# MEASURING AND DRAWING
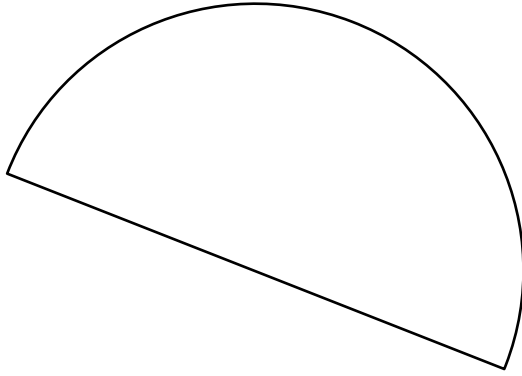
CONTENT DOMAIN REFERENCES:
G3, G4, M7

**1**

[2012]

Here is a semi-circle.

Measure accurately the length of the straight edge.
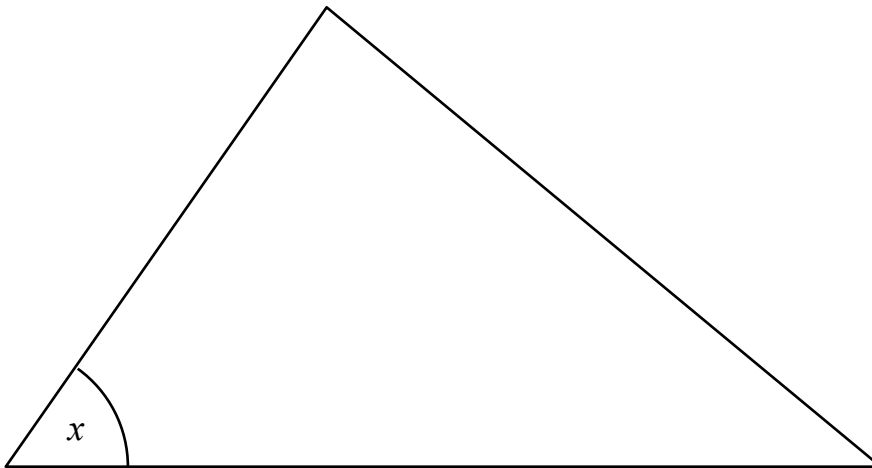
Give your answer in **centimetres**.

| cm |
|---|

[1 mark]

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**2**

[2004]

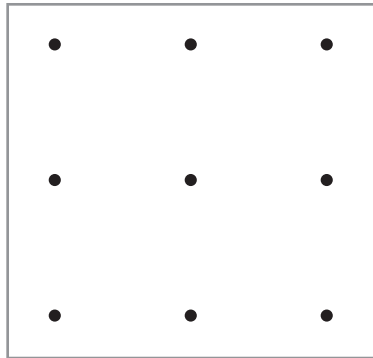Measure angle $x$ accurately.

Use a protractor (angle measurer).

| ° |
|---|

[1 mark]

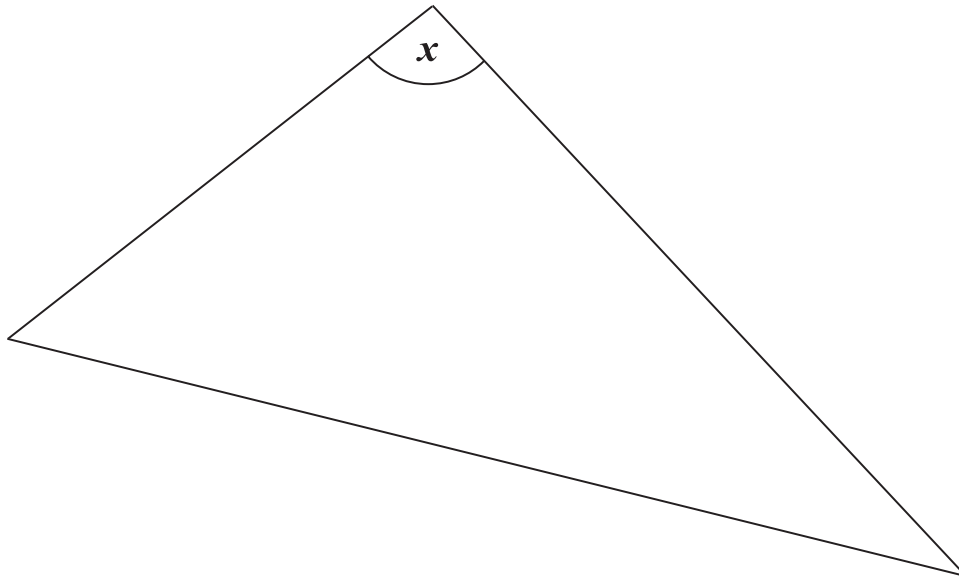On the grid join dots to make a triangle which does **not** have a **right angle**.

