Name: _____

GCSE Unit 5a Practice Assessment

Date:

Time: 50 minutes

Total marks available: 49

Total marks achieved: _____

Questions

Q1.

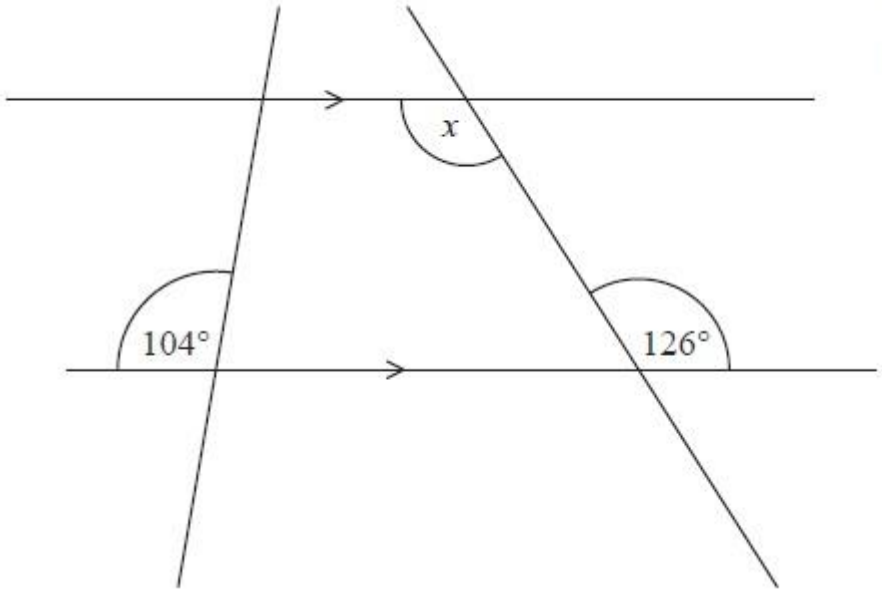


Diagram **NOT** accurately drawn

(i) Find the size of the angle marked *x*.

..... °

(ii) Give a reason for your answer.

.....

(Total for Question is 2 marks)

Q2.

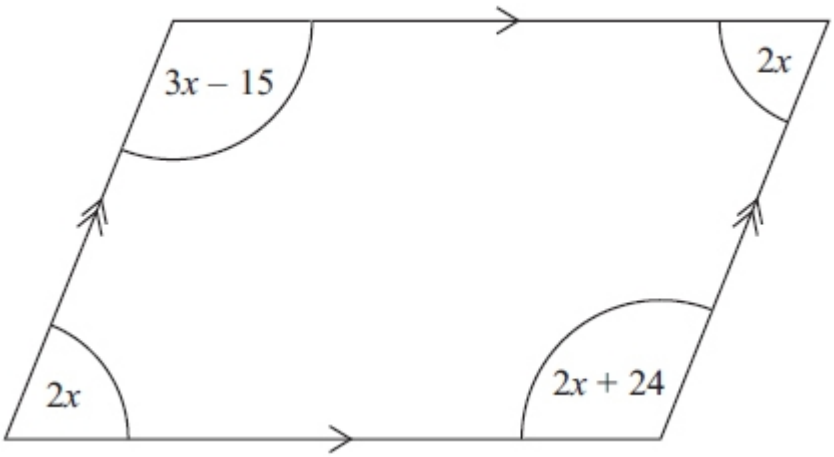


Diagram **NOT** accurately drawn

The diagram shows a parallelogram.
The sizes of the angles, in degrees, are

$2x$
$3x - 15$
$2x$
$2x + 24$

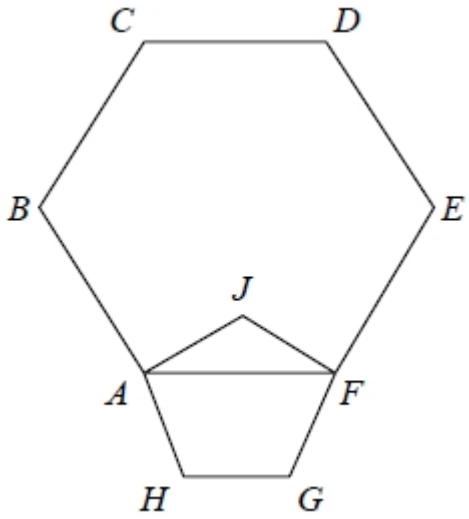
Work out the value of x.

x = ...

