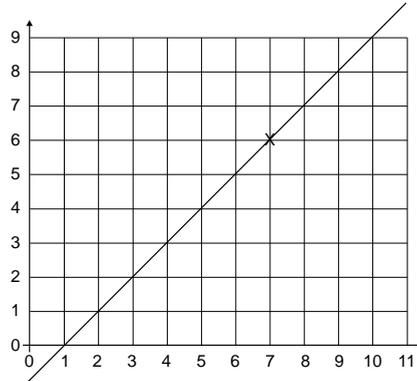


Co-ordinates and Angles KS2 SATS Standard Worksheet

1.



(7, 6) are coordinates of a point on the line.

(a) Tick (✓) which of these are coordinates of other points on the line.

(3,2) (9,10) (5,4)

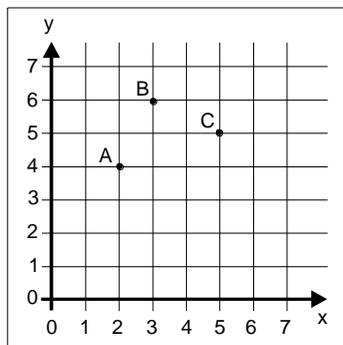
(4,2) (10,9) (7,9)

1 mark

(b) How do you know that point (11, 12) would not be on this line?

1 mark

2.



A, B and C are three corners of a **square**.

What are the **co-ordinates** of the other corner?

(,)

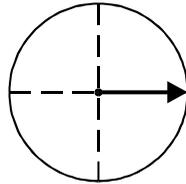
1 mark

3. Complete the table.

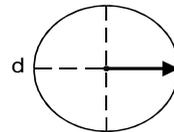
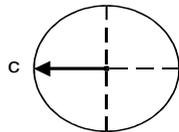
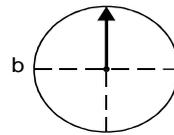
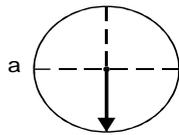
shape	number of right angles
-------	-------------------------------

1 mark

4. What will this arrow look like after a **half turn**?

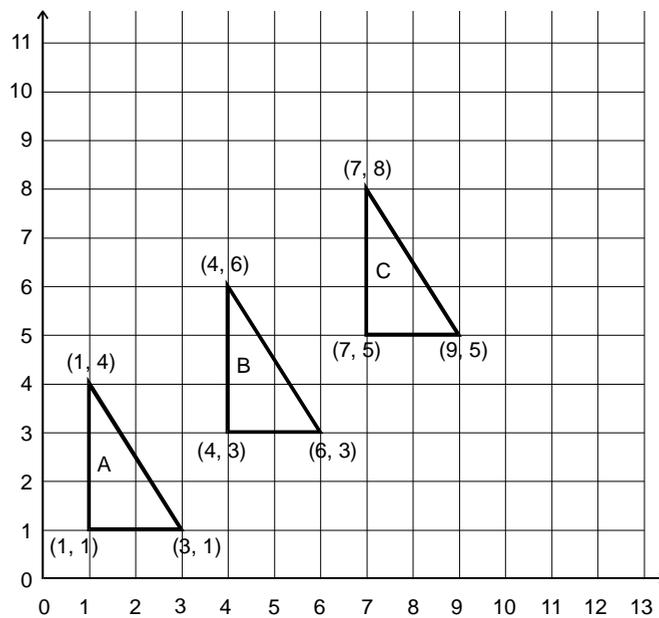


Tick (✓) the drawing a,b,c or d which shows this.



1 mark

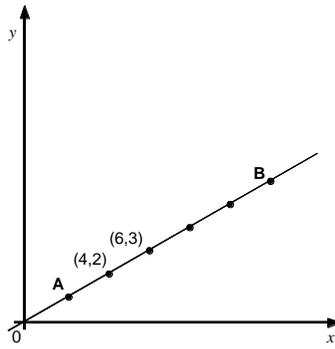
5.



