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.**

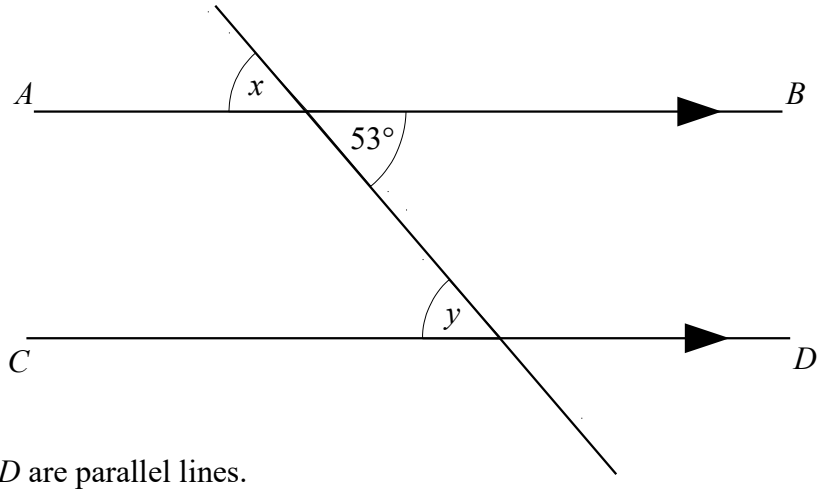
Information

• 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.

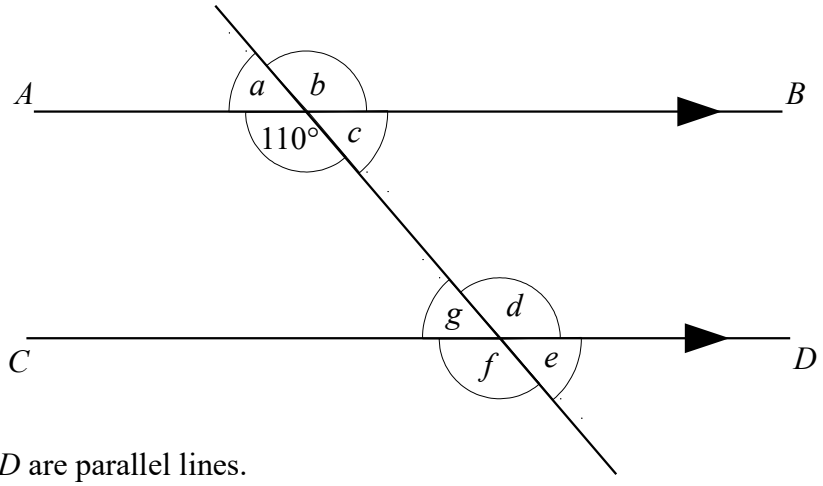
……

……

(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.

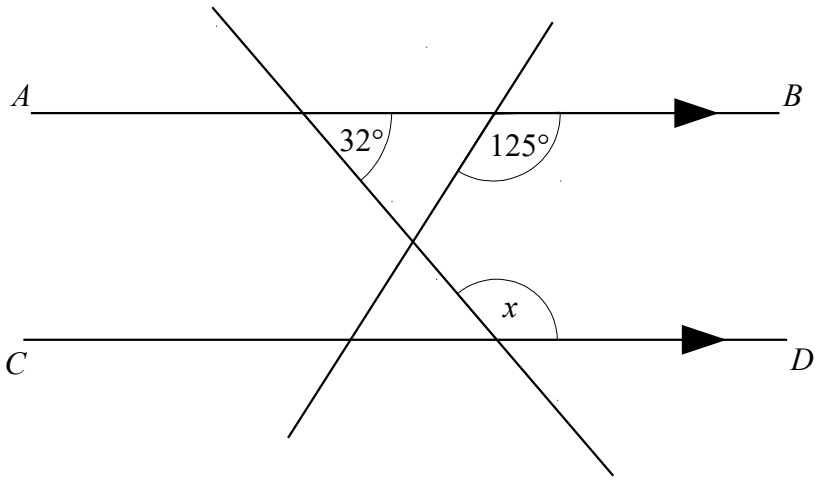
……

……

(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.