(Total for Question is 3 marks)

Q3.

ABCDEF is a regular hexagon.
AJFGH is a regular pentagon.



Work out the size of angle *BAJ*.

(Total for question = 4 marks)

Q4.

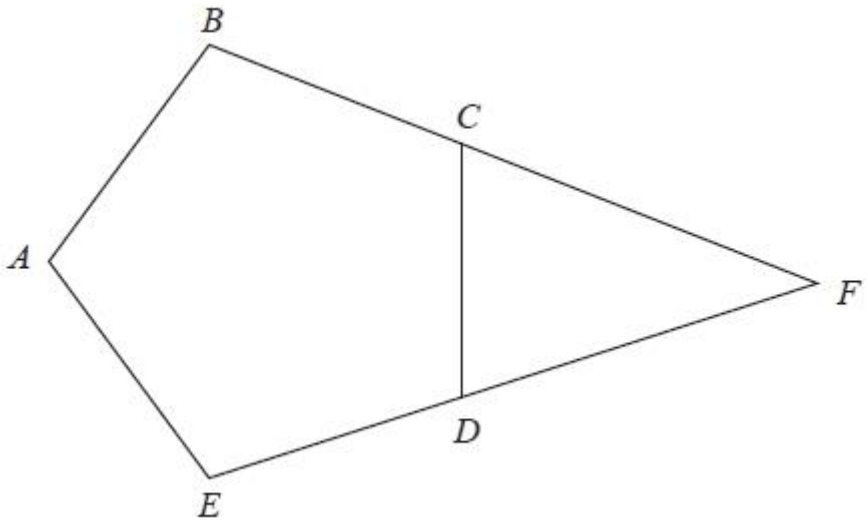


Diagram **NOT** accurately drawn

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

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

.....°

(Total for Question is 3 marks)

Q5.

*

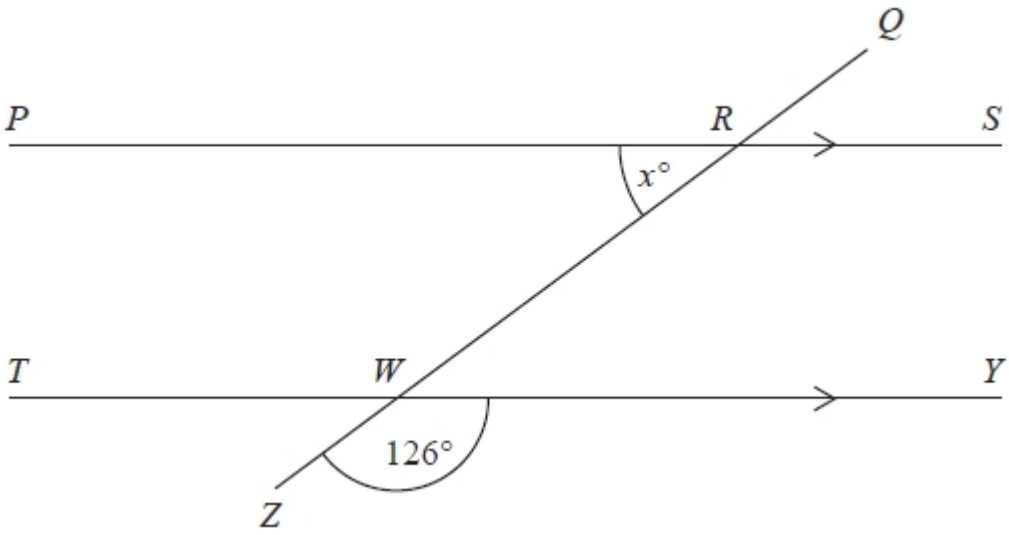


Diagram **NOT** accurately drawn

PRS and *TWY* are parallel straight lines.
QRWZ is a straight line.

Work out the value of *x*.
Give reasons for your answer.

(Total for Question is 3 marks)

Q6.

