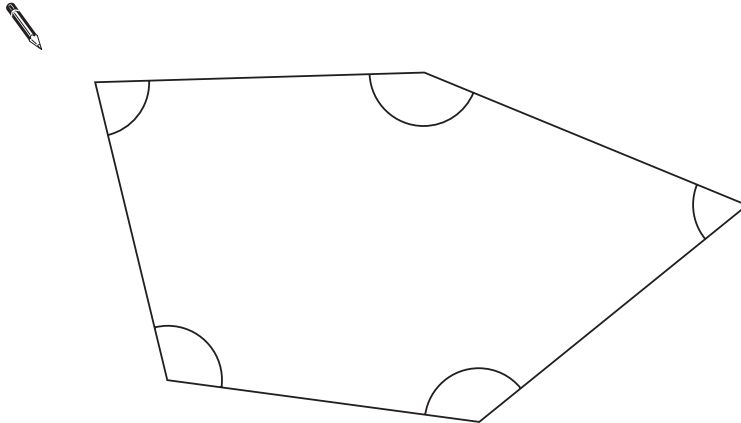


1

Look at this shape.

[2009]

Tick (✓) each angle that is **less** than a right angle.



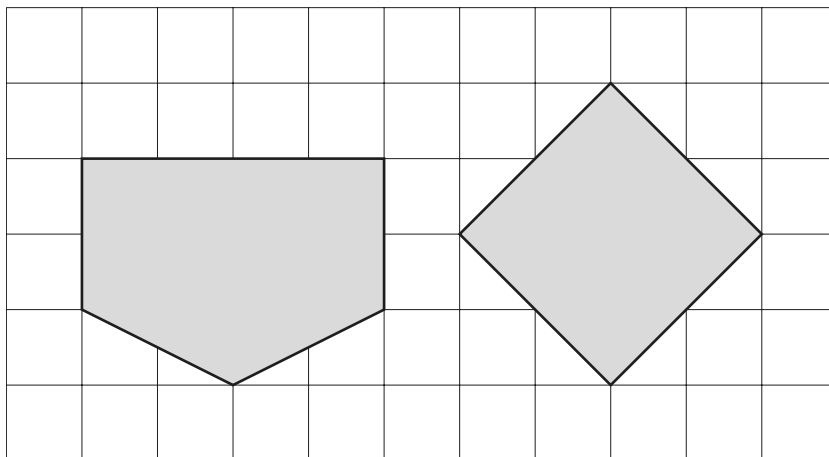
[1 mark]

2

Here are two shapes on a square grid.

[2015]

For each shape, write how many **right angles** it has.

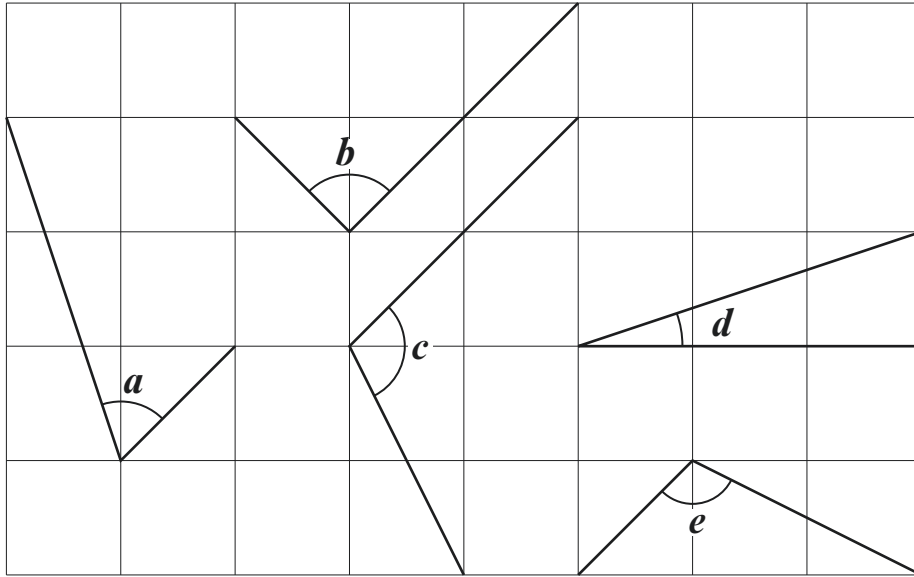


[1 mark]

3

Here are five angles marked on a grid of squares.

