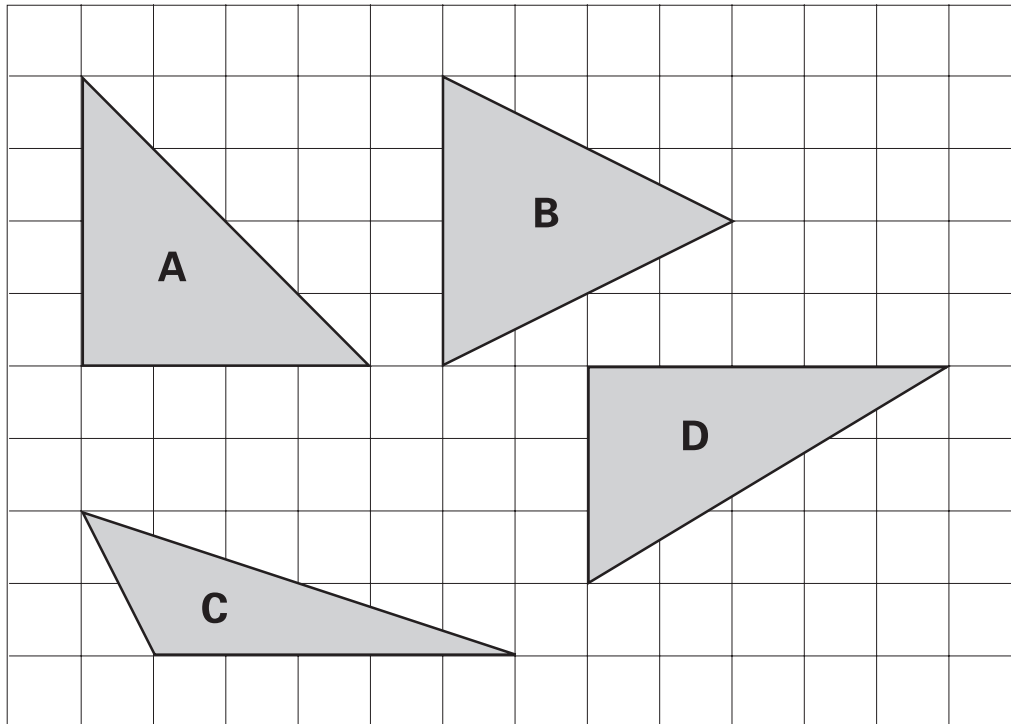


1

Here are four triangles drawn on a square grid.

[2002]



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

One has been done for you.



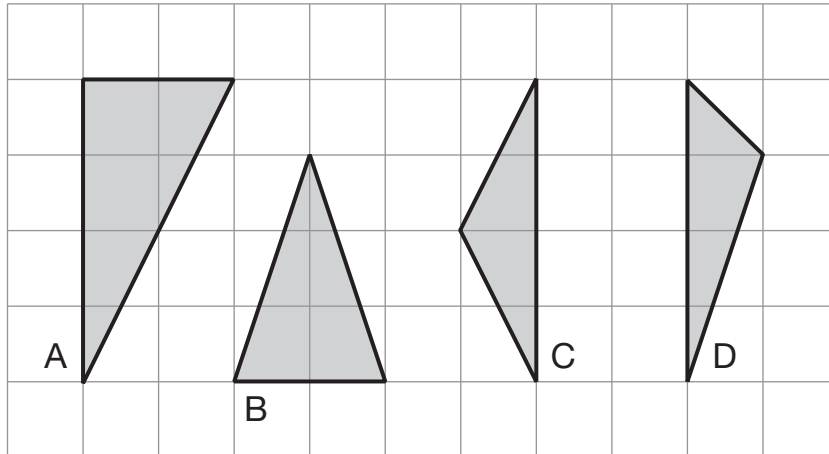
	has a right angle	has an obtuse angle	has 3 acute angles
is isosceles	A		
is not isosceles			

[2 marks]

2

Here are four triangles on a square grid.

[2007]



Write the letters of the **two isosceles** triangles.



_____ and _____

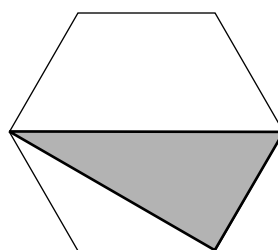
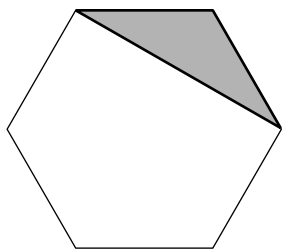
[1 mark]

3

These two shaded triangles are each inside a regular hexagon.

