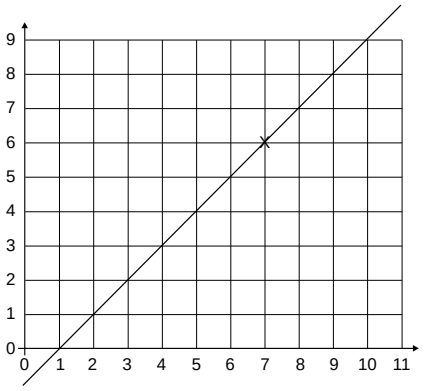
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# Co-ordinates and Angles KS2 SATS Standard Worksheet

**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)** ☐

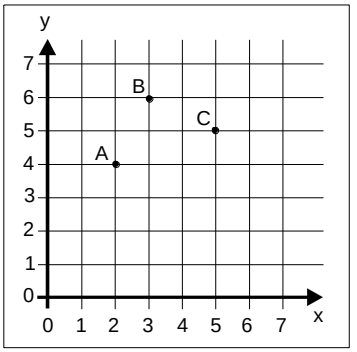
**(4,2)** ☐ **(10,9)** ☐ **(7,9)** ☐

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.

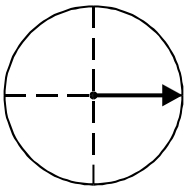
| shape | number of **right** angles |
|---|---|

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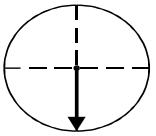
| | |
|---|---|
|  | ..... |
|  | ..... |

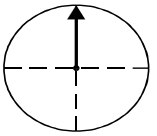
1 mark

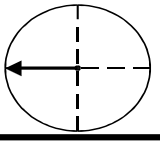
**4.** What will this arrow look like after a **half turn?**

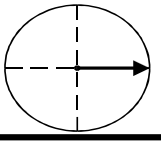


Tick (✓) the drawing a,b,c or d which shows this.

a 

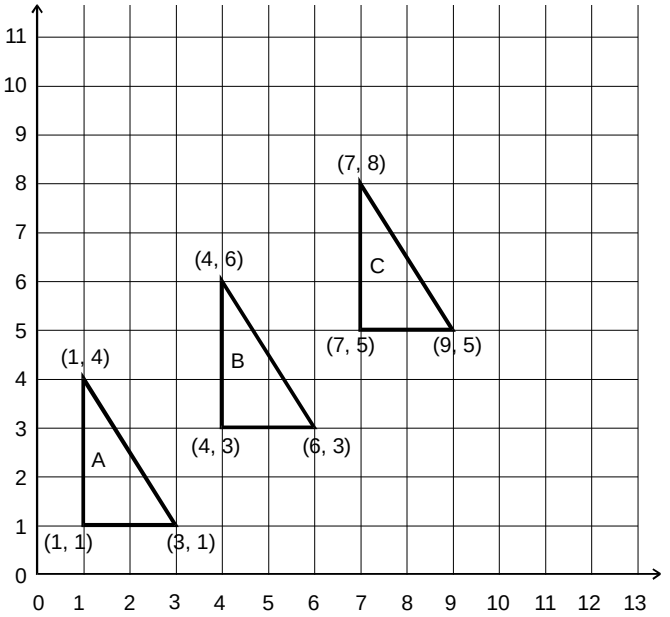
b 

c 

d 

1 mark

**5.**

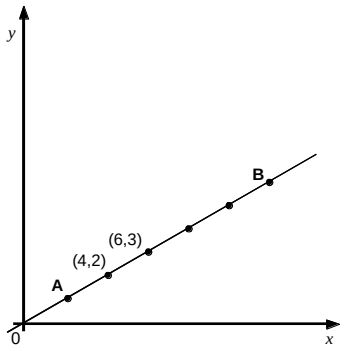



Write the co-ordinates of the next triangle in the sequence.

