

Angles in Parallel Lines

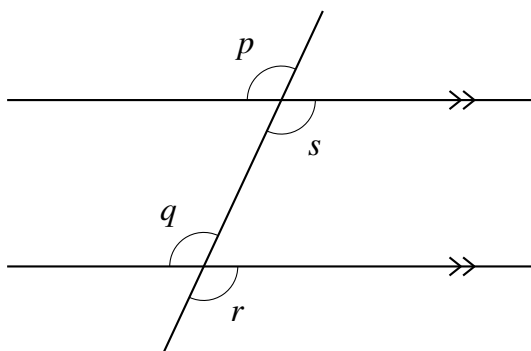
For AQA GCSE Mathematics (8300) • Foundation tier

Name _____

Total marks: **24**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method. Diagrams are not drawn accurately.

- 1** The diagram shows two parallel lines crossed by a straight line.



Not drawn accurately

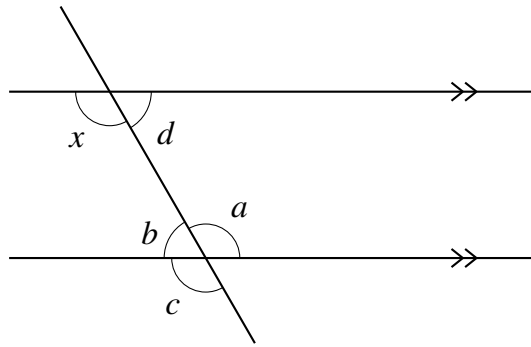
Which statement is true?

Tick one box.

[1 mark]

- ☐ p and q are corresponding angles
- ☐ p and s are alternate angles
- ☐ q and s are co-interior angles
- ☐ q and r are corresponding angles

- 2 The diagram shows two parallel lines.



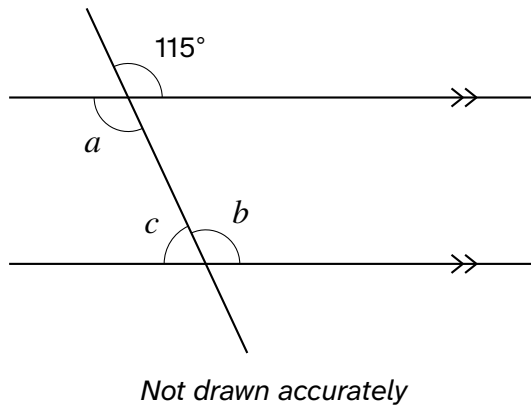
Not drawn accurately

Write down the letter of the angle that is alternate to angle x .

[1 mark]

Answer _____

- 3** The diagram shows two parallel lines.



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

[1 mark]

Answer _____ degrees

- (b) Write down the size of angle b .

[1 mark]

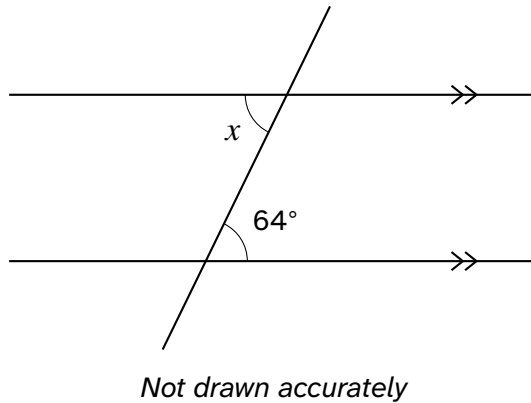
Answer _____ degrees

- (c) Work out the size of angle c .

[1 mark]

Answer _____ degrees

- 4 The diagram shows two parallel lines.



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

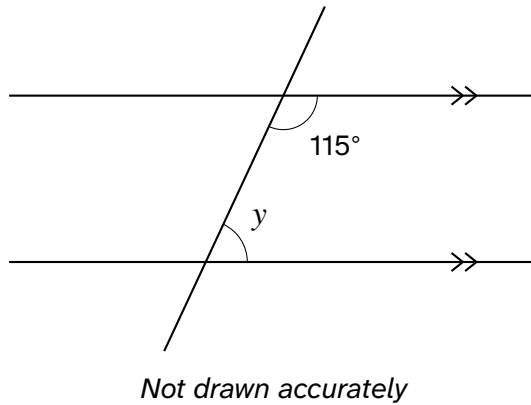
[1 mark]

Answer _____ degrees

- (b) Give a reason for your answer.

[1 mark]

- 5 The diagram shows two parallel lines.