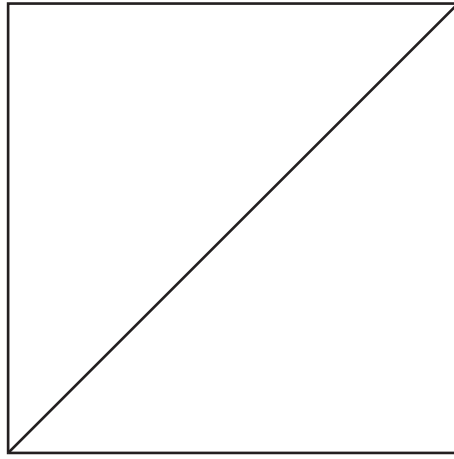Use a ruler.

[1 mark]

*x*

Measure angle *x* accurately.

Use a protractor (angle measurer).

°

[1 mark]

**5**

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

Give your answer in **centimetres**.

cm

[1 mark]

**6**

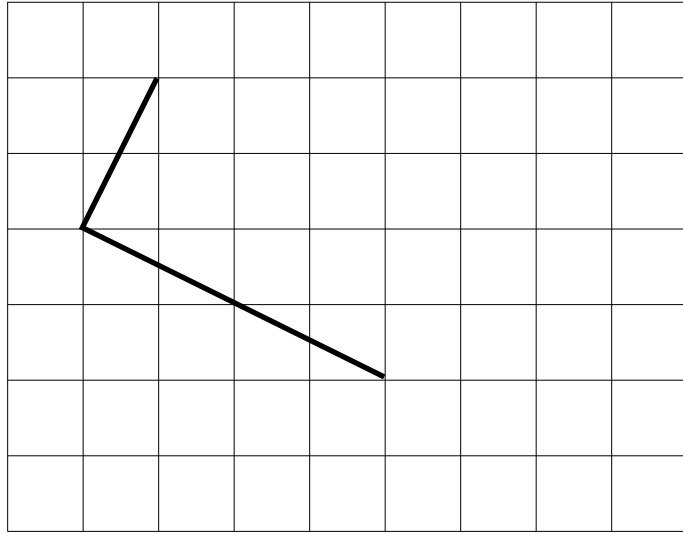Join dots on the grid to make a quadrilateral that has **3 acute** angles.

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[1 mark]

**7**

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

Use a ruler.

[1 mark]

**8**

Here is a triangle.
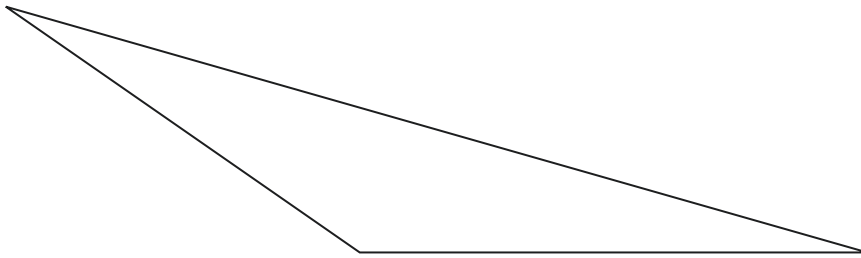
Measure the shortest side accurately, in centimetres.

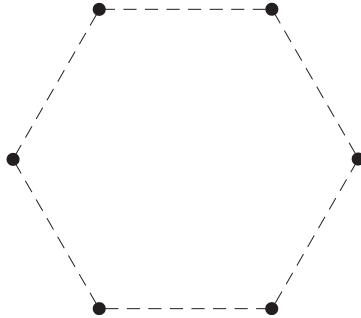| | cm |
|---|---|

Measure the largest angle.

| | ° |
|---|---|

[2 marks]

Here is a regular hexagon.