1 mark

**6.** Here is a graph.

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

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

**(  ,  )**

1 mark

Megan says,

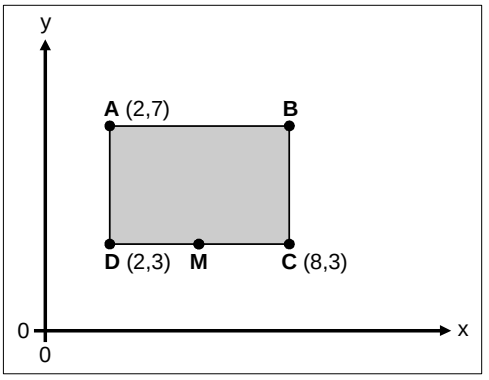
***'The point B has coordinates (11,5).'***

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

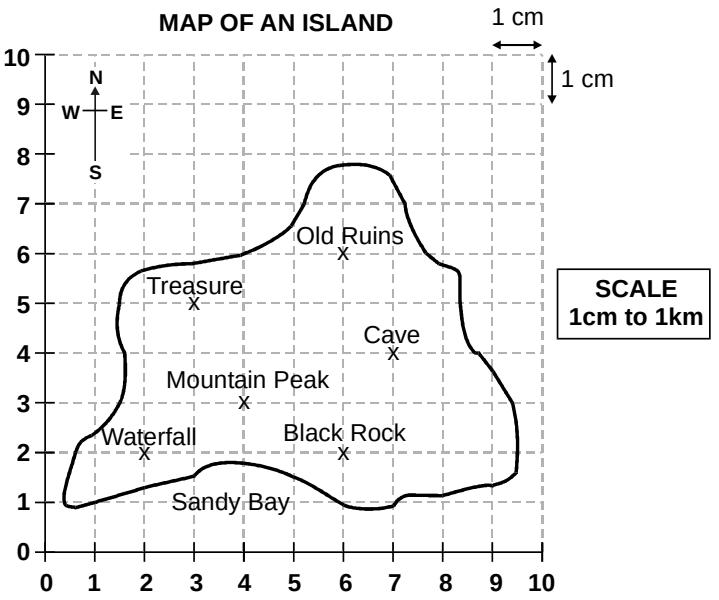
**M** is half way between **D** and **C**.

What are the co-ordinates of **M**? **(  ,  )**

1 mark

**8.**

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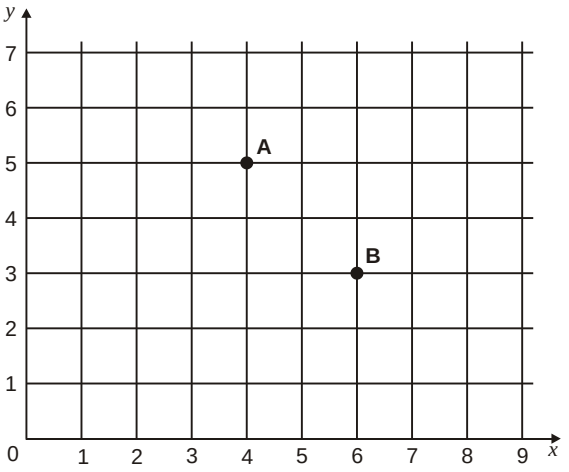

The Cave has co-ordinates **(7 , 4).**

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

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)

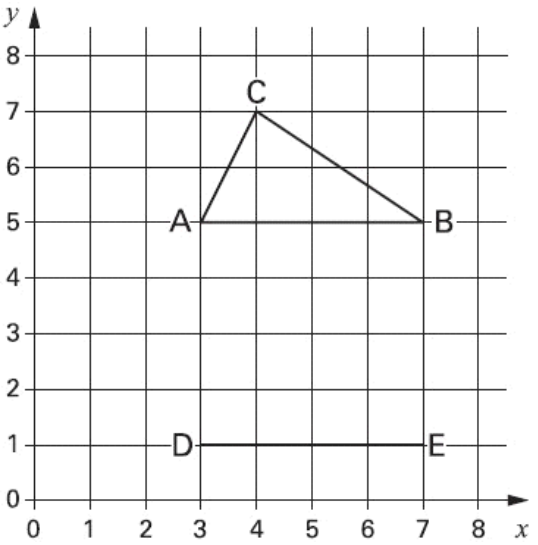
Write the coordinates of point **C.**

**( , )**

1 mark

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

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

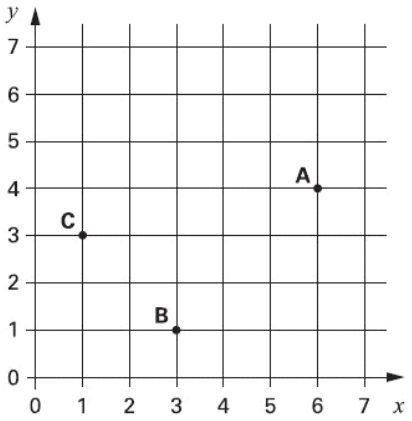
What will be the coordinates of point **F**?