[2001]

Under each hexagon, put a ring around the correct name of the shaded triangle.



equilateral

equilateral

isosceles

isosceles

scalene

scalene

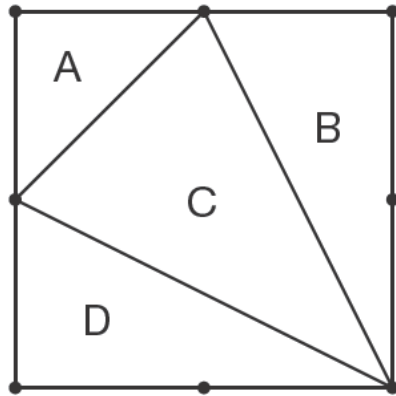
[1 mark]

4

This diagram shows a square with dots at the vertices and at the middle of each side.

[2012]

The square is divided into four triangles, **A**, **B**, **C** and **D**.



Write the letters of all the triangles that have a **right angle**.



Write the letters of all the **isosceles** triangles.



[2 marks]

5

Anna has four **different** triangles.

[Extra]

Complete the table to show the size of the angles in each triangle.

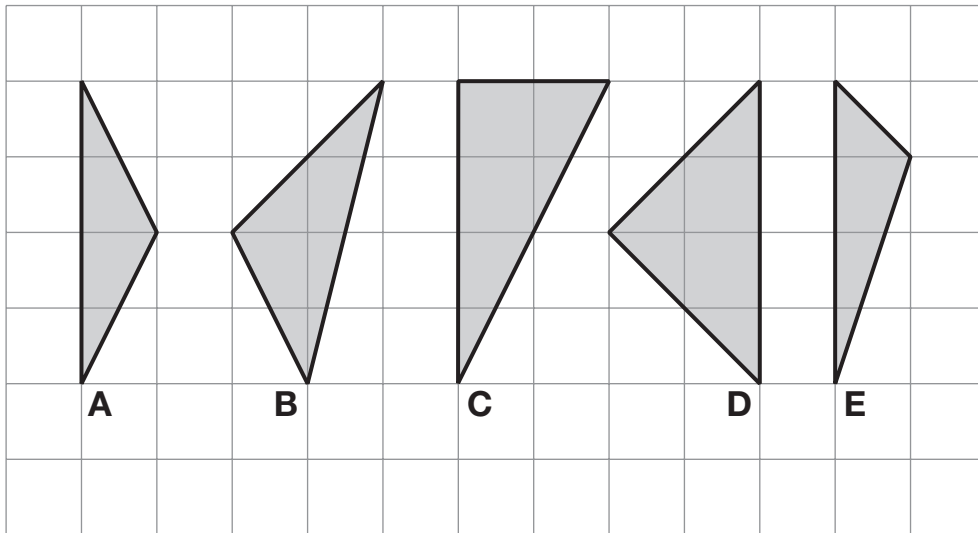
Type of triangle	Angle 1	Angle 2	Angle 3
Isosceles	90°		
Right-angled	80°		
Isosceles	70°		
Isosceles	70°		

[2 marks]

6

Here are five shaded triangles on a square grid.

[2010]



Write the letter of each triangle that has a right angle.



Write the letter of each triangle that has two equal sides.



[2 marks]

7

A triangle has **three equal sides**.

[Extra]

Write the sizes of the **angles** in this triangle.



_____ °, _____ °, _____ °

A **right-angled triangle** has **two equal sides**.

Write the sizes of the **angles** in this triangle.