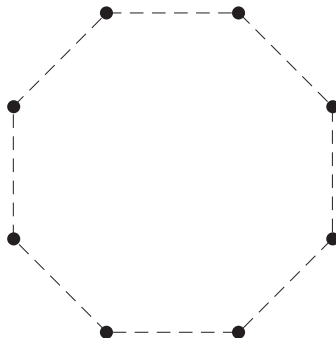Join three of the dots to make an **equilateral** triangle.

Use a ruler.

Here is a regular octagon.

Join three of the dots to make an **isosceles** triangle.

Use a ruler.

[2 marks]

**10**

Here are four lines: A, B, C and D.

**A**

**B**

**C**

**D**

Which two lines have a total length of 18cm?

_____ and _____

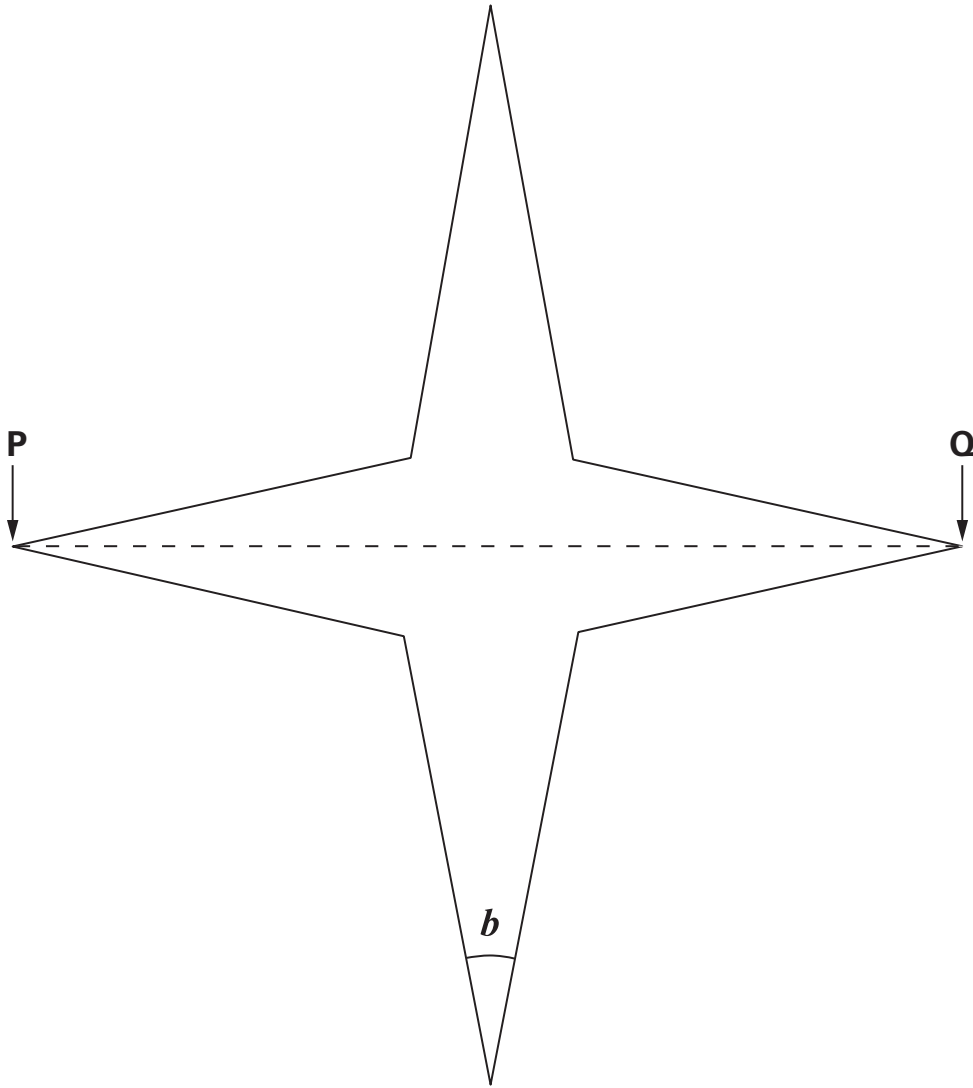Draw a straight line that is 3 centimetres longer than line **B**.

