



Help Code : 022

LINES

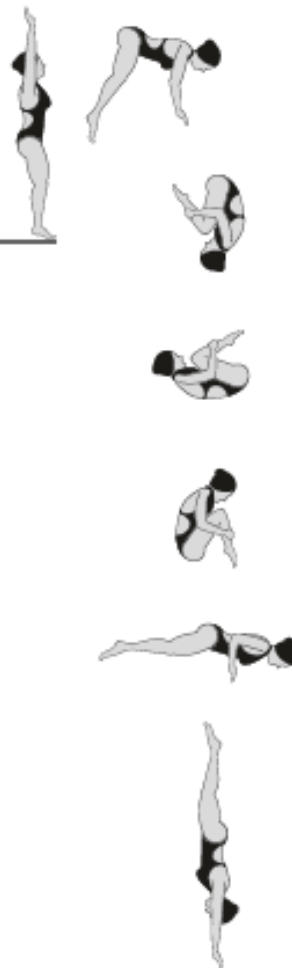
ANGLES + CONSTRUCTION

16

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



start _____



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

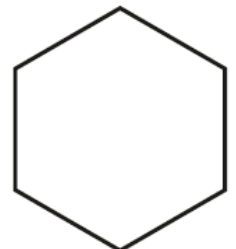
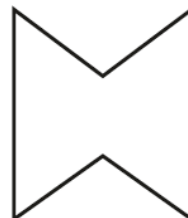
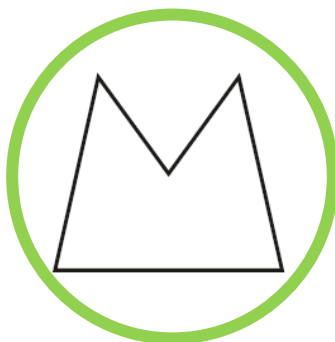
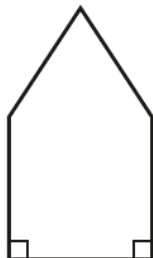
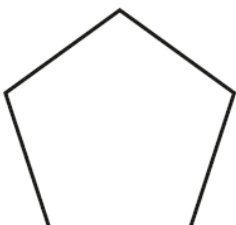
540

°

13

Circle the **pentagon** with exactly **four acute angles**.

YouTube



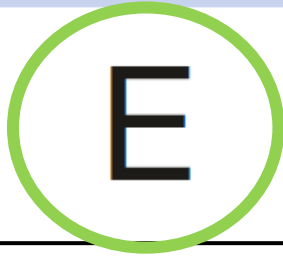
15

Look at the letters below.

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

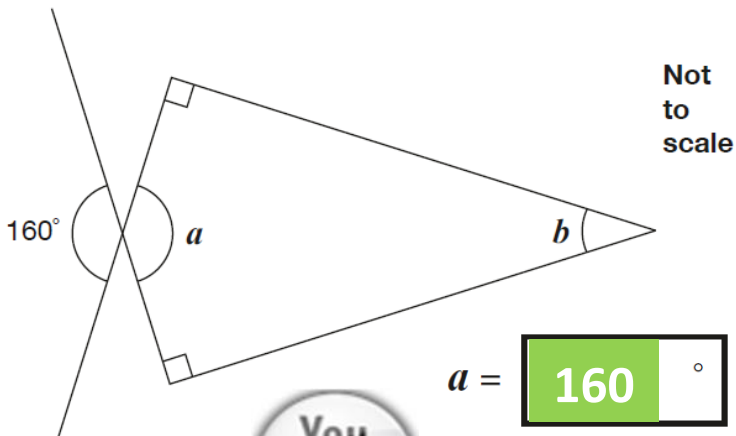


A C E L Z



17

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



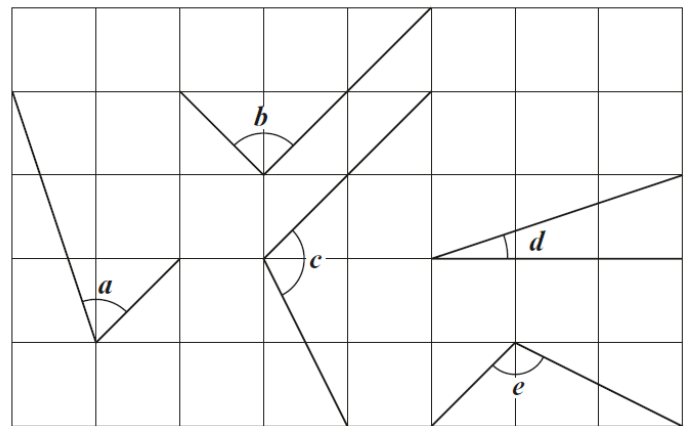
$a =$ °

$b =$ °



7

Here are five angles marked on a grid of squares.

