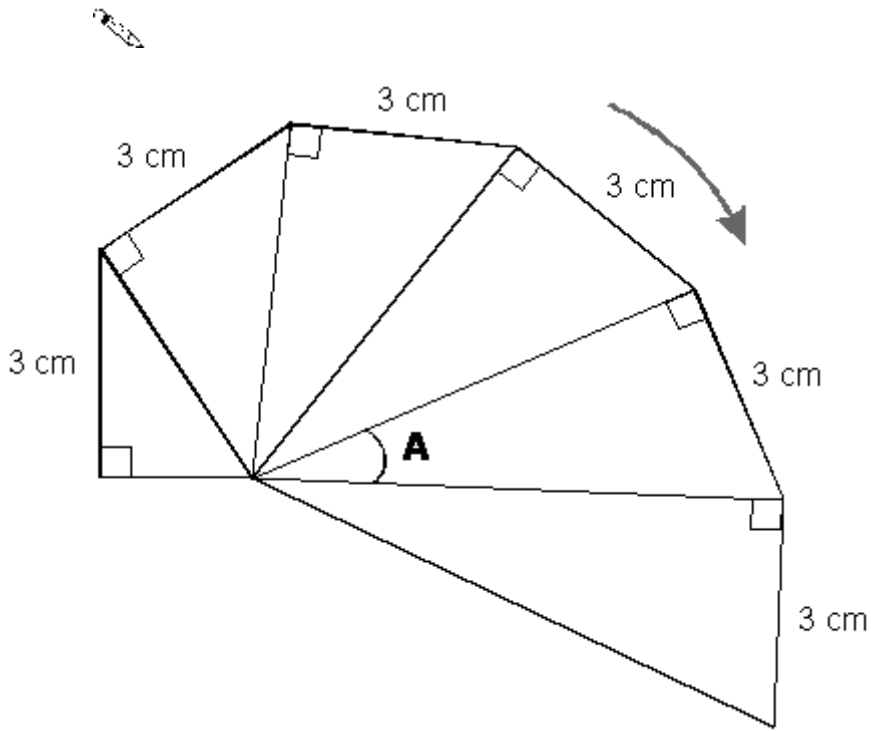


Q1. Here is the start of a spiral sequence of right-angled triangles.

Draw **accurately** the next right-angled triangle on the diagram.

You may use an angle measurer.

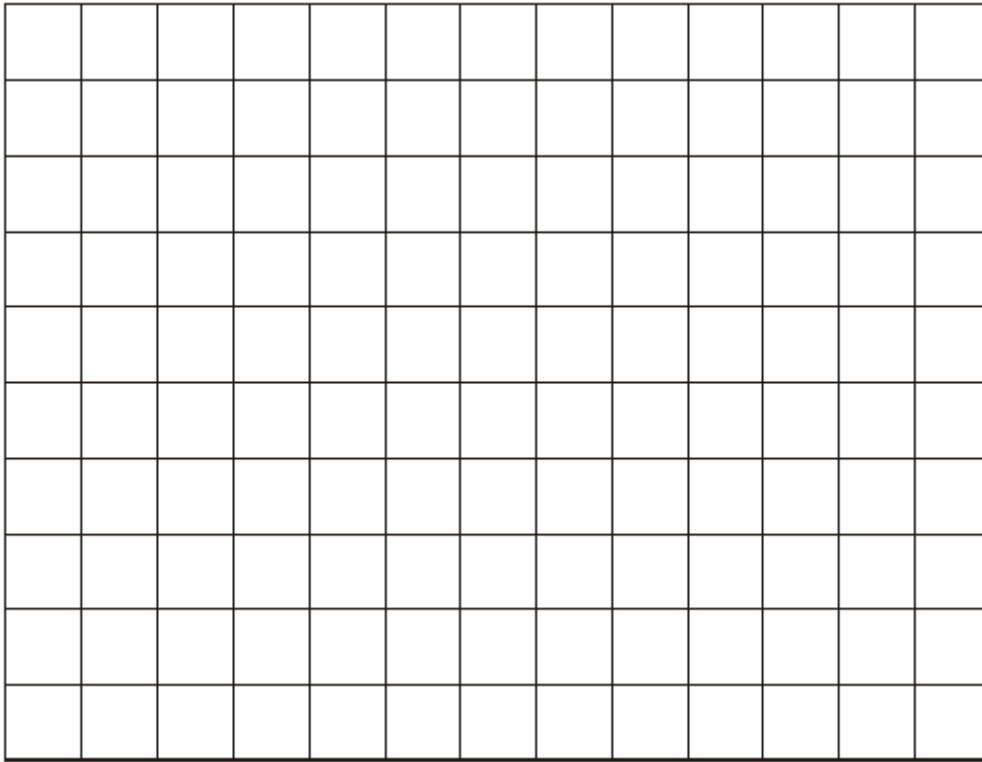


2 marks

Use an angle measurer to find the size of angle **A**.

