## Interior And Exterior Angles

Please write clearly in block capitals

Forename:

Surname:

## Materials

For this paper you must have:

- mathematical instruments

You can use a calculator.

## Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer all questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.


## Information

- The marks for questions are shown in brackets.
- You may ask for graph paper, tracing paper and more answer paper. These must be tagged securely to this answer book.


## Advice

- In all calculations, show clearly how you work out your answer.

1 The diagram below shows a regular pentagon.
$A B C$ is a straight line


1(a) $\quad$ Find $x$
Give a reason for your answer.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$。

1(b) $\quad$ Find $y$
Give a reason for your answer.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$。

2 The diagram below shows a regular polygon.
The exterior angle is $20^{\circ}$


Find the number of sides of the polygon shown above.
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$ sides

3 The diagram below shows a regular hexagon.


Find the value of $x$
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$。

Turn over for next question

4 The diagram shows a regular hexagon and regular pentagon attached


Find the value of $x$
You must show all your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$。

## Turn over for next question

5 The diagram below shows an irregular heptagon


Find the value of $x$
You must show all your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$ $\circ$

Turn over for next question

6 The diagram below shows an irregular hexagon.


Find the value of $x$
You must show all your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer $\qquad$。

## End of Questions

