



ACHIEVE ACADEMY

GCSE Maths — Foundation Tier

Angles & Parallel Lines · Practice Booklet

NAME: _____

CLASS: _____

DATE: _____

☐ Developing

☒ Secure

☐ Greater Depth

Answer every question in the working space provided. Method marks are available for correct working even if the final answer is wrong. Check the time allowed with your tutor before you start.

Angles & Parallel Lines

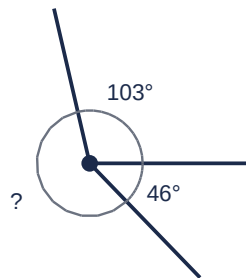
Total marks available: 64

● Angles & Parallel Lines

Q1

[2 marks]

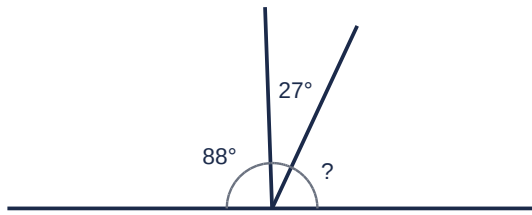
The angles below are all around the point O. Work out the size of the angle marked with a question mark.



Q2

[2 marks]

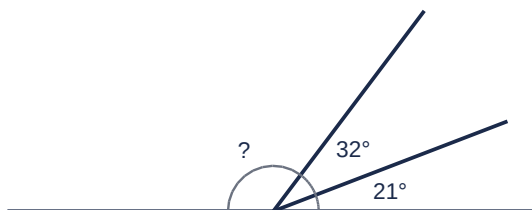
The angles below lie on a straight line. Work out the size of the angle marked with a question mark.



Q3

[2 marks]

The angles below lie on a straight line. Work out the size of the angle marked with a question mark.



Q4

[2 marks]

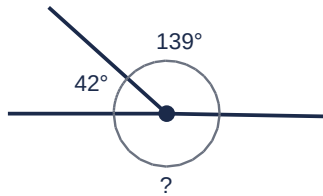
The angles below lie on a straight line. Work out the size of the angle marked with a question mark.



Q5

[2 marks]

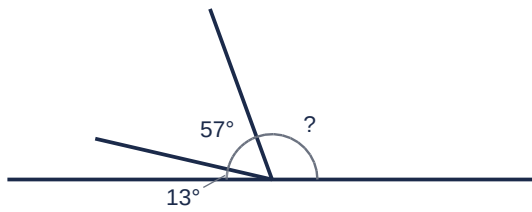
The angles below are all around the point O. Work out the size of the angle marked with a question mark.



Q6

[2 marks]

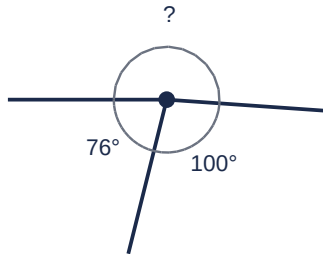
The angles below lie on a straight line. Work out the size of the angle marked with a question mark.



Q7

[2 marks]

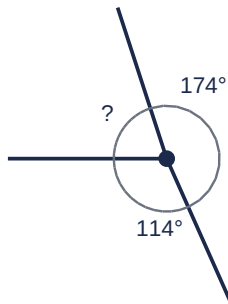
The angles below are all around the point O. Work out the size of the angle marked with a question mark.



Q8

[2 marks]

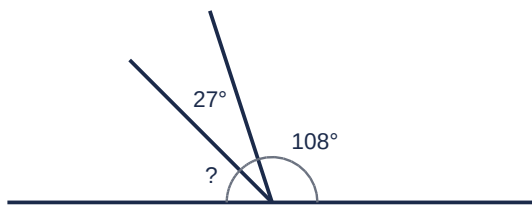
The angles below are all around the point O. Work out the size of the angle marked with a question mark.



Q9

[2 marks]

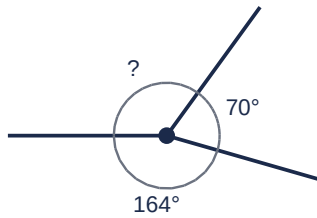
The angles below lie on a straight line. Work out the size of the angle marked with a question mark.