*

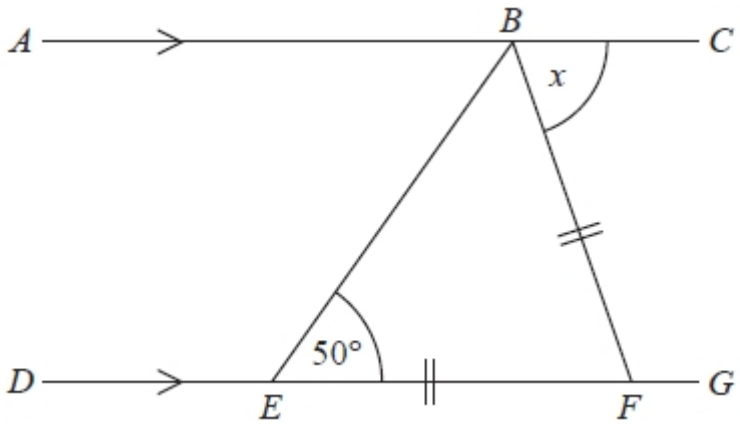


Diagram **NOT** accurately drawn

ABC is a straight line.
DEFG is a straight line.
AC is parallel to *DG*.
EF = *BF*.
Angle *BEF* = 50°.

Work out the size of the angle marked *x*.
Give reasons for your answer.

.....°

(Total for Question is 4 marks)

Q7.

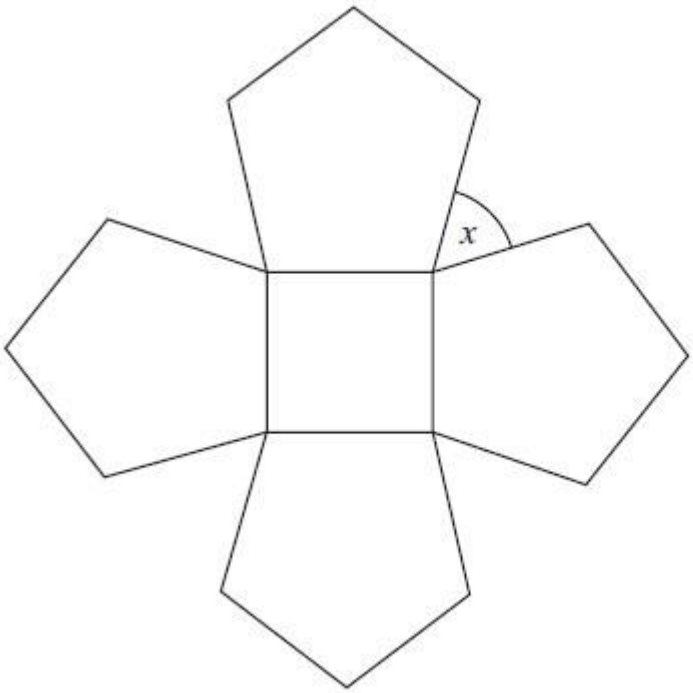


Diagram **NOT** accurately drawn

The diagram shows a square and 4 regular pentagons.

Work out the size of the angle marked *x*.

.....

(Total for Question is 3 marks)

Q8.

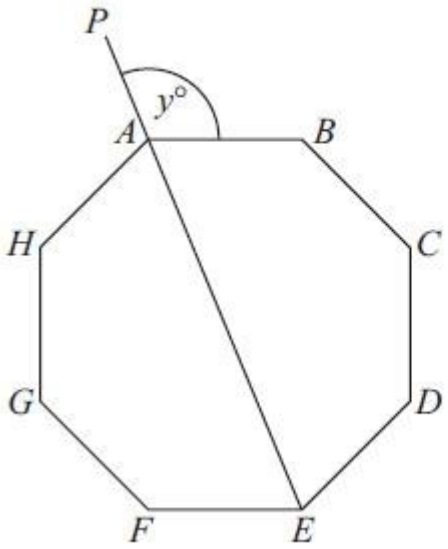


Diagram **NOT** accurately drawn

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

Angle *PAB* = *y*°

Work out the value of *y*

y = ...

(Total for Question is 4 marks)

Q9.
The diagram shows a pattern using four identical rhombuses.