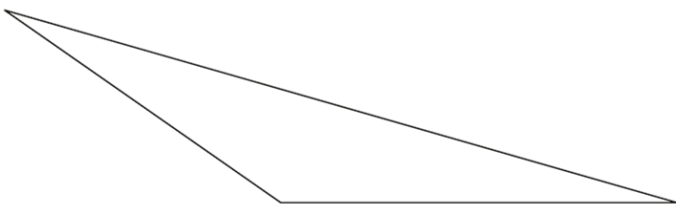


Write the letters of the angles that are **obtuse**.

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

9

Here is a triangle.



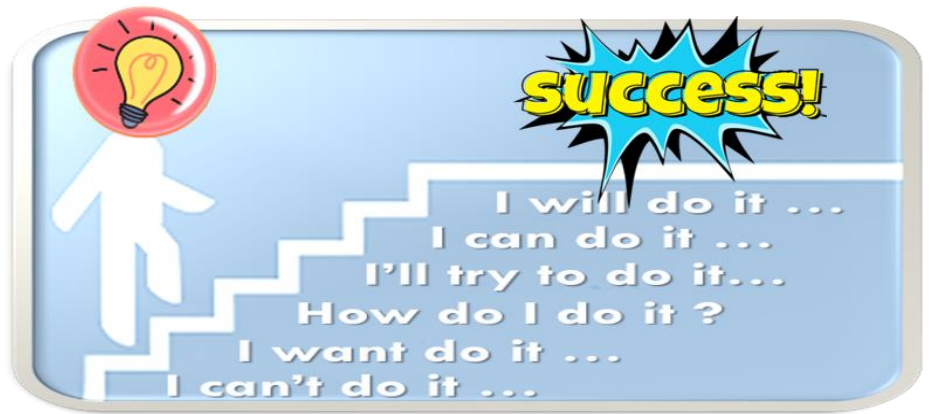
Measure the shortest side accurately, in centimetres.

cm

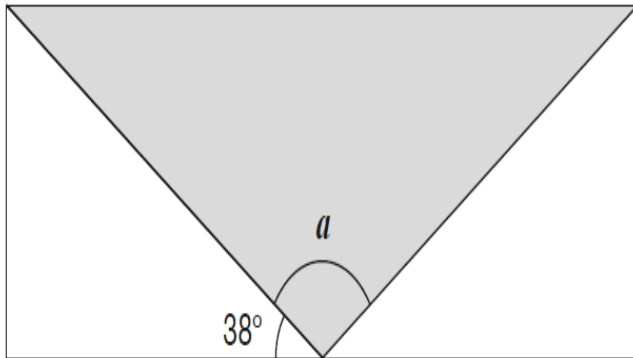
Measure the largest angle.

°





15 A shaded isosceles triangle is drawn inside a rectangle.



Not to scale

Calculate the size of angle a .