( , )

1 mark

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**11.**



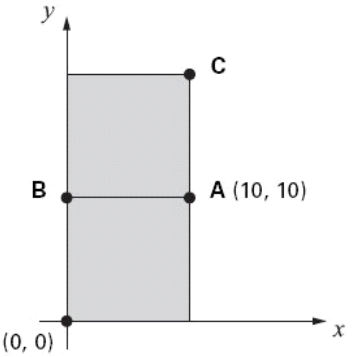

A, B and C are three corners of a rectangle.

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

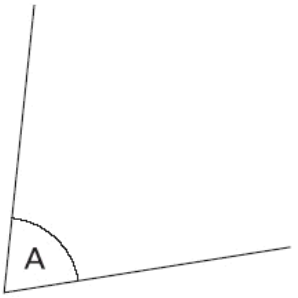
**C** is ( , )

1 mark

**13.** Measure **angle A** accurately.

Use a protractor (angle measurer).

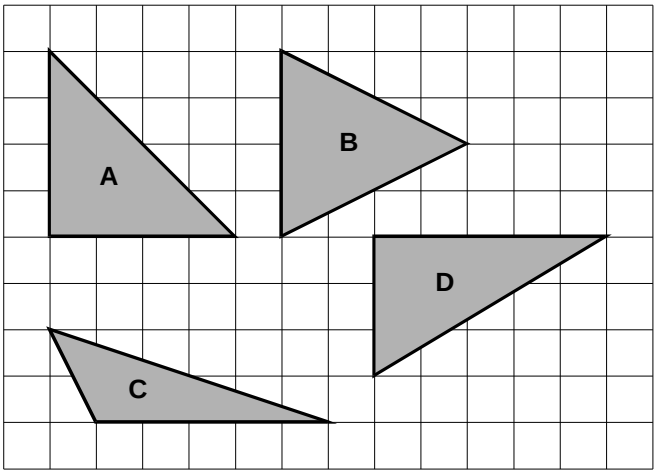
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**angle A =** ____ °

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.

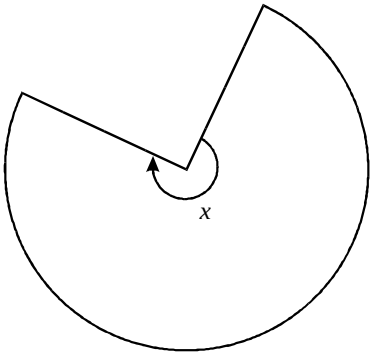
One has been done for you.

| | 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**.

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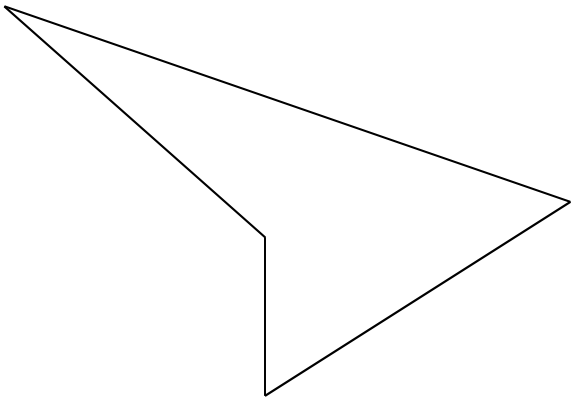



How many degrees is **angle *x***?

1 mark

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**16.**



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

Give your answer in millimetres.

**mm**

1 mark

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

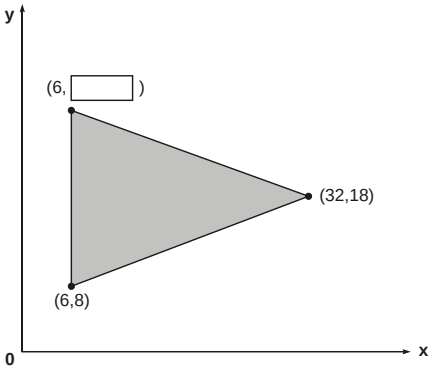
Use a protractor (angle measurer).

