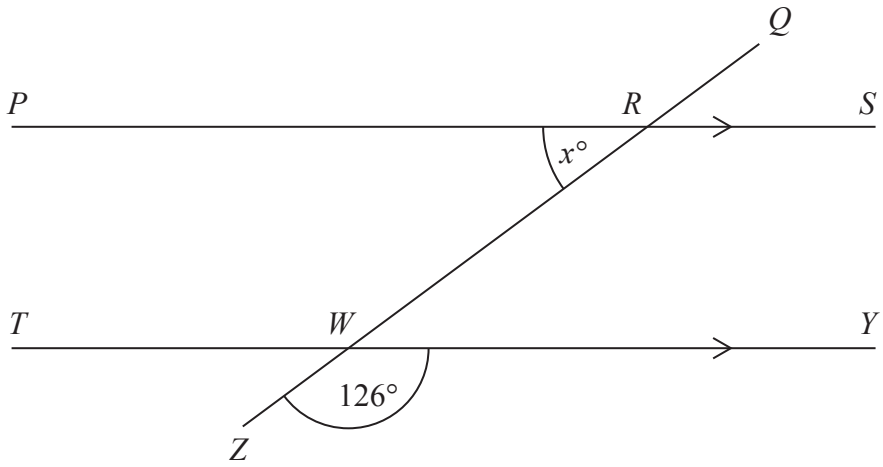
1

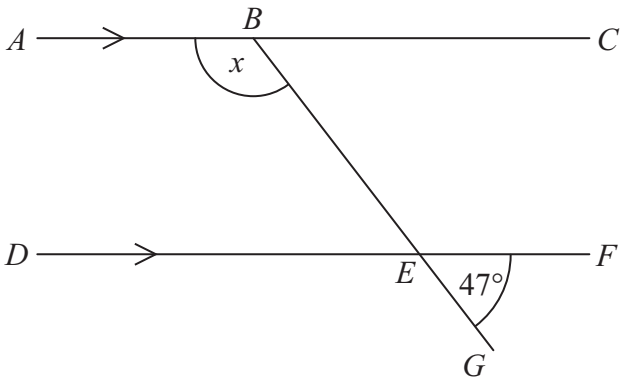


PRS and *TWY* are parallel straight lines.
QRWZ is a straight line.

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

(Total for Question 1 is 3 marks)

2



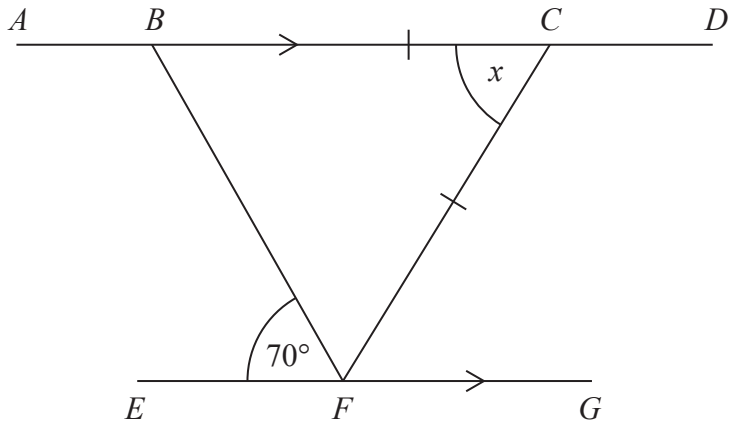
ABC and *DEF* are parallel lines.
BEG is a straight line.
Angle *GEF* = 47°.

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

.....°

(Total for Question 2 is 3 marks)

3

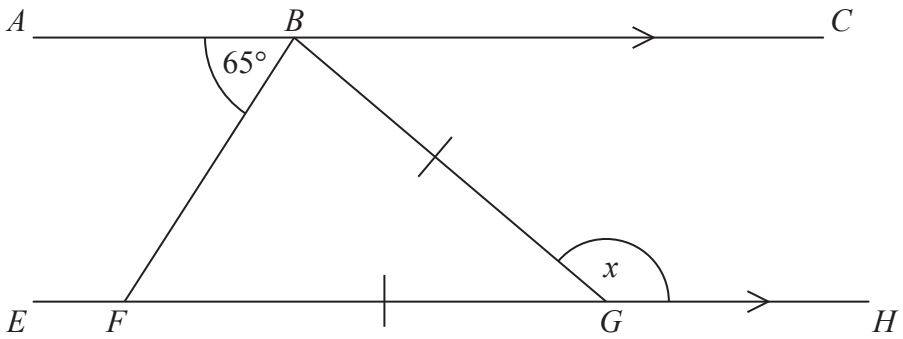


ABCD and *EFG* are parallel lines.
BC = *CF*
Angle *BFE* = 70°

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

(Total for Question 3 is 4 marks)

4



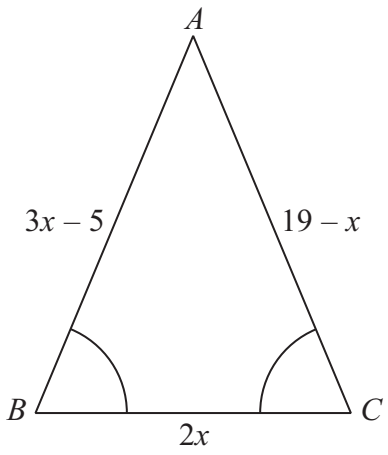
ABC is parallel to *EFGH*.

