

1 Work out the size of an exterior angle of a regular hexagon.

(2 marks)

2 Work out the size of each interior angle in a regular octagon.

(2 marks)

3 Work out the size of each interior angle in a regular pentagon.

(2 marks)

4 The size of each exterior angle in a regular polygon is 20° .
Work out how many sides the polygon has.

(2 marks)

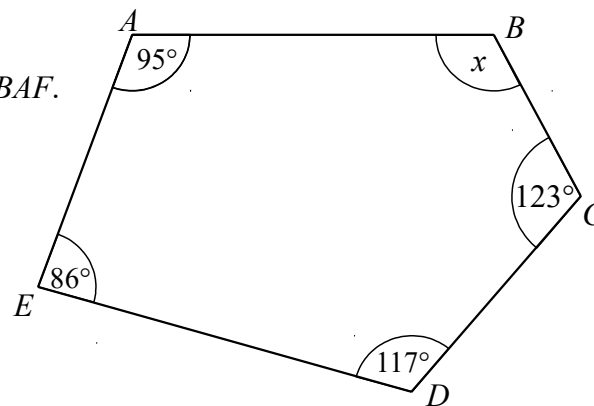
5 The size of each exterior angle in a regular polygon is 18° .
Work out how many sides the polygon has.

(2 marks)

6 The size of each interior angle in a regular polygon is 165° .
Work out how many sides the polygon has.

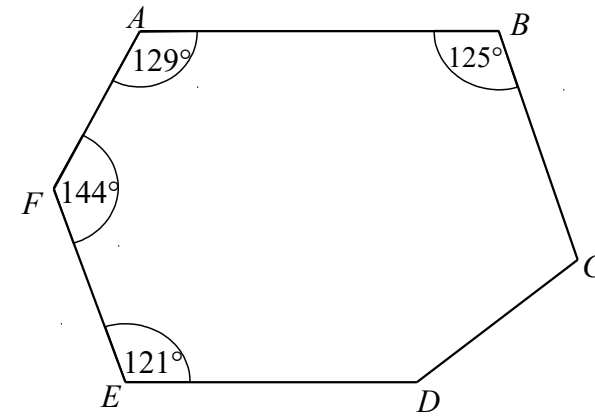
(2 marks)

7 $ABCDE$ is a pentagon.
Work out the size of angle BAF .



(2 marks)

8



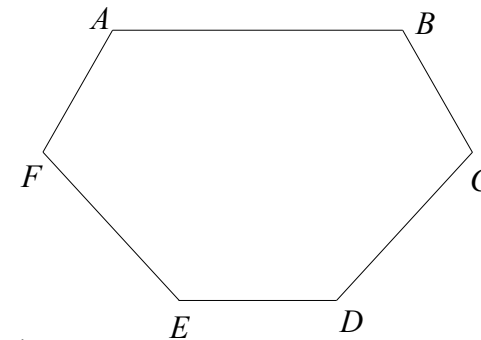
$ABCDEF$ is a hexagon.

Angle $CDE = 2 \times$ Angle BCD

Work out the size of angle CDE .

(3 marks)

9



$ABCDEF$ is a hexagon.

Angle $BAF =$ Angle $ABC =$ Angle $AFE =$ Angle BCD .

Angle $DEF =$ Angle $CDE = 130^\circ$

Work out the size of angle BAF .

You must show all your working.

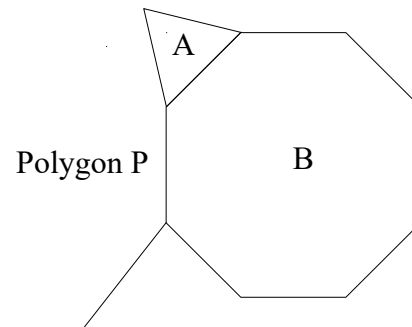
(3 marks)

- 10 Shape A is a regular triangle.
Shape B is a regular octagon.

Another regular polygon,
P, is shown on the diagram.

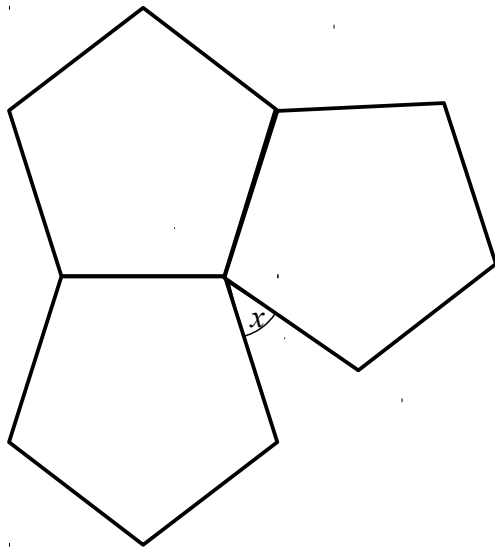
How many sides does polygon P have?

You must show your working.



(4 marks)

11

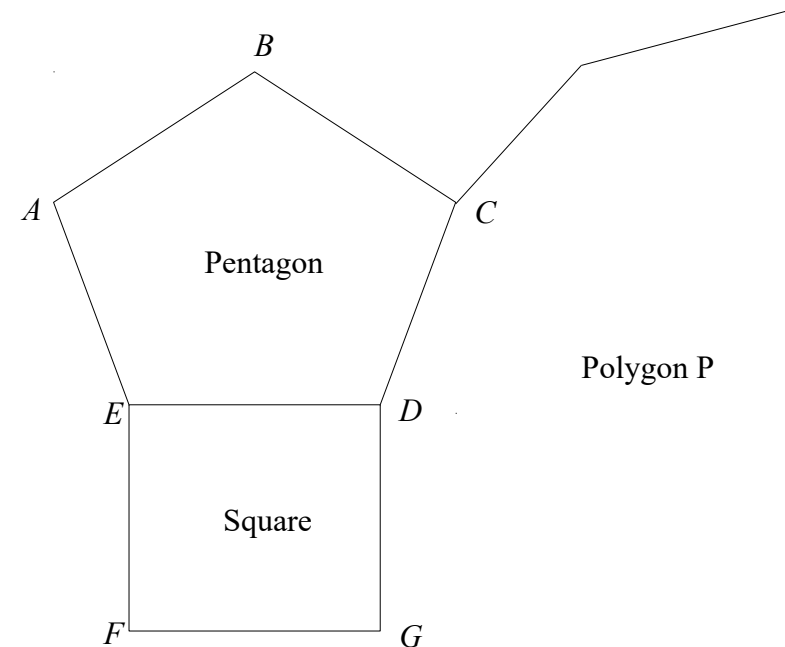


The diagram shows three regular pentagons meeting at a point.

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

(3 marks)

12



The diagram shows a regular pentagon, ABCDE, and a square, EDFG.

The lines CD and DG are both sides of another regular polygon, P.

How many sides does polygon P have?

You must show how you got your answer.

(4 marks)