

Lesson 7 Teaching Portal Materials

Episode Supports

Episode 1: Making Sense

Episode Description

Sasha and Keoni review the relationship that they discovered between the value of p in the equation $y = \frac{x^2}{4p}$ and the width of the graph of the parabola.

Focus Questions

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

1. [Pause the video at [1:06](#)]. What does it mean for a parabola to be wider than another parabola?
2. [Pause the video at [3:33](#)]. How does Keoni know where to place the red directrix?

Supporting Dialogue

Focus students' attention on precision of language:

- What does it mean for one parabola to be skinnier than another?

Math Extensions

1. On the worksheet, add two more parabolas: one parabola with a p -value of $\frac{1}{8}$; and another with a p -value of 1.5.
2. What do you notice about those two additional parabolas?

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