

# Angles in Parallel Lines

## Question Paper

Level	GCSE
Subject	Maths
Exam Board	Edexcel GCSE
Topic	Angles in Parallel Lines
Grade Level	Grade 4
Booklet	Question Paper

**Time Allowed:** 33 minutes

**Score:** /27

**Percentage:** /100

**Grade Boundaries:**

1.

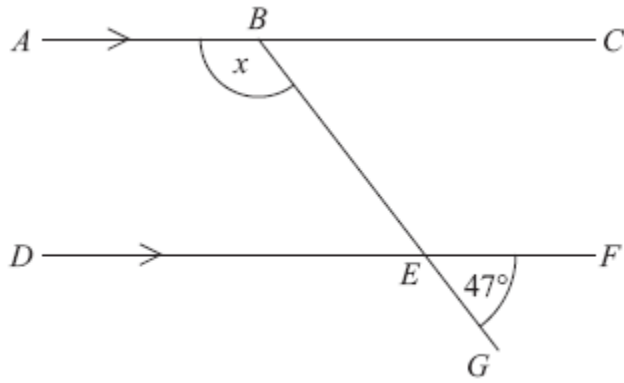


Diagram **NOT**  
accurately drawn

*ABC* and *DEF* are parallel lines.

*BEG* is a straight line.

Angle *GEF* =  $47^\circ$ .

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

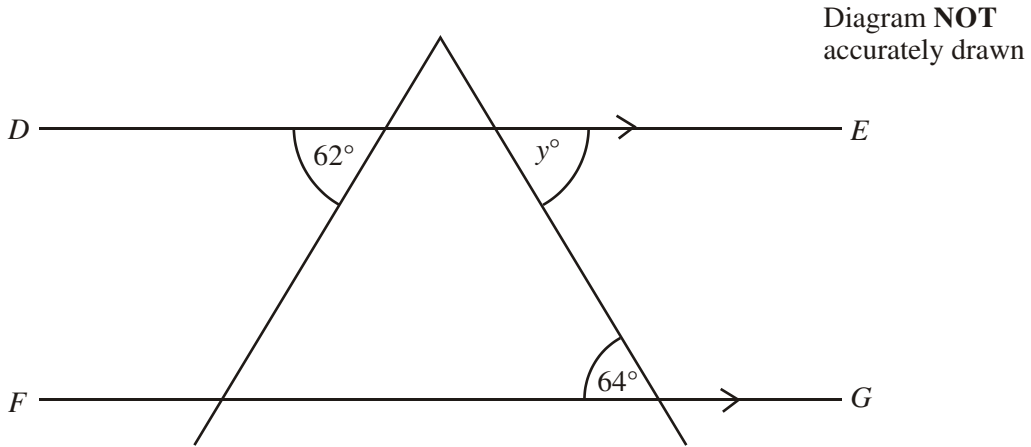
**Give reasons for your answer.**

.....<sup>o</sup>

**(3 marks)**

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2.



*DE* is parallel to *FG*.

- (i) Find the size of the angle marked  $y^\circ$ .

.....<sup>o</sup>

**(1)**

- (ii) Give a reason for your answer.

.....  
.....

**(2)**

**(3 marks)**

3.