[2016]



Write the letters of the angles that are **obtuse**.

Write the letters of the angles that are **acute**.

[2 marks]

4

Look at the letters below.

[2017]

Circle the letter below that has both parallel **and** perpendicular lines.

A C E L Z

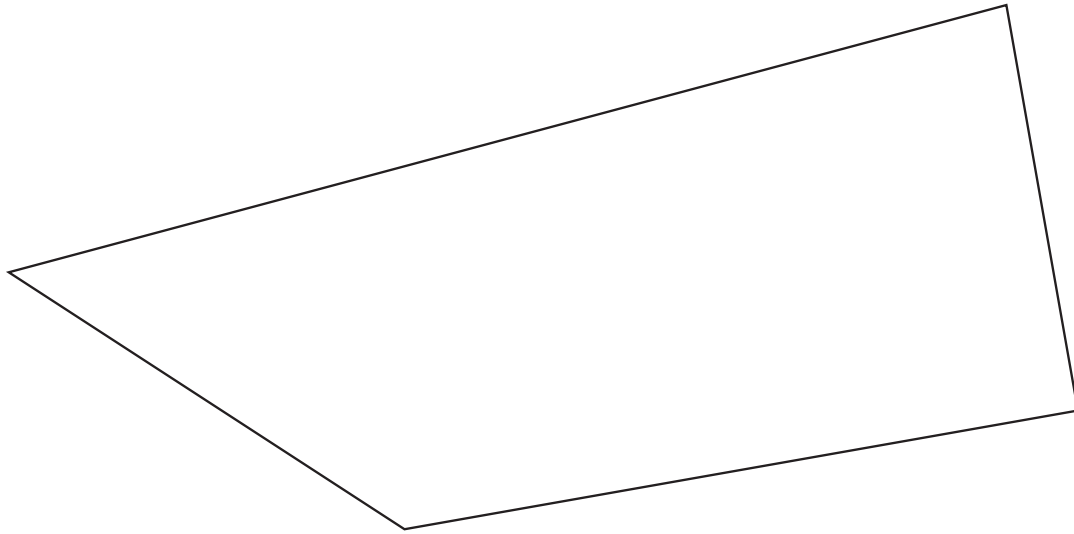
[1 mark]

5

In this shape, one of the angles is **obtuse**.

[2014]

Tick (✓) the obtuse angle.

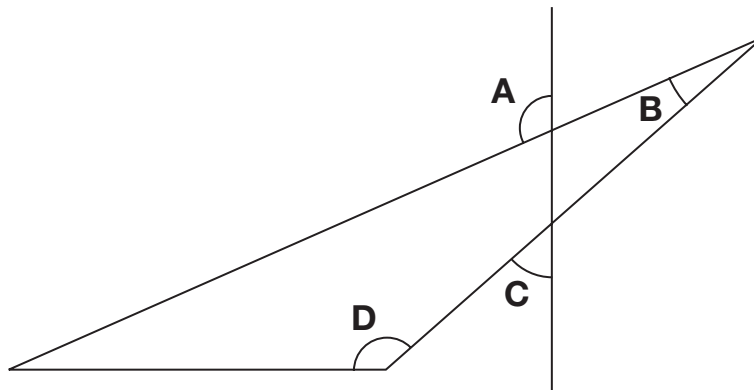


[1 mark]

6

This diagram has four angles marked **A**, **B**, **C** and **D**.

[2011]



Write the letters of the angles that are **obtuse** angles.