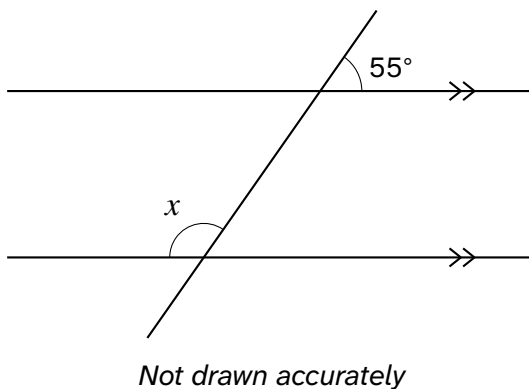


Work out the size of angle y .
Give a reason for your answer.

[2 marks]

Answer _____ degrees

- 6 The diagram shows two parallel lines.

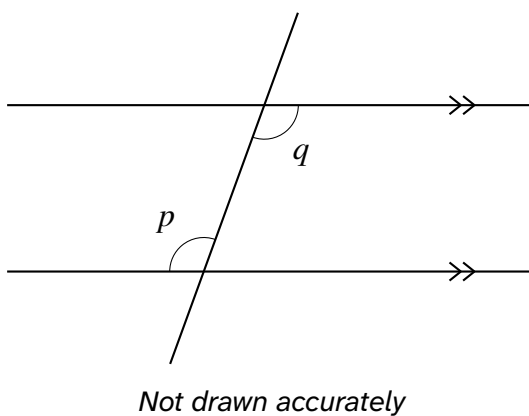


Work out the size of angle x .
Give reasons for your answer.

[3 marks]

Answer _____ degrees

- 7 The diagram shows two parallel lines.



Circle the word that describes angles p and q .

[1 mark]

corresponding

alternate

co-interior

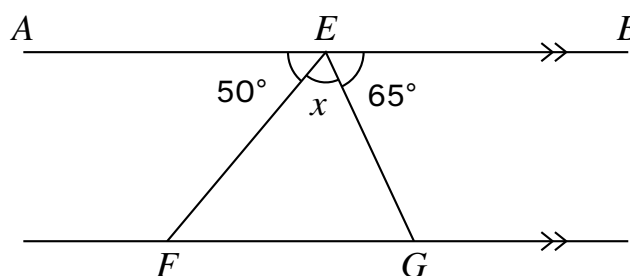
vertically opposite

- 8 $ABCD$ is a parallelogram.
Angle $DAB = 58^\circ$
Work out the size of angle ABC .

[2 marks]

Answer _____ degrees

- 9 AEB is a straight line.
 AEB is parallel to FG .



Not drawn accurately

- (a) Work out the size of angle x .

[1 mark]

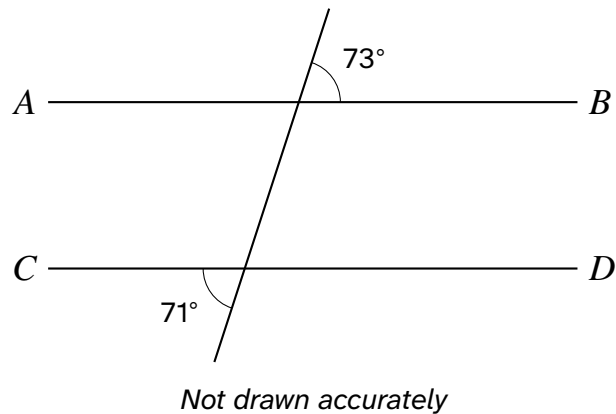
Answer _____ degrees

- (b) Work out the size of angle EGF .
Give a reason for your answer.

[2 marks]

Answer _____ degrees

- 10 A straight line crosses the lines AB and CD .
Kai says,
' AB and CD are parallel.'



Is Kai correct?

Tick a box.

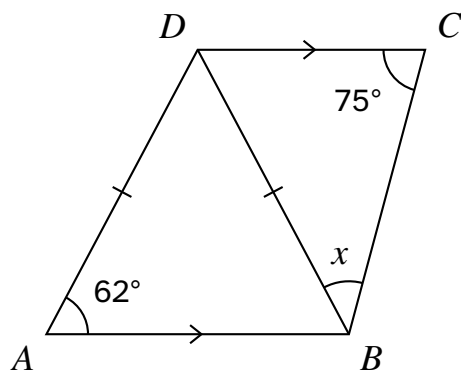
Give a reason for your answer.

[2 marks]

☐ Yes

☐ No

- 11 $ABCD$ is a trapezium.
 AB is parallel to DC .
 $AD = BD$



Not drawn accurately

Work out the size of angle x .

[4 marks]

Answer _____ degrees