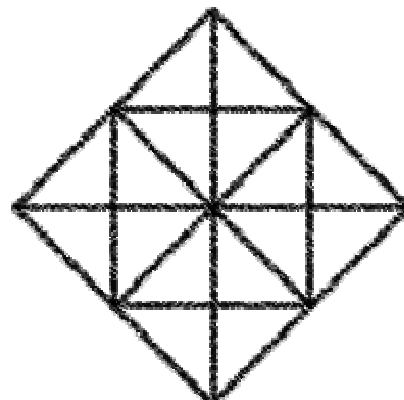
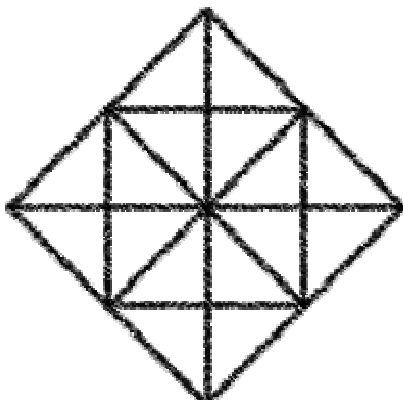
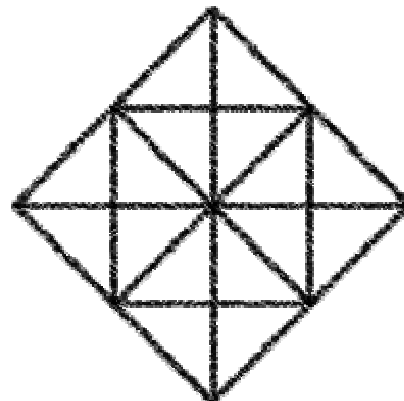
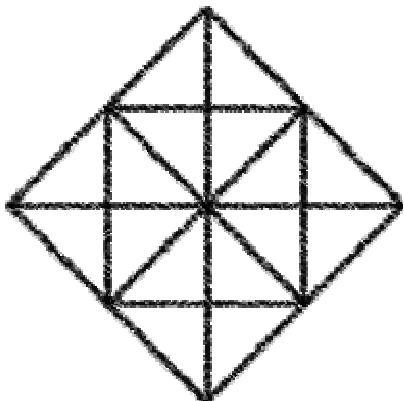
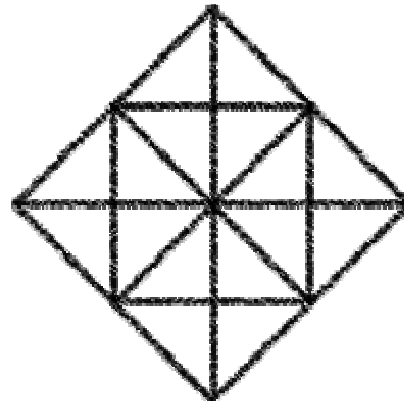
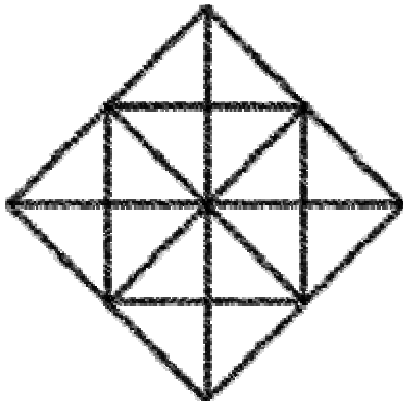


### PATTERNS AND NUMBERS

- Colour in these tiling patterns so that exactly half of each pattern is one colour and exactly half is another colour. Can you find at least six different ways to do it?
- Mark any lines of symmetry on each when you have coloured it, and write down how many lines of symmetry each has.



On these tiling patterns, colour in:

- all the large squares in one colour (these squares look like diamonds - turn the page round a bit if you're not sure that they are also squares)
- all the small squares in a second colour
- all the triangles in a third colour
- all the rectangles in a fourth colour (notice that some have their long side horizontal and some vertical)

Diagram 1

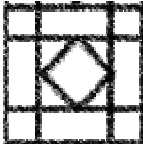


Diagram 2

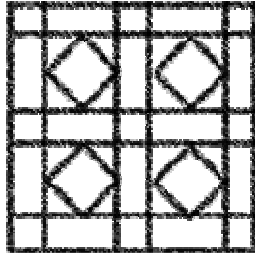
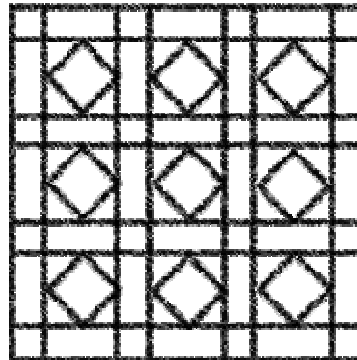


Diagram 3



Then fill in the table (apart from the right-hand column):

	Diagram 1	Diagram 2	Diagram 3	Next diagram
How many large squares are there?				
How many small squares are there?				
How many triangles are there?				
How many rectangles are there?				

What type of number is the total for large squares? .....

What type of number is the total for small squares? .....

What number is the total for triangles a multiple of? .....

What number is the total for rectangles a multiple of? .....

Can you predict how many of each shape there would be in the next diagram? (Use the right-hand column of the table for your answers).