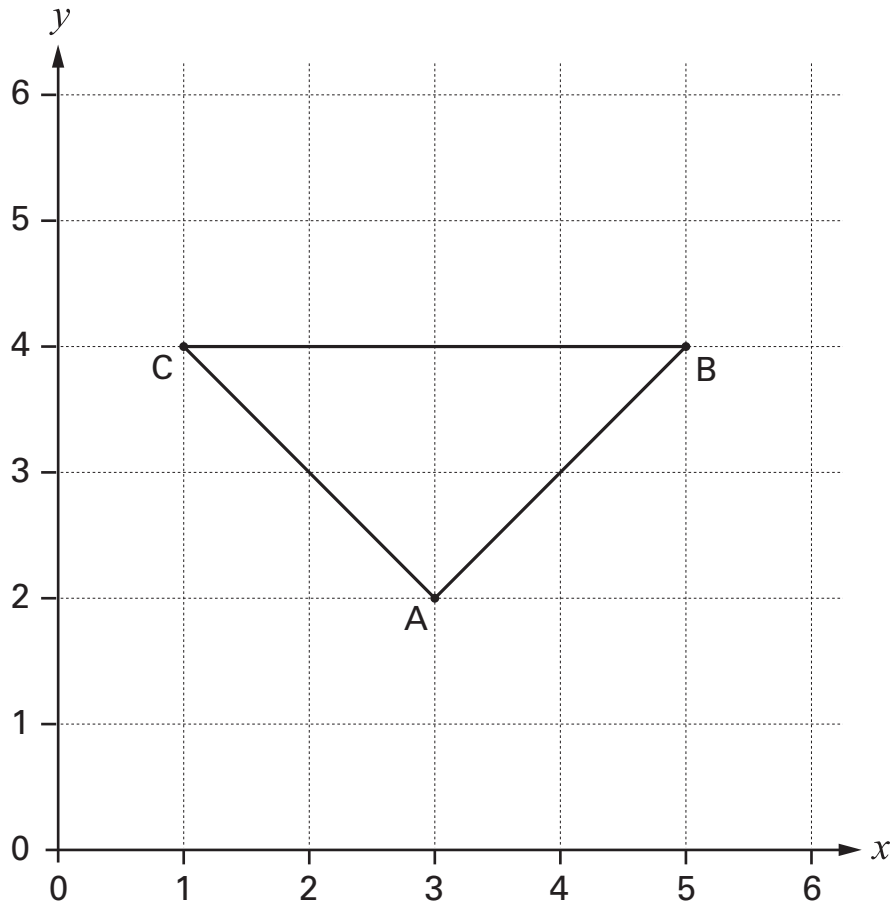
_____ °, _____ °, _____ °

[2 marks]

8

Look at the triangle ABC, drawn on a square grid.

[Extra]



Here are some statements about triangle ABC.

For each statement tick (✓) True or False.

	True	False
The triangle is isosceles.	<input type="checkbox"/>	<input type="checkbox"/>
The triangle has only one line of symmetry.	<input type="checkbox"/>	<input type="checkbox"/>
The triangle is right-angled.	<input type="checkbox"/>	<input type="checkbox"/>
The coordinates of A are (2, 3)	<input type="checkbox"/>	<input type="checkbox"/>

[2 marks]

9

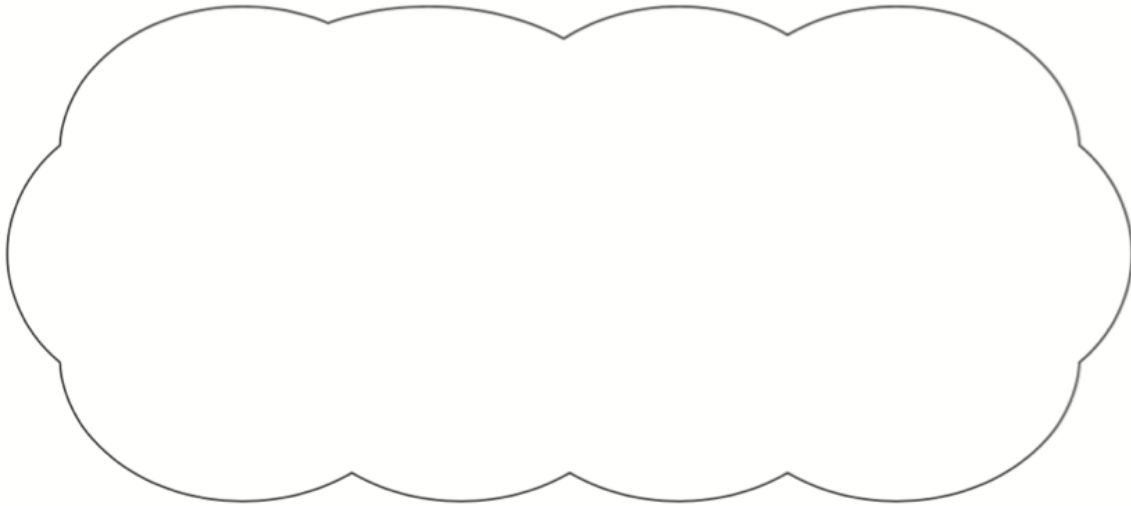
Jamie draws a triangle.