Show your method

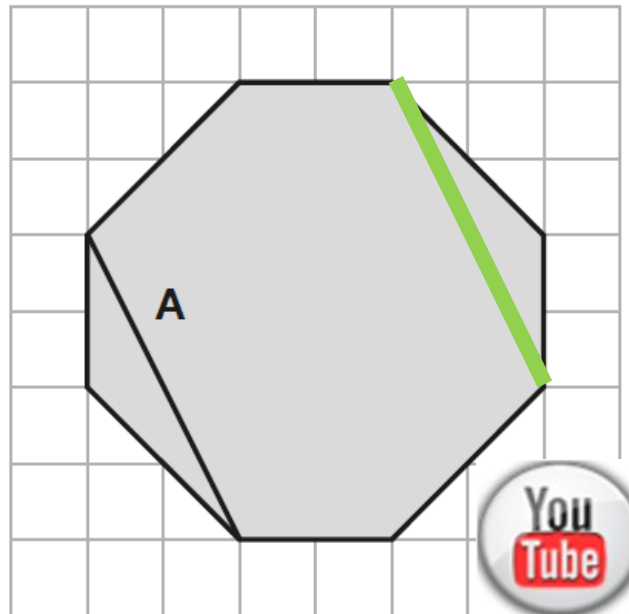
a is 104

13 The diagram shows a shaded octagon on a square grid.

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

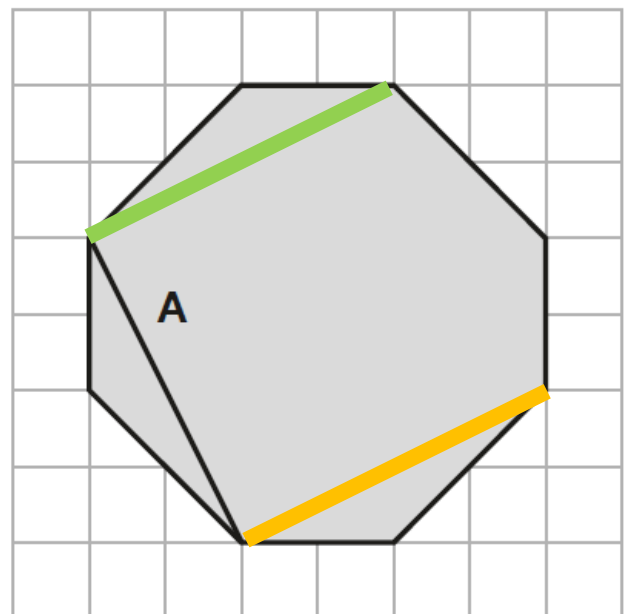
Join two other vertices to draw a line **parallel** to line **A**.

Use a ruler.



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

Use a ruler.



Y6 SATS

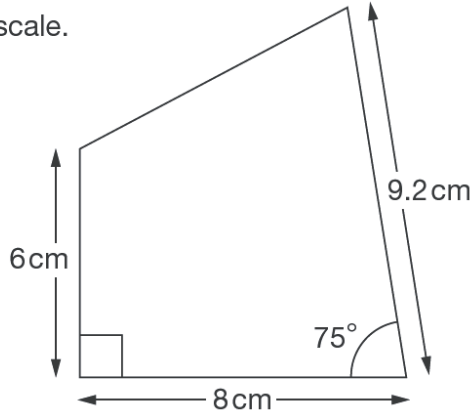
Construction Lines & Angles

Help Code : 022

BOOSTER

Here is a sketch of a quadrilateral. **2011A KS2 Q24**

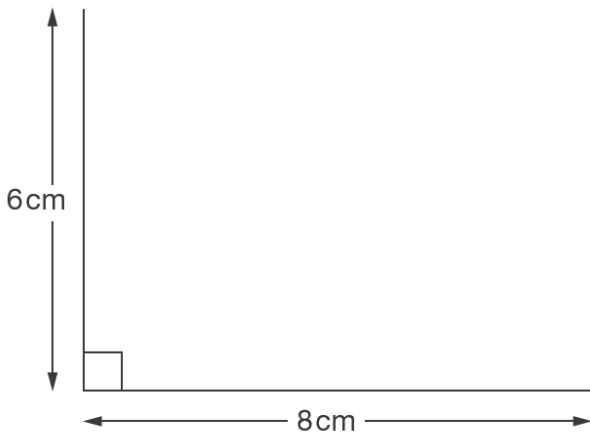
It is not drawn to scale.



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

Use a protractor (angle measurer) and a ruler.

Two of the lines have been drawn for you.