Write the co-ordinates of the next triangle in the sequence.

1 mark

6. Here is a graph.



The dots (●) on the line are **equally spaced**.

What are the **coordinates** of the point **A**?

(,)

1 mark

Megan says,

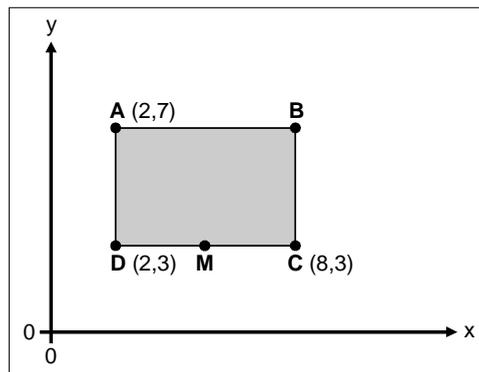
'The point B has coordinates (11,5).'

Use the graph to explain why she **cannot** be correct.

.....

1 mark

7. Here is a shaded **rectangle**.



What are the co-ordinates of **B**?

(,)

1 mark

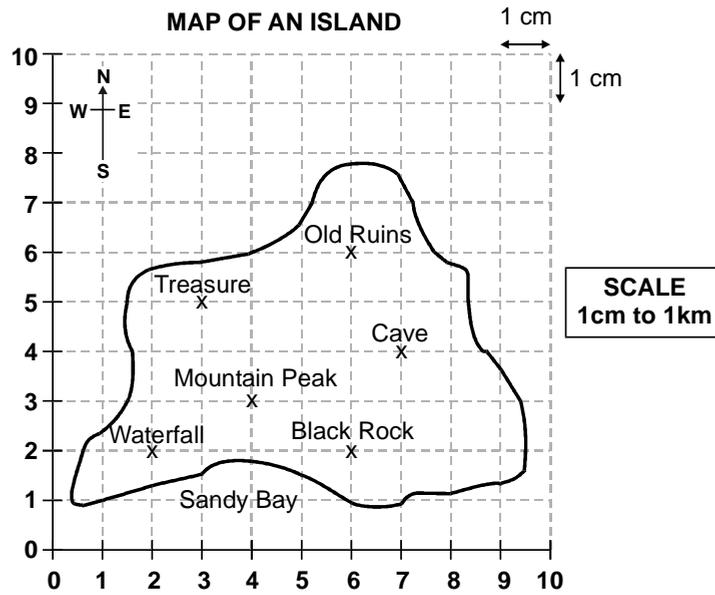
M is half way between **D** and **C**.

What are the co-ordinates of **M**?

(,)

1 mark

8.



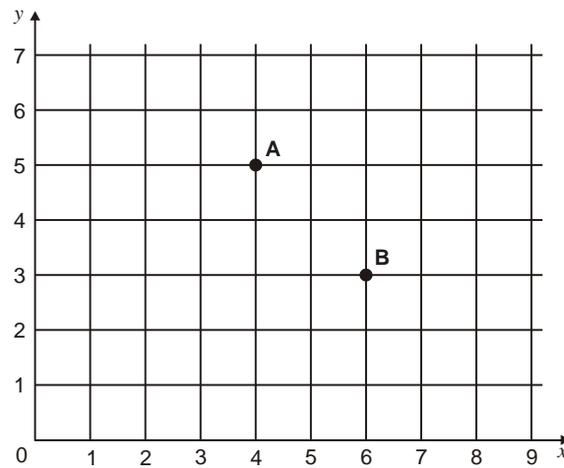
The Cave has co-ordinates **(7 , 4)**.

What are the co-ordinates of the Treasure? **(3 , 5)**

1 mark

9. **A, B, C** and **D** are the vertices of a rectangle.

A and **B** are shown on the grid.



