Perimeters - Questions

Key Stage 2: 2003 Paper A

1.

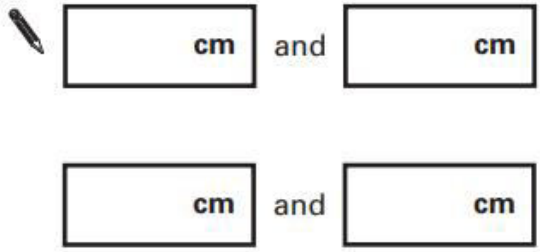
20 An isosceles triangle has a perimeter of 12cm.

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.



20i

20ii

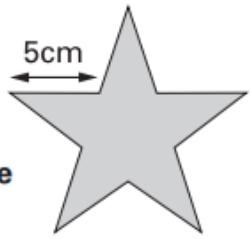
2 marks

Key Stage 2: 2004 Paper A

1.

15 Millie has some star-shaped tiles.

Each edge of a tile is 5 centimetres long.



Not actual size

She puts two tiles together to make this shape.

Work out the perimeter of Millie's shape.

cm

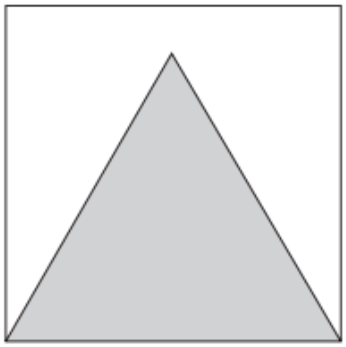
15

1 mark

Key Stage 2: 2004 Paper A

2.

25 Here is an equilateral triangle inside a square.



Not actual size

The perimeter of the triangle is 48 centimetres.

What is the perimeter of the **square**?

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

cm

25i

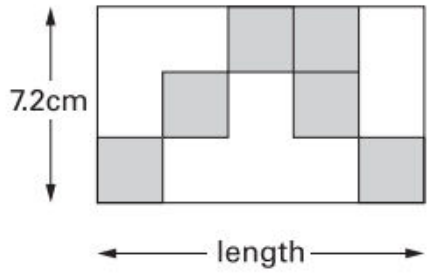
25ii

2 marks

Key Stage 2: 2004 Paper B

1.

22 Here is a rectangle with six identical shaded squares inside it.



Not actual size

The width of the rectangle is **7.2 centimetres**.

Calculate the **length** of the rectangle.

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

cm

22i

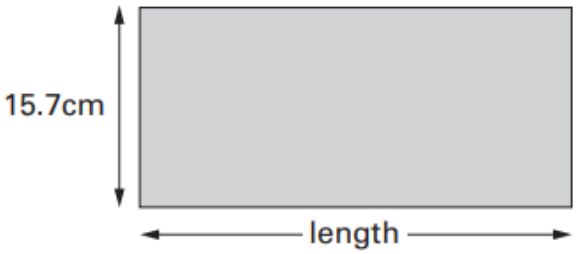
22ii

2 marks

Key Stage 2: 2005 Paper B

1.

24 Here is a rectangle with a width of 15.7 centimetres.



Not actual size

The **perimeter** of this rectangle is 85 centimetres.

Calculate the length of the rectangle.

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

cm

24i

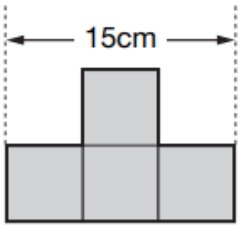
24ii

2 marks

Key Stage 2: 2006 Paper A

1.

19 This shape is made from 4 shaded squares.



Not actual size

Calculate the perimeter of the shape.