Q10

[2 marks]

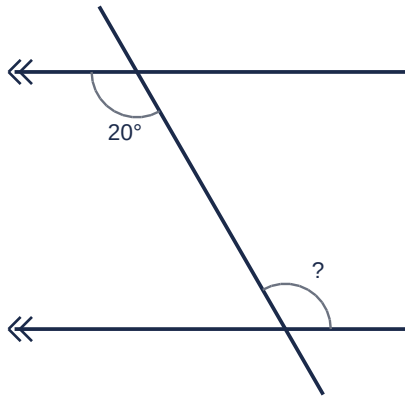
The angles below are all around the point O. Work out the size of the angle marked with a question mark.



Q11

[2 marks]

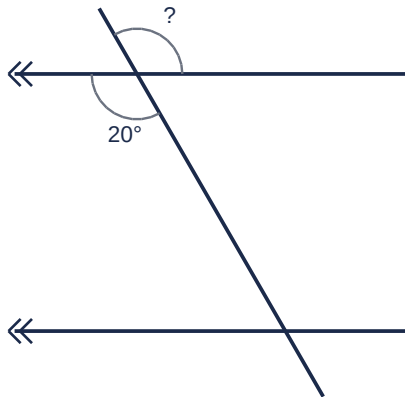
The two lines below are parallel. Using the fact that alternate angles are equal, calculate the size of the angle marked with a question mark.



Q12

[2 marks]

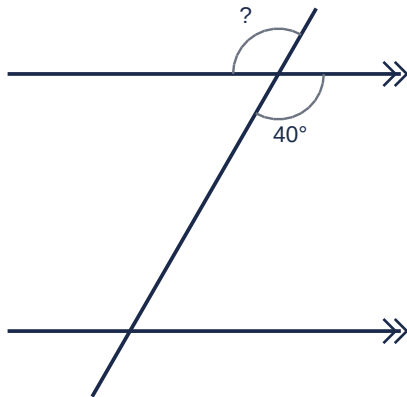
Two straight lines cross, forming the angles shown. Calculate the size of the angle marked with a question mark, which is vertically opposite the given angle.



Q13

[2 marks]

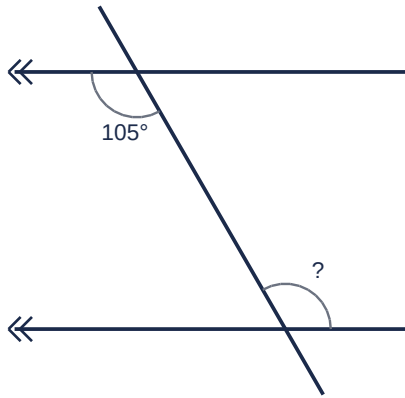
Two straight lines cross, forming the angles shown. Calculate the size of the angle marked with a question mark, which is vertically opposite the given angle.



Q14

[2 marks]

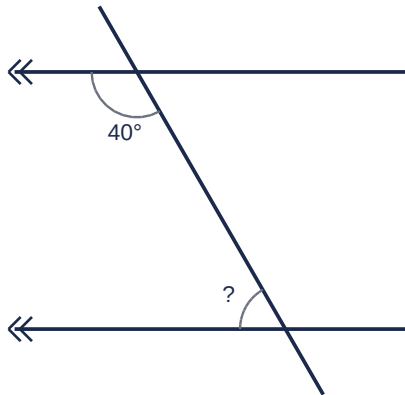
The two lines below are parallel. Using the fact that alternate angles are equal, calculate the size of the angle marked with a question mark.



Q15

[2 marks]

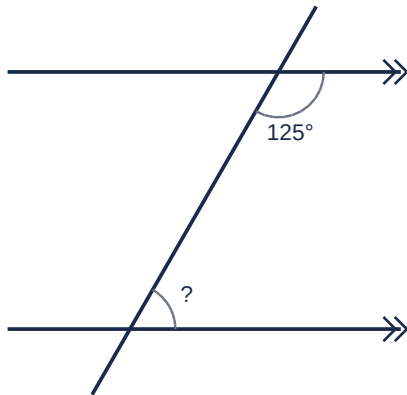
The two lines below are parallel. Using the fact that co-interior angles (also called allied angles) are supplementary (they sum to 180°), calculate the size of the angle marked with a question mark.