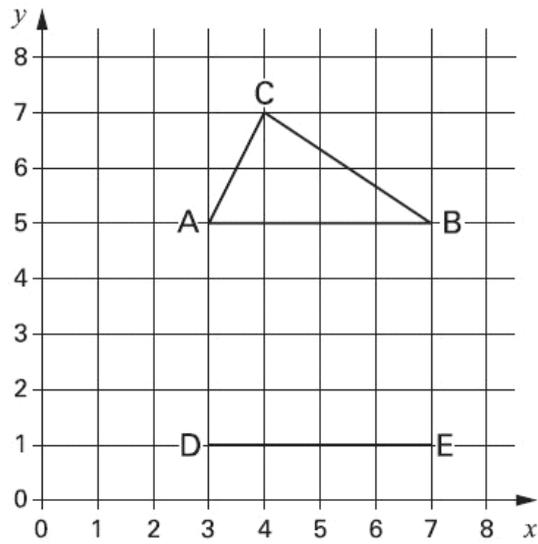
D is the point (3, 4)

Write the coordinates of point **C**.

(6 , 5)

1 mark

10. Kyle has drawn triangle **ABC** on this grid.



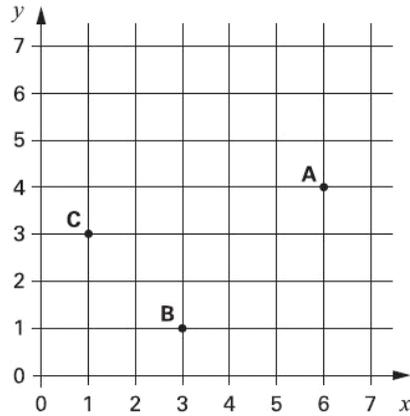
Holly has started to draw an **identical** triangle **DEF**.

What will be the coordinates of point **F**?



1 mark

11.



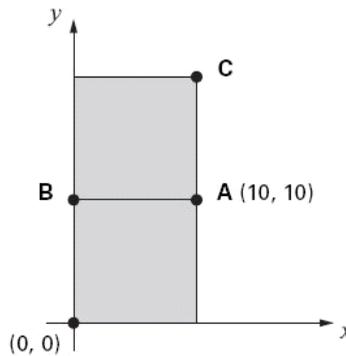
A, B and C are three corners of a rectangle.

What are the coordinates of the fourth corner?

(,)

1 mark

12. The diagram shows two identical squares.



A is the point (10,10)

What are the coordinates of B and C?

B is (,)

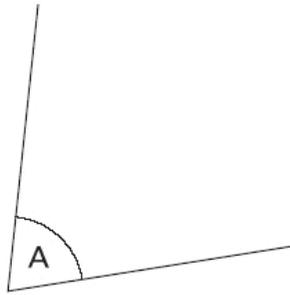
1 mark

C is (,)

1 mark

13. Measure **angle A** accurately.

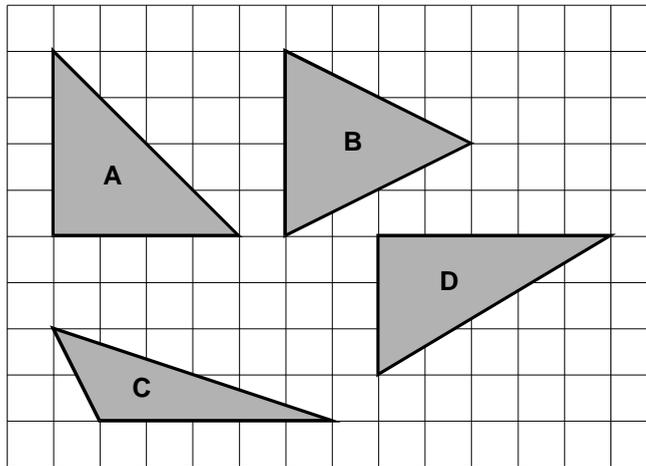
Use a protractor (angle measurer).



angle A = °

1 mark

14. Here are four triangles drawn on a square grid.



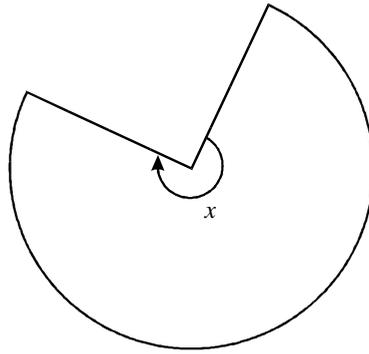
Write the letter for each triangle in the correct region of the sorting diagram.