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

cm

19i

19ii

2 marks

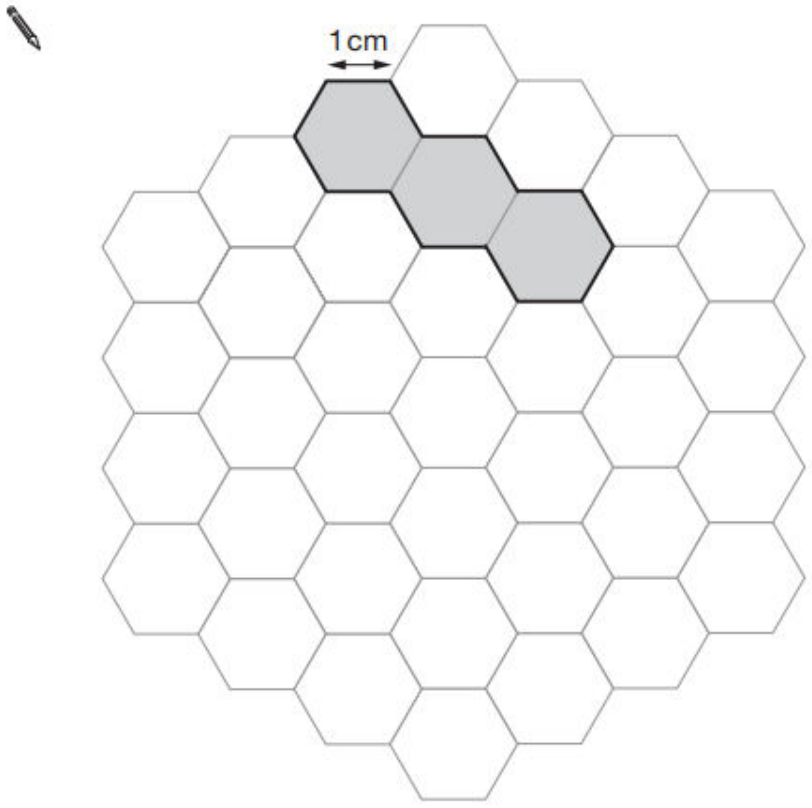
Key Stage 2: 2007 Paper A

1.

14 Here is a grid of regular hexagons.

The shaded shape has an area of 3 hexagons and a perimeter of 14 cm.

Draw another shape on the grid which has an **area** of 4 hexagons and a **perimeter** of 14 cm.



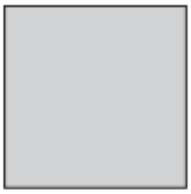
14

1 mark

Key Stage 2: 2008 Paper B

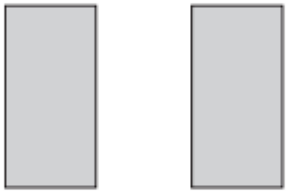
1.

24 The perimeter of a square is 72 centimetres.



Not actual size

The square is cut in half to make two identical rectangles.



What is the perimeter of **one** rectangle?

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

cm

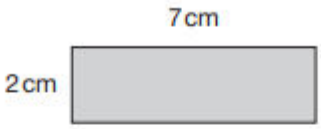
2 marks

Key Stage 2: 2009 Paper A

1.

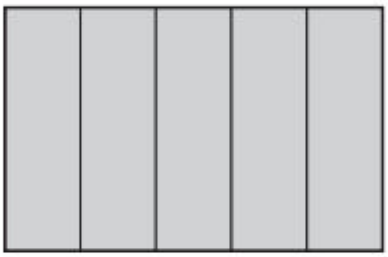
20 Lara has some identical rectangles.

They are 7 centimetres long and 2 centimetres wide.



Not actual size

She uses **five** of her rectangles to make the large rectangle below.



What is the **perimeter** of the large rectangle?

cm

20a

1 mark

What is the **area** of the large rectangle?

cm^2

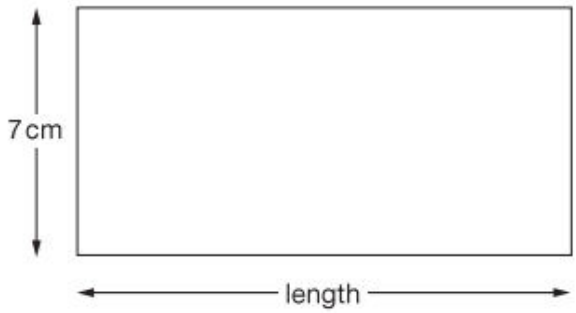
20b

1 mark

Key Stage 2: 2010 Paper A

1.

21



Not actual size

The perimeter of this rectangle is 50 centimetres.