°

1 mark

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

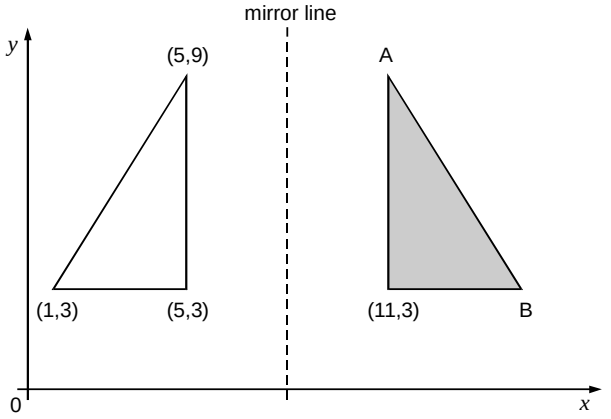
Write in the missing co-ordinate.




1 mark

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

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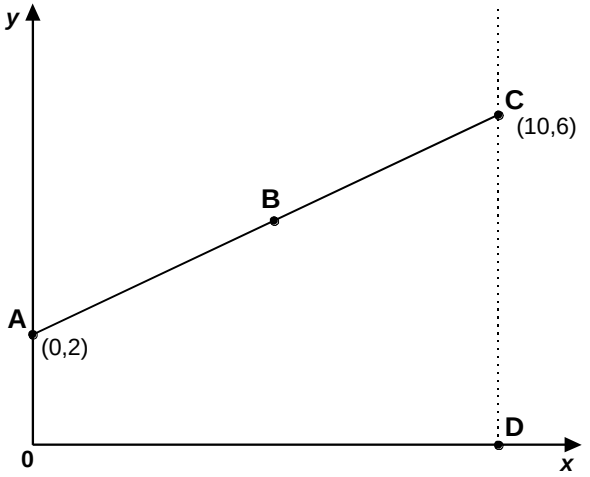
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Write the **co-ordinates** of point **A** and point **B**.

**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

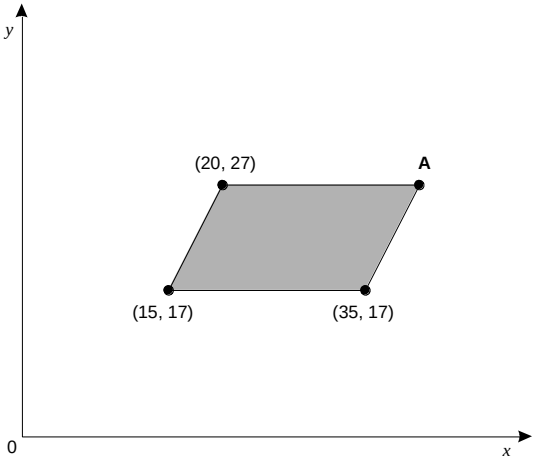
Point **D** is directly below point **C**.

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.**

( , )

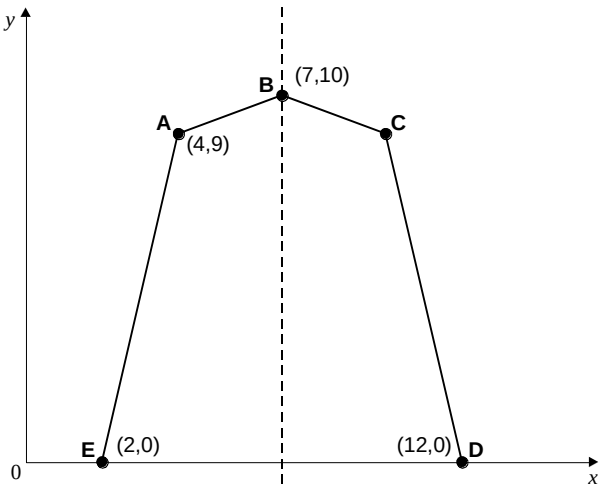
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1 mark

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

The pentagon is symmetrical.

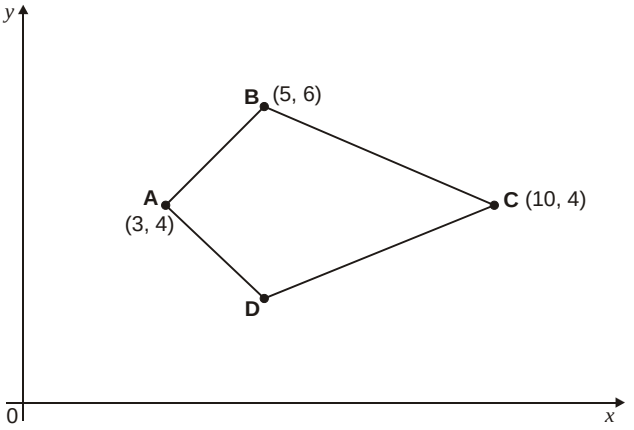



What are the coordinates of point **C**?