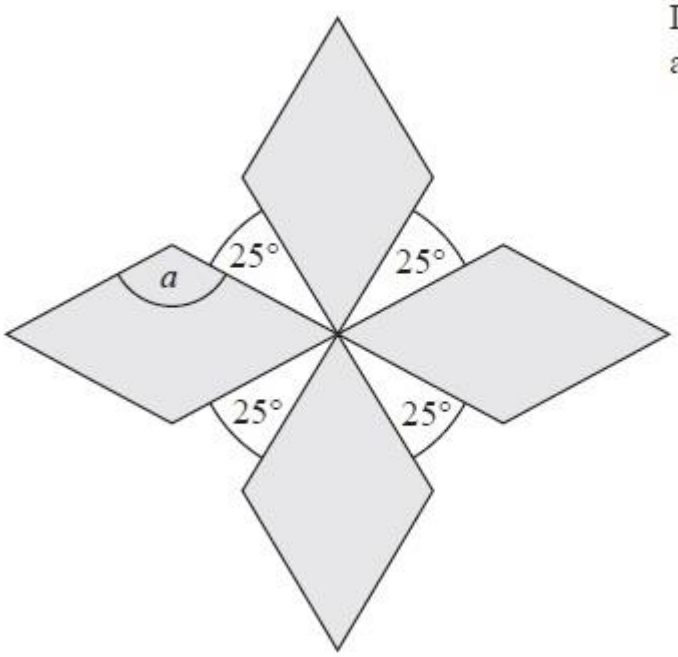


Diagram **NOT** accurately drawn

Work out the size of the angle marked *a*.

You must show your working.

..... °

(Total for Question is 4 marks)

Q10.

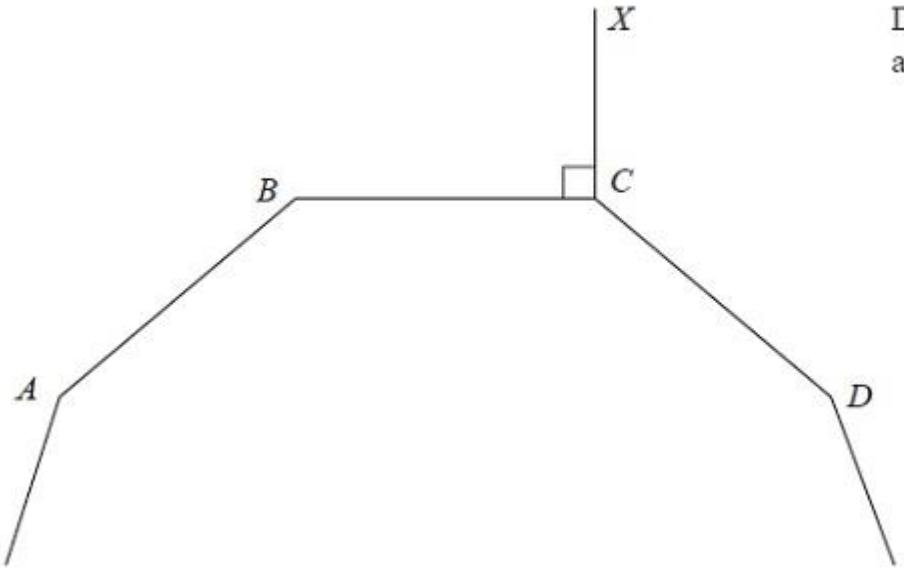


Diagram **NOT** accurately drawn

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 is 3 marks)

Q11.

The diagram shows 3 sides of a regular polygon.

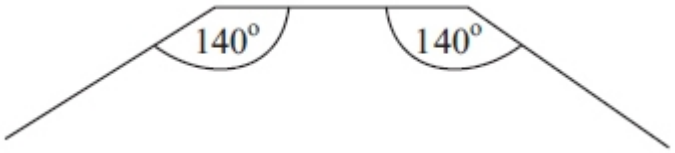


Diagram **NOT** accurately drawn

Each interior angle of the regular polygon is 140°.

Work out the number of sides of the regular polygon.

.....

(Total for Question is 3 marks)

Q12.