[2007]

He says,

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

Explain why Jamie **cannot** be correct.



[1 mark]

10

Here are four statements.

[2005]

For each statement put a tick (✓) if it is **possible**.
Put a cross (✗) if it is **impossible**.



A triangle can have 2 acute angles.

A triangle can have 2 obtuse angles.

A triangle can have 2 parallel sides.

A triangle can have 2 perpendicular sides.

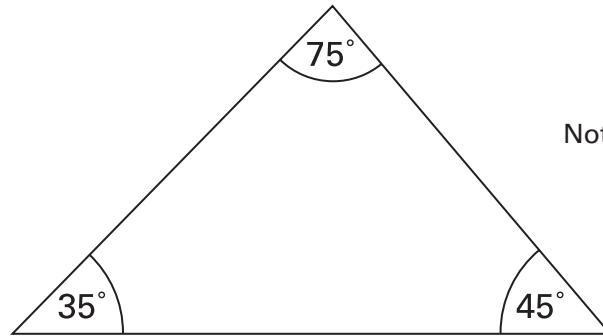
[2 marks]

11

Tina measures the angles in a triangle.

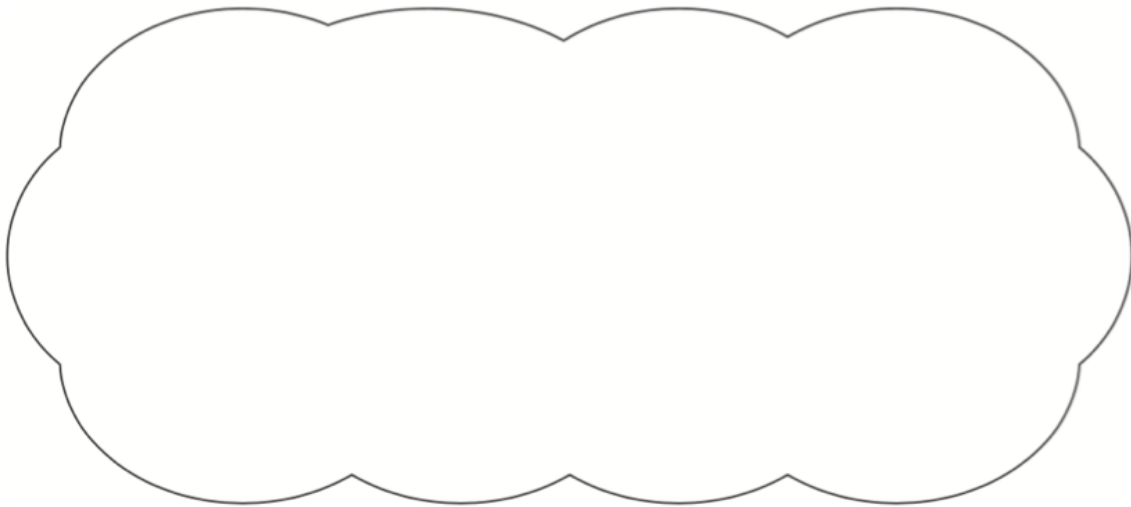
[Extra]

The sketch shows her results.



Not drawn accurately

How can you tell that Tina has made a mistake?



[1 mark]

12

An isosceles triangle has a perimeter of 12cm.

[2003]

One of its sides is 5cm.

What could the length of each of the other two sides be?

Two different answers are possible.

Give **both** answers.