( , )

1 mark

**22.** Here is a kite.

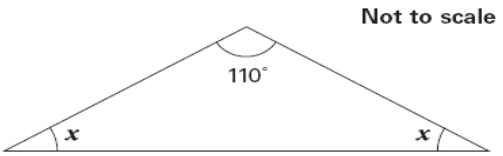



Write the coordinates of point **D**.

( , )

1 mark

**23.** Here is an isosceles triangle.




Calculate the size of angle $x$.

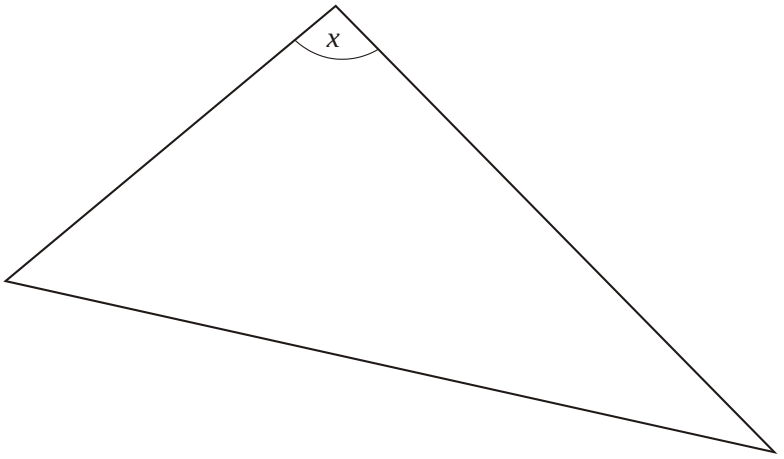
Do **not** use a protractor (angle measurer).

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$x$ = ____ °

1 mark

**24.**



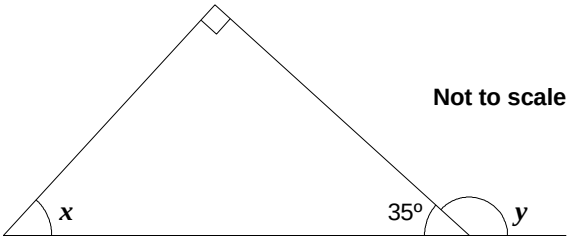

Measure angle $x$ accurately.

Use a protractor (angle measurer).

____

1 mark

**25.** Look at this diagram.




Calculate the size of angle $x$ and angle $y$.

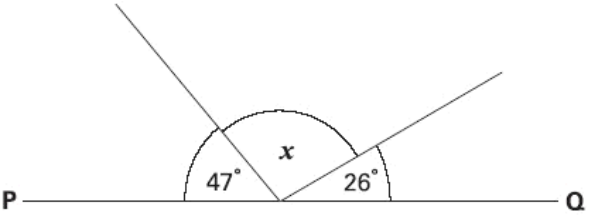
Do **not** use a protractor (angle measurer).

$x$ = ____ 1 mark $y$ = ____

1 mark

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

Not drawn accurately



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**Calculate** the size of angle $x$.

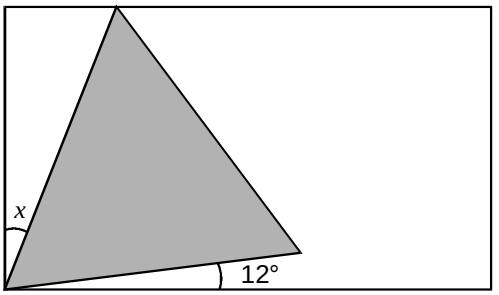
Do **not** use a protractor (angle measurer).

[ ] °

1 mark

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




**Not to scale**

Calculate the value of angle ***x***.

