

## Friday 10<sup>th</sup> July – Lines of symmetry

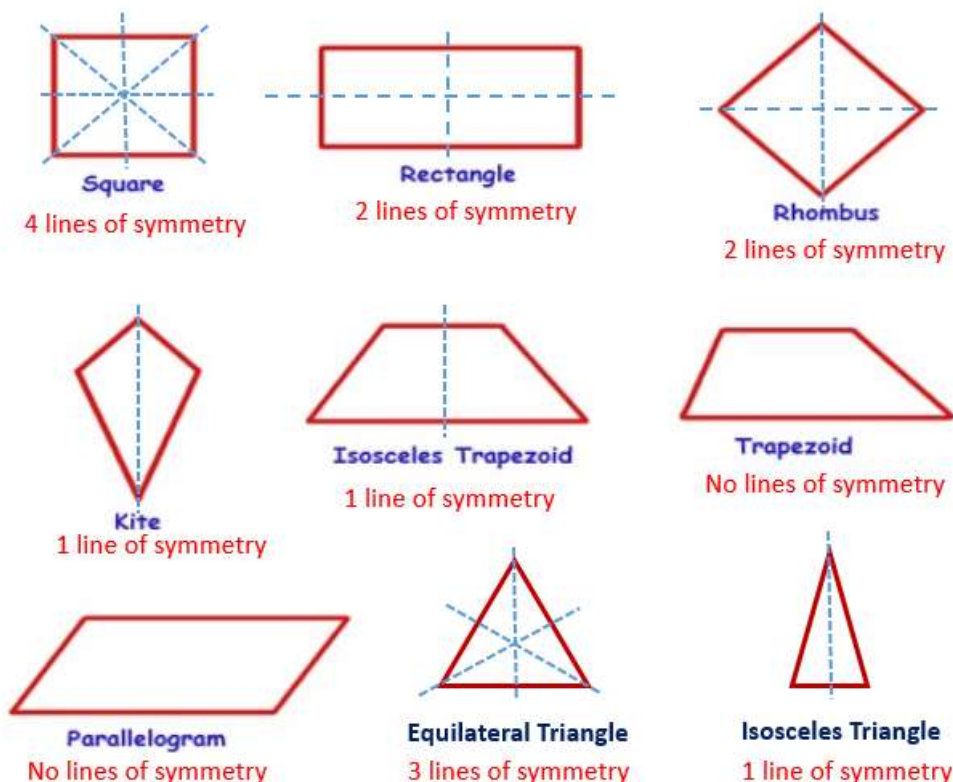
- Today we are going to be looking at lines of symmetry in different shapes.
- What is a line of symmetry ?
- How many lines of symmetry does a triangle have? How many lines of symmetry does a quadrilateral have?
- Do all triangles or quadrilaterals have an equal number of lines of symmetry?

# Lines of Symmetry

## Definition of symmetry:




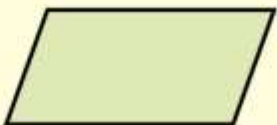
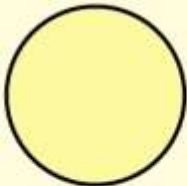
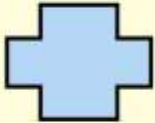
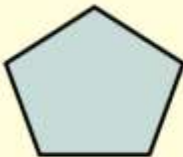
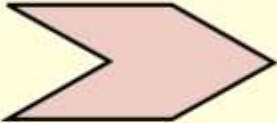
A 2D shape is **symmetrical** if a **line** can be drawn through it so that either side of the **line** looks exactly the same. The **line** is called a **line of symmetry**. This is sometimes called a 'mirror **line**' or 'mirror **symmetry**'. Many shapes will have more than one line of symmetry.

## Lines of Symmetry

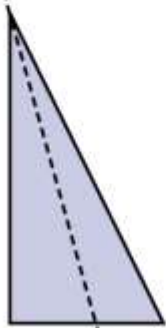


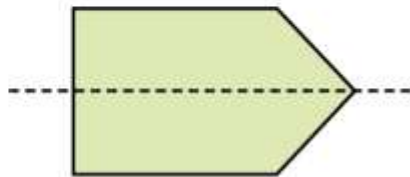
# Lines of symmetry

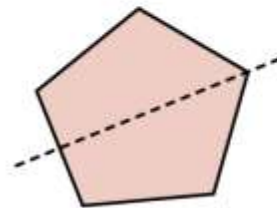
1 Tick the shapes that have at least one line of symmetry.

