Exterior and Interior Angles Past paper questions Edexcel GCSE

None Calculator

1.
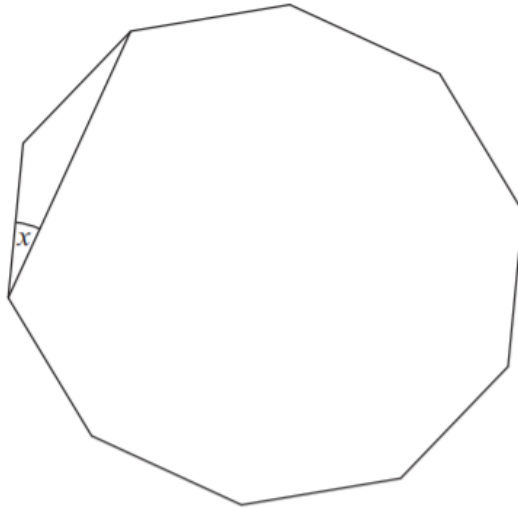
Diagram **NOT**
accurately drawn

x

The diagram shows a regular decagon.

Work out the size of angle x.

.... °
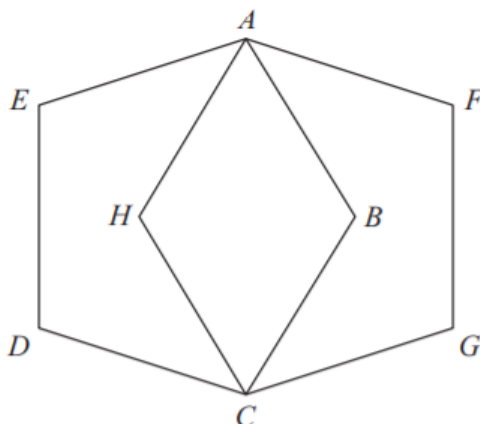
(Total for Question 11 is 4 marks)

2.

Diagram **NOT**
accurately drawn

ABCDE and *AFGCH* are regular pentagons.
The two pentagons are the same size.

Work out the size of angle *EAH*.
You must show how you got your answer.

....

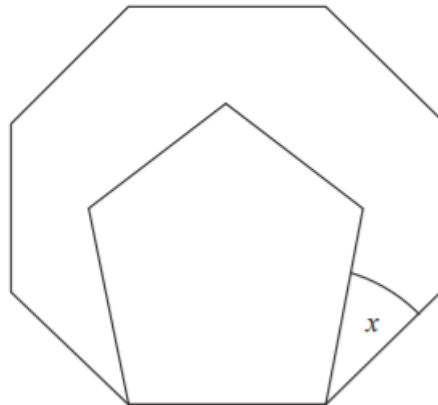**(Total for Question 10 is 4 marks)**

3.

Diagram **NOT**
accurately drawn

x

The diagram shows two regular polygons.

Find the size of the angle marked x.
Give reasons for your answer.

(Total for Question 10 is 4 marks)

4.

The interior angle of a regular polygon is 160°.

Diagram **NOT** accurately drawn.

(i) Write down the size of an exterior angle of the polygon.

.... °

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

....

(Total for Question 6 is 3 marks)

5.

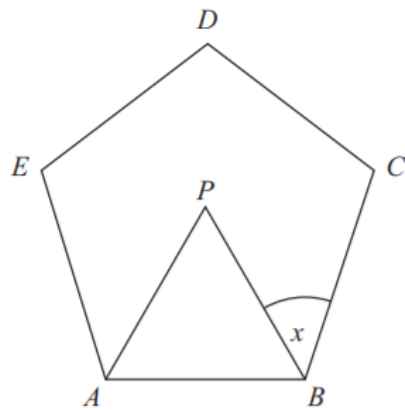

Diagram **NOT**
accurately drawn

ABCDE is a regular pentagon.
ABP is an equilateral triangle.

Work out the size of angle *x*.

°

....

(Total for Question 8 is 4 marks)

6.

The diagram shows 3 sides of a regular polygon.
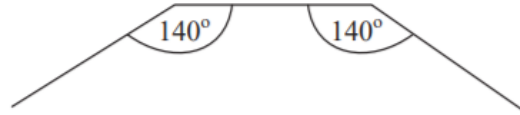
140°   140°   Diagram **NOT**
                     accurately drawn

Each interior angle of the regular polygon is 140°.

Work out the number of sides of the regular polygon.

....
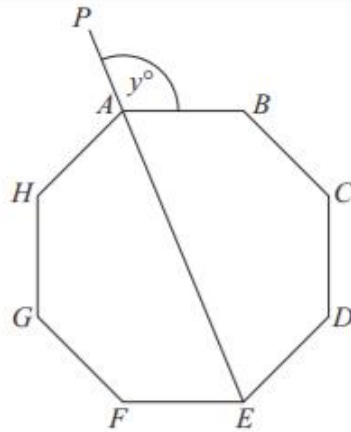
(Total for Question 6 is 3 marks)

7.

Diagram **NOT**
accurately drawn

ABCDEFGH is a regular octagon.
PAE is a straight line.

Angle *PAB* = $y°$

Work out the value of y

$y =$ ....
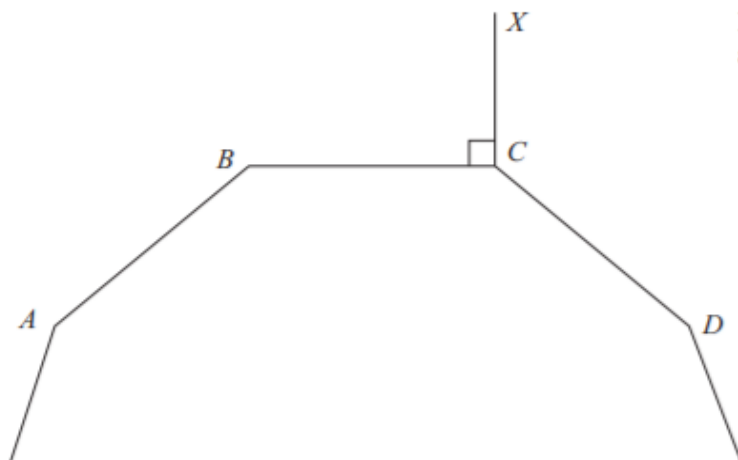
(Total for Question 9 is 4 marks)

8.

Diagram **NOT** accurately drawn

A, B, C and D are four vertices of a regular 10-sided polygon.
Angle $BCX = 90°$.

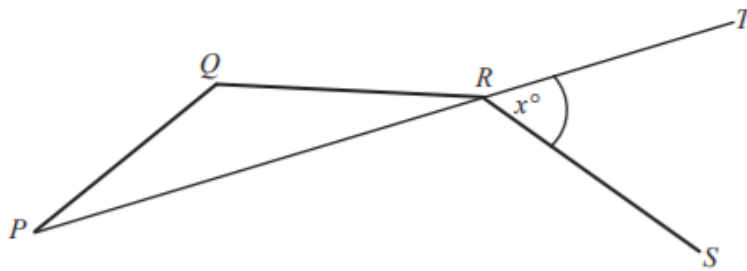Work out the size of angle DCX.

(Total for Question 10 is 3 marks)

9.

Diagram **NOT** accurately drawn

PQ, QR and *RS* are 3 sides of a regular decagon.
PRT is a straight line.
Angle *TRS* = $x°$

Work out the value of x

$x =$ ....

(Total for Question 4 = 5 marks)