Use a ruler.

[2 marks]

Look at this star.



Use a ruler to measure **accurately** the **width** of the star, from **P** to **Q**.
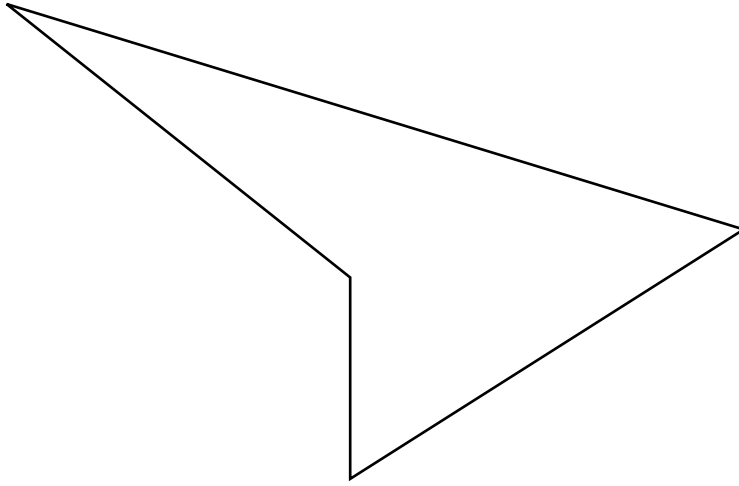
Give your answer in **millimetres**.

|  | mm |

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

|  | ° |

[2 marks]

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

Give your answer in millimetres.

mm

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

Use a protractor (angle measurer).

°

[2 marks]

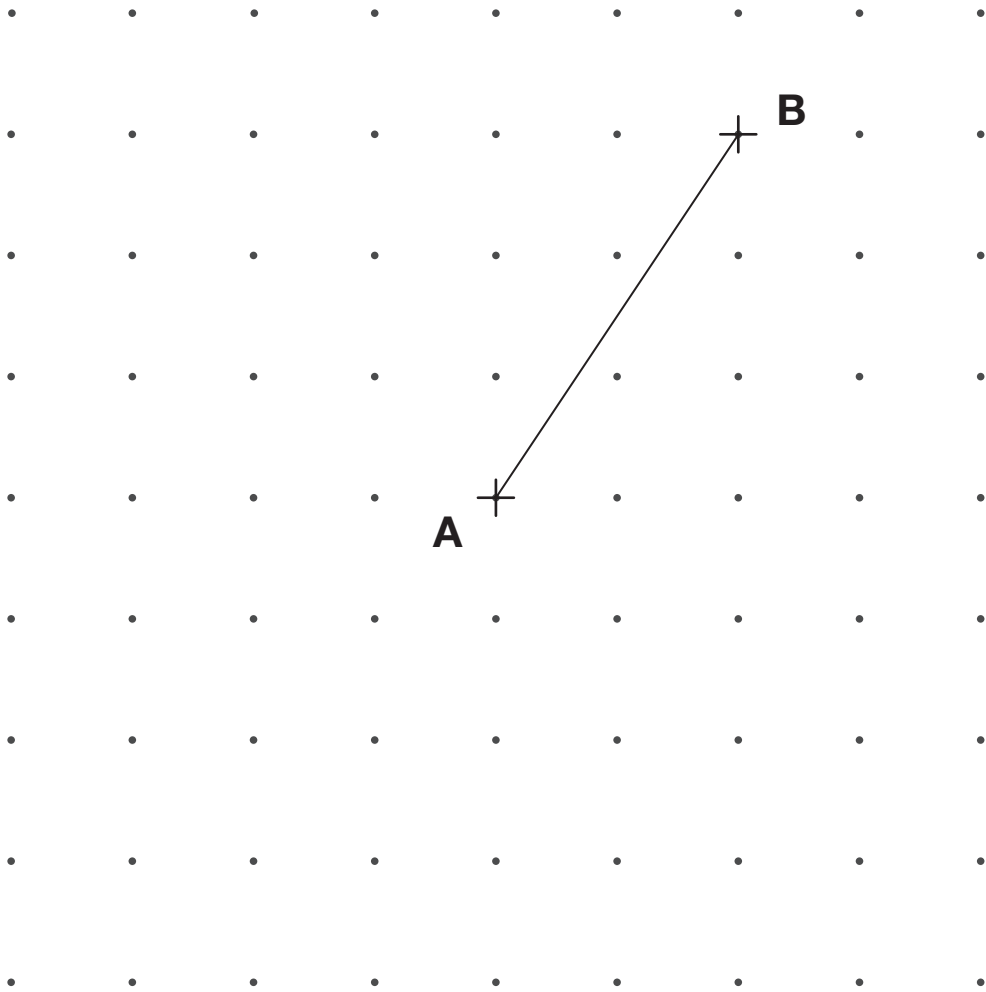Here is a grid of dots.

