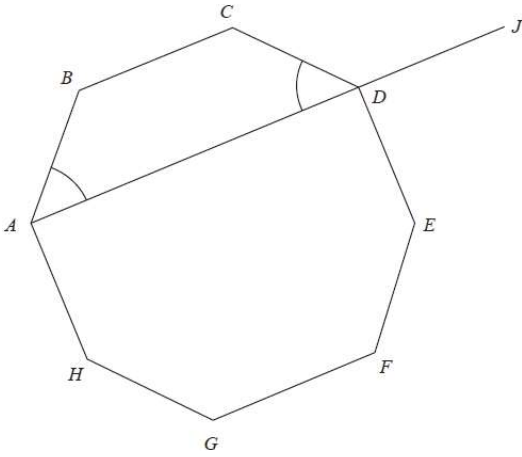


GCSE QUESTIONS

Q1. NON-CALCULATOR



$ABCDEFGH$ is a regular octagon.

ADJ is a straight line.

angle BAD = angle CDA

Show that angle $CDJ = 135^\circ$

(Total for question = 4 marks)

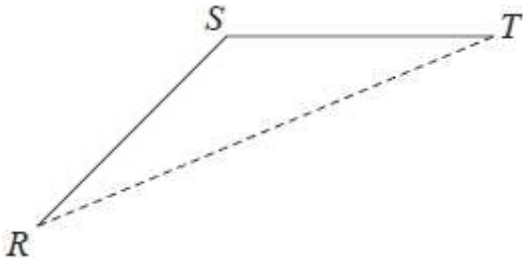
Q2. NON-CALCULATOR

The size of each interior angle of a regular polygon is 11 times the size of each exterior angle.

Work out how many sides the polygon has.

.....
(Total for question = 3 marks)

Q3. CALCULATOR ALLOWED

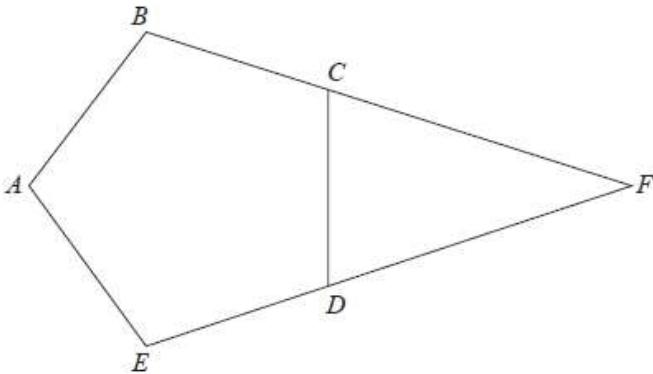


RS and *ST* are 2 sides of a regular 12-sided polygon.
RT is a diagonal of the polygon.

Work out the size of angle *STR*. You must show your working.

..... °
 (Total for question = 3 marks)

Q4. CALCULATOR ALLOWED

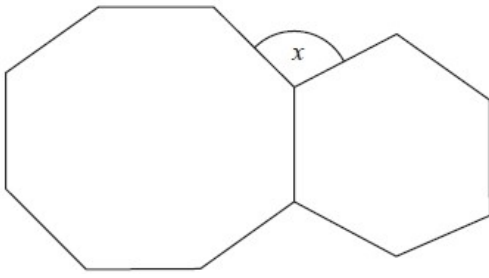


ABCDE is a regular pentagon.
BCF and *EDF* are straight lines.

Work out the size of angle *CFD*. You must show how you get your answer.

..... °
 (Total for question = 3 marks)

Q5. CALCULATOR ALLOWED

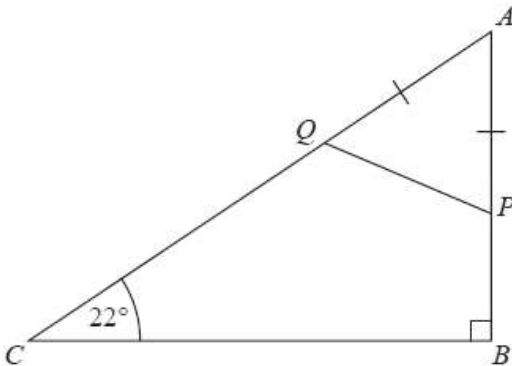


The diagram shows a regular octagon and a regular hexagon.
Find the size of the angle marked x . You must show all your working.

$x = \dots\dots\dots^\circ$

(Total for question = 3 marks)

Q6. CALCULATOR ALLOWED



ABC is a right-angled triangle.

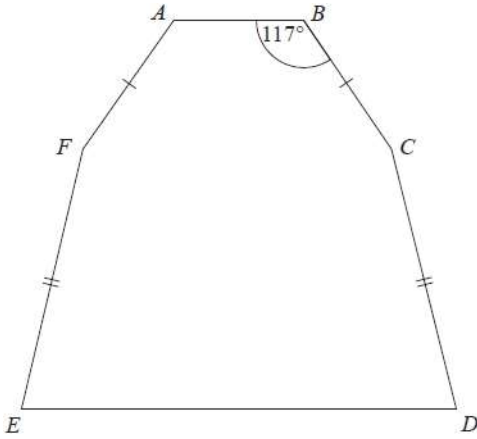
- P is a point on AB .
- Q is a point on AC .
- $AP = AQ$.

Work out the size of angle AQP . You must give a reason for each stage of your working.

(Total for question is 4 marks)

Q7. CALCULATOR ALLOWED

The diagram shows a hexagon. The hexagon has one line of symmetry.



$FA = BC$

$EF = CD$

Angle $ABC = 117^\circ$

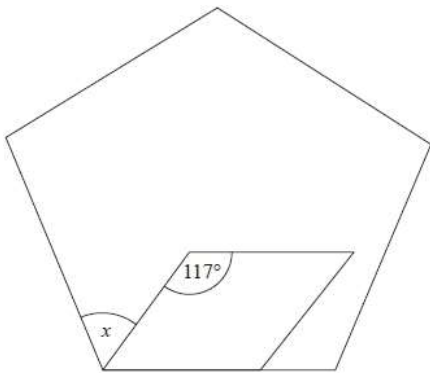
Angle $BCD = 2 \times$ angle CDE

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

.....
 (Total for question = 4 marks)

Q8. CALCULATOR ALLOWED

The diagram shows a regular pentagon and a parallelogram.



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

.....
 (Total for question = 4 marks)