GB = *GF*
Angle *ABF* = 65°

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

(Total for Question 4 is 4 marks)

5 ABC is a triangle.



Angle ABC = angle BCA.

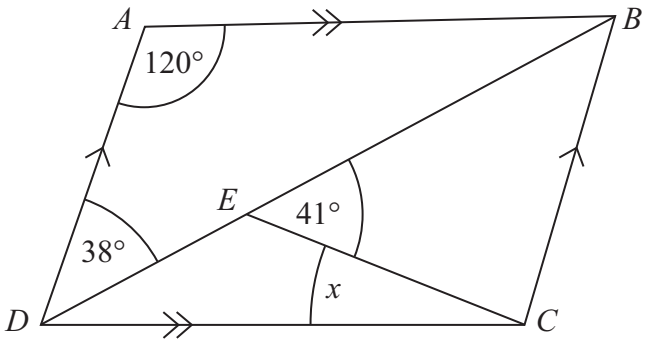
The length of side AB is $(3x - 5)$ cm.
The length of side AC is $(19 - x)$ cm.
The length of side BC is $2x$ cm.

Work out the perimeter of the triangle.
Give your answer as a number of centimetres.

..... cm

(Total for Question 5 is 5 marks)

6



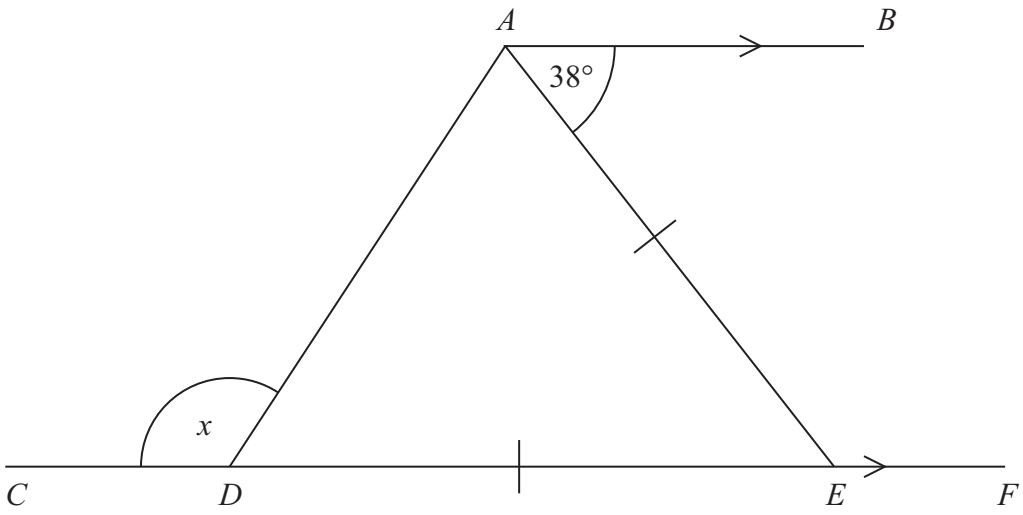
ABCD is a parallelogram.

Angle *ADB* = 38°.
Angle *BEC* = 41°.
Angle *DAB* = 120°.

Calculate the size of angle *x*.
You must give reasons for your answer.

(Total for Question 6 is 4 marks)

7

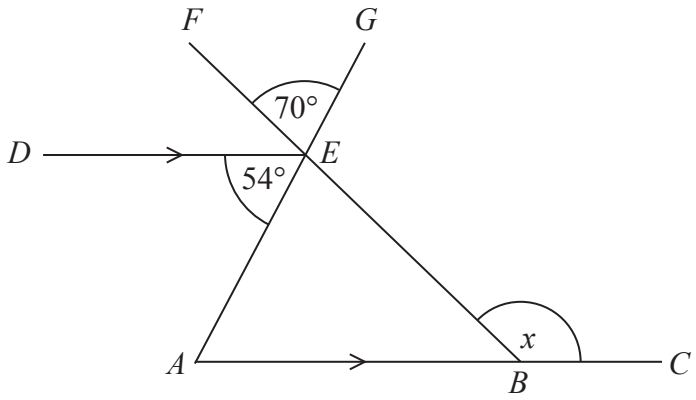


CDEF is a straight line.
AB is parallel to *CF*.
DE = *AE*.

Work out the size of the angle marked *x*.
You must give reasons for your answer.