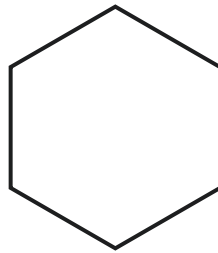
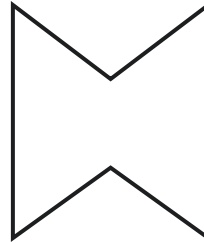
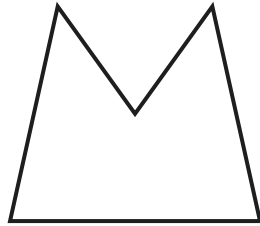
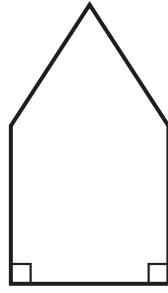
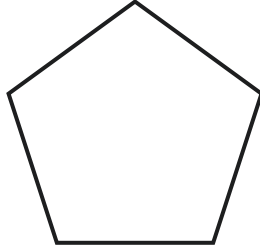


[1 mark]

7

Circle the pentagon with exactly four acute angles.

[2017]

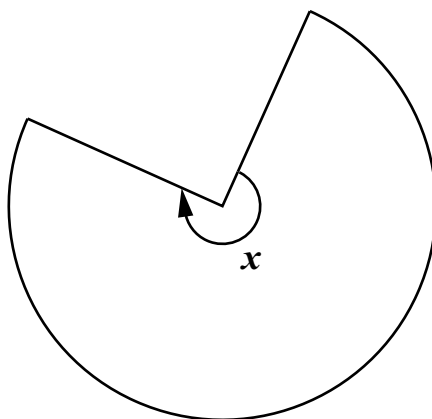


[1 mark]

8

This shape is three-quarters of a circle.

[2001]



How many degrees is angle x ?



[1 mark]

9

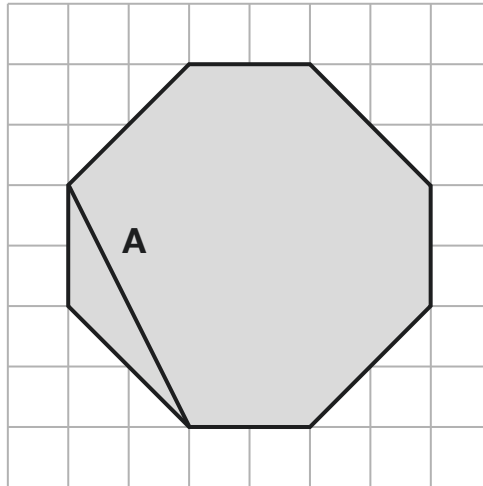
The diagram shows a shaded octagon on a square grid.

[2016S]

Line **A** joins two vertices of the octagon.

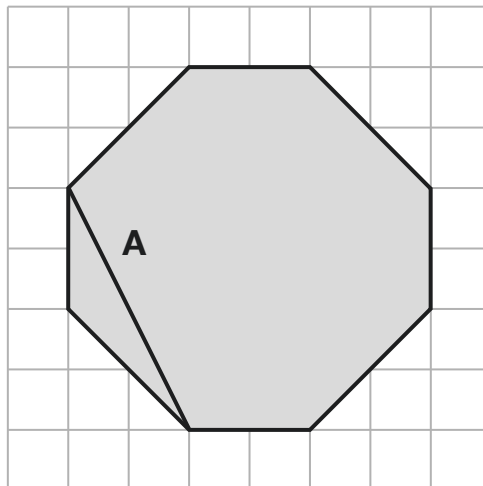
Join two other vertices to draw a line **parallel** to line **A**.

Use a ruler.



Join two vertices to draw a line **perpendicular** to line **A**.

Use a ruler.