One has been done for you.

	has a right angle	has an obtuse angle	has 3 acute angles
is isosceles	A		
is not isosceles			

2 marks

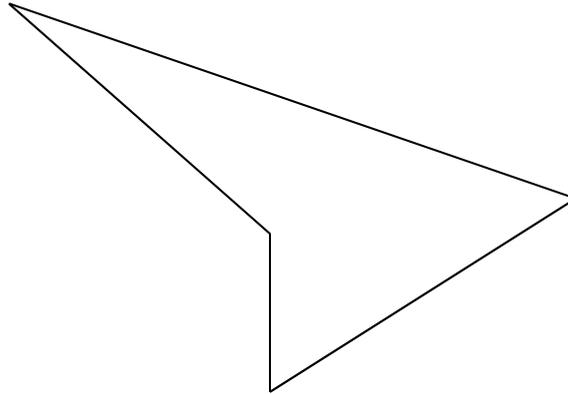
15. This shape is **three-quarters of a circle**.



How many degrees is **angle x** ?

1 mark

16.



Measure accurately the **longest side** of this shape.

Give your answer in millimetres.

1 mark

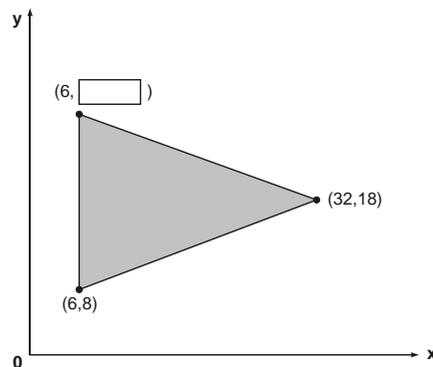
Measure accurately the **smallest angle** in the shape.

Use a protractor (angle measurer).

1 mark

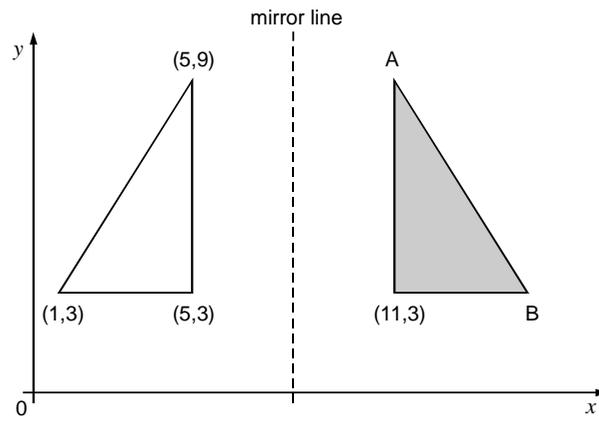
17. The shaded shape is an **isosceles** triangle.

Write in the missing co-ordinate.



1 mark

18. The shaded triangle is a reflection of the white triangle in the mirror line.

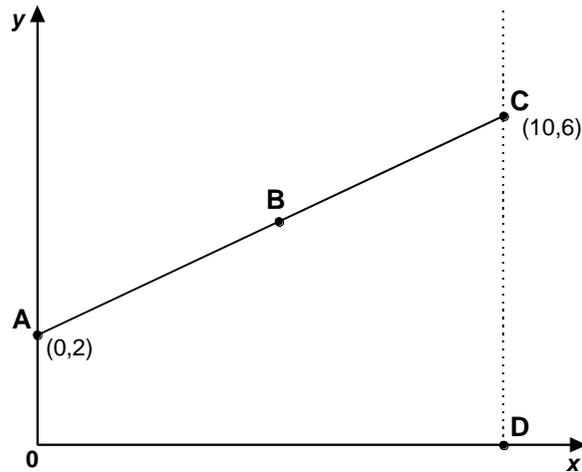


Write the **co-ordinates** of point **A** and point **B**.