Q16

[2 marks]

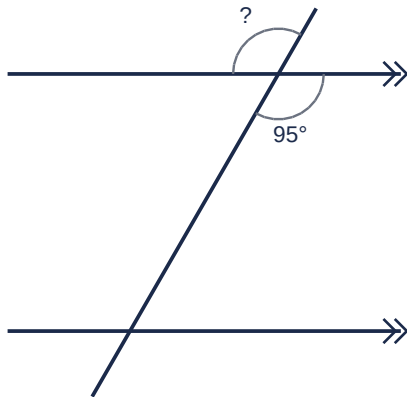
The two lines below are parallel. Using the fact that co-interior angles (also called allied angles) are supplementary (they sum to 180°), calculate the size of the angle marked with a question mark.



Q17

[2 marks]

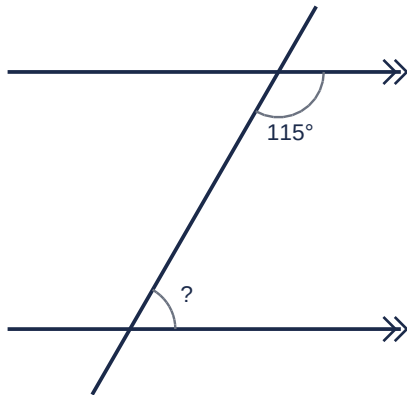
Two straight lines cross, forming the angles shown. Calculate the size of the angle marked with a question mark, which is vertically opposite the given angle.



Q18

[2 marks]

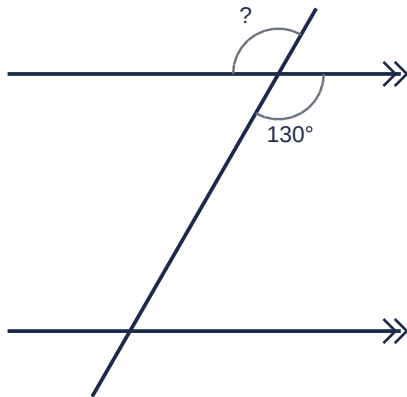
The two lines below are parallel. Using the fact that co-interior angles (also called allied angles) are supplementary (they sum to 180°), calculate the size of the angle marked with a question mark.



Q19

[2 marks]

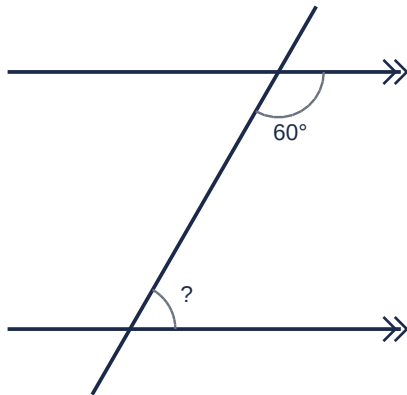
Two straight lines cross, forming the angles shown. Calculate the size of the angle marked with a question mark, which is vertically opposite the given angle.



Q20

[2 marks]

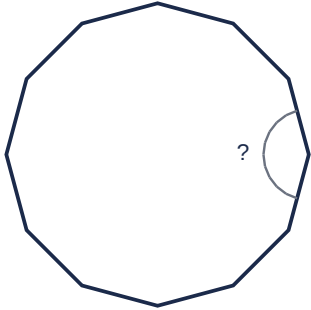
The two lines below are parallel. Using the fact that co-interior angles (also called allied angles) are supplementary (they sum to 180°), calculate the size of the angle marked with a question mark.



Q21

[3 marks]

The diagram shows a regular polygon with 12 sides. Calculate the size of the interior angle marked with a question mark.

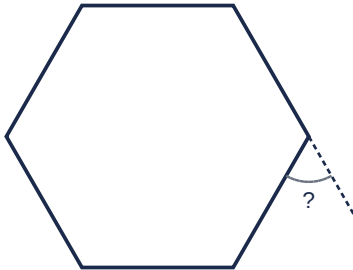


A large rectangular area with a dashed border, intended for the student to write their answer.