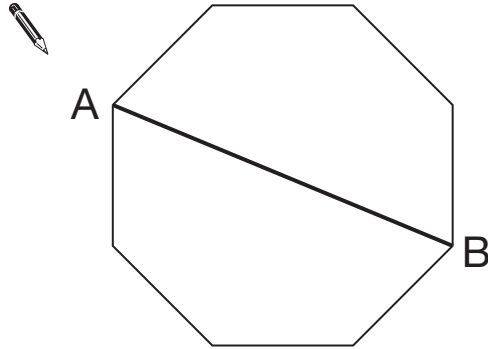
[2 marks]

10

[2008]

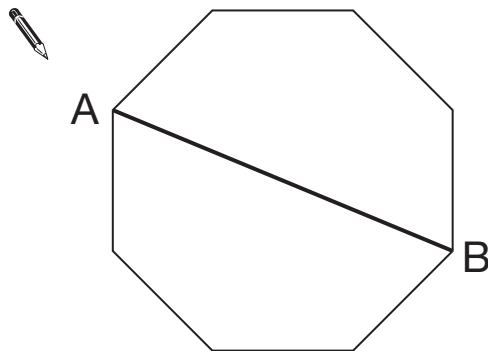
Here is a regular octagon with two vertices joined to make the line AB.

Join two other vertices to draw **one** line that is **parallel** to the line AB.



Here is the octagon again.

Join two vertices to draw **one** line that is **perpendicular** to the line AB.



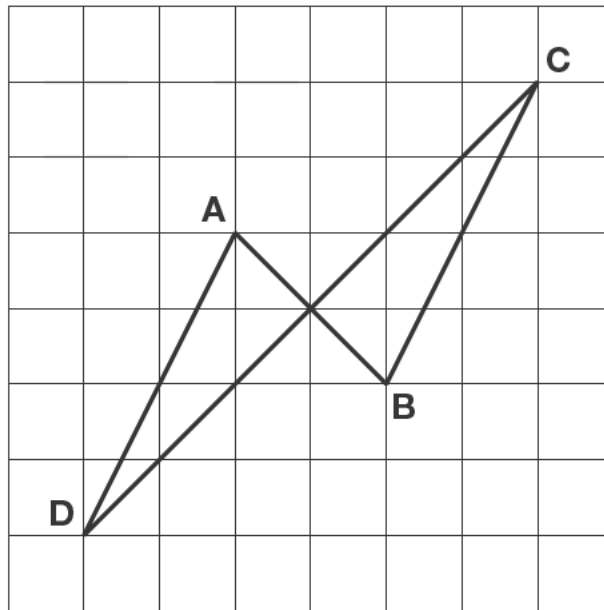
[2 marks]

11

The diagram shows four lines drawn on a square grid.

[2012]