cm

and

cm

cm

and

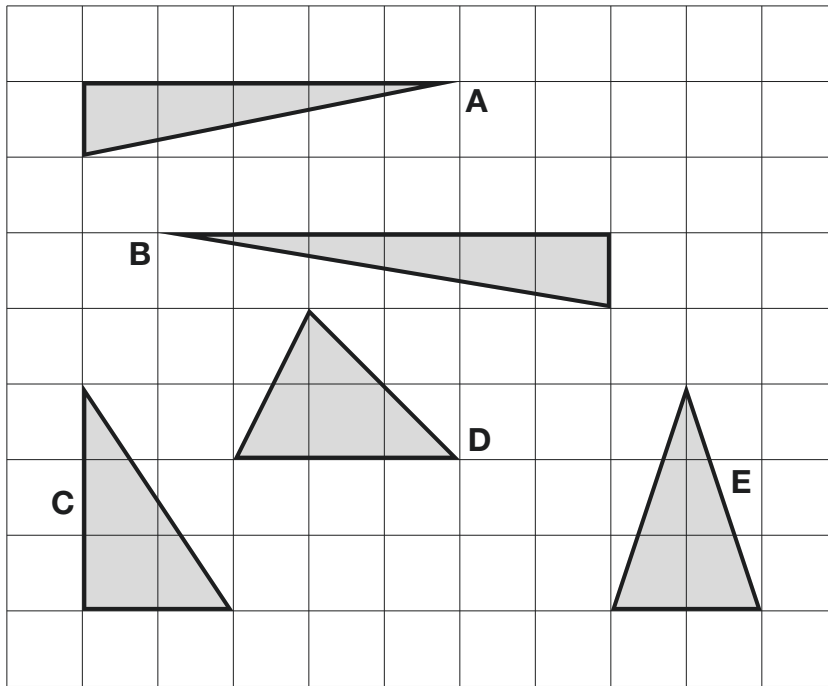
cm

[2 marks]

13

Here are five triangles on a square grid.

[2016]



Four of the triangles have the same area.

Which triangle has a **different** area?

[1 mark]

14

Is it possible to draw a triangle with **sides** 150cm, 10cm and 10cm?

[Extra]

Yes

No

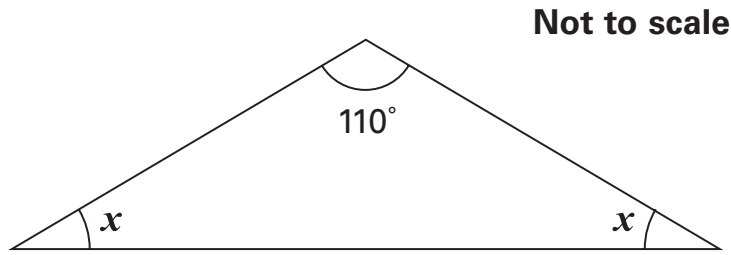
Explain your answer.

[1 mark]

15

Here is an isosceles triangle.

[2005]



Calculate the size of angle x .

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

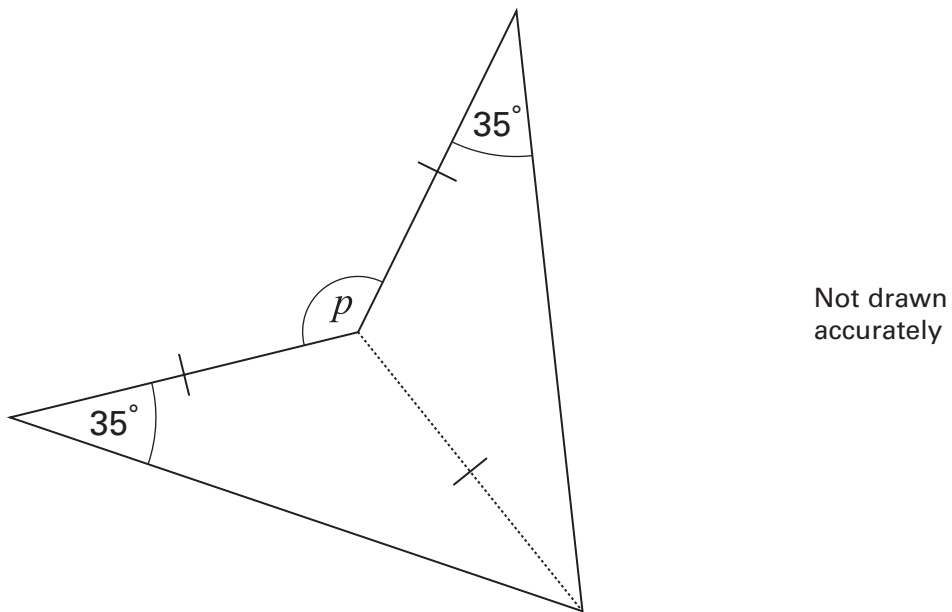
 $x =$

[1 mark]

16

This shape has been made from two congruent **isosceles** triangles.

