

Angles in Parallel Lines

For Pearson Edexcel GCSE Mathematics (1MA1) • Foundation tier

Name _____

Total marks: **26**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

- 1** The diagram shows two parallel lines.

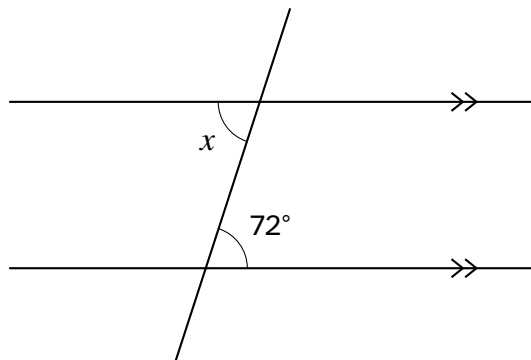


Diagram **NOT** accurately drawn

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

.....^o
(1)

- (b) Give a reason for your answer.

(1)

(Total for Question 1 is 2 marks)

- 2 PQ and RS are parallel lines.
An angle of 62° is marked on the diagram.

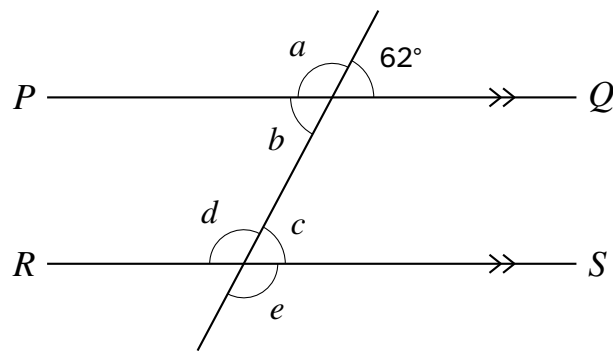


Diagram **NOT** accurately drawn

- (a) Write down the letters of the **two** angles that are equal to 62°

.....
(1)

- (b) Give a reason why angle c is 62°

.....
(1)

- (c) Work out the size of angle d .
Give a reason for each stage of your working.

.....
(2)

(Total for Question 2 is 4 marks)

- 3 The diagram shows two parallel lines.

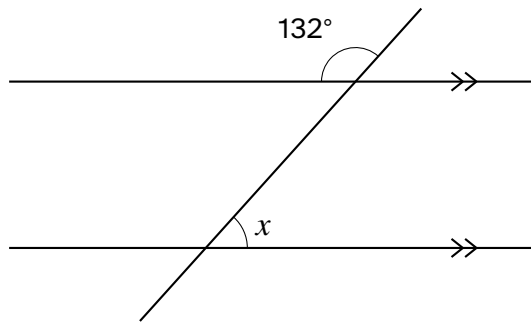


Diagram **NOT** accurately drawn

Work out the size of the angle marked x .
You must give a reason for each stage of your working.

.....^o
(3)

(Total for Question 3 is 3 marks)

- 4 AEB is parallel to FG .

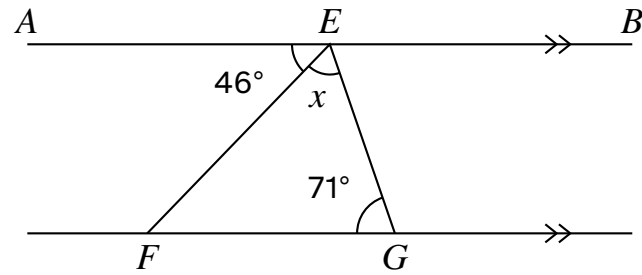


Diagram **NOT** accurately drawn

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

..... °
(4)

(Total for Question 4 is 4 marks)

- 5 The diagram shows two parallel lines.

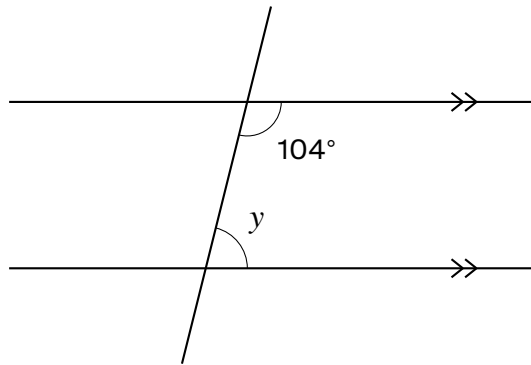


Diagram **NOT** accurately drawn

Work out the size of angle y .
Give a reason for your answer.

.....[°]
(2)

(Total for Question 5 is 2 marks)

- 6 $ABCD$ is a parallelogram.
Angle $DAB = 64^\circ$
Work out the size of angle ABC .
Give a reason for your answer.

.....[°]
(2)

(Total for Question 6 is 2 marks)

- 7 The diagram shows two parallel lines.

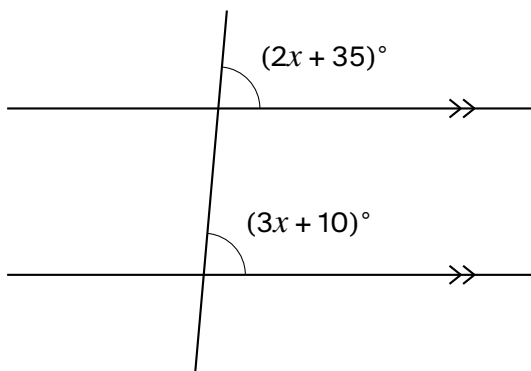


Diagram **NOT** accurately drawn

Work out the value of x .

$x = \dots\dots\dots$
(3)

(Total for Question 7 is 3 marks)

- 8 A straight line crosses the lines RS and TU .
Nadia says,
' RS and TU are parallel.'

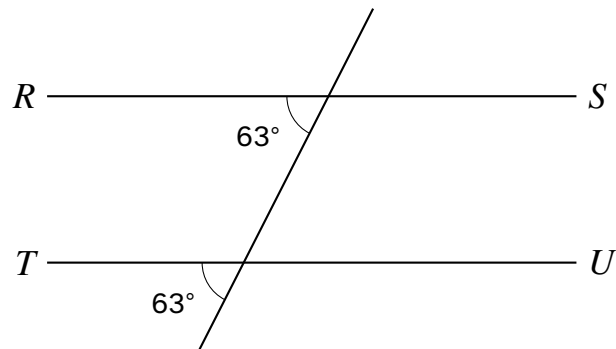


Diagram **NOT** accurately drawn

Is Nadia correct?
You must give your reasoning.

(2)

(Total for Question 8 is 2 marks)

- 9 ABC and $DEFG$ are parallel lines.
 BE and BF are straight lines.

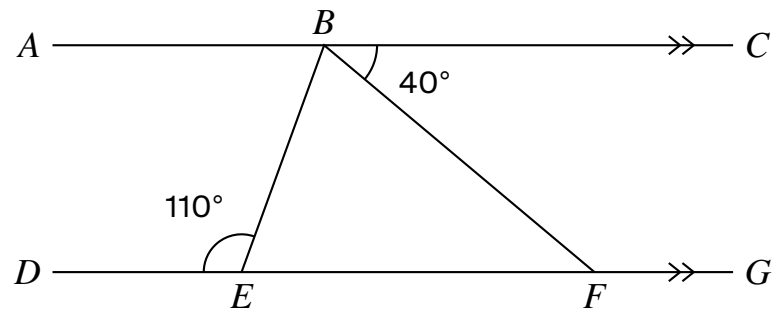


Diagram **NOT** accurately drawn

Show that triangle BEF is isosceles.
Give a reason for each stage of your working.

(4)

(Total for Question 9 is 4 marks)