Bishops Online Tutoring

Education Consultancy

Edexcel GCSE Mathematics

ANGLES

Materials Required:

- Pen
- HB Pencil
- Ruler (in centimetres and millimetres)
- Protractor
- Compass

Instructions:

- Use a black ink pen to answer all questions
- Fill your name in the section below
- Answer the questions in the spaces provided
- Show your working out for all answers

Information:

- The marks allocated for each question are displayed within brackets – utilise this information to gauge the appropriate amount of time to dedicate to each question
- Questions marked with an asterisk (*) will assess your written communication; be careful of spelling, punctuation and grammar with these questions

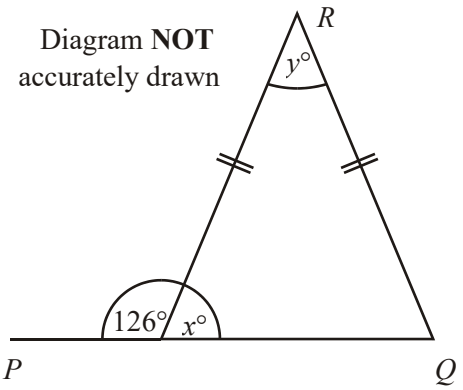
Advice:

- Carefully read the question before attempting to answer it
- Be vary of time and try to answer every question
- If you have enough time in the end, go back and check your answers. A good way to check your answers is to retry the question with the hope of getting the same answer as before without looking at your working out from before

NO CALCULATOR ALLOWED

NAME:	

1.



PQ is a straight line.

(a) Work out the size of the angle marked $x°$.

.....°

(1)

(b) (i) Work out the size of the angle marked $y°$.

.....°

(ii) Give reasons for your answer.

.....

.....

(3)

(4 marks)

2.

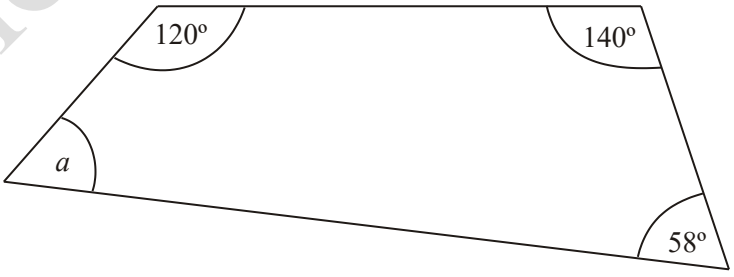


Diagram **NOT** accurately drawn

Work out the size of the angle *a*.

.....°

(2 marks)

3.

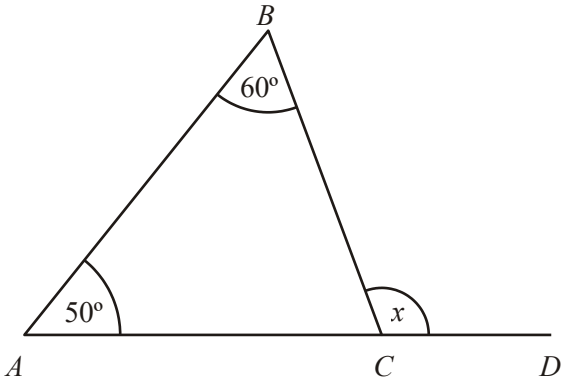


Diagram **NOT** accurately drawn

In the diagram, *ABC* is a triangle.
ACD is a straight line.
Angle *CAB* = 50°.
Angle *ABC* = 60°.

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

.....°

(2 marks)

4.

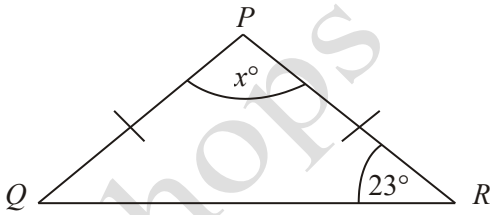


Diagram **NOT** accurately drawn

PQR is an isosceles triangle.

PQ = *PR*.
Angle *R* = 23°.

Work out the value of *x*.

x = ...

(2 marks)

5.