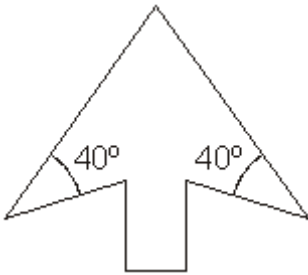
1 mark

Q2. On the grid below, use a ruler to draw a **pentagon** that has **three right angles**.



1 mark

Q3. This is a design for an arrowhead.

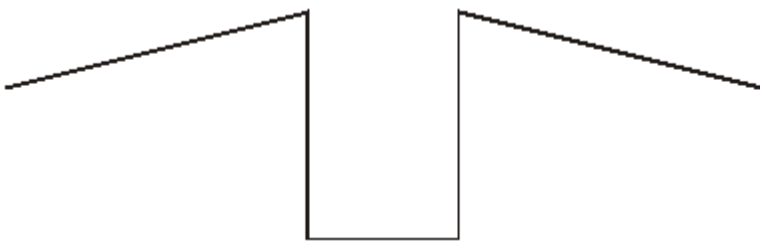


Below is part of a larger scale drawing of the arrowhead.

The drawing has the same size angles as the design.

Draw two more lines to complete the arrowhead **accurately**.

Use an angle measurer (protractor).

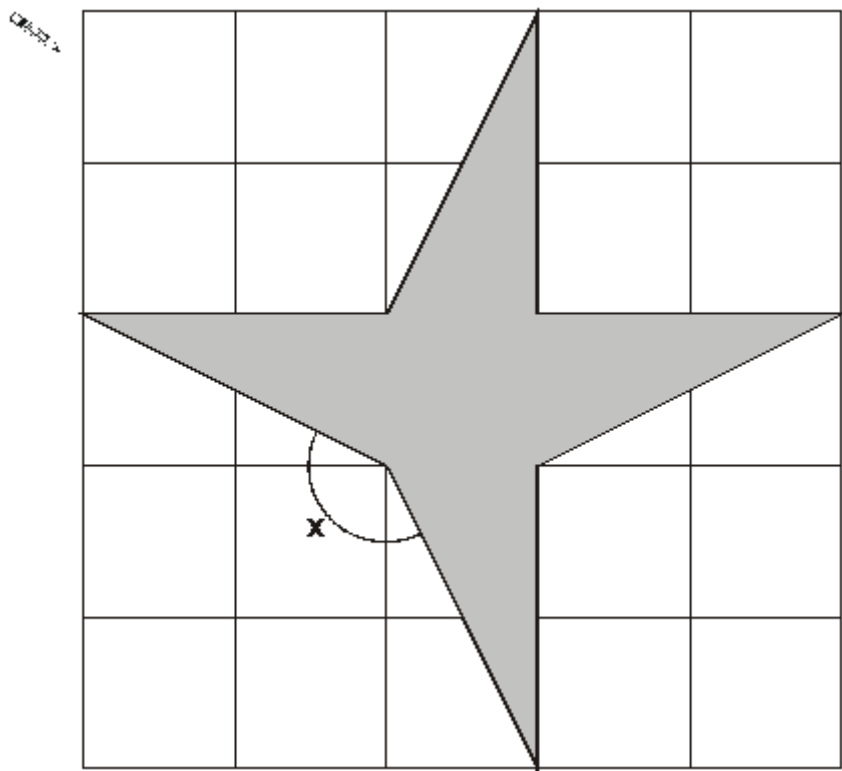


2 marks

Q4. Here is a shaded shape on a grid made of squares.

Draw the line of symmetry of the shaded shape.

You may use a mirror or tracing paper.



1 mark

What **fraction** of the area of the grid is shaded?

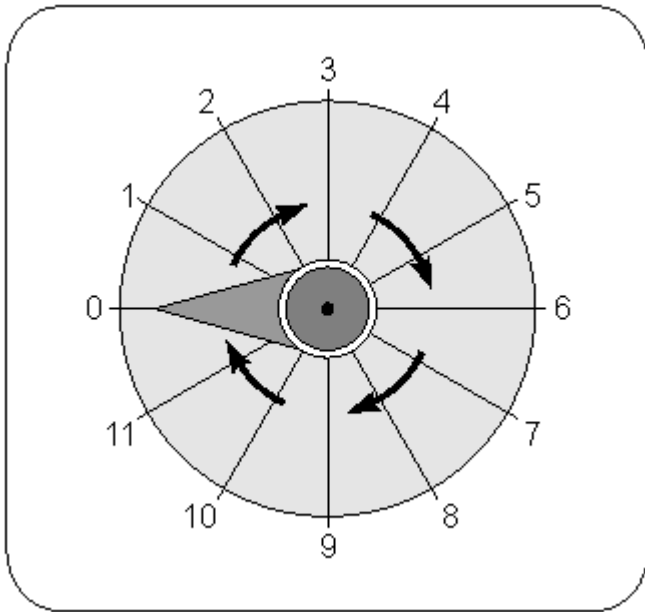
1 mark

Measure **angle x** in degrees.