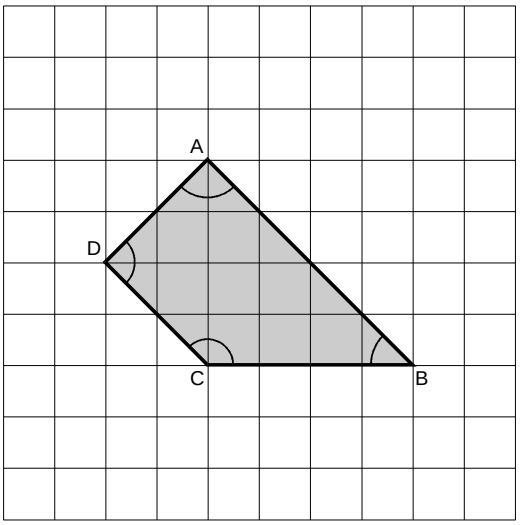
Do **not** use a protractor (angle measurer).

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

°

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. ☐

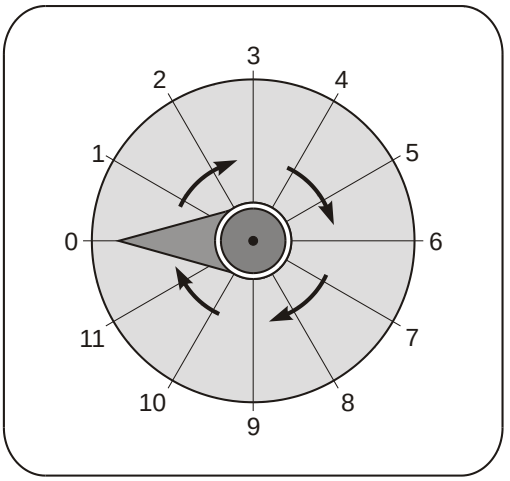
Line **AD** is **parallel** to line **BC**. ☐

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

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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°**?

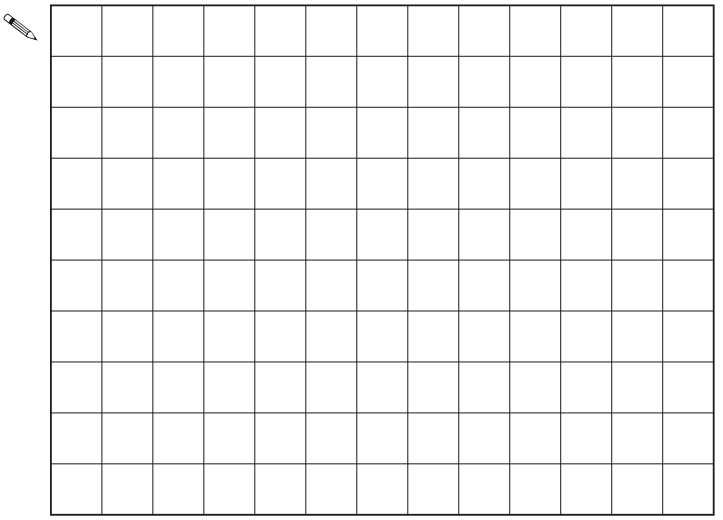
1 mark

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**.



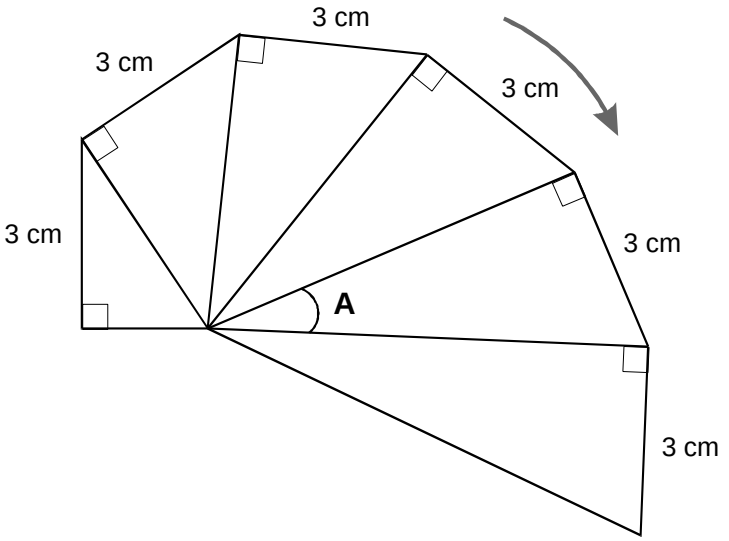
1 mark

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

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

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You may use an angle measurer.




2 marks

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

°

1 mark