

Linked to your previous learning:

What is a line of symmetry?

Draw a square and use dotted lines to show all of the lines of symmetry.

Which prior

knowledge did

you use?

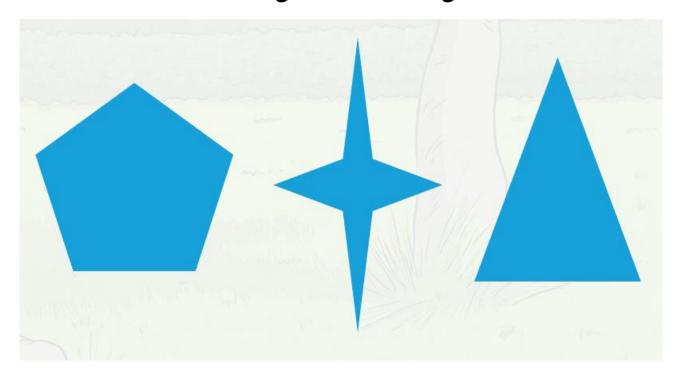
Repeat for a rectangle.

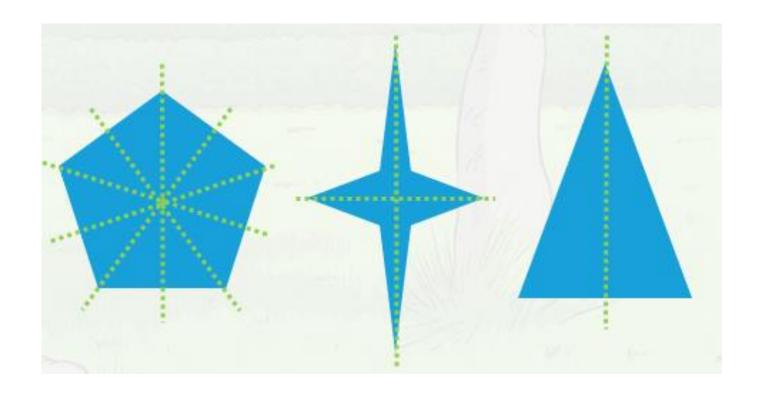
Do the square and rectangle have the same number of lines of symmetry? If they do not, explain why this is.

# WALT: Identify lines of symmetry

How many lines of symmetry do these shapes have?

Draw the shape and the lines of symmetry





Shape I has 5 lines of symmetry Shape 2 has 2 lines of symmetry Shape 3 has I line of symmetry

## Key Vocabulary

- Symmetry
- Reflect
- Reflection
- Mirror line
- Shapes



Add to the key vocabulary list as you use and apply your knowledge liked to symmetry.

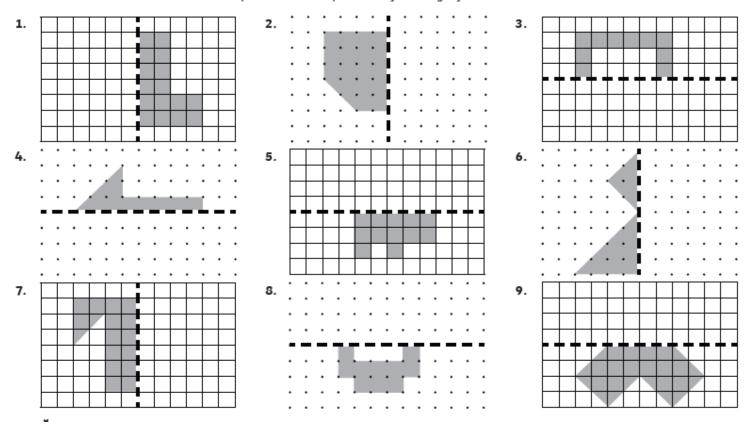
## What would you include in a WAGOLL for identifying lines of symmetry?