 A is B is

2 marks

19. Here is a graph



The points **A**, **B** and **C** are **equally spaced**.

What are the **co-ordinates** of the **point B**?

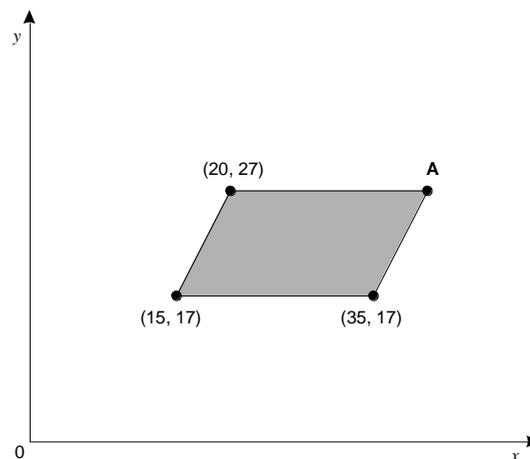
1 mark

Point **D** is directly below point **C**.

What are the **co-ordinates** of the **point D**?

1 mark

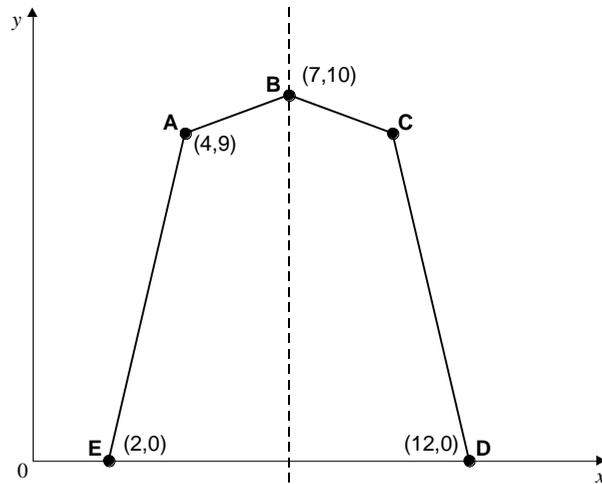
20. The shaded shape is a parallelogram.



Write in the coordinates of point **A**.

21. Here is a pentagon drawn on a coordinate grid.

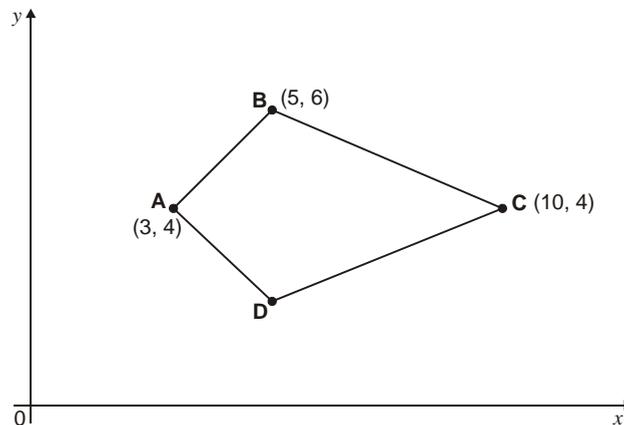
The pentagon is symmetrical.



What are the coordinates of point **C**?

1 mark

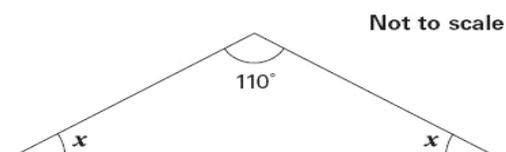
22. Here is a kite.