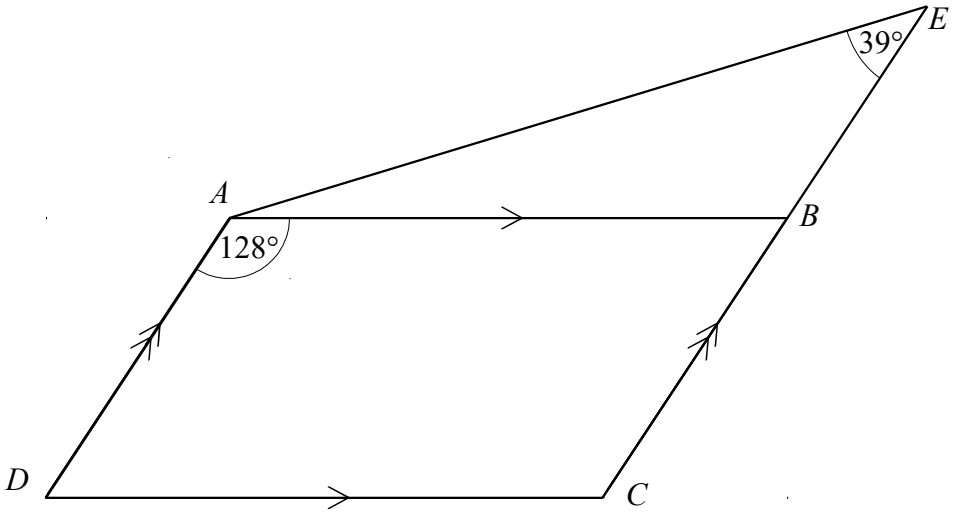
……

……

(2)

(Total for question 3 is 3 marks)

4



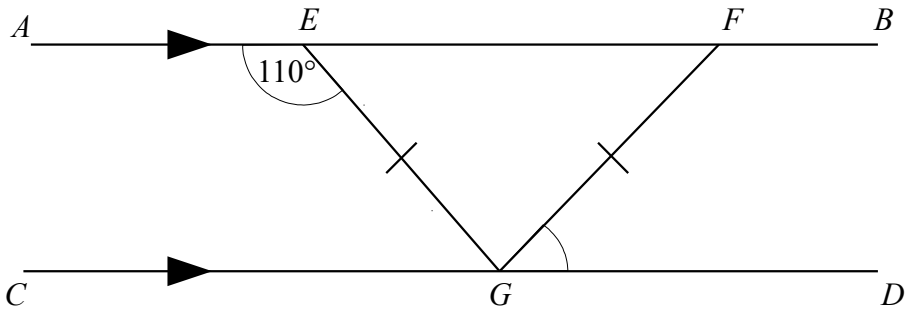
ABCD is a parallelogram.
CBE is a straight line.
Angle *BAD* = 128°
Angle *AEB* = 39°