[Extra]



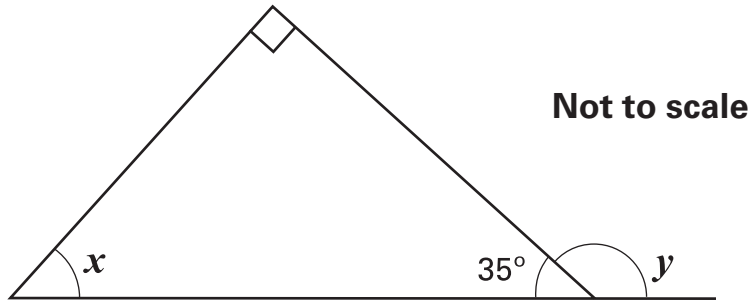
What is the size of angle p ?

[2 marks]

17

Look at this diagram.

[2002]

Calculate the size of angle x and angle y .Do **not** use a protractor (angle measurer).

$$x = \boxed{}^\circ$$

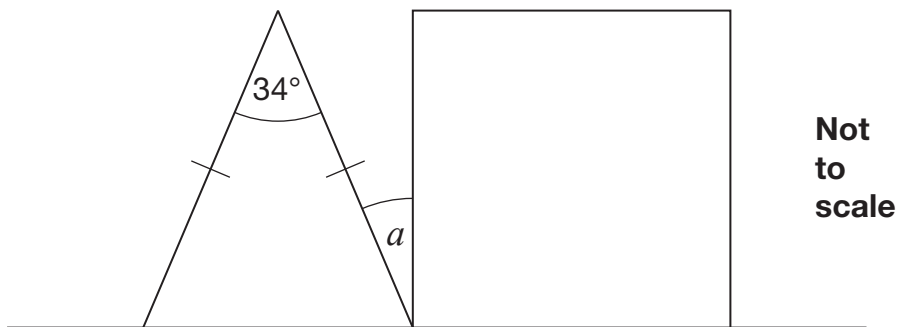
$$y = \boxed{}^\circ$$

[2 marks]

18

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

[Extra]

Calculate angle a .

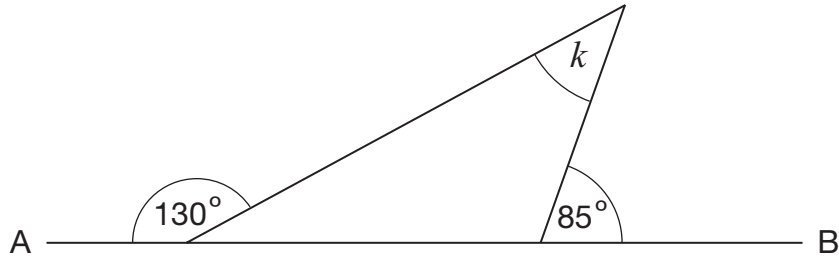
[2 marks]

19

Look at the diagram.

[Extra]

Not drawn accurately



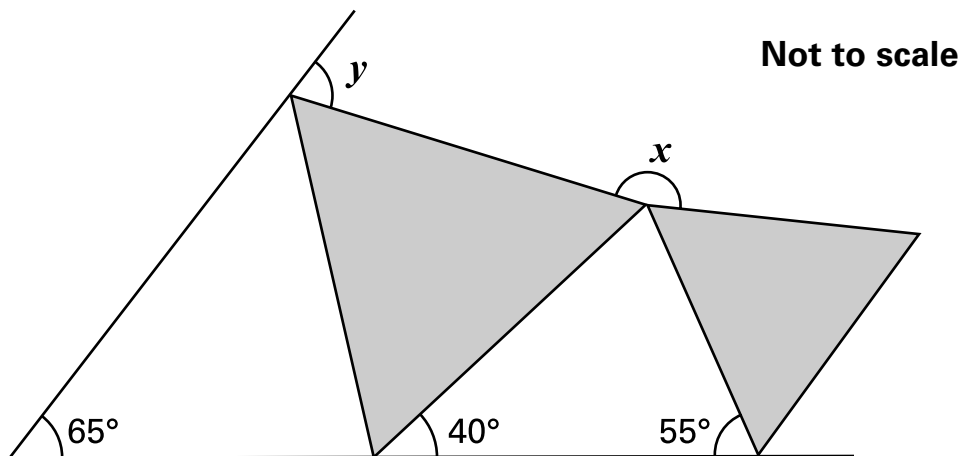
AB is a straight line.

Work out the size of angle k

[2 marks]

20The diagram shows two shaded **equilateral triangles**.

