

Name: _____

GCSE (1 – 9)

Angles in Parallel Lines

Instructions

- Use **black** ink or ball-point pen.
- Answer all Questions.
- Answer the Questions in the spaces provided
– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

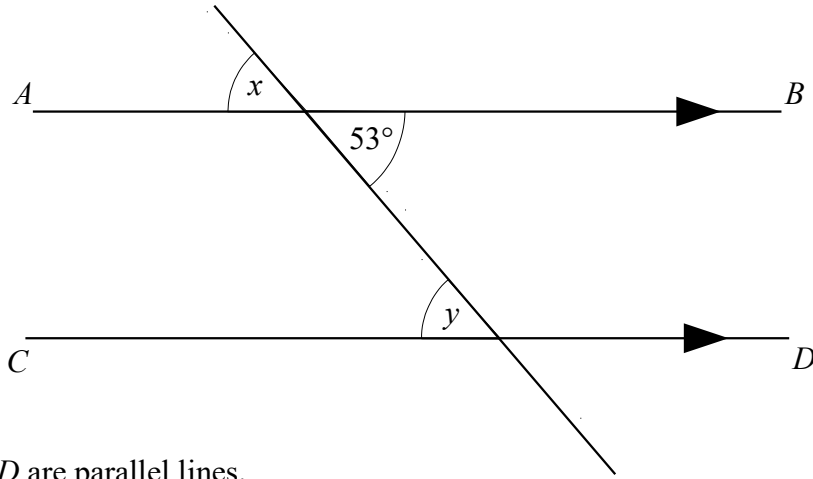
Information

- The marks for each Question are shown in brackets
– *use this as a guide as to how much time to spend on each Question.*

Advice

- Read each Question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every Question.
- Check your answers if you have time at the end

1



AB and *CD* are parallel lines.

(a) Write down the size of angle *x*.

.....°
(1)

(b) Give a reason for your answer.

.....
.....
(1)

(c) Write down the size of angle *y*.

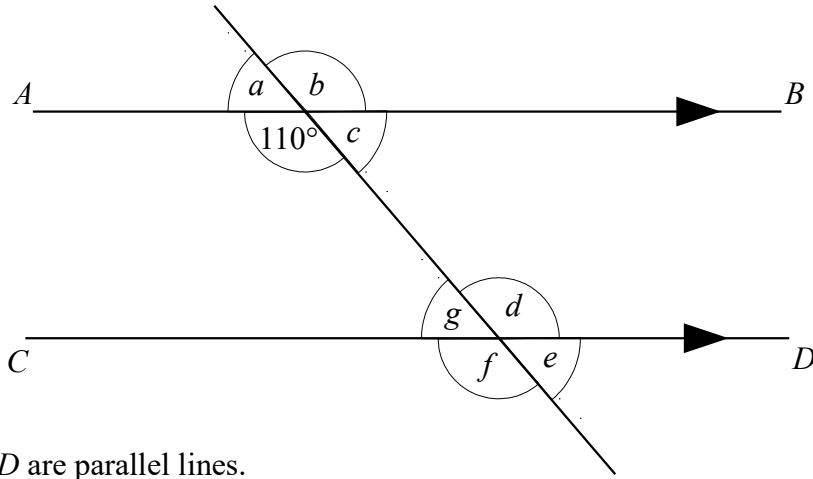
.....°
(1)

(d) Give a reason for your answer.

.....
.....
(1)

(Total for question 1 is 4 marks)

2



AB and *CD* are parallel lines.
An angle of 110° is shown on the diagram.

(a) Write down the letter of one other angle of size 110°

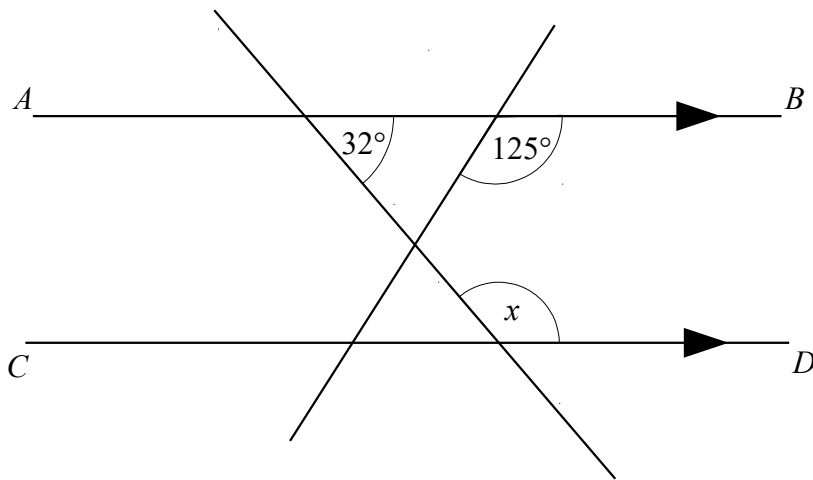
.....
(1)

(b) Give a reason for your answer.

