lesson 4 Teaching Portal Materials

Episode Supports

Episode 1: Making Sense

Episode Descriptions: Kate and Christopher use the Races applet to find the number of miles and minutes the red car should travel to go at the same speed as the blue car, which travels 12 miles in 9 minutes. They notice some patterns that work and others that don't work.

Focus Questions: For use in a classroom, pause the video and ask these questions:

- 1. [Pause video at **1:53**] Can someone revoice Kate and Christopher's conjecture? Who thinks it will work? Who thinks it will not work?
- 2. [Pause video at **3:28**] Can someone revoice Christopher's conjecture? Who thinks that the two cars have amounts of time and distance that will make the cars travel at the same speed? Who thinks that the two cars will travel at different speeds?

Supporting Dialogue: When engaging in the tasks in class, invite your students to notice the many different quantities that are represented in the applet and student work:

- Stop at the video at **3:42**. Note that Kate just mentioned that she needs to compare the speeds of each car, not the times traveled of each car. These are examples of two different quantities in the problem. Work with your neighbor to name all the different quantities that are represented in the problem.
- Ask students to share the quantities from their lists. Ask students to show where they see the quantity represented. Ask other students if they see it the same way or differently. Continue to ask students to share and explain where and how they see different quantities.

. "Lesson 4 Episode 1 Teacher Support Material" by MathTalk is licensed under CC BY-NC-SA 4.0

