

Teacher Supporting Materials for Lesson 1 Episode 4: Repeating Your Reasoning

Episode Description

Sasha and Keoni apply their methods to construct a second parabola with a different focus and directrix.

Students' Conceptual Challenges – none. Omit this tab.

Focus Questions

For use with a classroom, pause the video and ask these questions:

1. [Pause the video at [1:34](#)]. Restate Sasha's prediction. Do you agree with it?
2. [Pause the video at [2:33](#)]. Keoni says they do not need to draw a line for the first point that they found on this parabola. Why not?

Supporting Dialogue

When students are working on the tasks in class, you can support dialogue as follows:

Ask students to focus on precision, i.e., "Compare your methods of measurement with each other. Are some methods more precise than others? How so?"

Math Extensions

These questions allow students to extend concepts and terminology from the episode:

1. Continue exploring how parabolas change when the relative position of the focus and directrix changes. Justify your findings.