Use an angle measurer (protractor).

1 mark

Q5. Here is a dial.



The pointer on this dial turns in a **clockwise** direction.
The pointer is at **0**.

Which **number** does it point to after a turn of **270°**?

جواباً

1 mark

The pointer moves from **10** to **11**.

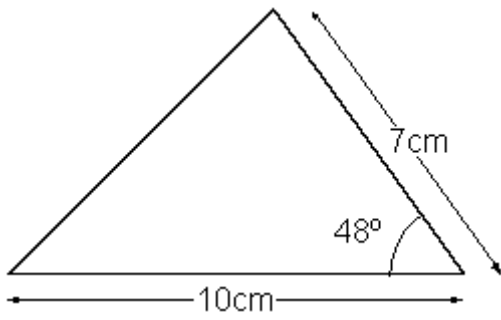
How many **degrees** does it turn through?

جواباً

1 mark

Q6. Here is a sketch of a triangle.

It is not drawn to scale.

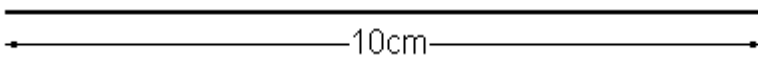


Draw the full size triangle **accurately**, below.

Use an angle measurer (protractor) and a ruler.

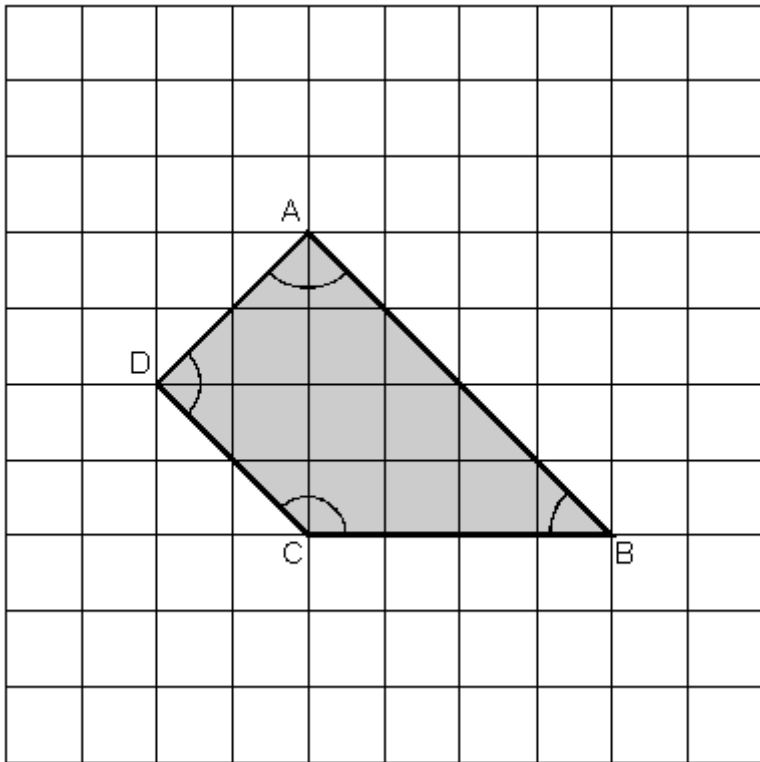
One line has been done for you.

Handwritten mark



2 marks

Q7. Here is a shape on a square grid.



For each sentence, put a tick (✓) if it is true.

Put a cross (✗) if it is not true.



Angle **C** is an **obtuse** angle.

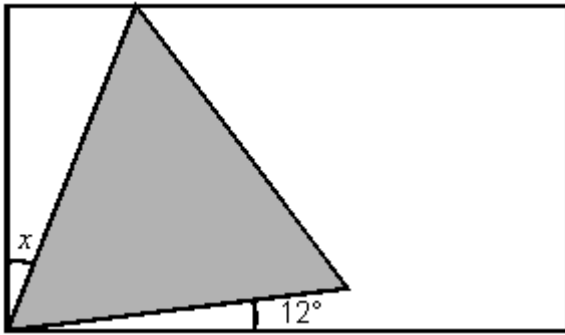
Angle **D** is an **acute** angle.

