Teacher Supporting Materials for Lesson 2 Episode 4: Repeating Your Reasoning

Episode Description

Sasha and Keoni find the x-value of a point on the parabola with a y-value of 7.

Students' Conceptual Challenges – none. Omit this tab.

Focus Questions

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

- 1. [Pause video at **0:41**]. Sasha drew a horizontal line. What is the true about every point on that line?
- 2. [Pause video at **2:24**]. Keoni says that the value of b is 5.29. Are there other possibilities for a value for b so that b² will equal 28?

Supporting Dialogue

Invite your students to reflect on the emergence of a mathematical method by asking:

- Summarize your methods to find the x-value of a point on the parabola with a y-value of 7.
- Will these methods always work? Why?

Math Extension

- 1. Solve for the x-value of a point on the parabola with a y-value of $\frac{1}{2}$.
- 2. Solve for the x-value of a point on the parabola with a y-value of $\sqrt{10}$.