Calculate the length of the rectangle.

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

cm

21i

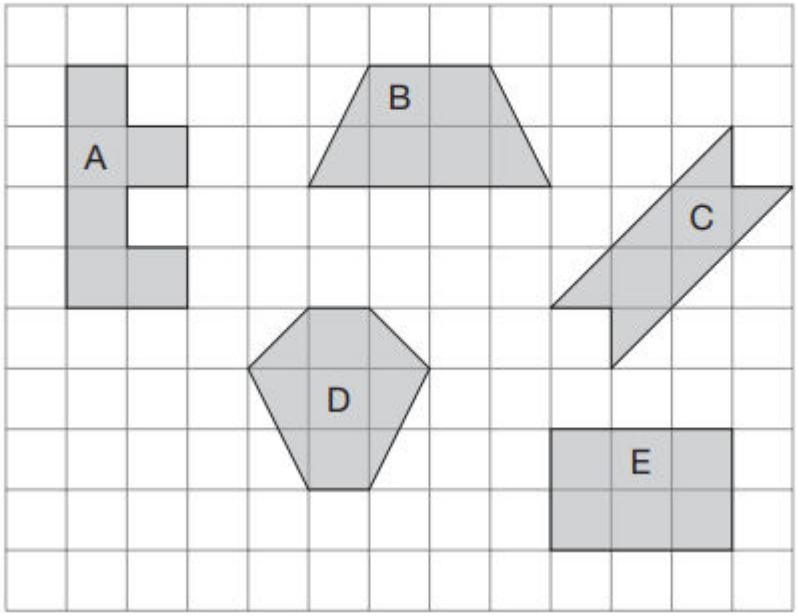
21ii

2 marks

Key Stage 2: 2011 Paper A

1.

13 Here are some shapes on a 1 cm square grid.



What is the **perimeter** of shape A?

cm

13a

1 mark

Write the letter of the shape that has the **smallest area**.

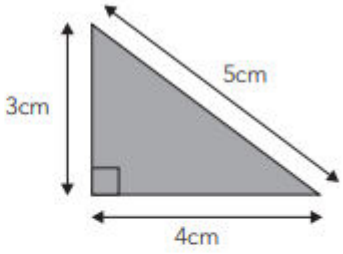
13b

1 mark

Key Stage 2: 2012 Paper A L6

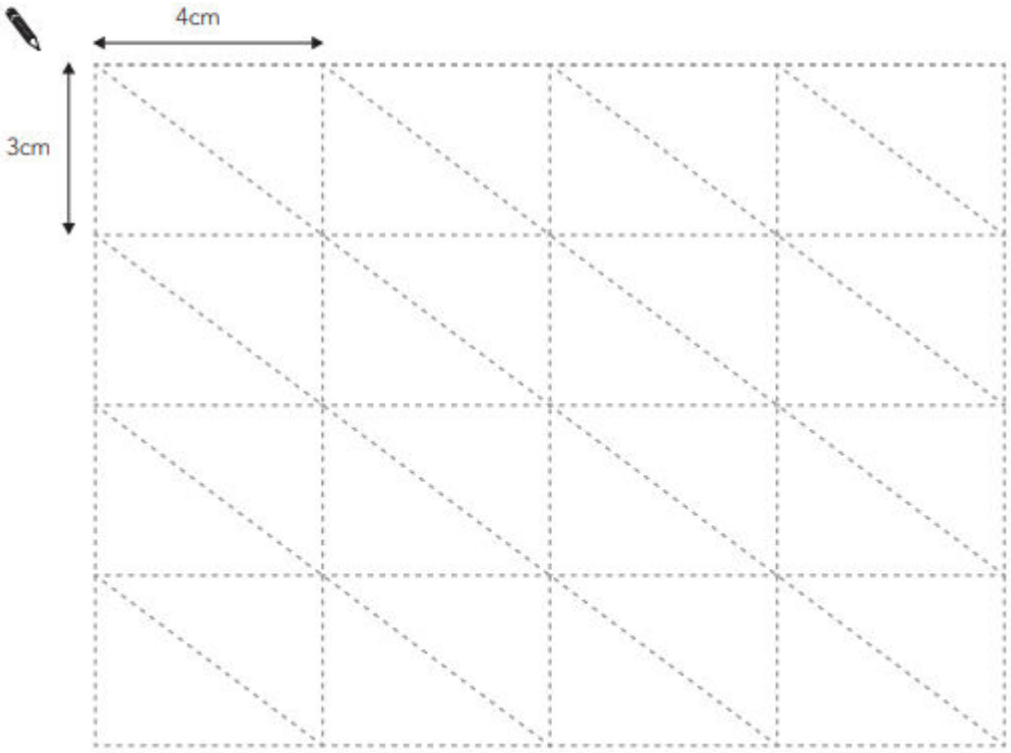
1.