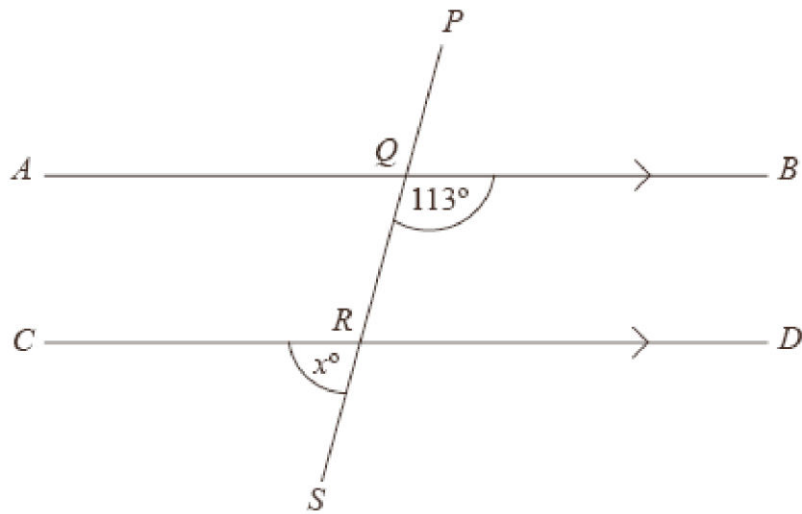


Diagram **NOT** accurately drawn

$AQB$ ,  $CRD$  and  $PQRS$  are straight lines.

$AB$  is parallel to  $CD$ .

Angle  $BQR = 113^\circ$ .

(a) Work out the value of  $x$ .

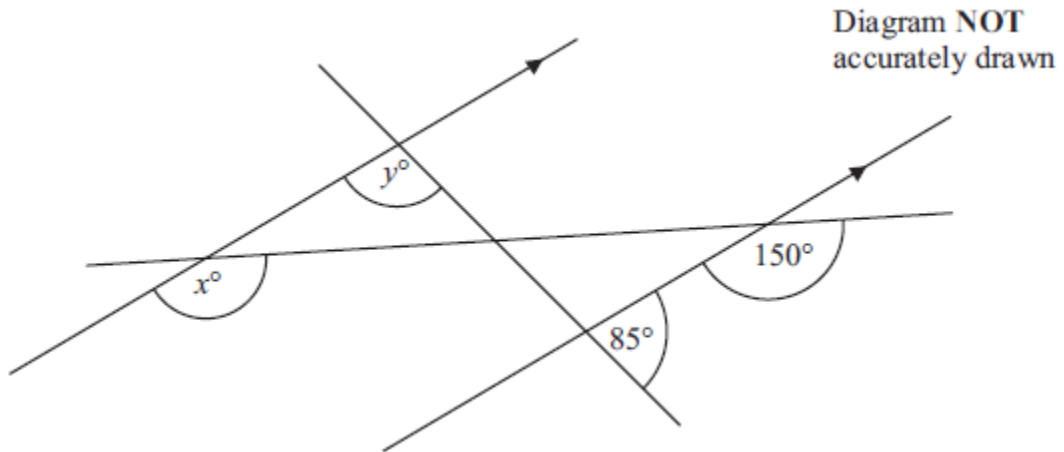
$x = \dots\dots\dots$

(b) Give reasons for your answer.

.....  
.....  
.....

**(4 marks)**

4.



(a) i) Find the value of  $x$ .

.....  
(1)

ii) Give reasons for your answer.

.....  
(1)

(b) i) Find the value of  $y$ .

.....  
(2)

ii) Give reasons for your answer.

.....  
(2)

**(6 marks)**

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\*5.

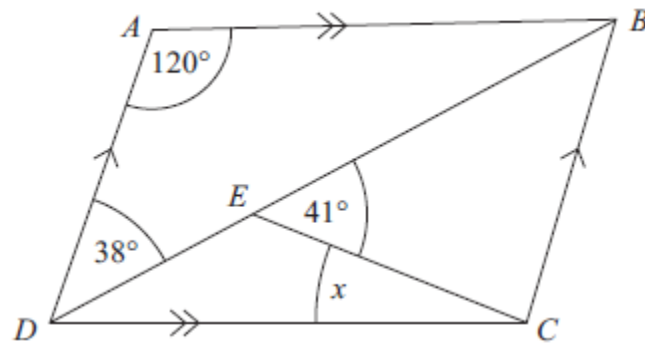


Diagram **NOT**  
accurately drawn

$ABCD$  is a parallelogram.

Angle  $ADB = 38^\circ$ .

Angle  $BEC = 41^\circ$ .

Angle  $DAB = 120^\circ$ .