Line **AD** is **parallel** to line **BC**.

Line **AB** is **perpendicular** to line **AD**.

2 marks

Q8. Here is an **equilateral triangle** inside a **rectangle**.



Not to scale

Calculate the value of angle x .

Do **not** use a protractor (angle measurer).

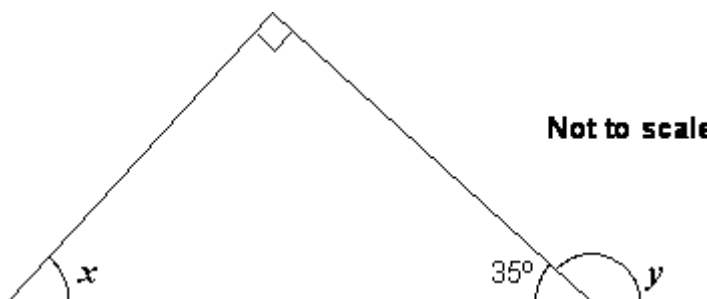


Show your **working**.
 You may get a mark

o

2 marks

Q9. Look at this diagram.



Not to scale

Calculate the size of angle x and angle y .

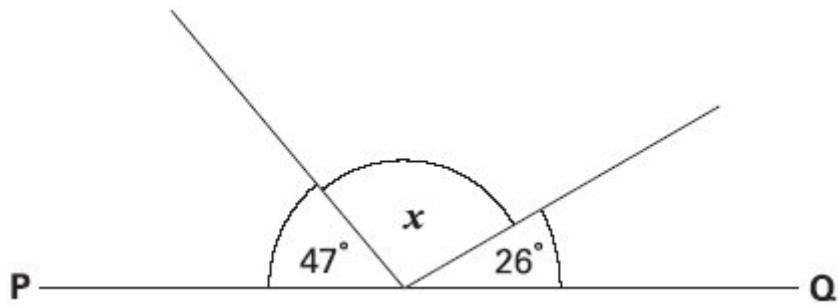
Do **not** use a protractor (angle measurer).

1 mark

1 mark

Q10. PQ is a straight line.

Not drawn accurately

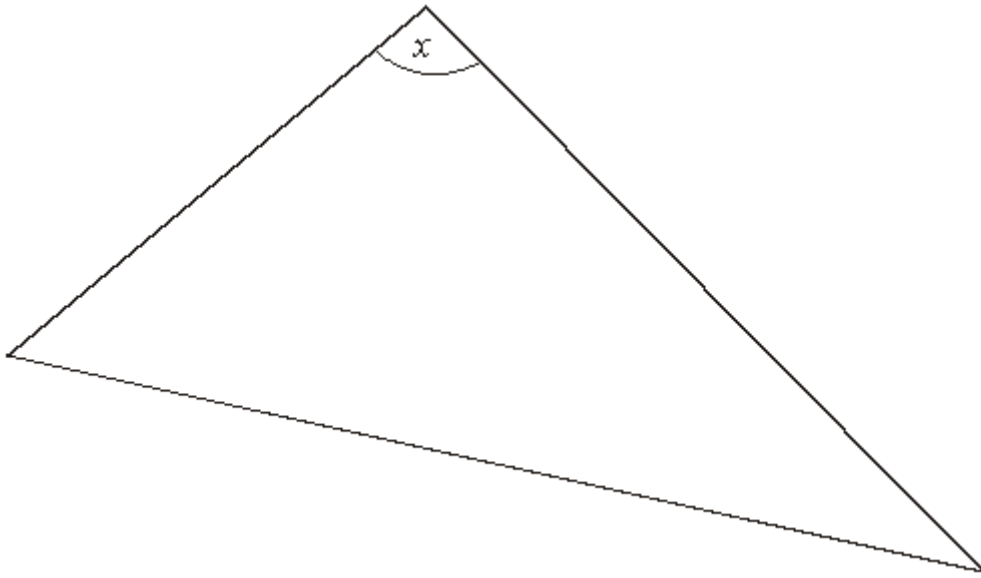


Calculate the size of angle x .

Do **not** use a protractor (angle measurer).

1 mark

Q11.



Measure angle x accurately.

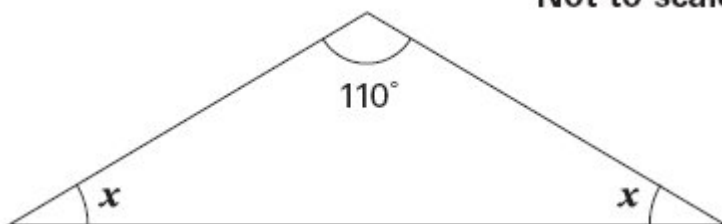
Use a protractor (angle measurer).