Write the coordinates of point **D**.

1 mark

23. Here is an isosceles triangle.



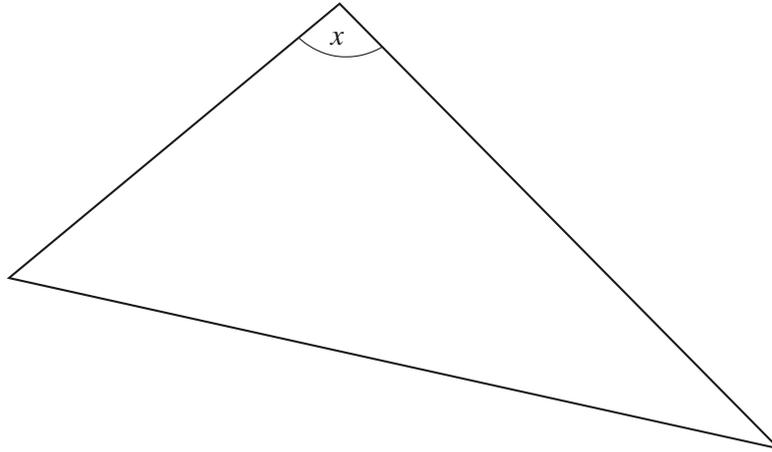
Calculate the size of angle x .

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

$x =$ °

1 mark

24.

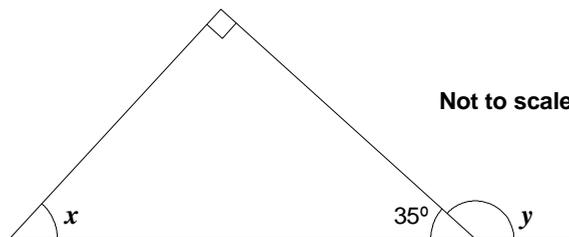


Measure angle x accurately.

Use a protractor (angle measurer).

1 mark

25. Look at this diagram.



Calculate the size of angle x and angle y .

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

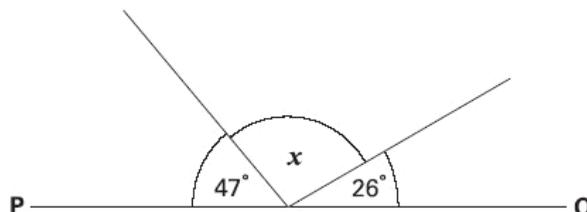
$x =$ 1 mark

$y =$

1 mark

26. **PQ** is a straight line.

Not drawn accurately



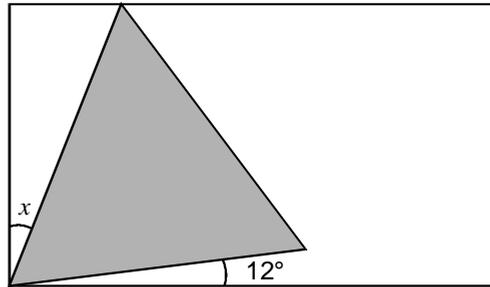
Calculate the size of angle x .

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



1 mark

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



Not to scale

Calculate the value of angle x .

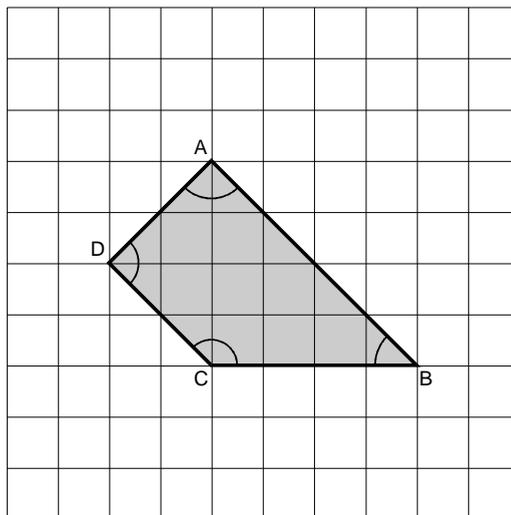
Do **not** use a protractor (angle measurer).