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.
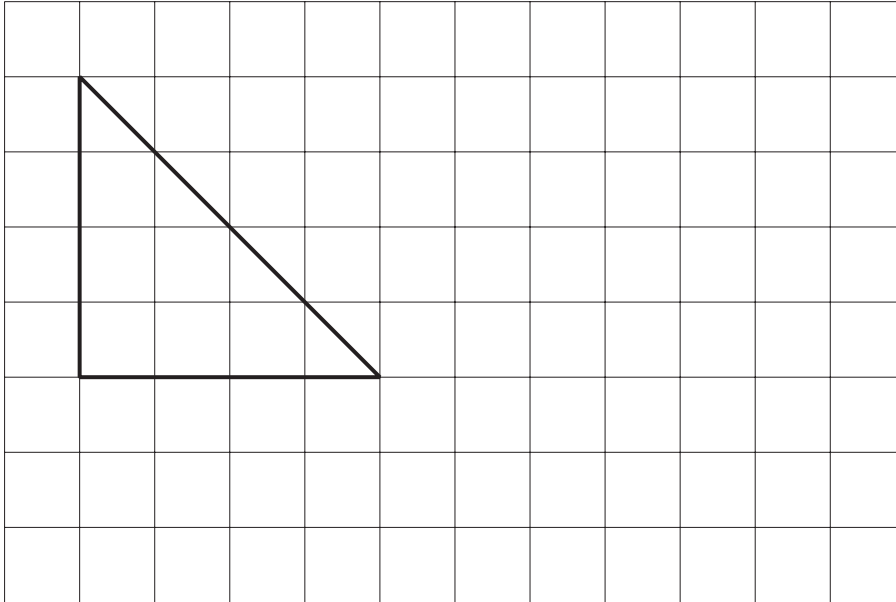
Use a ruler.

[1 mark]

**14**

Here is a triangle drawn on a square grid.

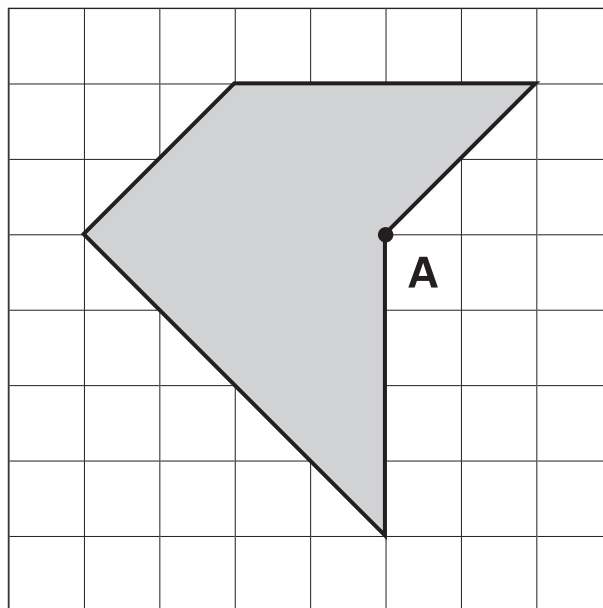Draw a **rectangle** on the grid with the **same area** as the triangle.

Use a ruler.