13 The grid below is made of right-angled triangles like this:



Shade triangles on the grid to make a **quadrilateral**.

Your quadrilateral must have an area of **24cm²** and a perimeter of **26cm**.

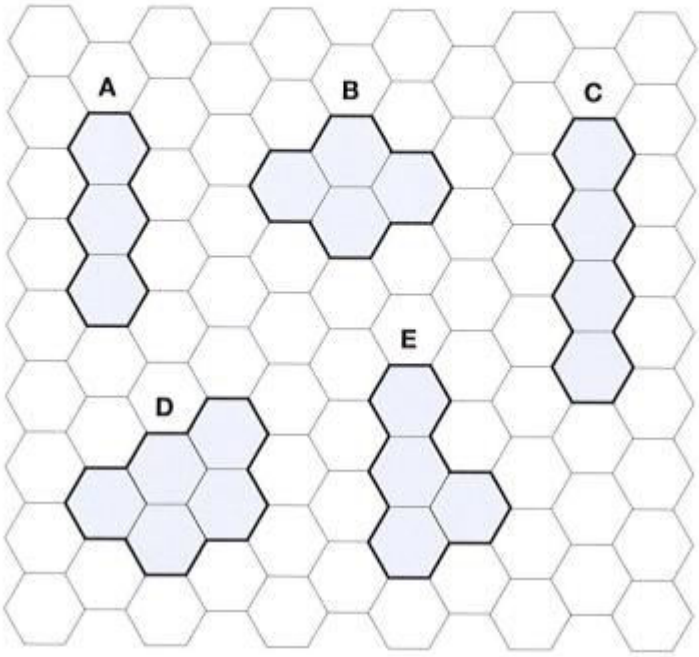


(2 marks)

Key Stage 2: 2012 Paper A

1.

13 Here are five shapes on a regular grid.



Which shape has the longest **perimeter**?

13a

1 mark

Which shape has only one **line of symmetry**?

13b

1 mark

Key Stage 2: 2013 Paper A L6

1.

3 The following quadrilaterals all have a **perimeter of 36cm**

Here is a table to show the length of each side.

Complete the table.

One quadrilateral is done for you.

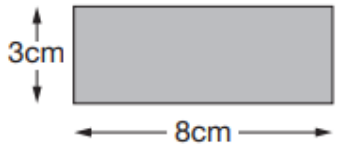
	Side lengths			
square	9cm	9cm	9cm	9cm
rectangle	3cm			
rhombus	9cm			
kite	10cm			

2 marks

Key Stage 2: 2013 Paper A

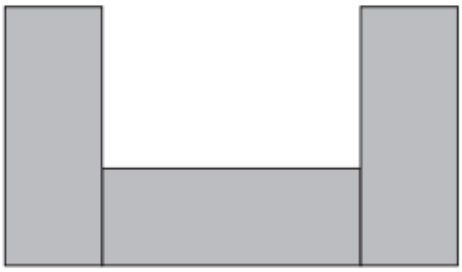
1.

23 Alfie has some rectangles.



Not actual size

He makes this shape using three of the rectangles.



What is the **perimeter** of Alfie's shape?

