

## Lens 3: Informing Instruction

What do you plan to learn about students by using the argumentation task?

**Use the guiding questions to identify what you want students to learn from each argumentation task.**

- Does the task help you learn about students' prior knowledge about a topic?
- Does the task help you learn about students' ability to apply or connect their knowledge of one or more topics from a lesson, unit or course?
- Does the task help you learn about students' degree of mastery of targeted skills or concepts?
- Does the task help you learn about students' ability to communicate their reasoning effectively and to make clear connections among their claims, warrants and evidence?

### Task 1

The coordinates of the four vertices of figure ABCD are A(4, 3), B(8, 3), C(4, 6) and D(8, 6). Based on the differences between the coordinate points, Jasmine believes figure ABCD is a square. Do you agree with her? Write a mathematical argument to support your answer.

### Task 2

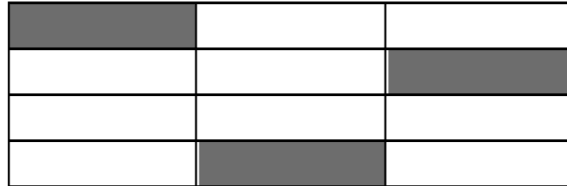
Alexa is training to bike 70 miles. During her first week of training she bikes 12 miles. During her second week she bikes 24 miles, and by her third week she bikes 36 miles. If Alexa continues with the same biking pattern each week, when will she be able to bike 70 miles? Write a mathematical argument to support your reasoning.

## Lens 3: Informing Instruction

What do you plan to learn about students by using the argumentation task?

### Task 3

Laura says that  $\frac{1}{4}$  of the rectangle is shaded. Do you think she is correct? Explain why or why not.



### Task 4

DO NOT solve.

Discuss solutions to each equation. Support your ideas with a mathematical argument.

a)  $3x + 5 = 2x - 6$

b)  $4x + 3 = 4x - 5$

c)  $2x - 10 = 2x - 10$