.....
.....
(2)

(Total for question 2 is 3 marks)

3



AB and *CD* are parallel lines.

(a) Find the size of angle x

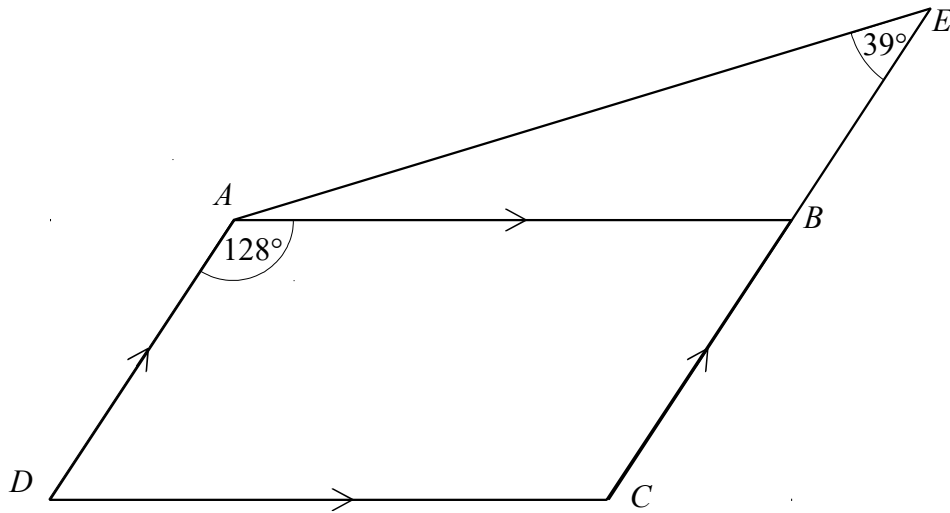
.....
(1)

(b) Give a reason for your answer.

.....
.....
(2)

(Total for question 3 is 3 marks)

4



ABCD is a parallelogram.

CBE is a straight line.

Angle *BAD* = 128°

Angle *AEB* = 39°

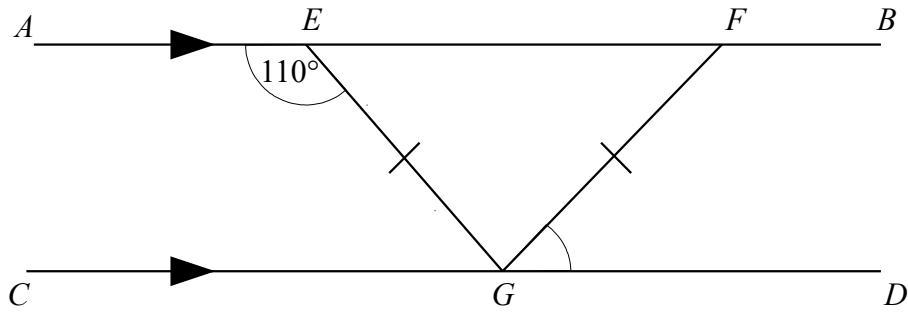
Find the size of angle *BAE*.

Give a reason for each stage of your working.

.....°

(Total for question 4 is 3 marks)

