

Angles in Polygons

Difficulty: Hard

Question Paper 1

Level	IGCSE
Subject	Maths (0580/0980)
Exam Board	CIE
Topic	Geometry
Sub-Topic	Angles in Polygons
Paper	Paper 2
Difficulty	Hard
Booklet	Question Paper 1

Time allowed: 26 minutes

Score: /20

Percentage: /100

Grade Boundaries:

CIE IGCSE Maths (0580)

A*	A	B	C	D	E
>88%	76%	63%	51%	40%	30%

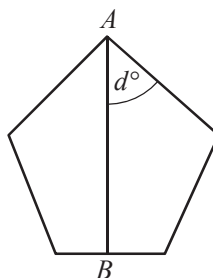
CIE IGCSE Maths (0980)

9	8	7	6	5	4	3
>94%	85%	77%	67%	57%	47%	35%

Question 1

The diagram shows a regular pentagon.
 AB is a line of symmetry.

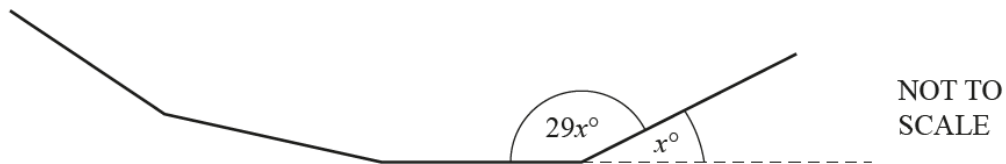
Work out the value of d .



NOT TO
SCALE

[3]

Question 2



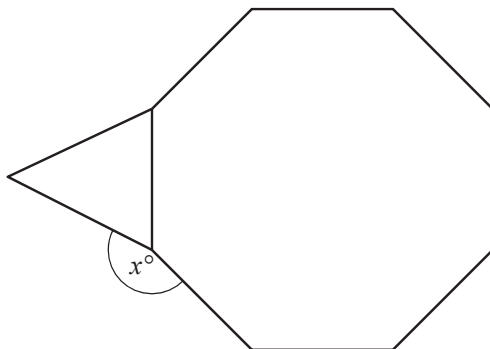
The diagram shows part of a regular polygon.
The exterior angle is x° .
The interior angle is $29x^\circ$.

Work out the number of sides of this polygon.

[3]

Question 3

The diagram shows a regular octagon joined to an equilateral triangle.

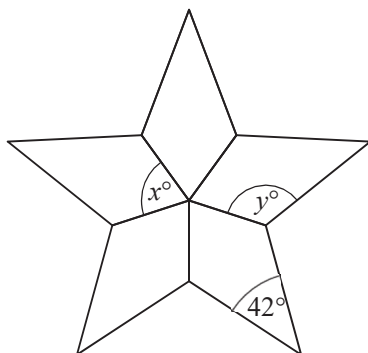


NOT TO
SCALE

Work out the value of x .

[3]

Question 4



NOT TO
SCALE

The diagram is made from 5 congruent kites.

Work out the value of

(a) x , [1]

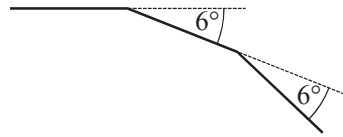
(b) y . [2]

Question 5

The exterior angle of a regular polygon is 36° .

What is the name of this polygon? [3]

Question 6

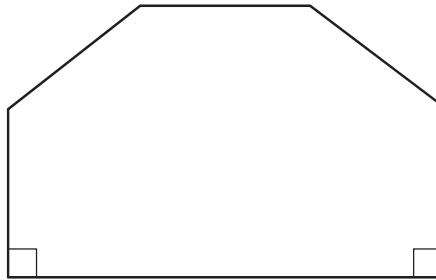


NOT TO
SCALE

The diagram shows two of the exterior angles of a regular polygon with n sides.
Calculate n .

[2]

Question 7



NOT TO
SCALE

The front of a house is in the shape of a hexagon with two right angles.
The other four angles are all the same size.

Calculate the size of one of these angles.

[3]