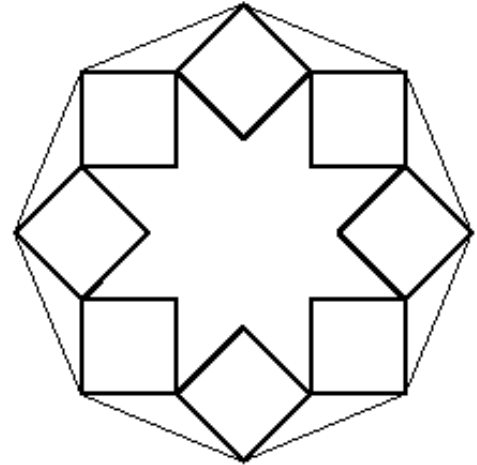

Octagon Tile

This problem gives you the chance to:

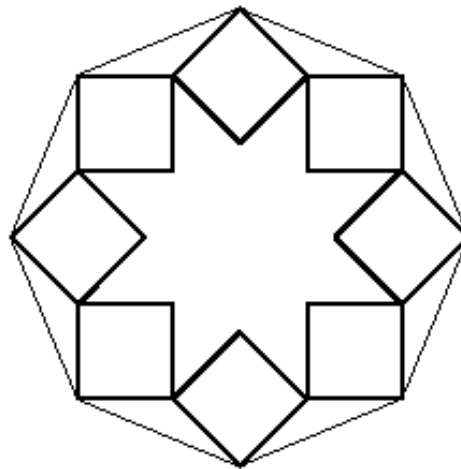
- work with patterns and shape
-

Here is a design for a tile in the shape of a regular octagon.

The design is made from eight squares all the same size placed symmetrically round the octagon.



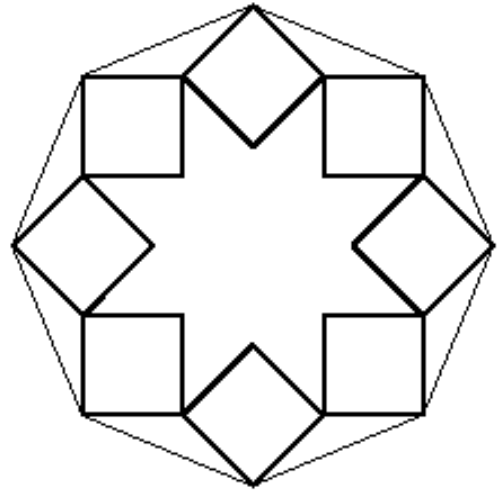
1. Join eight points in the diagram to make another regular octagon.



2. The inner sides of the squares form a 'star' in centre of the tile.

How many sides does the star have? _____

3. Draw in all the lines of symmetry of the star.

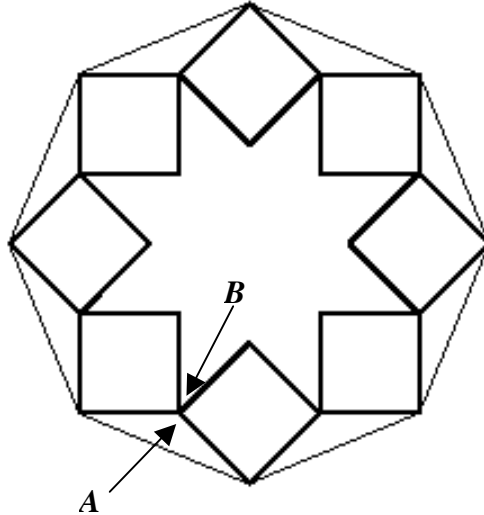


How many lines of symmetry does the star have? _____

What is the angle between each line of symmetry and the next? _____

Explain how you know.

4.



Angle A is 135° . Explain why angle B is 45° .
