

1. Each exterior angle of a regular polygon is 30° .

Work out the number of sides of the polygon.

.....

(2 marks)

2.

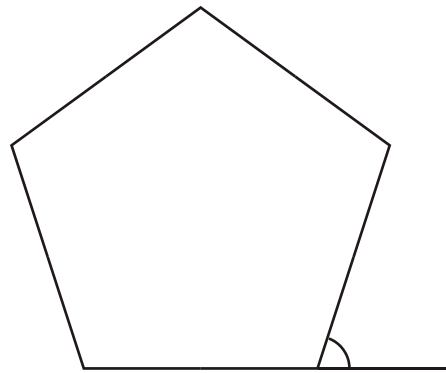


Diagram **NOT**
accurately drawn

Work out the size of an exterior angle of a regular pentagon.

.....^o

(2 marks)

3.

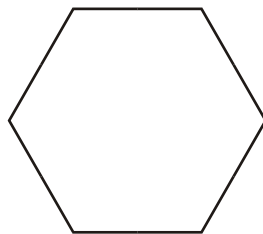


Diagram **NOT**
accurately drawn

Calculate the size of the exterior angle of a regular hexagon.

.....^o

(2 marks)

4. The size of each exterior angle of a regular polygon is 40° .

Work out the number of sides of the regular polygon.

.....

(2 marks)

5. The size of each interior angle of a regular polygon is 156° .

Work out the number of sides of the polygon.

.....

(3 marks)

6. Here is a regular polygon with 9 sides.

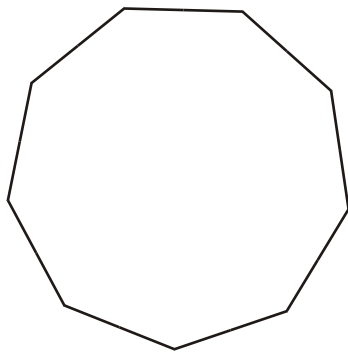


Diagram **NOT** accurately drawn

Work out the size of an exterior angle.

.....^o

(2 marks)

7.

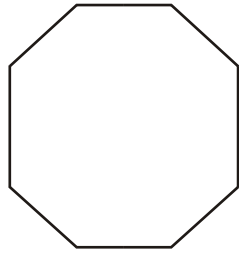


Diagram **NOT** accurately drawn

(a) Work out the size of each interior angle of a regular octagon.

.....

(3)

The size of each exterior angle of a regular polygon is 30°

(b) Work out the number of sides of the polygon.

.....

(2)

(5 marks)

8.

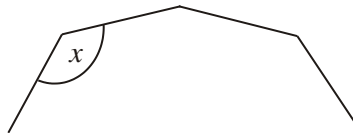


Diagram **NOT** accurately drawn

The diagram shows part of a **regular** 10-sided polygon.

Work out the size of the angle marked x .

.....^o

(3 marks)

9.

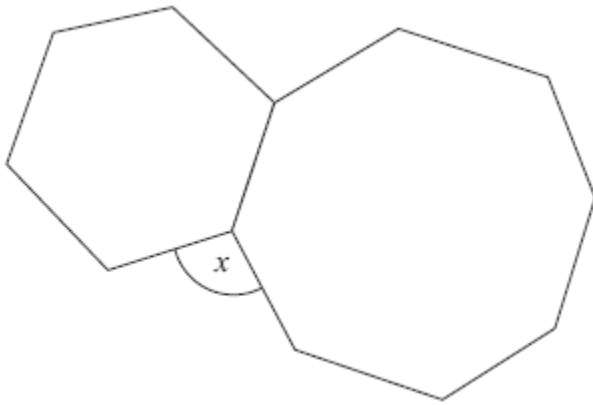


Diagram **NOT**
accurately drawn

The diagram shows a regular hexagon and a regular octagon.

Calculate the size of the angle marked x .
You must show all your working.

.....°

(4 marks)

10.