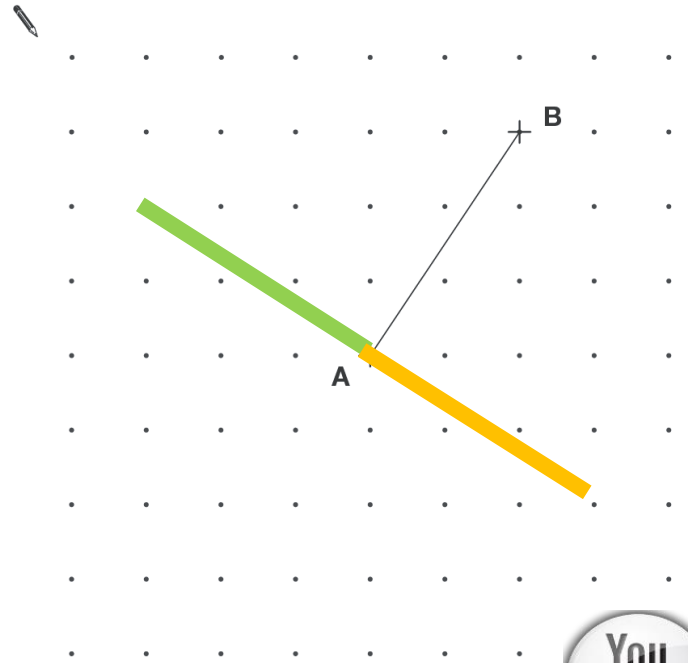


Here is a grid of dots. **2010A KS2 Q19**

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

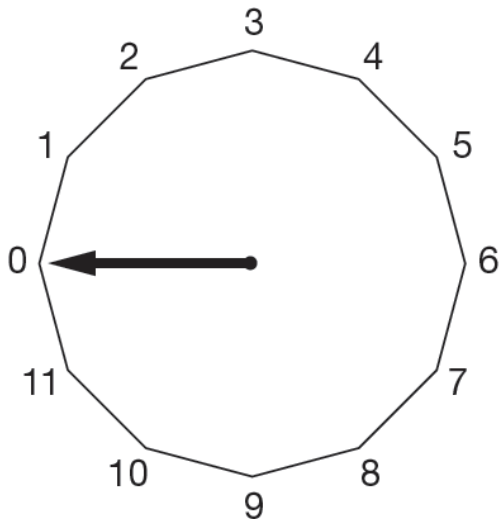
Draw a line to join point **A** to another dot on the grid so that the two lines make a right angle.

Use a ruler.



2008A KS2 Q18

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?

5

Nisha turns the pointer clockwise from number 2 to number 11

Through how many degrees does the pointer turn?



270

2007A KS2 Q25

Jamie draws a triangle.

He says,

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

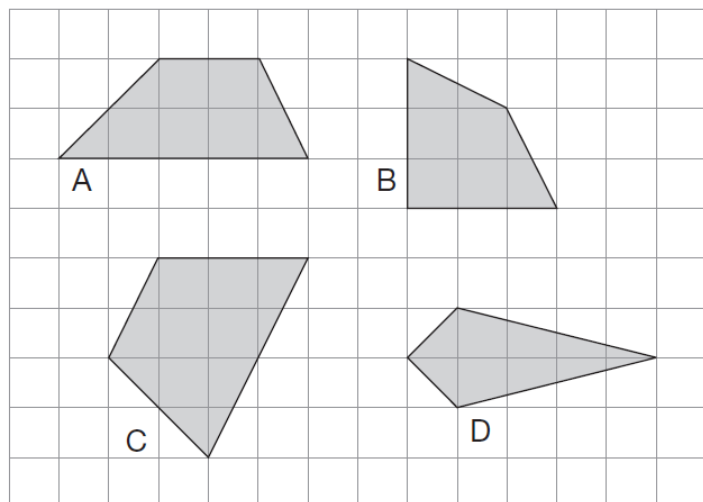
Explain why Jamie **cannot** be correct.

Discuss obtuse being bigger than 90 and what 3 of those would make when added together

YouTube

2007A KS2 Q17

Here are some shapes on a grid.



Write the letter of each shape that has one pair of parallel sides.

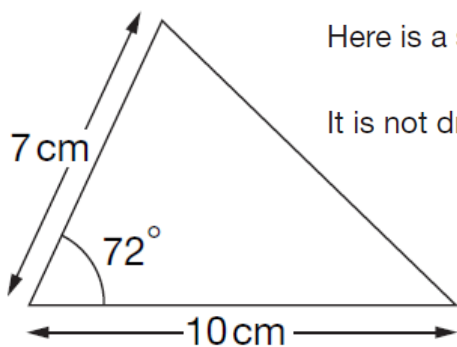
A, C

YouTube

2006A KS2 Q21

Here is a sketch of a triangle.

It is not drawn to scale.