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

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



AB

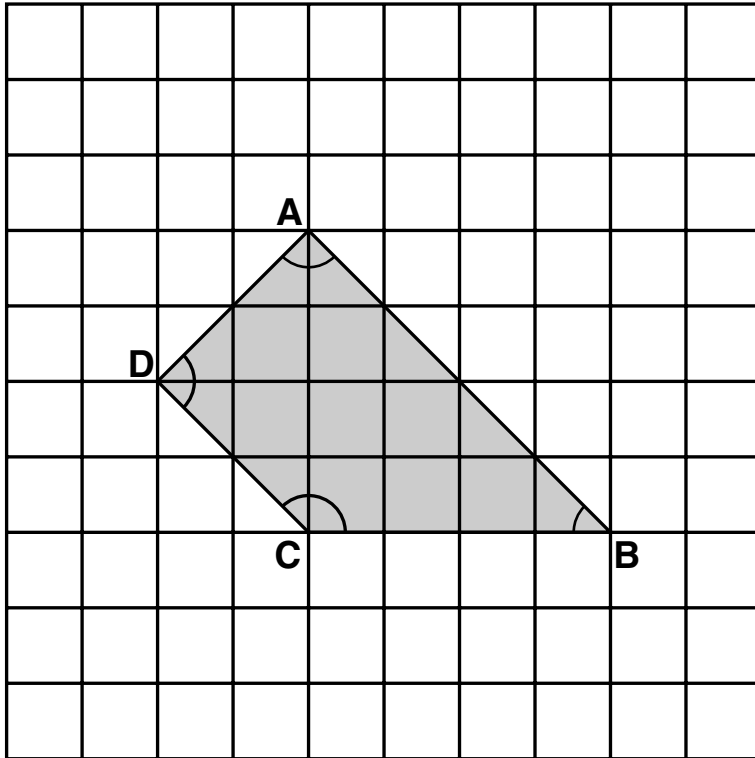
BC

CD

DA

[2 marks]

[2000]



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**.

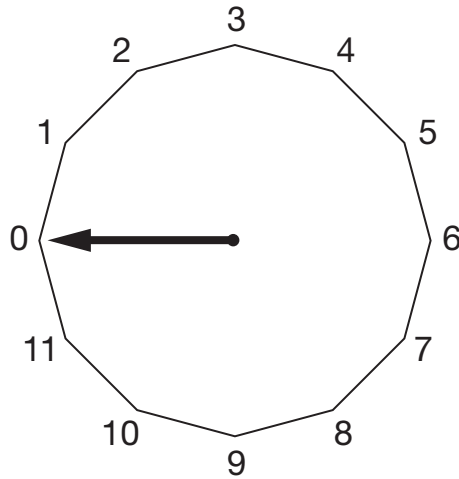
Line **AB** is **perpendicular** to line **AD**.

[2 marks]

13

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

[2008]



Ben turns the pointer from zero, clockwise through 150°

Which number will the pointer now be at?



Nisha turns the pointer clockwise from number 2 to number 11

Through how many degrees does the pointer turn?

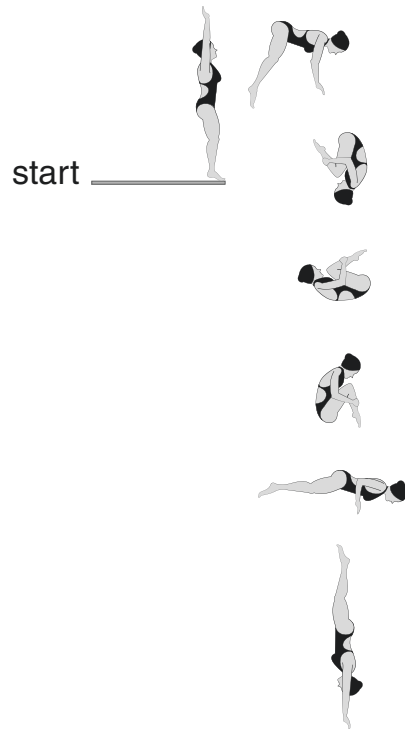


[2 marks]

14

Layla completes one-and-a-half somersaults in a dive.

[2017]

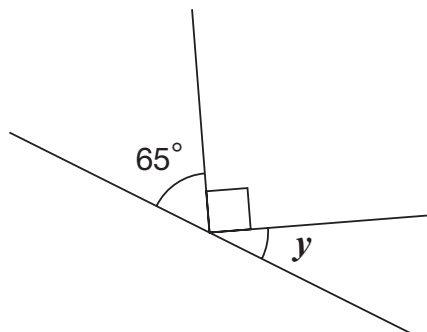


How many **degrees** does Layla turn through in her dive?

[1 mark]

15

[2009]



Not to scale

Calculate the size of angle y in this diagram.

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

 $y =$

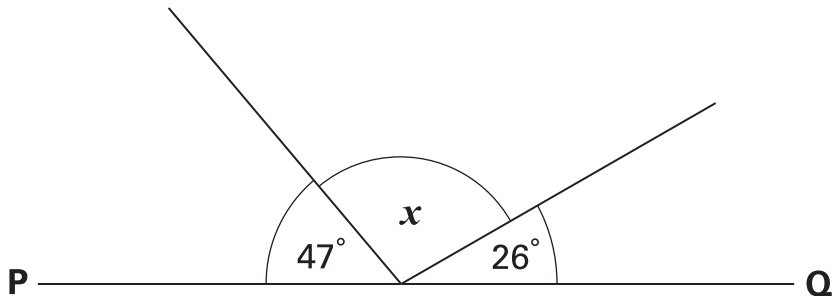
[1 mark]

16

PQ is a straight line.