1 mark

Q12. Here is an isosceles triangle.

Not to scale



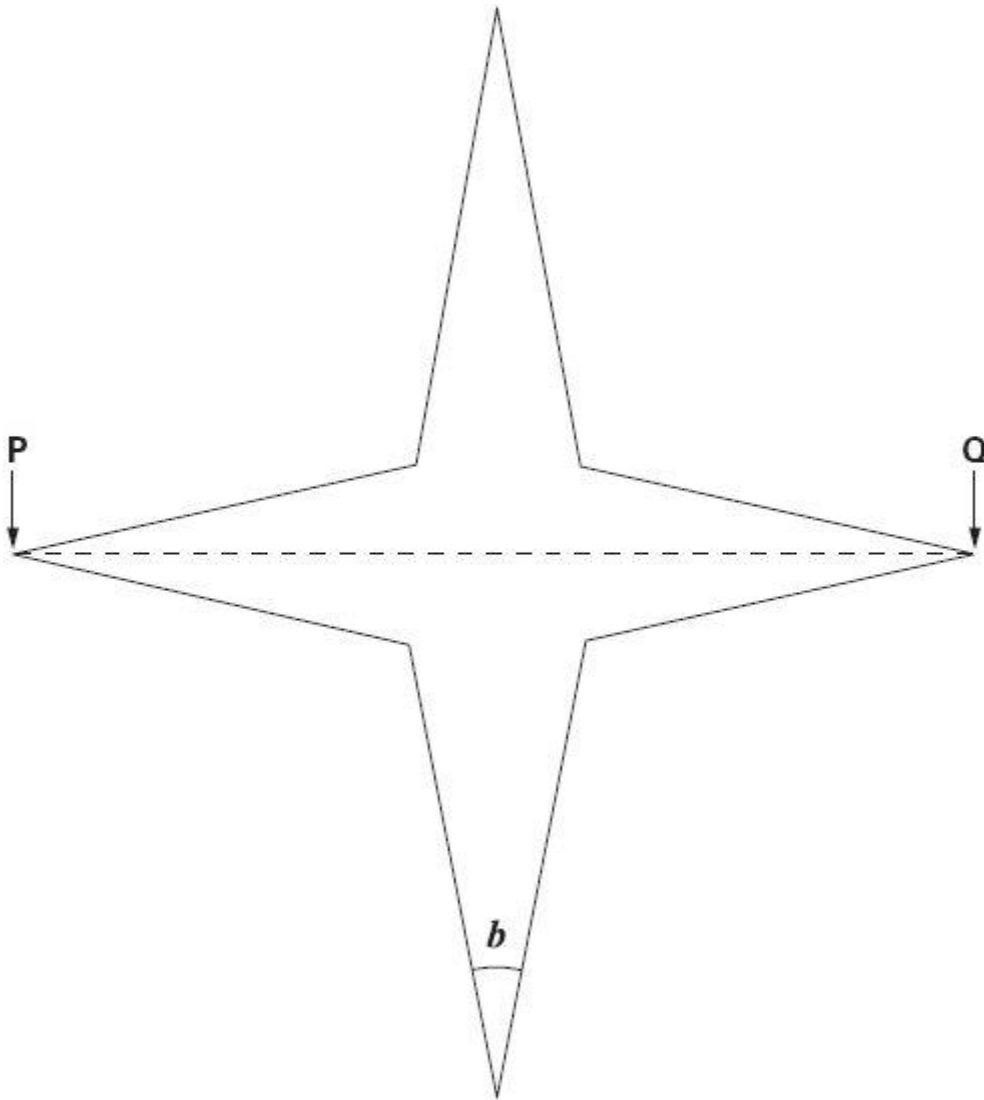
Calculate the size of angle x .

Do **not** use a protractor (angle measurer).



1 mark

Q13. Look at this star.



Use a ruler to measure **accurately** the **width** of the star, from **P** to **Q**.

Give your answer in **millimetres**.



1 mark

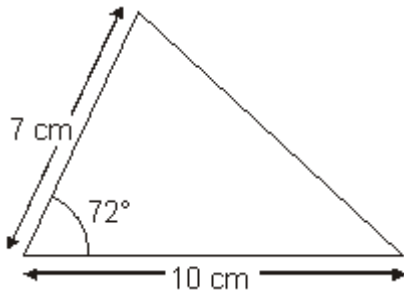
Use a protractor (angle measurer) to measure **angle *b***.



1 mark

Q14. Here is a sketch of a triangle.

It is not drawn to scale.

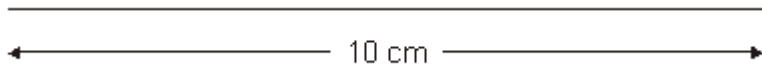


Draw the full-size triangle **accurately** below.