#### Fluency I - Do it!

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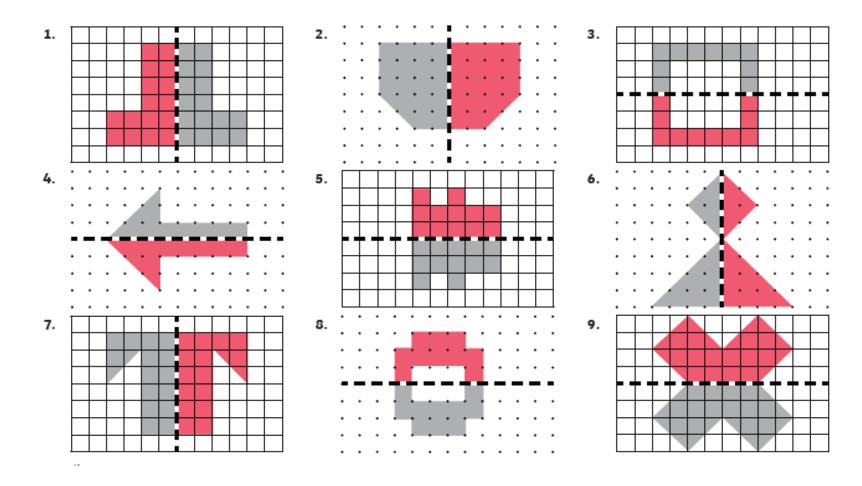
#### **Drawing Reflected Shapes**

Draw the shapes in their new positions after being reflected over the mirror line.



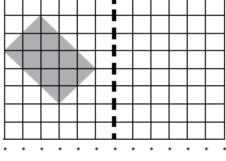
\*\* If you have one, you can use a mirror to help you to complete the shapes.

## Fluency I - Do it! ANSWERS

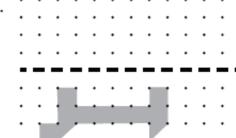


#### Fluency 2 - Do it!

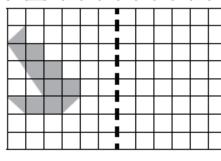




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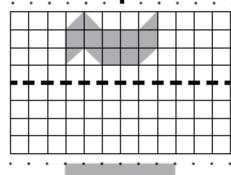
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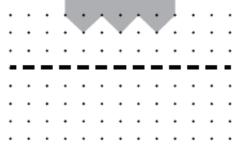
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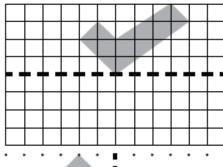
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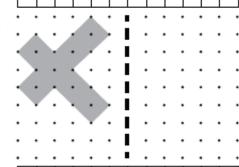
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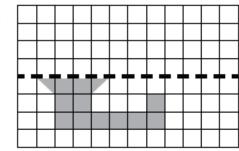
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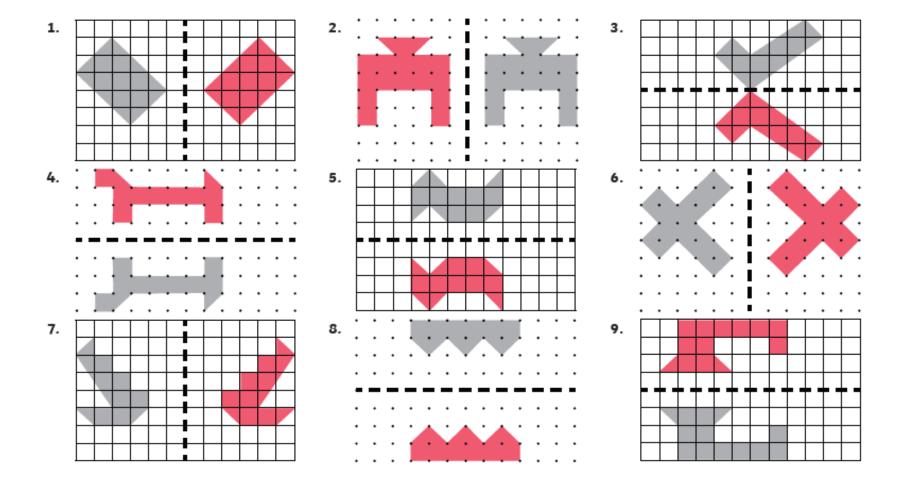


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## Fluency 2 - Do it! ANSWERS



### Reasoning - Secure it!

Are these statements always, sometimes or never true?

- A pentagon has five lines of symmetry.
  - A square has four lines of symmetry.
- A scalene triangle has three lines of symmetry.