[Extra]

Not drawn accurately



Calculate the size of angle x .

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



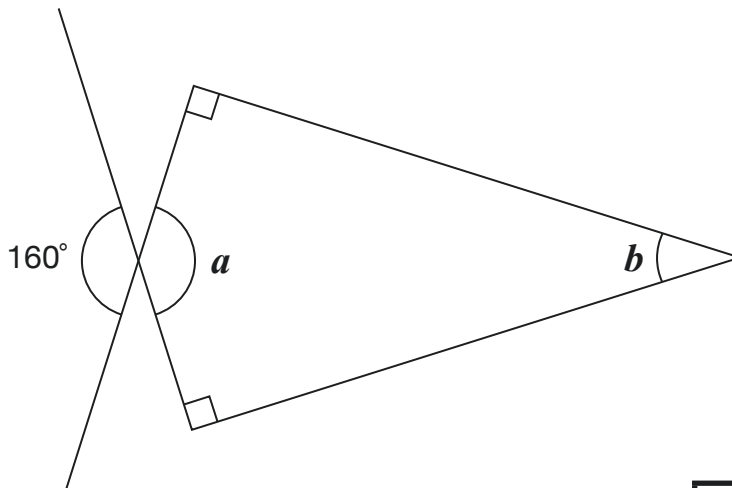
[1 mark]

17

Calculate the size of angles a and b in this diagram.

[2016]

Not to scale



$a =$

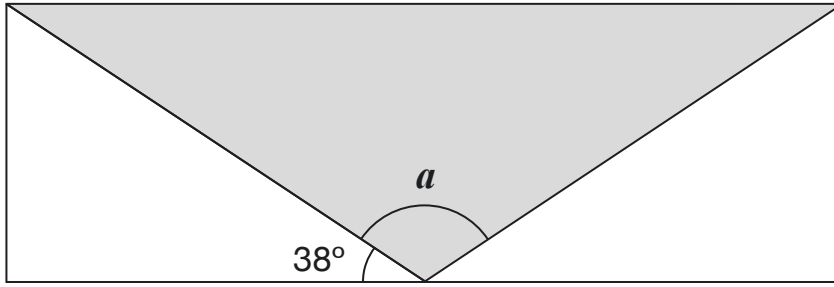
$b =$

[2 marks]

18

A shaded **isosceles** triangle is drawn inside a rectangle.

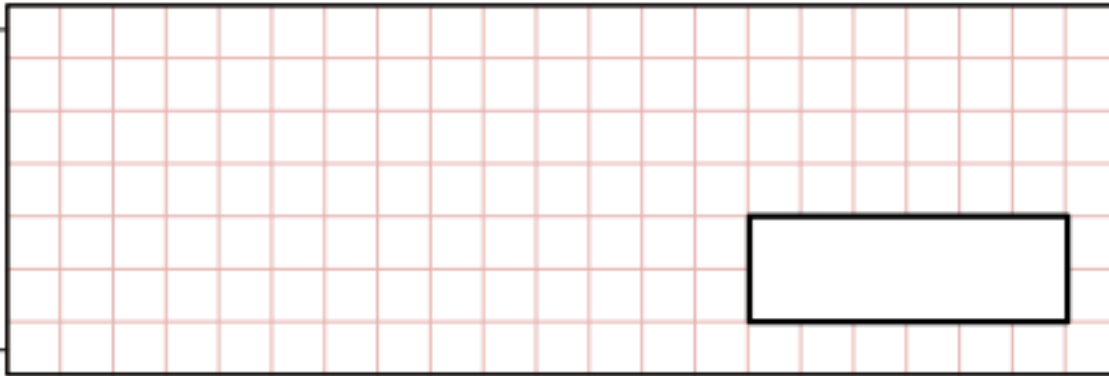
[2016S]



Not
to
scale

Calculate the size of angle a .