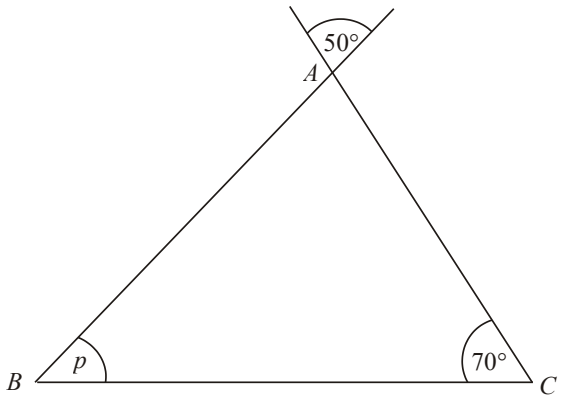


Diagram **NOT** accurately drawn

ABC is a triangle.

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

p = ...°

(2 marks)

6.

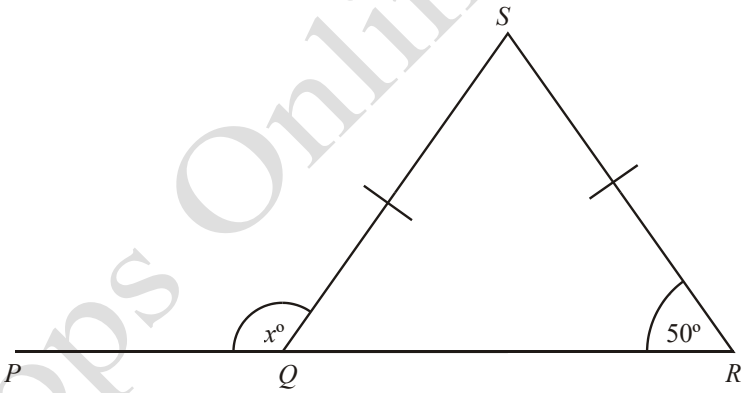


Diagram **NOT** accurately drawn

PQR is a straight line.
SQ = *SR*.

(i) Work out the size of the angle marked *x*°

.....°

(ii) Give reasons for your answer.

.....

.....

(3 marks)

7.

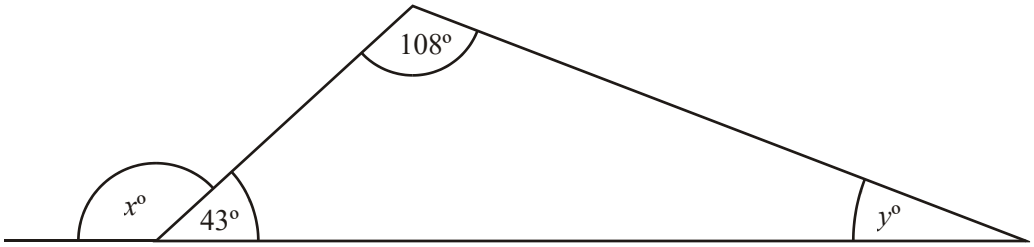


Diagram **NOT** accurately drawn (a)

(a) Work out the value of x.

x = ...

(1)

(b) Work out the value of y.

y = ...

(2)

(3 marks)

8.

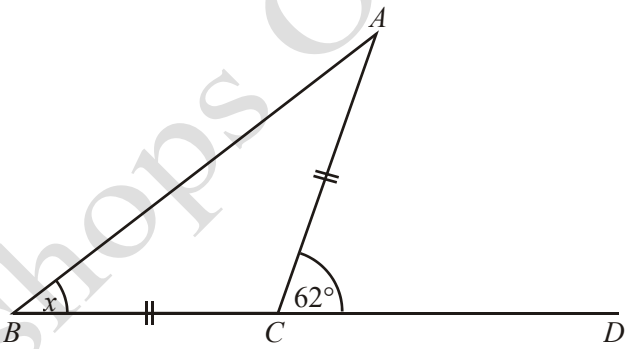


Diagram **NOT** accurately drawn

Triangle ABC is isosceles, with $AC = BC$.

Angle $ACD = 62^0$.

BCD is a straight line.

Work out the size of angle x.

x = ...^{0}

(2 marks)

9.