(Total for Question 7 is 4 marks)

8



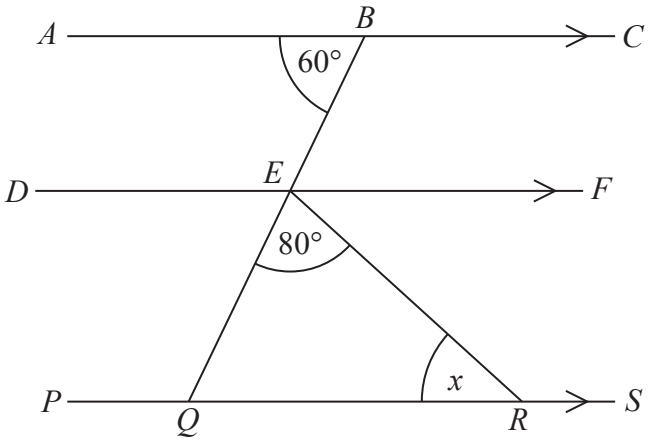
ABC and *DE* are parallel lines.
AEG and *BEF* are straight lines.

Angle *AED* = 54°
Angle *FEG* = 70°

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

(Total for Question 8 is 4 marks)

9



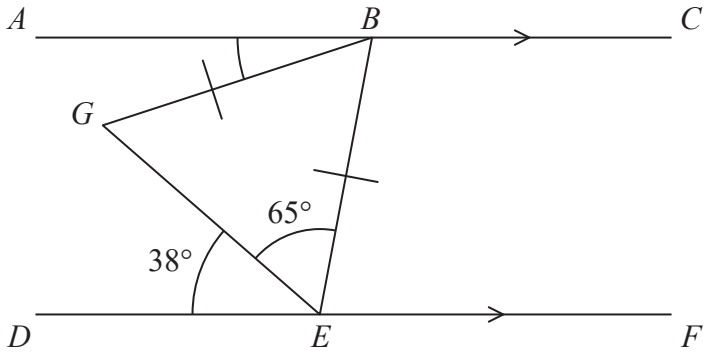
ABC, *DEF* and *PQRS* are parallel lines.
BEQ is a straight line.

Angle *ABE* = 60°
Angle *QER* = 80°

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

(Total for Question 9 is 4 marks)

10



ABC and *DEF* are parallel lines.

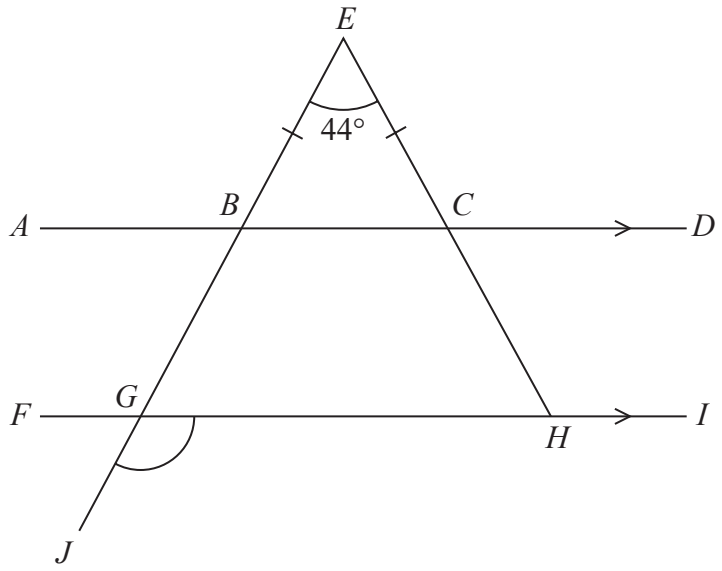
BG = *BE*
Angle *DEG* = 38°
Angle *GEB* = 65°

Find the size of angle *ABG*.

.....°

(Total for Question 10 is 3 marks)

11



ABCD and *FGHI* are parallel straight lines.
EBGJ and *ECH* are straight lines.

BE = *CE*
Angle *BEC* = 44°

Work out the size of angle *JGH*.
Give a reason for each stage of your working.

.....°

(Total for Question 11 is 5 marks)

12

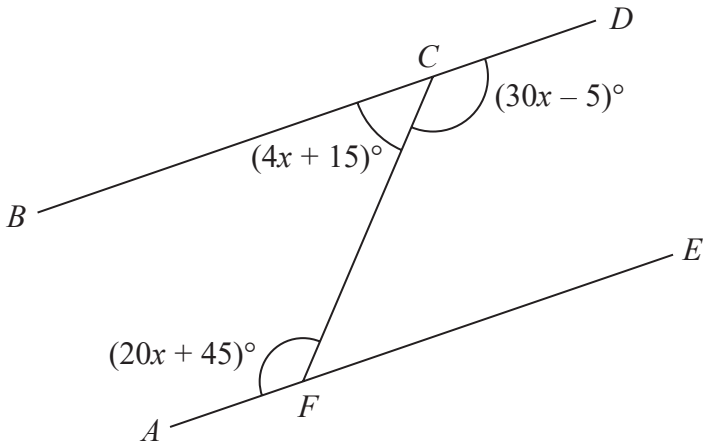


Diagram **NOT** accurately drawn

BCD and *AFE* are straight lines.

Show that *BCD* is parallel to *AFE*.
Give reasons for your working.

(Total for Question 11 is 5 marks)