## Unit 1 Lesson 15: Symmetry

## 1 Back to the Start (Warm up)

## Student Task Statement

Here is a segment $A B$ :


If you translate the segment up 5 units then down 5 units, it looks the same as it did originally.

1. What other rigid transformations create an image that fits exactly over the original segment?
2. Are there any single rigid motions that do the same thing?

## 2 Self Reflection

## Student Task Statement

Determine all the lines of symmetry for the shape your teacher assigns you. Create a visual display about your shape. Include these parts in your display:

- the name of your shape
- the definition of your shape
- drawings of each line of symmetry
- a description in words of each line of symmetry
- one non-example in a different color (a description and drawing of a reflection not over a line of symmetry)


## 3 Diabolic Diagonals

## Student Task Statement

Kiran thinks both diagonals of a kite are lines of symmetry. Tyler thinks only 1 diagonal is a line of symmetry. Who is correct? Explain how you know.