Use a protractor (angle measurer) and a ruler.

One line has been drawn for you.





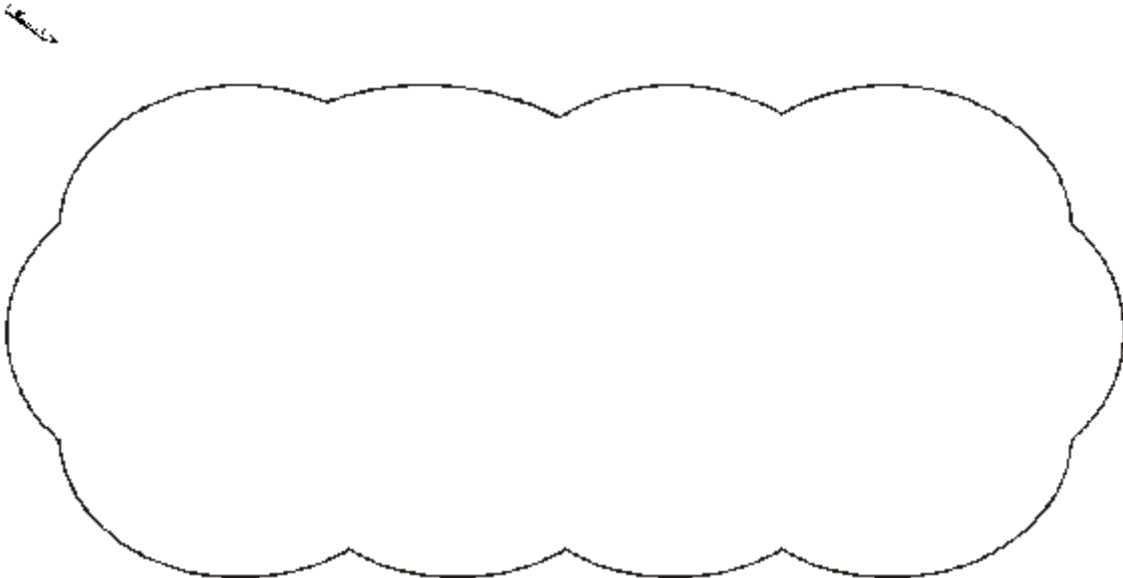
2 marks

Q15. Jamie draws a triangle.

He says,

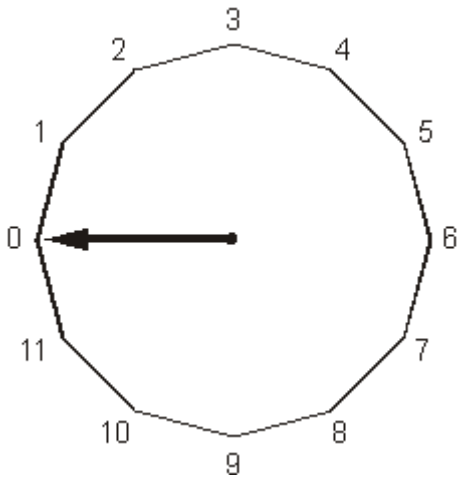
'Two of the three angles in my triangle are obtuse'.

Explain why Jamie **cannot** be correct.



1 mark

Q16. This regular 12-sided shape has a number at each vertex.



Ben turns the pointer from zero, clockwise through 150°

Which number will the pointer now be at?



1 mark

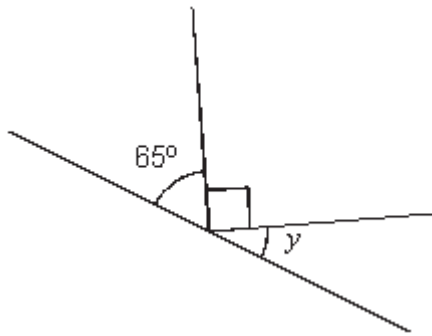
Nisha turns the pointer clockwise from number 2 to number 11

Through how many degrees does the pointer turn?



1 mark

Q17.



Not to scale

Calculate the size of angle y in this diagram.

Do **not** use a protractor (angle measurer).