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

o

2 marks

28. 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.

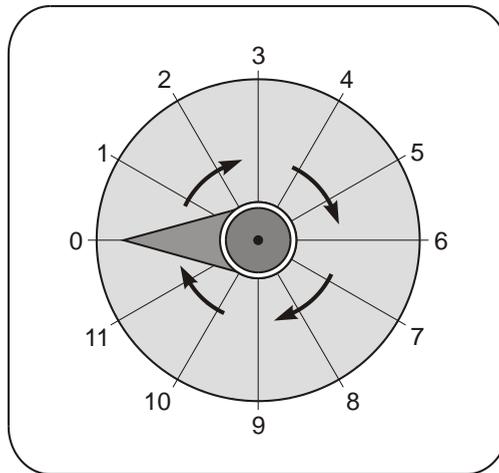
Angle **D** is an **acute** angle.

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

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

2 marks

29. 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°**?

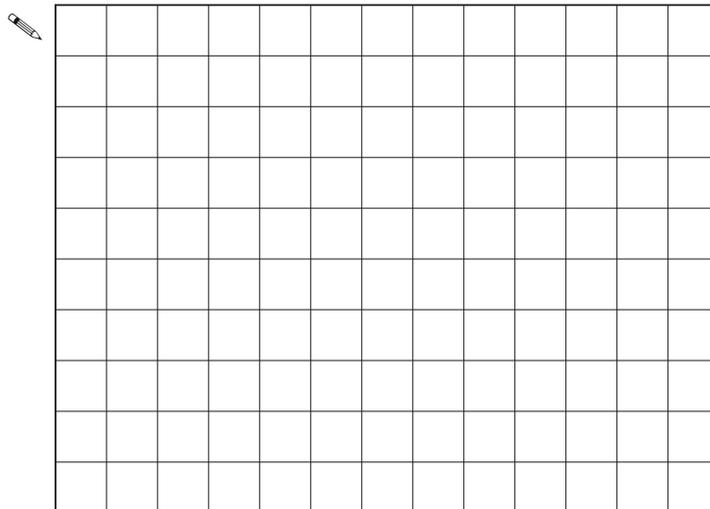
1 mark

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

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

1 mark

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

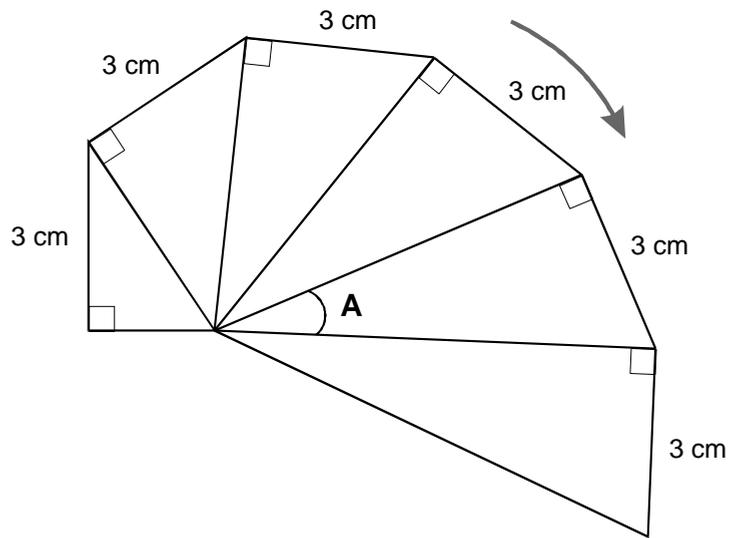


1 mark

31. 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