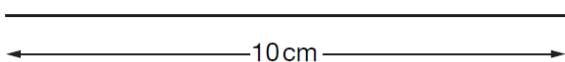


YouTube

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

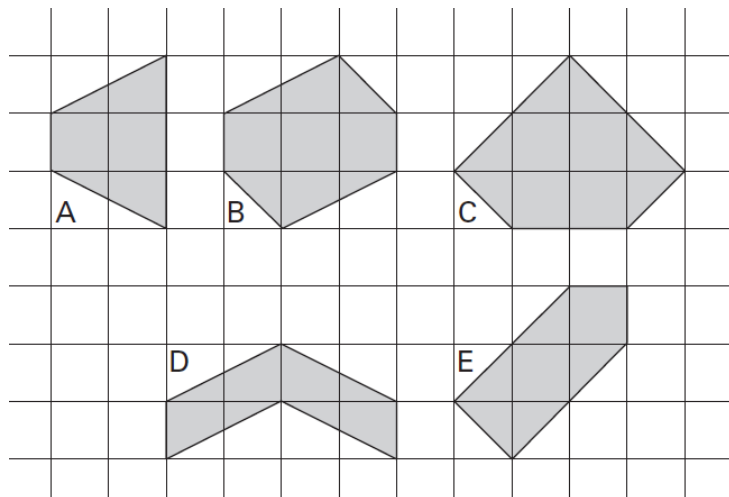
Use a protractor (angle measurer) and a ruler.

One line has been drawn for you.



2005A KS2 Q6

Here are some shaded shapes on a square grid.



Write the letters of the **two** shapes which are hexagons.

YouTube

B

... and

D

Write the letters of the **two** shapes which have right angles.

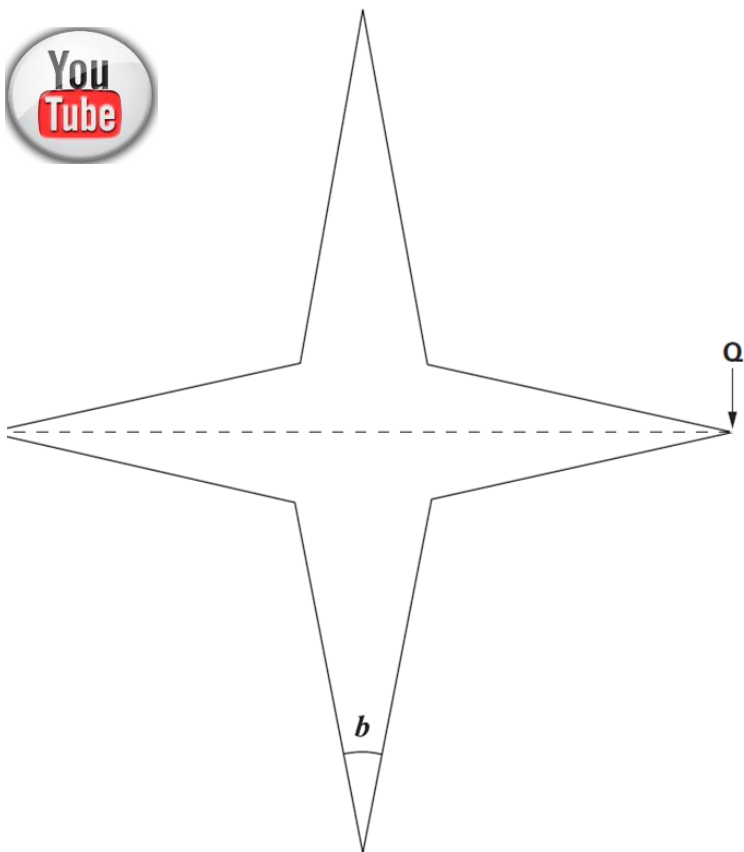
C

... and

E

2005A KS2 Q17

Look at this star.



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

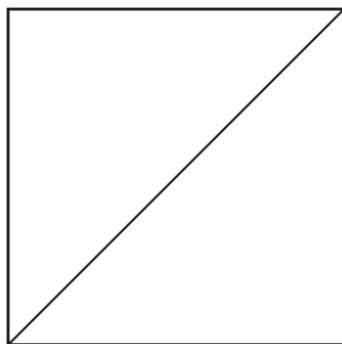
Give your answer in **millimetres**.

118 mm

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

22 °

2004A KS2 Q4



Measure accurately the length of the **diagonal** of this square.

Give your answer in **centimetres**.

7.8 - 8 cm

2005A KS2 Q21



Here are four statements.

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.