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

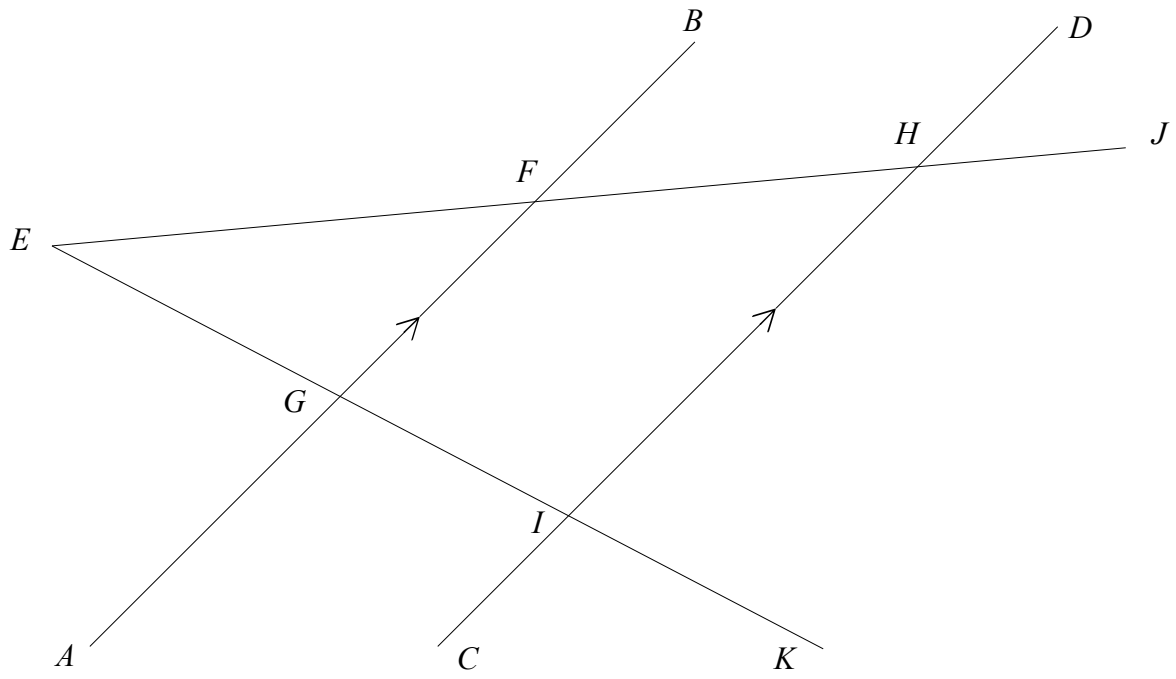
Angle *AEG* = 110°

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

…….....°

(Total for question 5 is 3 marks)

6



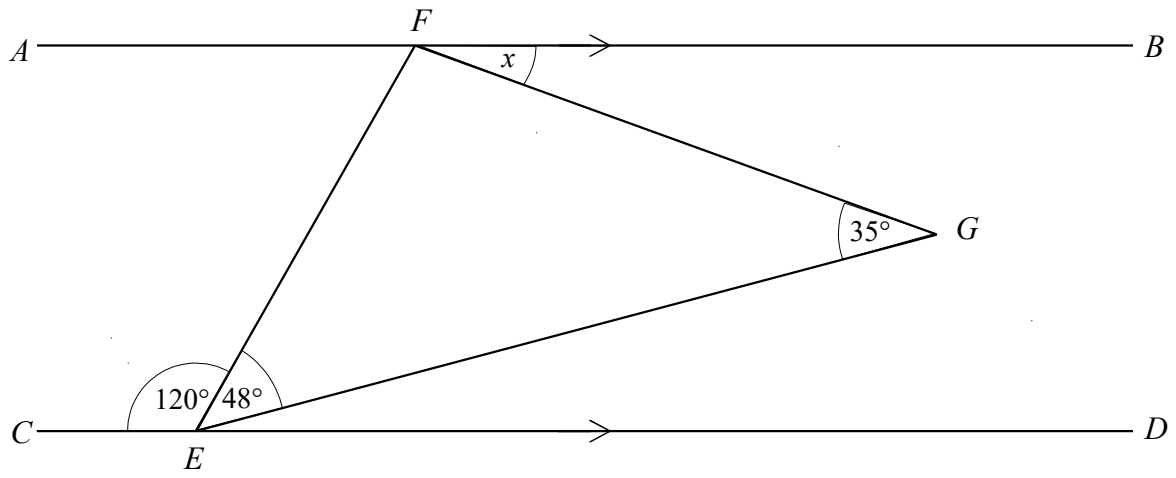
AB and *CD* are parallel.
Angle *HIK* = 85°
Angle *BFH* = 32°

Find the size of angle *FEG*.
You must show how you got your answer.

….....°

(Total for question 6 is 3 marks)

7



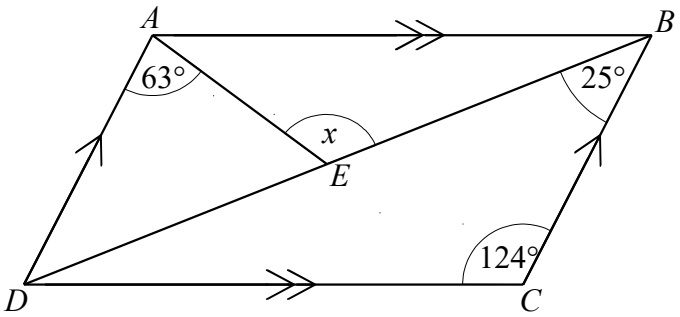
AB and *CD* are parallel.

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°
Angle *BCD* = 124°
Angle *CBD* = 25°

Calculate the size of angle *x*.
Give reasons for each stage of your answer.

…….....°

(Total for question 8 is 3 marks)