[2001]

Calculate the size of the **angle x** and **angle y** .Do **not** use a protractor (angle measurer). $x =$

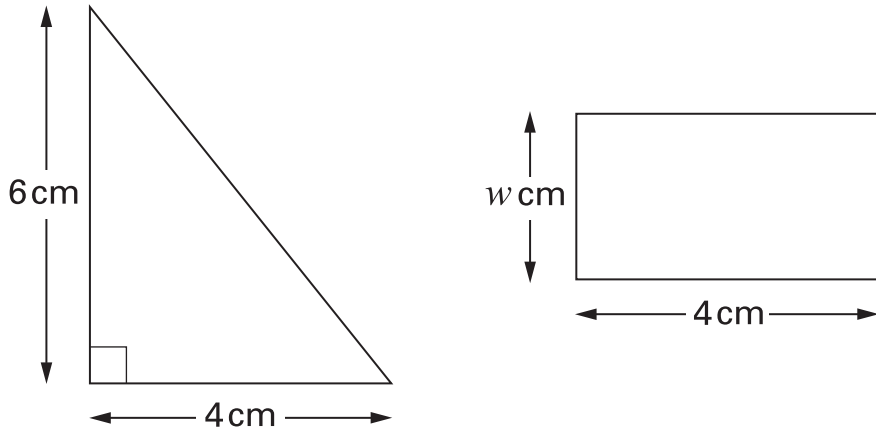
 $y =$

[2 marks]

21

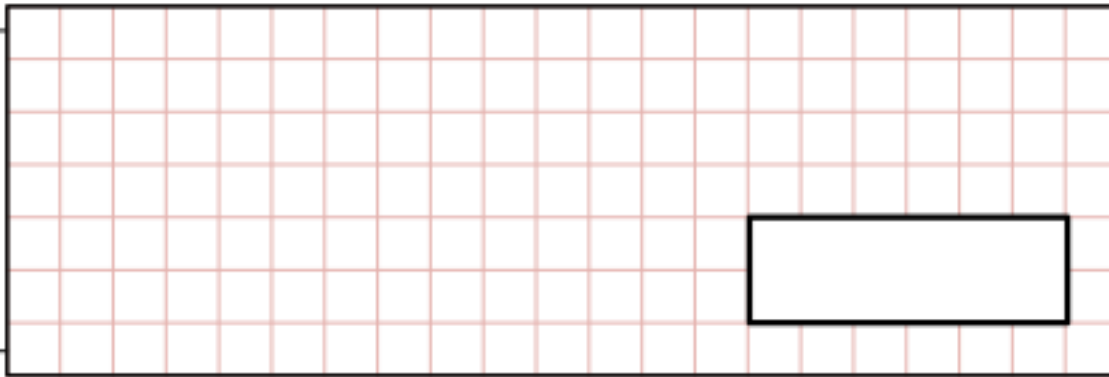
The triangle and the rectangle below has the **same area**.

[Extra]



Work out the value of w .

Show your method

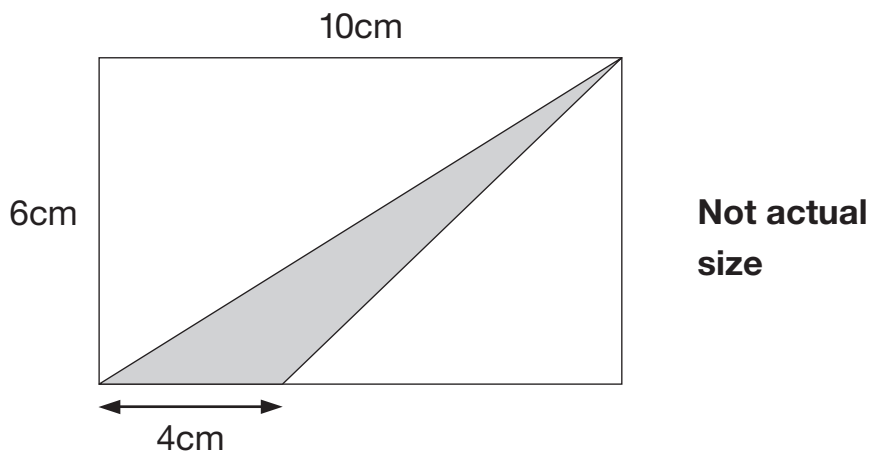


[2 marks]

22

The diagram shows a shaded triangle inside a rectangle.

[Extra]



What is the area of the shaded triangle?

[2 marks]