✗

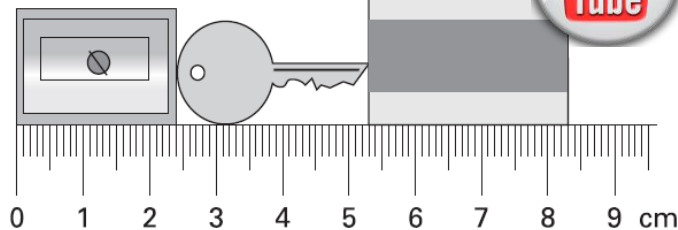
A triangle can have 2 perpendicular sides.

✓

2002A KS2 Q13

Here are a pencil sharpener, a key and a rubber.

Actual size



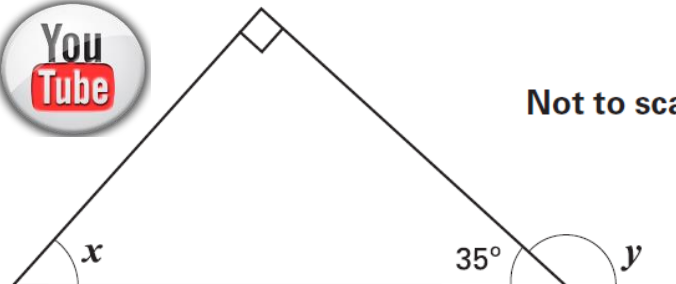
What is the length of **all three things** together?

Give your answer in **millimetres**.

83 mm

2002A KS2 Q23

Look at this diagram.



Not to scale

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

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

$x =$

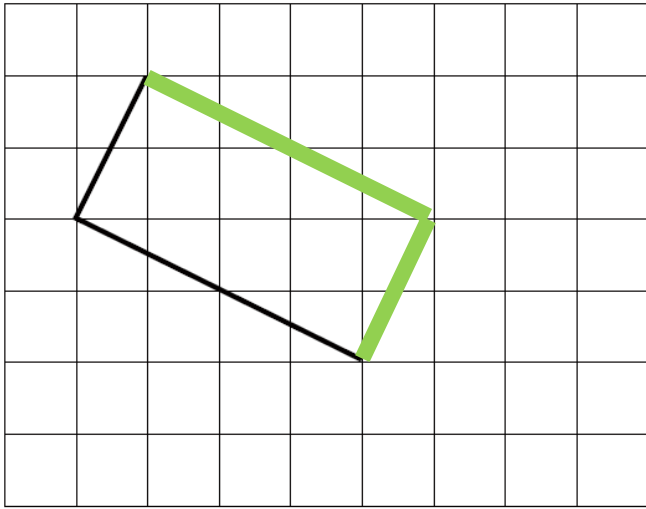
$y =$

2001A KS2 Q6



Draw **two more straight lines** to make a rectangle.

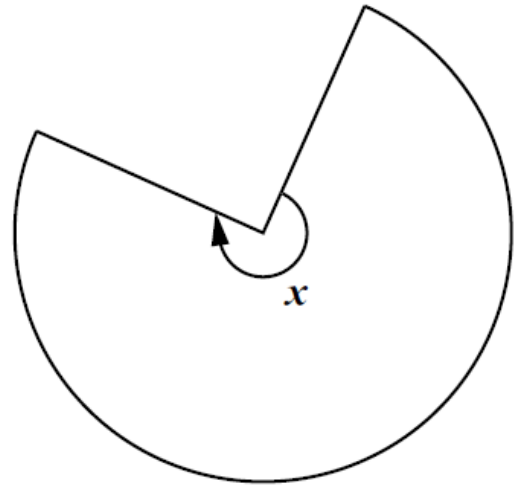
Use a ruler.



2001 KS2 Q13



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

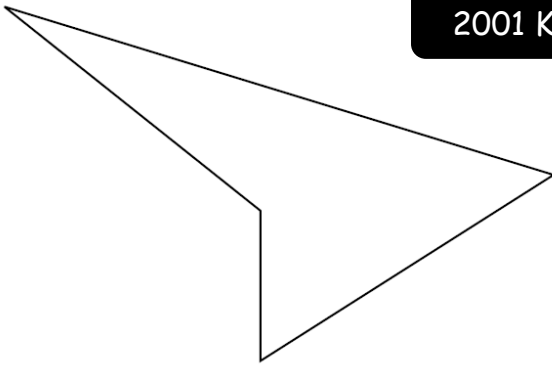


How many degrees is **angle x**?



270 °

2001 KS2 Q17



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

Give your answer in millimetres.



96 mm

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

Use a protractor (angle measurer).



22 °