[1 mark]

**15**

Draw **two straight lines** from point **A** to divide the shaded shape into a square and two triangles.
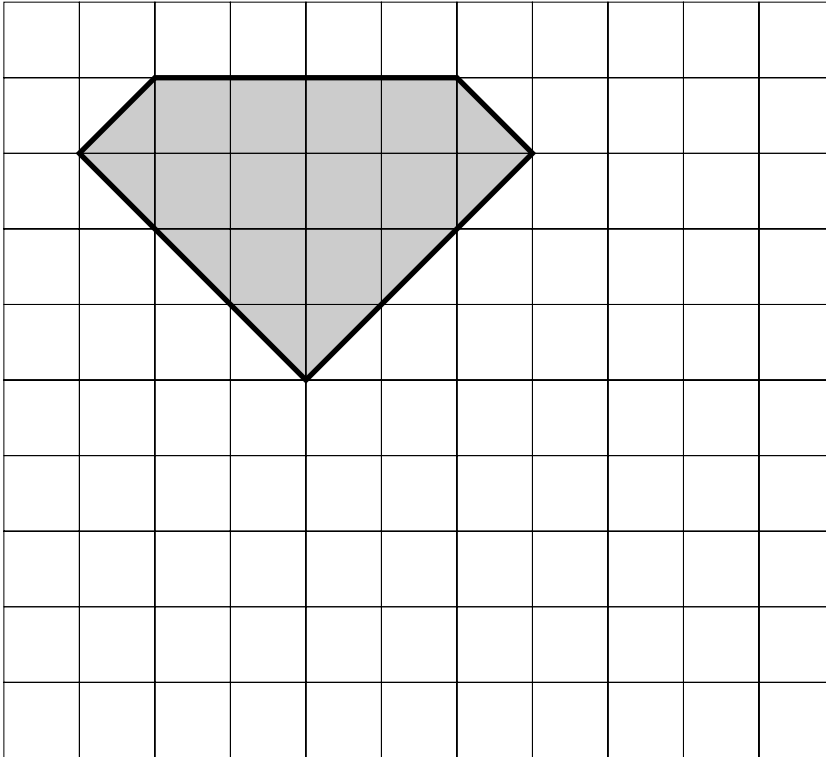
A

[1 mark]

**16**

On the grid, draw a **rectangle** which has the **same area** as this shaded pentagon.
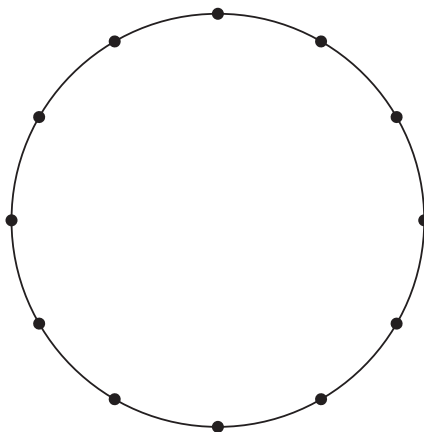
Use a ruler.



[1 mark]

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**17**

The twelve points on this circle are equally spaced.

Join four points to make a **square**.
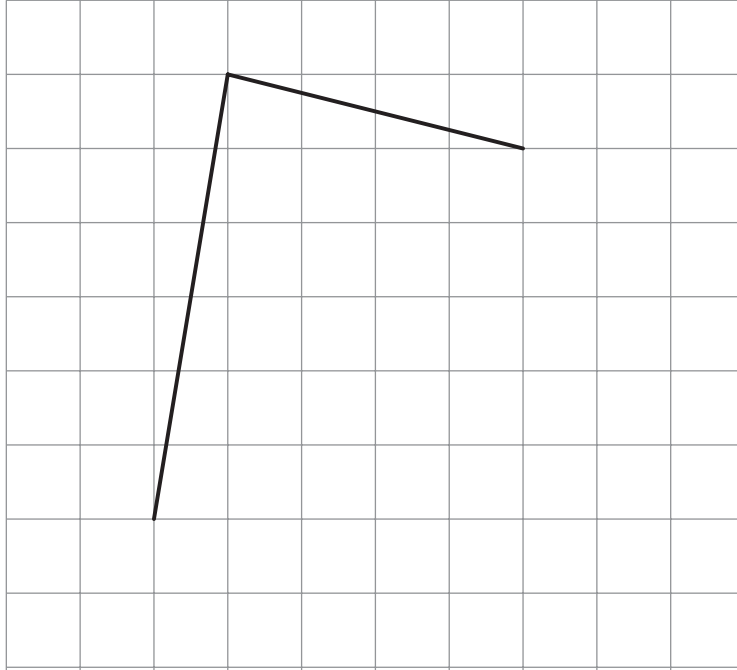
Use a ruler.