5



AB and *CD* are parallel lines.
EFG is an isosceles triangle

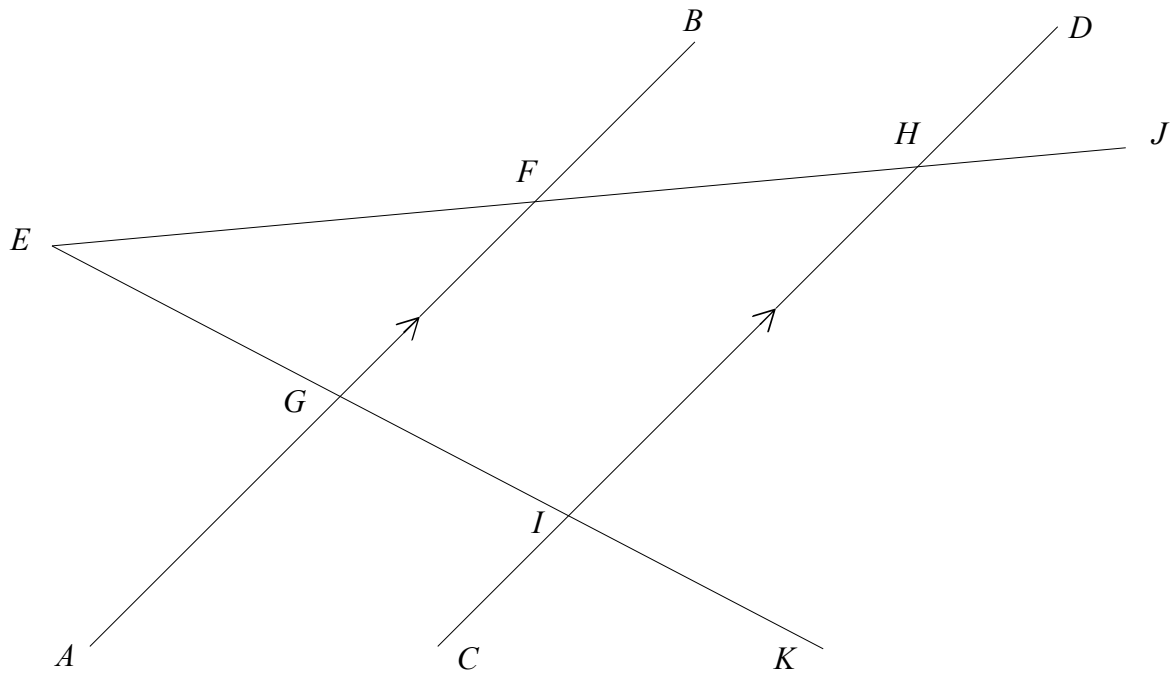
Angle *AEG* = 110°

Find the size of angle *FGD*.
Give a reason for each stage of your working.

.....^o

(Total for question 5 is 3 marks)

6



AB and CD are parallel.

Angle $HIK = 85^\circ$

Angle $BFH = 32^\circ$

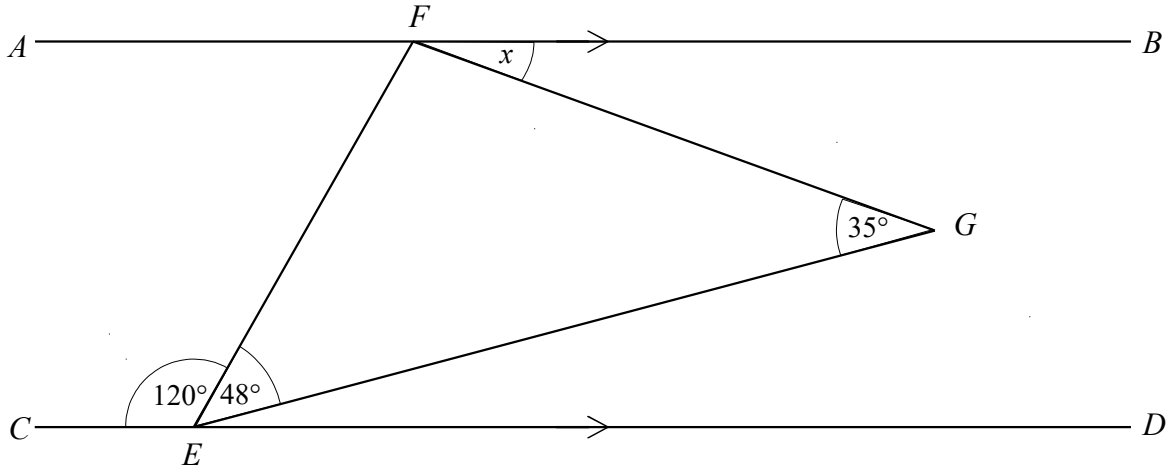
Find the size of angle FEG .

You must show how you got your answer.

.....^o

(Total for question 6 is 3 marks)

7



AB and CD are parallel.

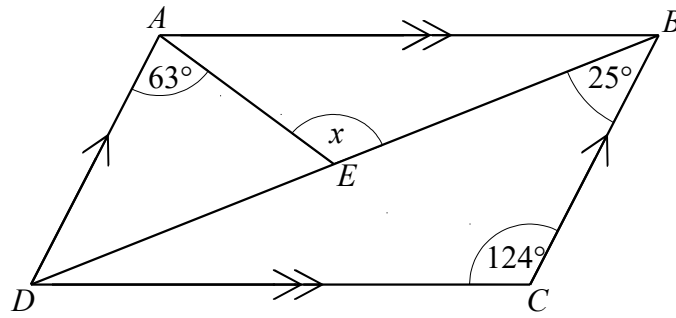
Find the size of angle x .

Give a reason for each stage of your working.

.....°

(Total for question 7 is 4 marks)

8



$ABCD$ is a parallelogram.

Angle $DAE = 63^\circ$

Angle $BCD = 124^\circ$

Angle $CBD = 25^\circ$

Calculate the size of angle x .

Give reasons for each stage of your answer.

.....^o

(Total for question 8 is 3 marks)