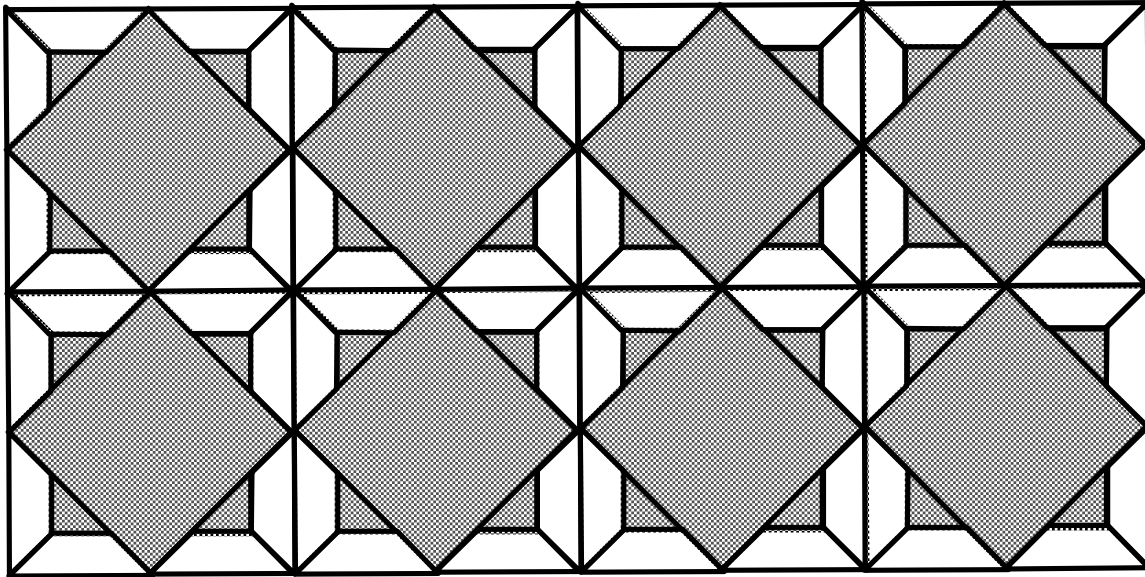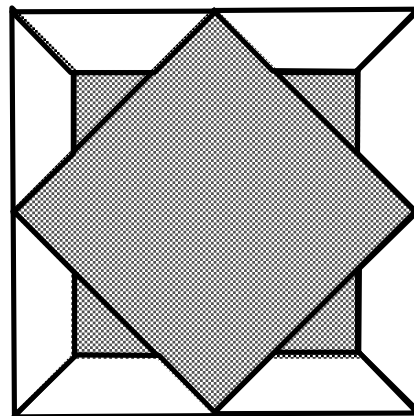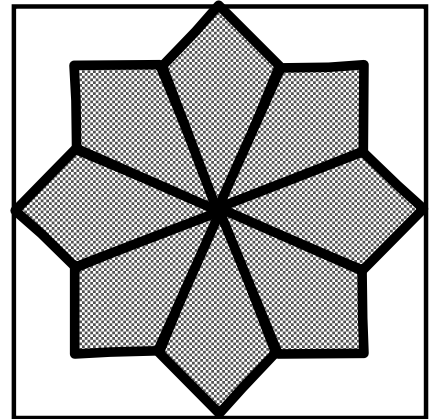# Floor Pattern

The diagram shows a floor pattern.

In the floor pattern, the shaded part is made by overlapping two equal squares.

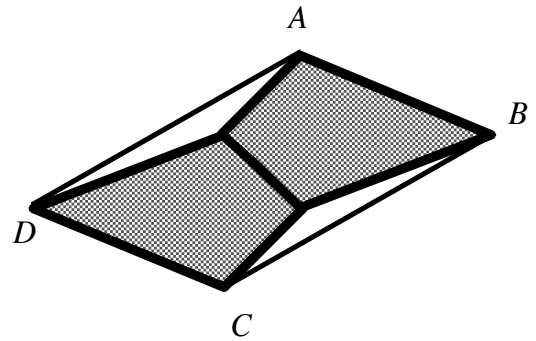The shaded shape can also be seen as a set of eight equal kites.

1. Find the measures of all four angles of the kites.

   Explain how you obtained your answers.

   _____

   _____

   _____

   _____

   _____

   _____

2. Two of the kites can fit together to make a hexagon.

   Prove that the quadrilateral ABCD is a parallelogram.

A

B

D

C

_____

_____

_____

_____

_____

_____

Floor Pattern		Rubric
	Points	Section points
1. Gives correct answers: **90°, 45°, 112.5°, 112.5°**	4 x 1	
Gives correct explanations such as:		
(*The 90° angle is the corner of a square.*) The 45° angle is 360 ÷ 8. The other two angles are equal and the angle sum is 360°.	2 x 1	
		6
2. AB = DC	1	
Gives correct explanation showing that ABCD is a parallelogram..	3	
Partial credit Incomplete explanation.	(1)	
		4
Total Points		**10**