Write your own always, sometimes and never statements linked to lines of symmetry.

#### Reasoning - Secure it! ANSWERS

A pentagon has five lines of symmetry.
 A square has four lines of symmetry.
 A scalene triangle has three lines of symmetry.
 Never



Write your own always, sometimes and never statements linked to regular and irregular polygons.

## Problem solving - Deepen it!

Anya says:

Shapes with both a horizontal and vertical line of symmetry always have diagonal lines of symmetry, just like this one.

Is Anya correct or not? Use your maths sentence starters and key vocabulary in your explanation. If you are saying that Anya is wrong, can you include examples of shapes which prove this?

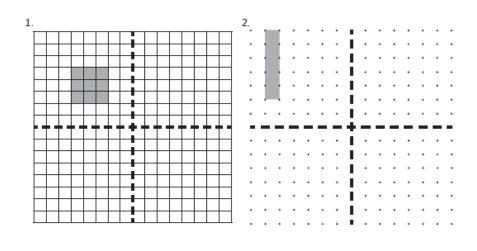
## Problem solving - Deepen it! ANSWERS

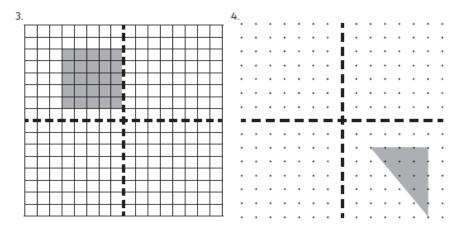
Anya is not correct.

No, here are some examples of shapes with vertical and horizontal lines of symmetry but no others:

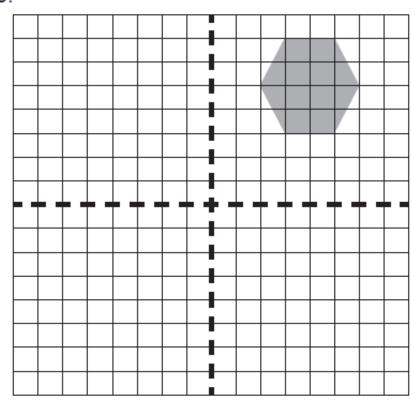


#### Challenge: Reflect shapes in a horizontal and vertical mirror line

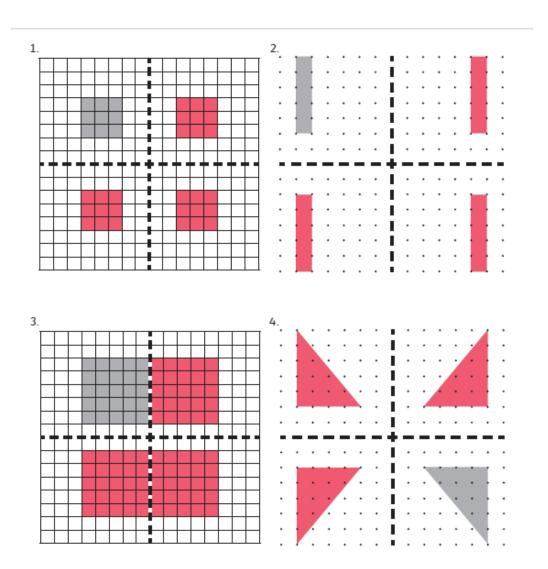




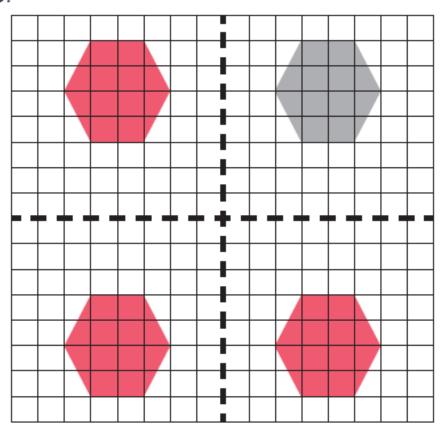
5.



#### Challenge: Reflect shapes in a horizontal and vertical mirror line ANSWERS



5.



#### Plenary

Use an emoji to show how well you have understood the WALT.



Roll a dice to generate a number. How many different shapes can you draw with that many lines of symmetry?