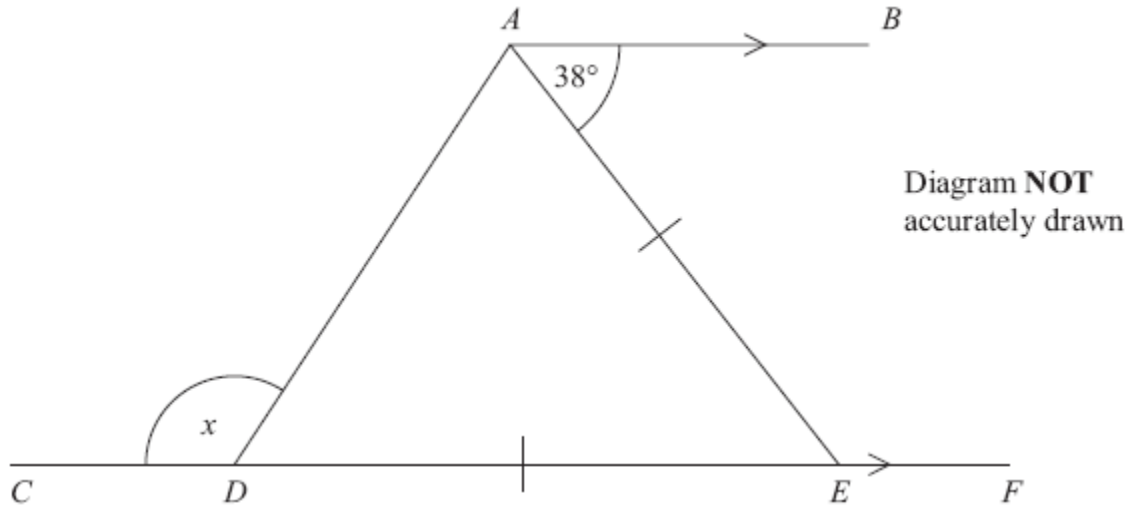
Calculate the size of angle  $x$ .

You must give reasons for your answer.

(4 marks)

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\*6.



$CDEF$  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.

(4 marks)

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\*7.

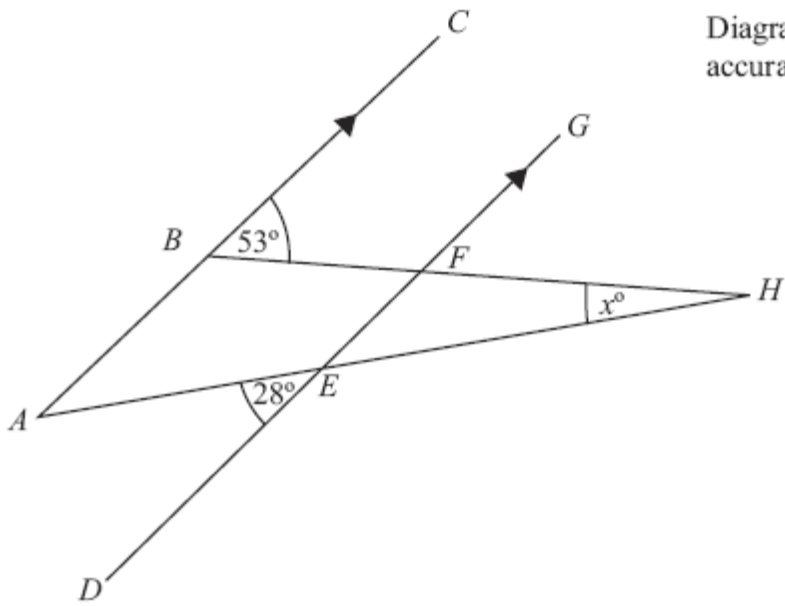


Diagram **NOT**  
accurately drawn

*ABC* and *DEFG* are parallel.  
*AEH* and *BFH* are straight lines.  
Work out the size of the angle marked  $x^\circ$ .

.....<sup>o</sup>  
(3 marks)

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