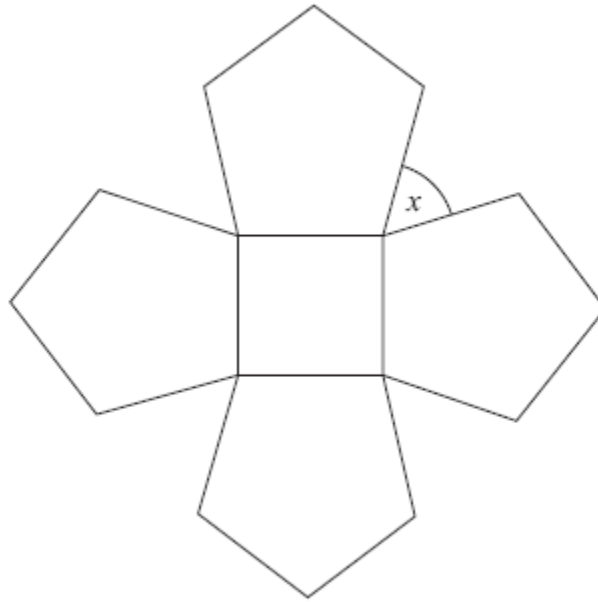


Diagram **NOT**
accurately drawn

The diagram shows a square and 4 regular pentagons.

Work out the size of the angle marked x .

.....^o

(4 marks)

11.

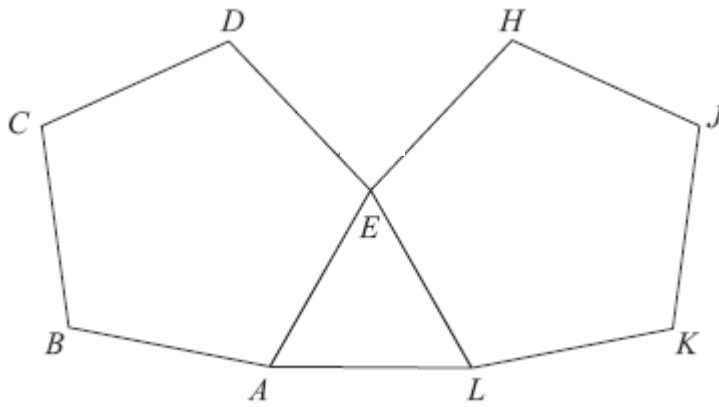


Diagram **NOT**
accurately drawn

$ABCDE$ and $EHJKL$ are regular pentagons.
 AEL is an equilateral triangle.

Work out the size of angle DEH .

.....^o
(4 marks)

12. The diagram shows part of a pattern made from tiles.

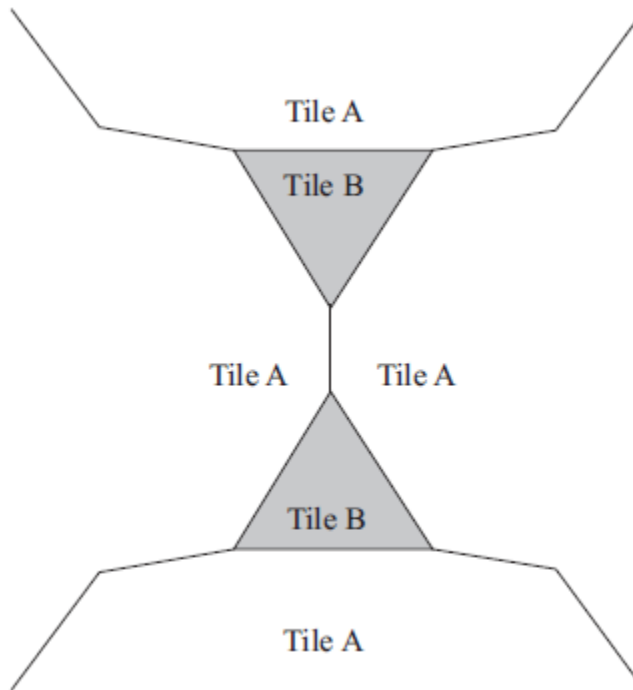


Diagram **NOT**
accurately drawn

The pattern is made from two types of tiles, tile A and tile B.

Both tile A and tile B are regular polygons.

Work out the number of sides tile A has.

.....
(4 marks)