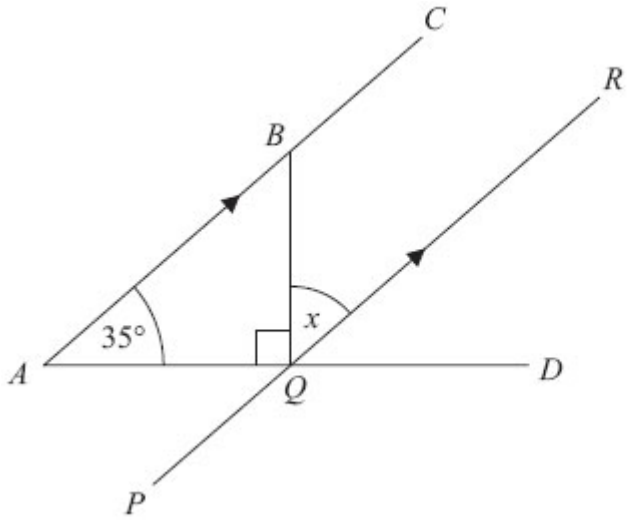


Diagram **NOT** accurately drawn

ABC, *PQR* and *AQD* are straight lines.
ABC is parallel to *PQR*.

Angle *BAQ* = 35°
Angle *BQA* = 90°

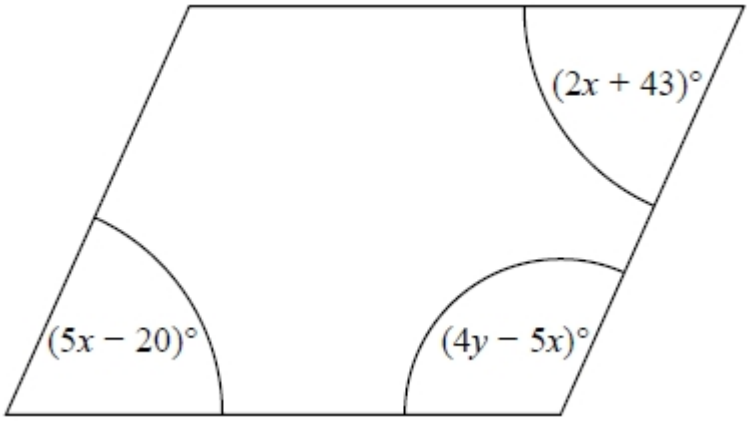
Work out the size of the angle marked *x*.
Give reasons for each stage of your working.

x = ... °

(Total for Question is 4 marks)

Q13.

Here is a parallelogram.



Work out the value of x and the value of y.

x = ...

y = ...

(Total for question = 5 marks)

Q14.

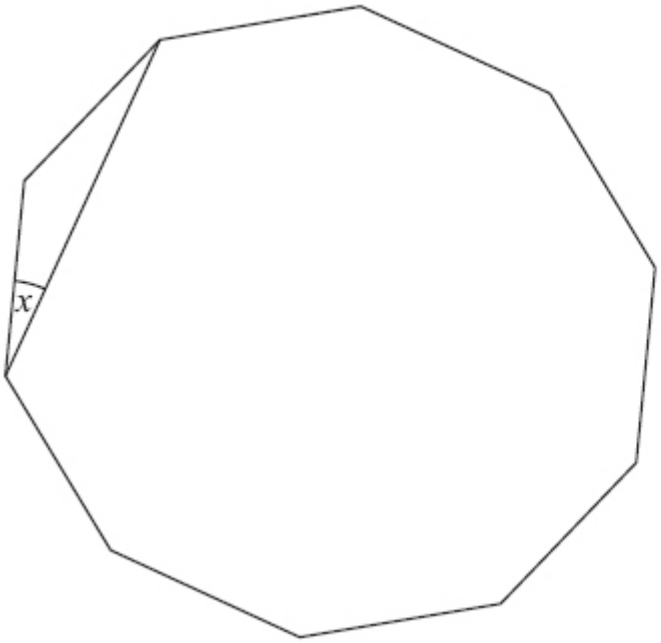


Diagram **NOT** accurately drawn

The diagram shows a regular decagon.
Work out the size of angle *x*.

.....

(Total for Question is 4 marks)