Show your method

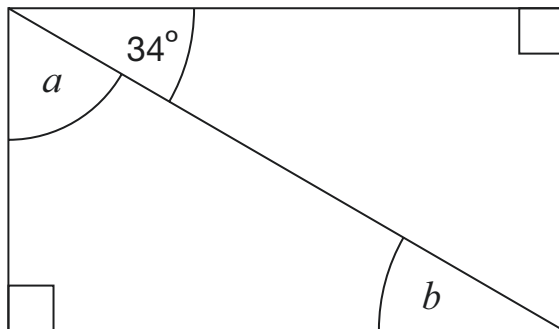


[2 marks]

19

Here is a rectangle.

[2015]



Not to
scale

Calculate the size of angles a and b .

Do not measure the angles.

 $a =$

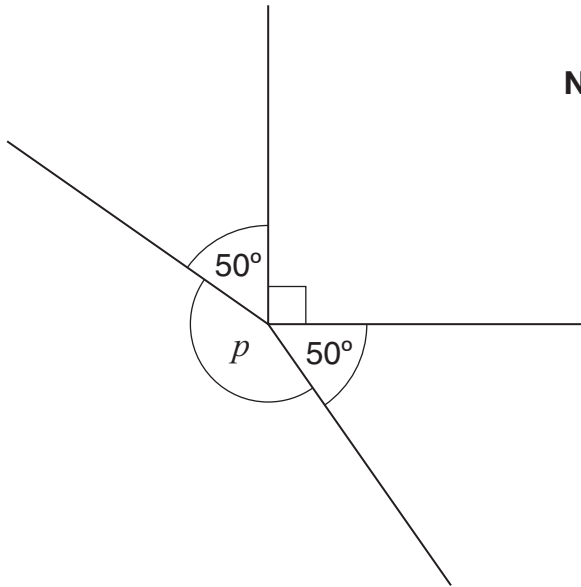
$b =$

[1 mark]

20

[2013]

Not to scale



Calculate the size of angle p in the diagram.

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

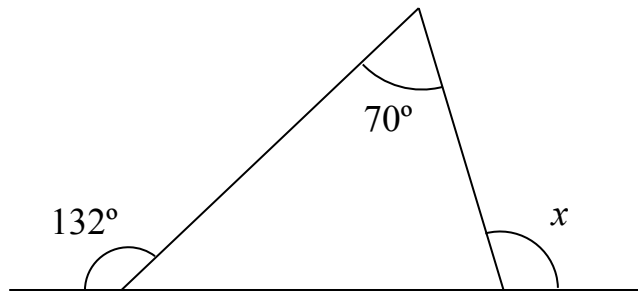


[1 mark]

21

Calculate the size of angle x

[Extra]



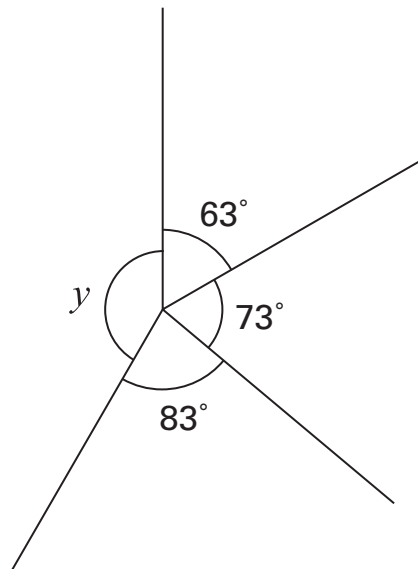
Show your method

[2 marks]

22

Calculate the size of angle y

[Extra]