[1 mark]

**18**

[2011]

Here is a square grid.

Two sides of a kite are drawn on the grid.

Complete the kite by drawing the two missing sides.

Use a ruler.

[1 mark]

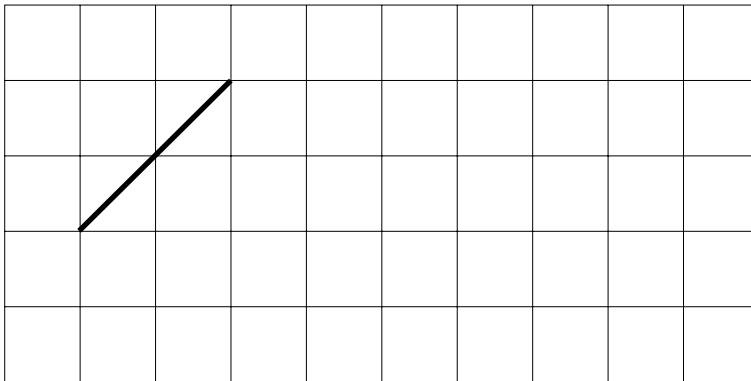**19**

[2001]

This is a centimetre grid.

Draw **3 more lines** to make a **parallelogram**
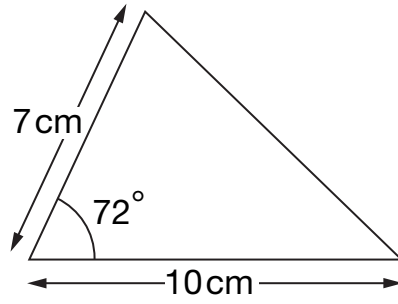with an **area** of **10cm²**

Use a ruler.
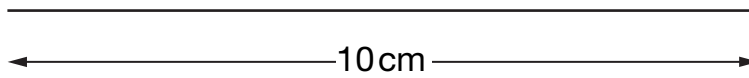
[2 marks]

**20**

Here is a sketch of a triangle.

It is not drawn to scale.



7 cm

72°

10 cm

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

Use a protractor (angle measurer) and a ruler.

One line has been drawn for you.

10 cm

[2 marks]
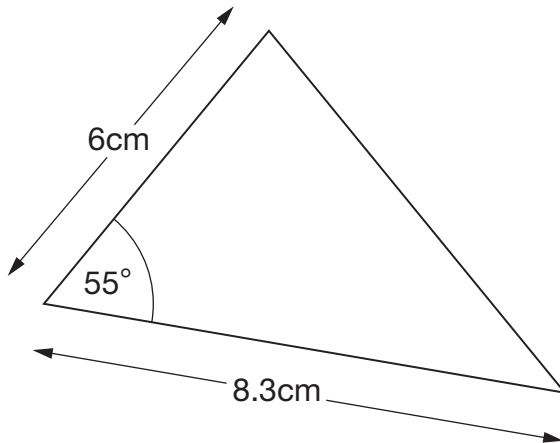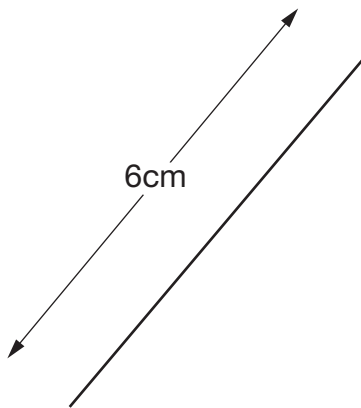
Here is a sketch of a triangle.

It is not drawn to scale.

6cm

55°

8.3cm

Draw the full-size triangle accurately below.

Use a protractor (angle measurer) and a ruler.

One line has been drawn for you.