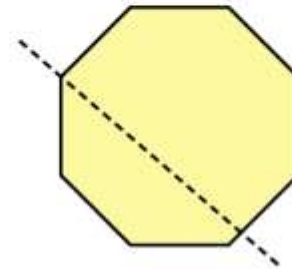
			
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

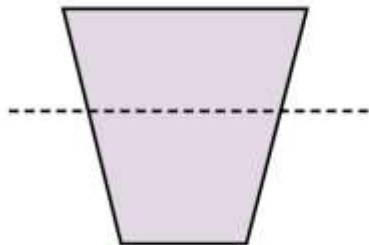
2 Tick the shapes that show a correct line of symmetry.

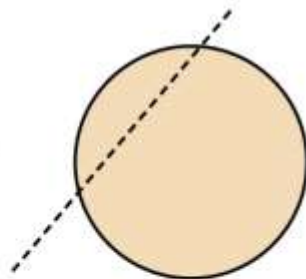


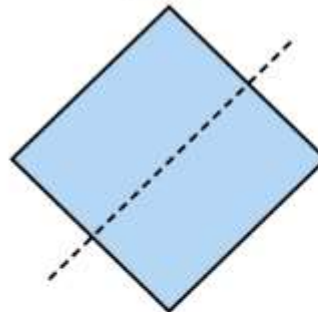


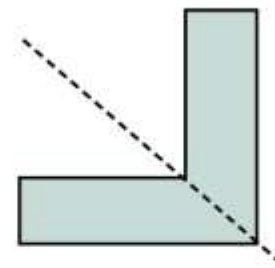













How did you know which shapes to tick?



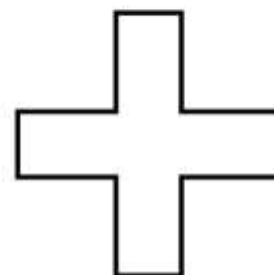


3 Draw one line of symmetry on each shape.

a)



c)



b)

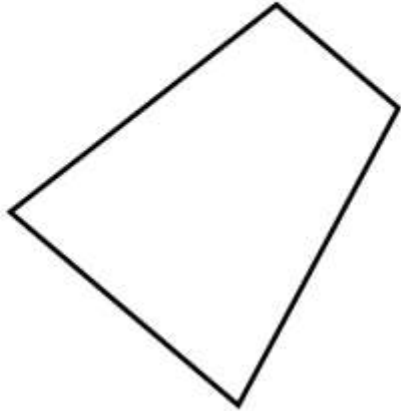


d)

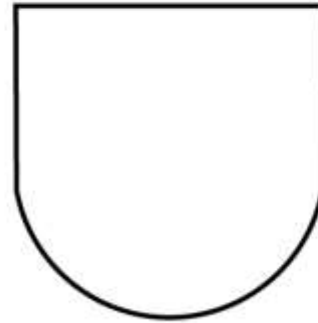


3

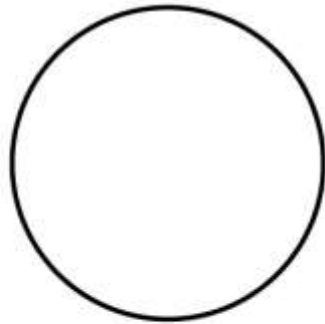
e)



g)



f)



h)



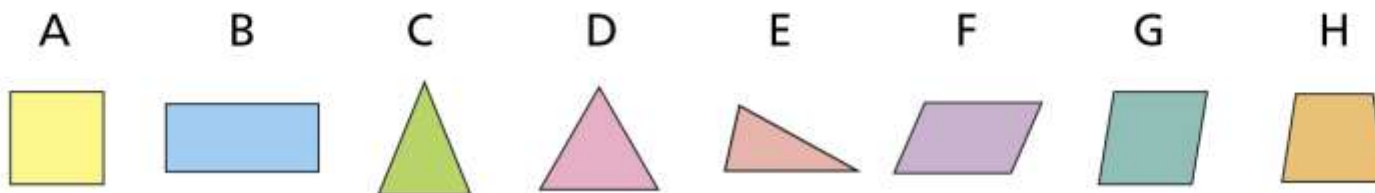
Is there more than one possible answer for each?





4 Sort the shapes into the table.

The first one has been done for you.



	1 line of symmetry	More than 1 line of symmetry	No lines of symmetry
Triangle			
Quadrilateral		A	

- 5 Tommy is folding a paper circle to find lines of symmetry.



A circle has  
lots of lines  
of symmetry!

Do you agree with Tommy? \_\_\_\_\_

Talk about it with a partner.





6 Here are 3 logos.



Dora

All of these logos  
have lines of symmetry  
because they're circles.



Mo

I disagree because  
the design on them  
isn't symmetrical.

Who do you agree with? \_\_\_\_\_

Talk about it with a partner.





7

Shade a maximum of 8 squares to make a symmetrical shape.



Compare answers with a partner. How many different shapes can you make?