Show your working

cm

23i

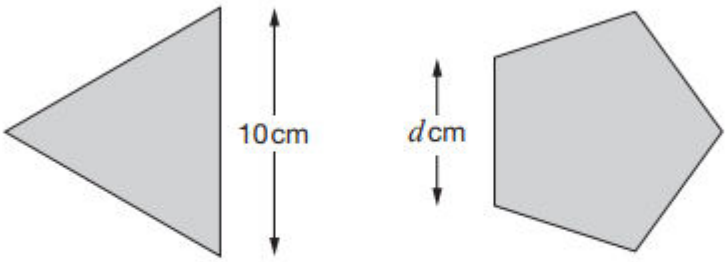
23ii

2 marks

Key Stage 2: 2014 Paper A L6

1.

2 Here are an equilateral triangle and a regular pentagon.



Not actual size

Each side of the triangle is 10 cm
Each side of the pentagon is d cm

The perimeter of the pentagon is 4 centimetres more than the perimeter of the triangle.

What number does d represent?

Show your working

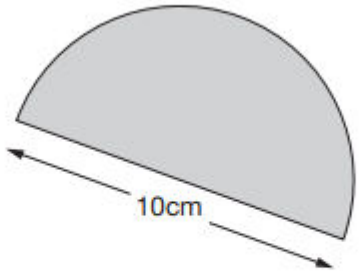
$d =$ ____ **cm**

2 marks

Key Stage 2: 2014 Paper B L6

1.

11 This shape is a semi-circle.



Not actual size

What is the **perimeter** of the shape?

Use this formula:
the circumference of a circle is **3.14 × diameter**

Show your method

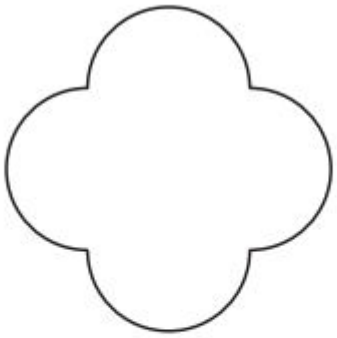
cm

2 marks

Key Stage 2: 2014 Paper A

1.

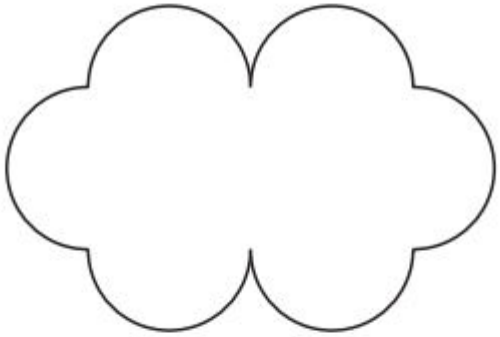
15 This shape is made out of four identical curves.



Not actual size

The perimeter of the shape is 28 centimetres.

A new shape is made out of curves of the same size.



What is the perimeter of the new shape?

Show your working

cm

1S

1Sii

2 marks

Key Stage 2: 2015 Paper A L6

1.

11 The **area** of this square is 36 cm^2.

Not actual size

The square is cut into quarters to create 4 identical rectangles.

What is the **perimeter** of **one** of the small rectangles?

Show your working

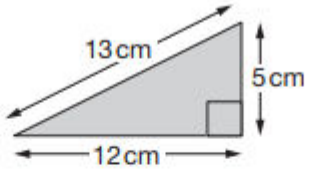
cm

2 marks

Key Stage 2: 2015 Paper B

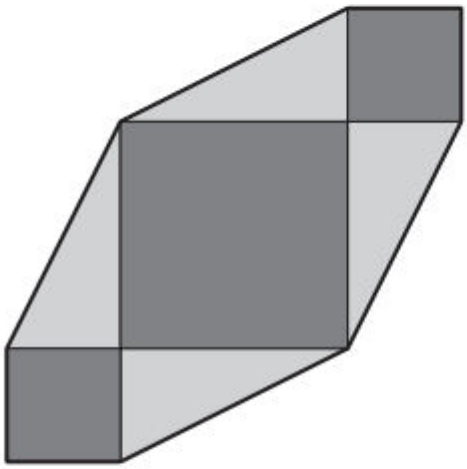
1.

20 Chen has some right-angled triangular tiles.



Not actual size

He makes this shape with four of his triangular tiles and three square tiles.



Not actual size

What is the **perimeter** of Chen's shape?

Show your working

cm

2 marks