	$y =$	$^{\circ}$		$^{\circ}$
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1 mark

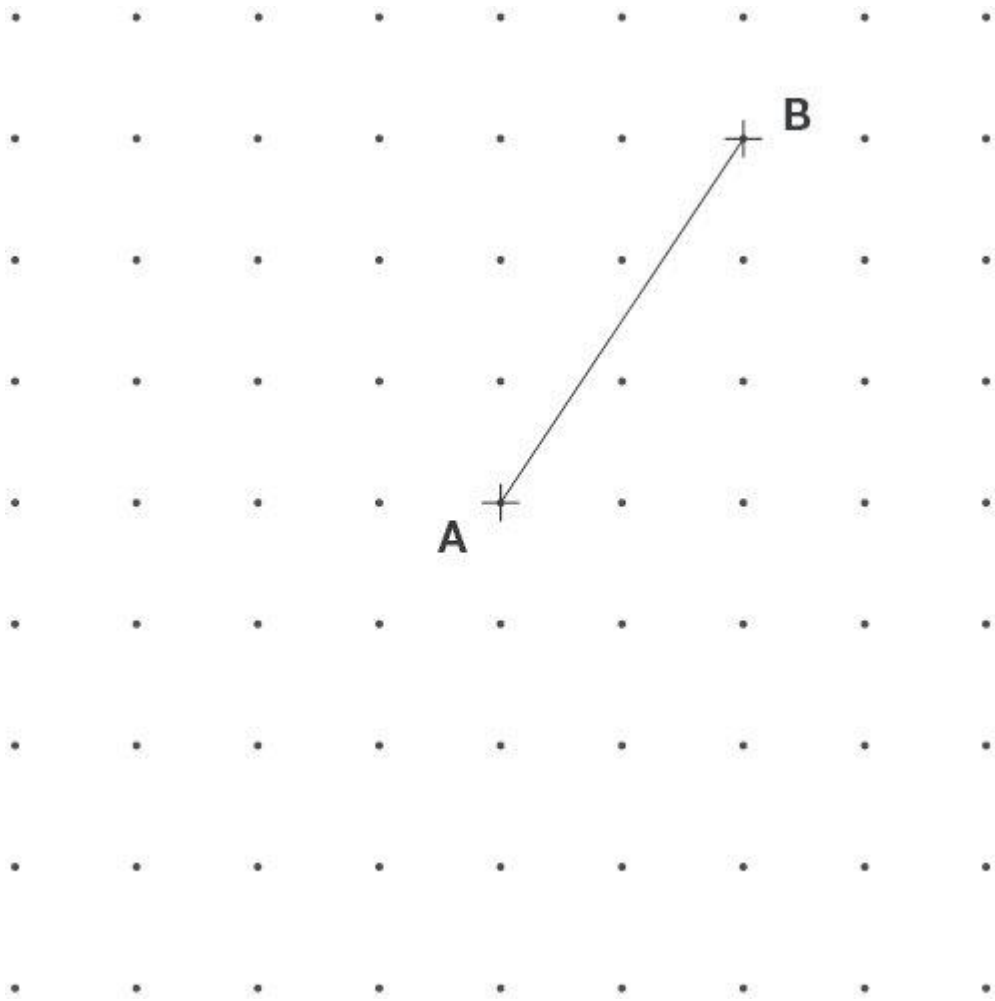
Q18. Here is a grid of dots.

Point **A** and point **B** are joined by a straight line.

Draw a line to join point A to another dot on the grid so that the two lines make a right angle.

Use a ruler.

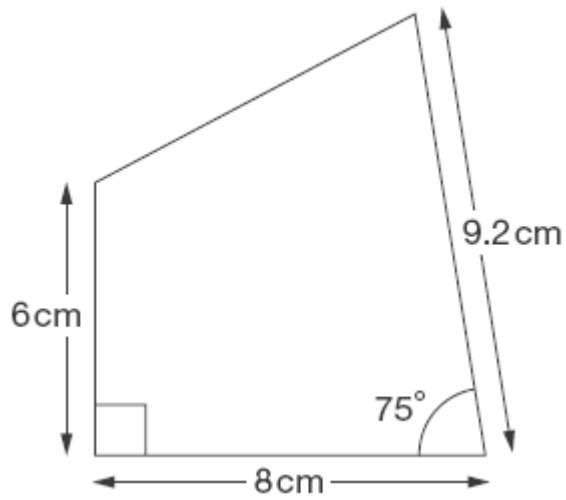




1 mark

Q19. Here is a sketch of a quadrilateral.

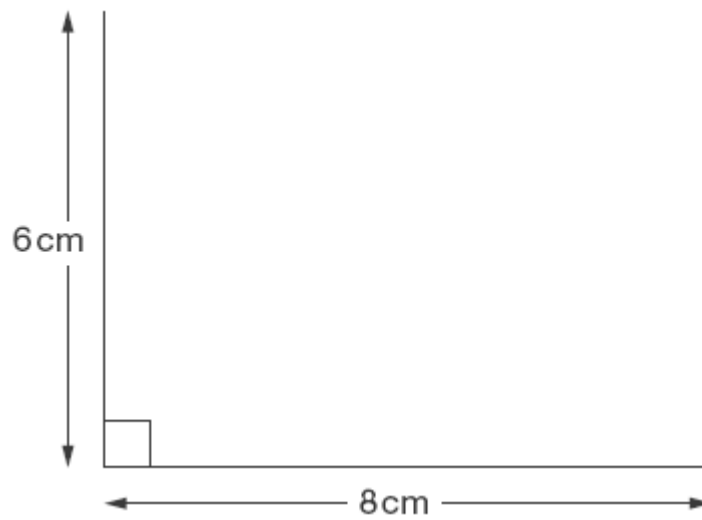
It is not drawn to scale.