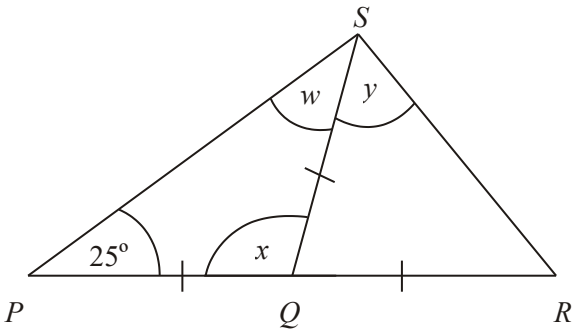


Diagram **NOT** accurately drawn

PQR is a straight line.

PQ = *QS* = *QR*.

Angle *SPQ* = 25°.

(a) (i) Write down the size of angle *w*.

.....°

(ii) Work out the size of angle *x*.

.....°

(2)

(b) Work out the size of angle *y*.

.....°

(2)

(4 marks)

10.

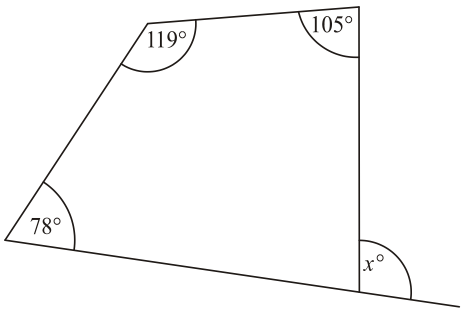


Diagram **NOT** accurately drawn

Work out the value of *x*.

x = ……...

(3 marks)

11.

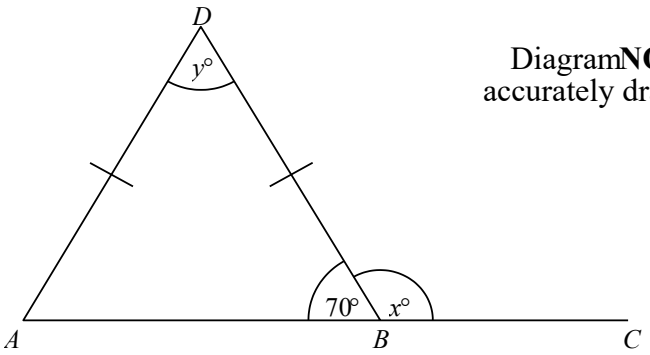


Diagram **NOT** accurately drawn

ABD is a triangle.
ABC is a straight line.
Angle *ABD* = 70°.
AD = *BD*.

(a) (i) Work out the value of *x*.

x = ...

(ii) Give a reason for your answer.

.....

(2)

(b) (i) Work out the value of *y*.

y = ...

(ii) Give a reason for your answer.

.....

.....

(3)

(5 marks)

12.

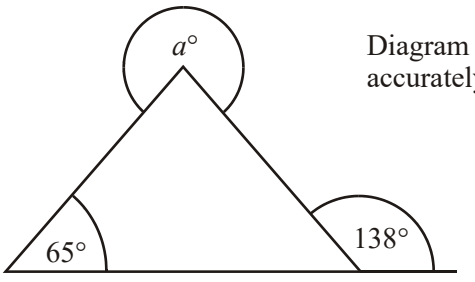


Diagram **NOT** accurately drawn

Work out the value of *a*.

a = ...

(3 marks)

13.

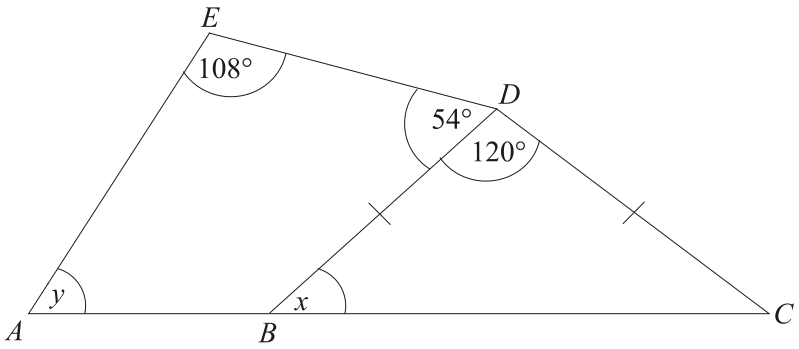


Diagram **NOT** accurately drawn

In the diagram, ABC is a straight line and $BD = CD$.

(a) Work out the size of angle x.

.....°

(2)

(b) Work out the size of angle y.

.....°

(3)

(5 marks)