6cm

[2 marks]

**22**

[2011]
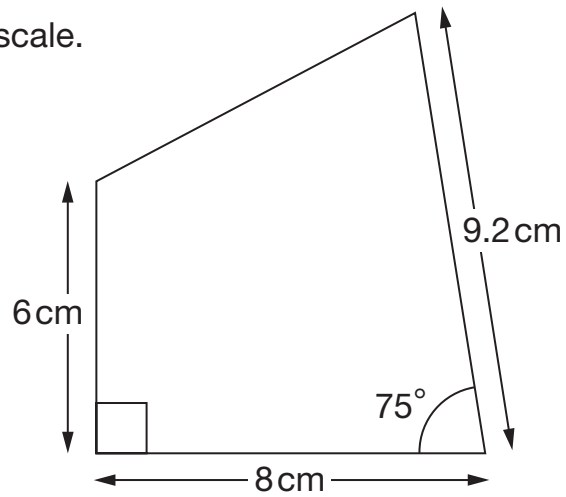
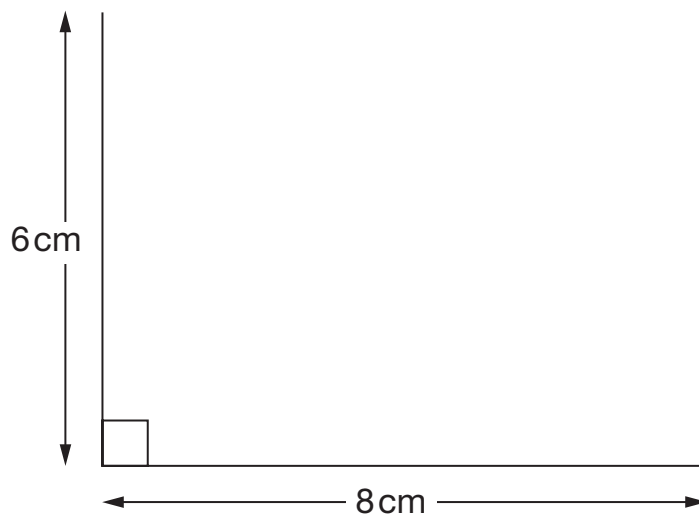Here is a sketch of a quadrilateral.

It is not drawn to scale.



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

Use a protractor (angle measurer) and a ruler.

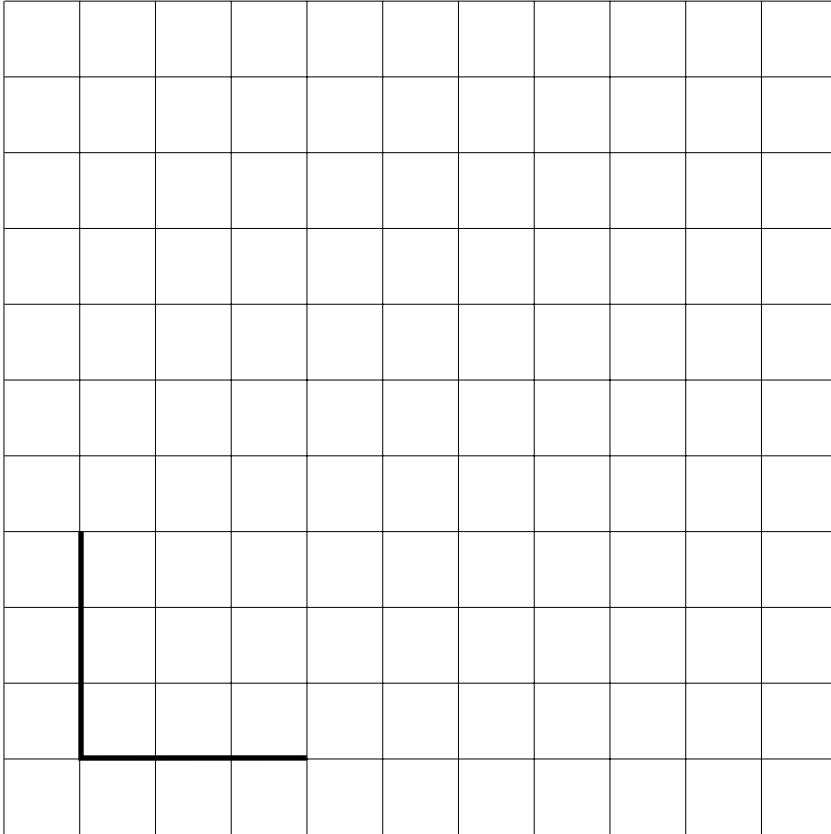Two of the lines have been drawn for you.



[2 marks]

**23**

Here is a centimetre grid.

> Draw **two** more lines to make a **quadrilateral** with an area of **18cm²**

Use a ruler.

[1 mark]