Draw the full-size quadrilateral **accurately** below.

Use a protractor (angle measurer) and a ruler.

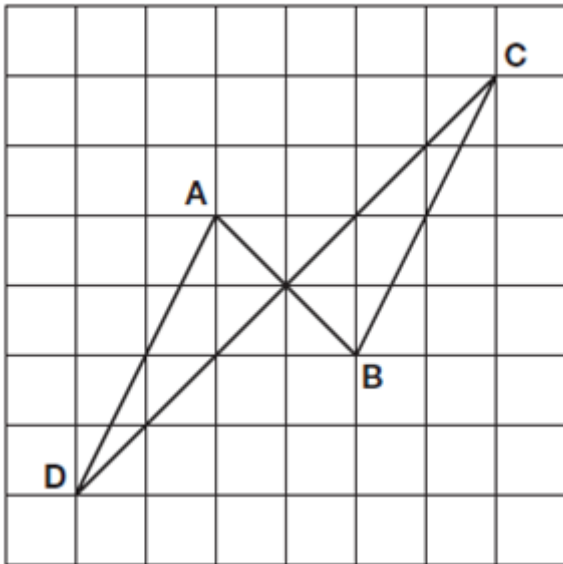
Two of the lines have been drawn for you.



2 marks

Q20. The diagram shows four lines drawn on a square grid.

The lines are **AB**, **BC**, **CD** and **DA**.



Which two of the lines are **parallel**?
Circle them in the list below.



AB

BC

CD

DA

1 mark

Which two of the lines are **perpendicular**?
Circle them in the list below.



AB

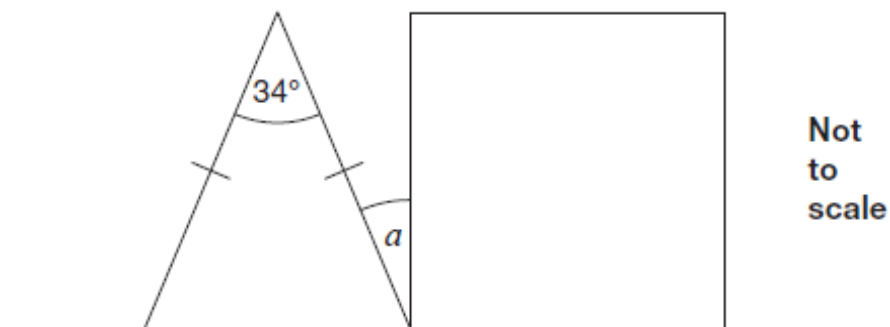
BC

CD

DA

1 mark

Q21. The diagram shows an isosceles triangle and a square on a straight line.



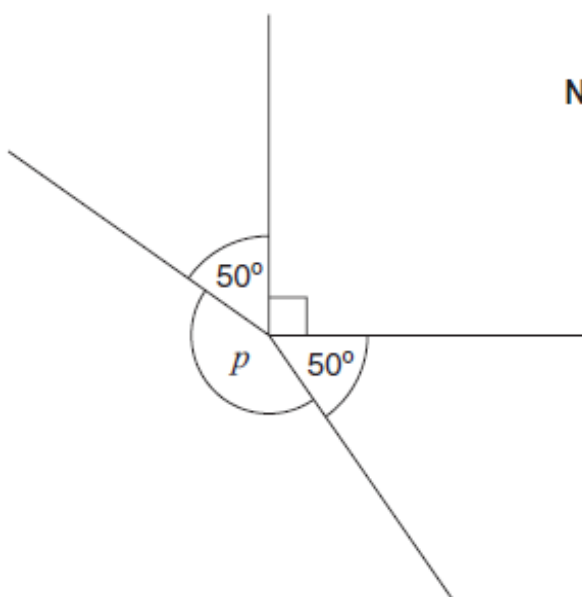
Calculate angle α .



Show your method

2 marks

Q22.



Calculate the size of angle p in the diagram.

Do **not** use a protractor (angle measurer).



Show
your
method



A large rectangular box with a thin black border, intended for the student to show their method. On the left side, a smaller box with a pointed right edge contains the text "Show your method". In the bottom right corner of the large box, there is a smaller rectangular box with a thick black border, containing a small circle.

2 marks