Q22

[2 marks]

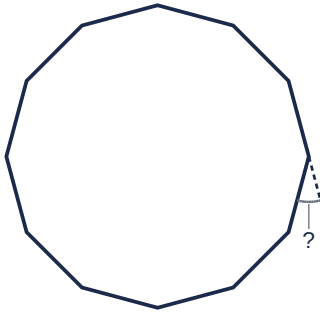
The diagram shows a regular polygon with 6 sides, with one side extended. Calculate the size of the exterior angle marked with a question mark.



Q23

[2 marks]

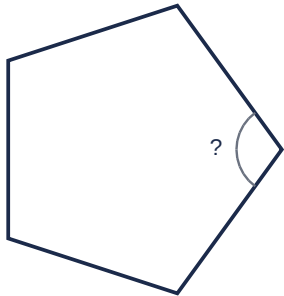
The diagram shows a regular polygon with 12 sides, with one side extended. Calculate the size of the exterior angle marked with a question mark.



Q24

[3 marks]

The diagram shows a regular polygon with 5 sides. Calculate the size of the interior angle marked with a question mark.

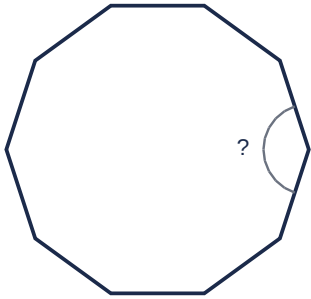


A large dashed rectangular box for writing the answer.

Q25

[3 marks]

The diagram shows a regular polygon with 10 sides. Calculate the size of the interior angle marked with a question mark.

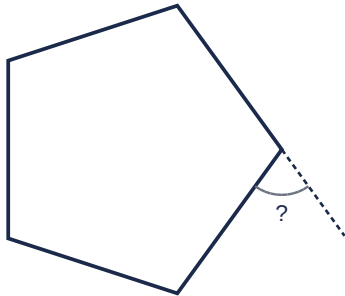


A large dashed rectangular box for writing the answer.

Q26

[2 marks]

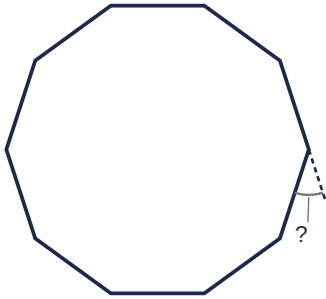
The diagram shows a regular polygon with 5 sides, with one side extended. Calculate the size of the exterior angle marked with a question mark.



Q27

[2 marks]

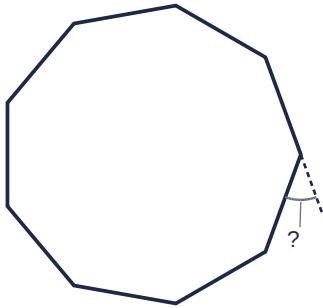
The diagram shows a regular polygon with 10 sides, with one side extended. Calculate the size of the exterior angle marked with a question mark.



Q28

[2 marks]

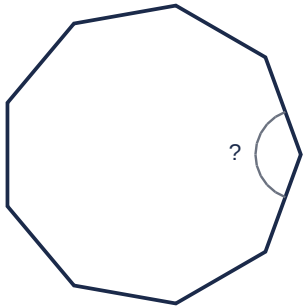
The diagram shows a regular polygon with 9 sides, with one side extended. Calculate the size of the exterior angle marked with a question mark.



Q29

[3 marks]

The diagram shows a regular polygon with 9 sides. Calculate the size of the interior angle marked with a question mark.

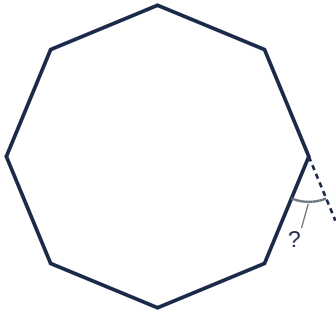


A large dashed rectangular box for writing the answer.

Q30

[2 marks]

The diagram shows a regular polygon with 8 sides, with one side extended. Calculate the size of the exterior angle marked with a question mark.



A large dashed rectangular box for writing the answer.