Not drawn accurately

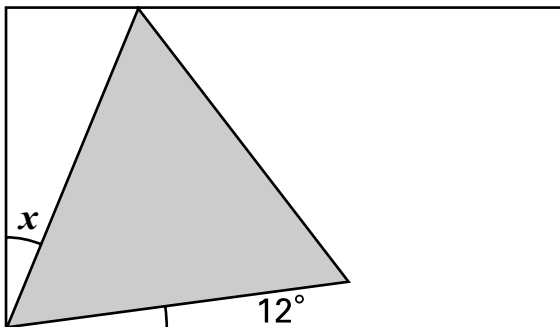


[2 marks]

23

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

[2001]



Not to scale

Calculate the value of angle x .

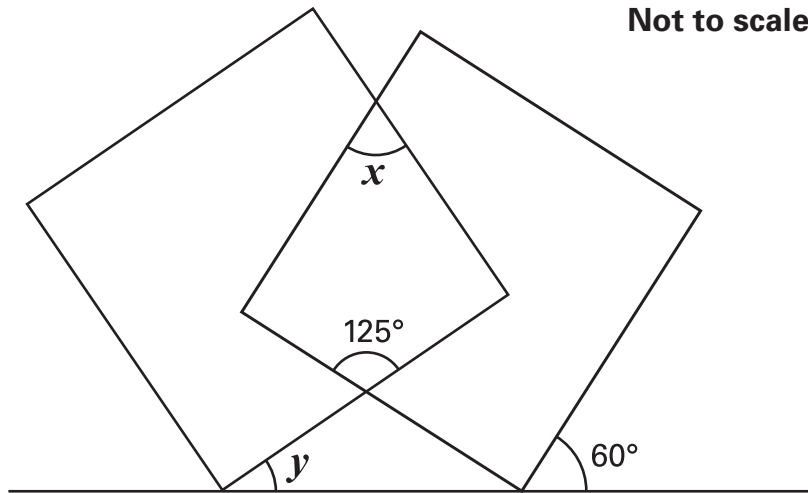
Do **not** use a protractor (angle measurer).

Show your method

[2 marks]

The diagram shows two overlapping squares and a straight line.

[2000]



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

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

 $x =$

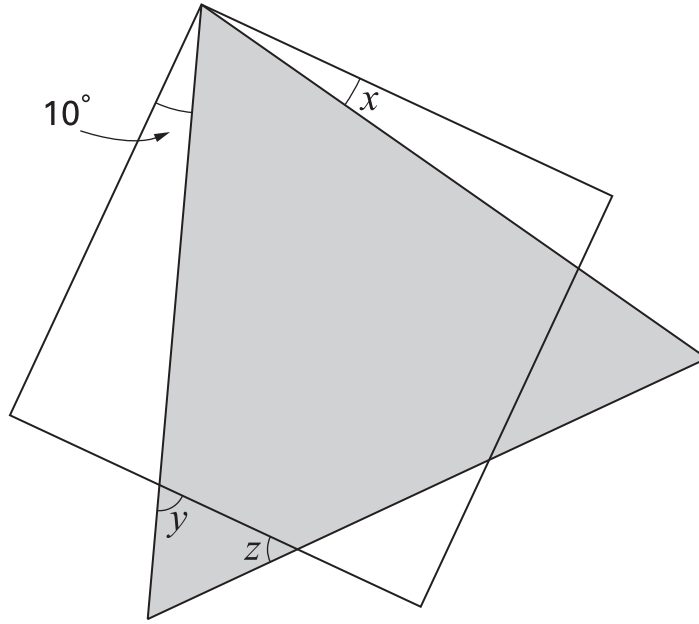
 $y =$

[2 marks]

25

The diagram shows a **square** and an **equilateral triangle**.

[Extra]



Not drawn accurately

Calculate the sizes of angles x , y and z



$x = \dots\dots\dots^\circ$

$y = \dots\dots\dots^\circ$

$z = \dots\dots\dots^\circ$

[3 marks]