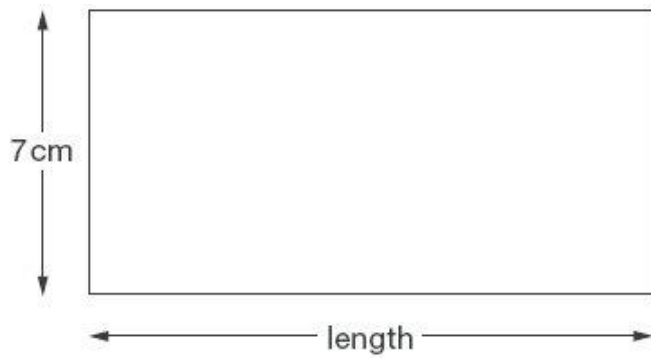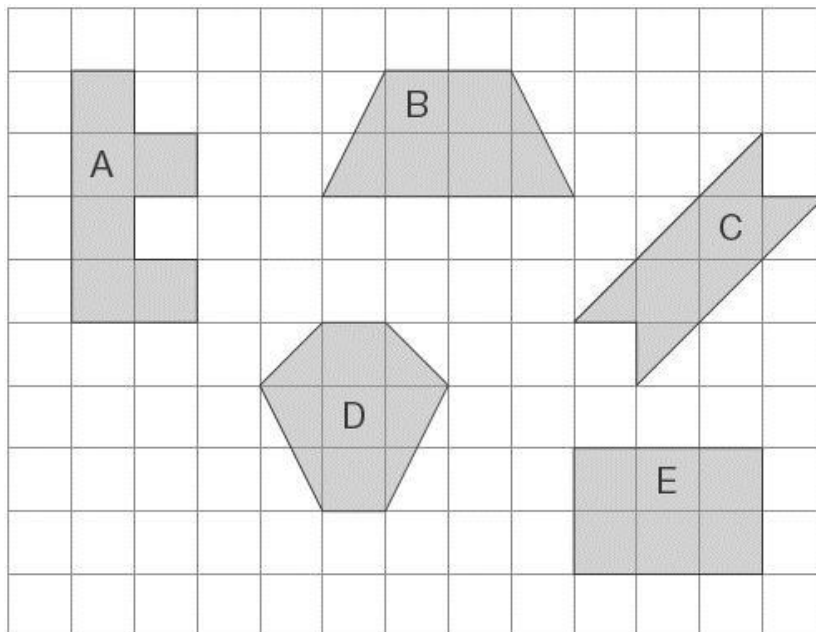**Q1.**

7 cm

length

Not actual size

The perimeter of this rectangle is 50 centimetres.

Calculate the length of the rectangle.

2 marks

Q2.

Here are some shapes on a 1cm square grid.

What is the **perimeter** of shape A?   1 mark
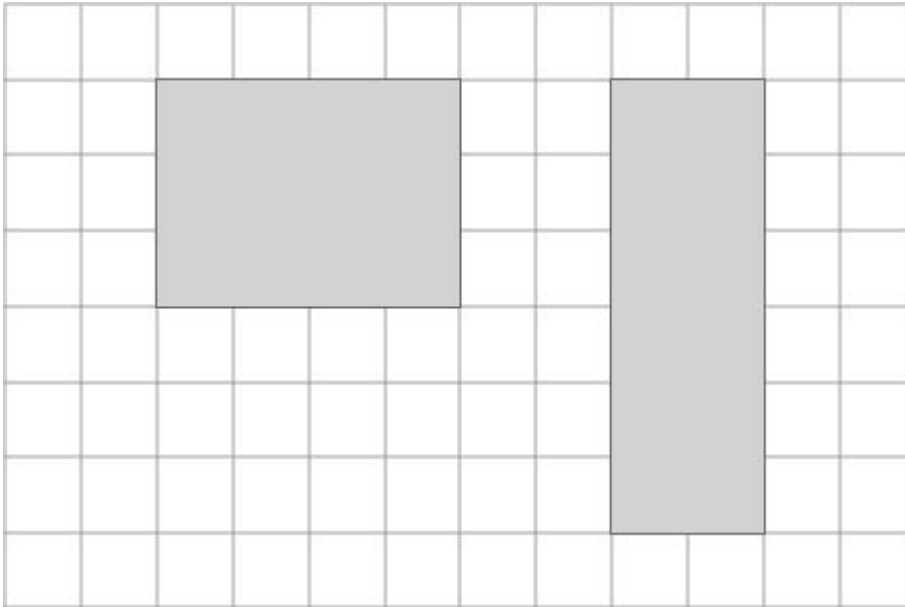
Write the letter of the shape that has the **smallest area**.   1 mark

Q3.

Look at the shaded rectangles drawn on a centimetre square grid.

Sam says,

*"The two rectangles have the same area as each other and the
same perimeter as each other"*

Is Sam correct?
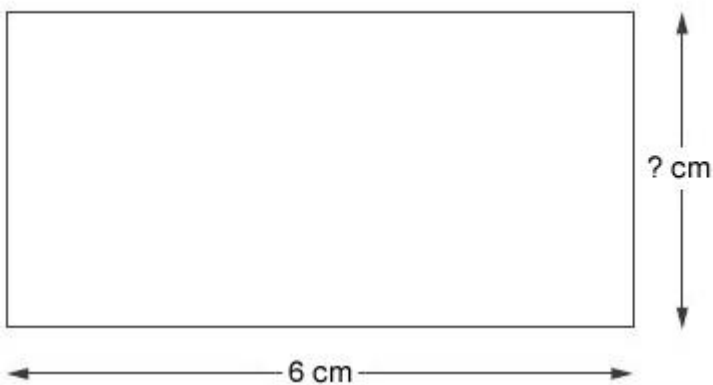Explain how you know using your reasoning sentence starters

1 mark

Q4.

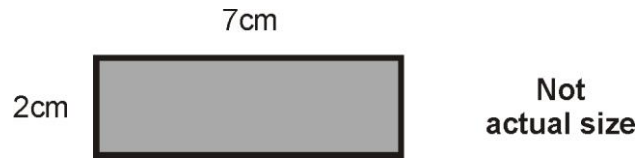The **perimeter** of this rectangle is 20 cm.

The **length** is 6 cm.

not to scale

? cm
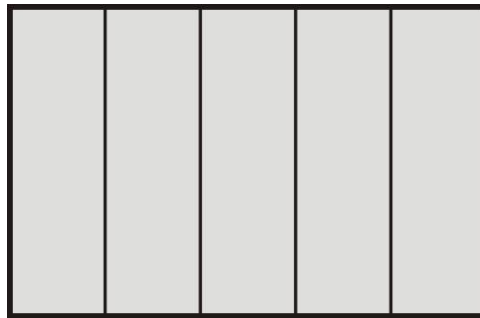
6 cm

How long is the **width** of the rectangle?

1 mark

Q5.

Lara has some identical rectangles.

They are 7 centimetres long and 2 centimetres wide.

7cm

2cm

Not
actual size

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

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

1 mark

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

1 mark
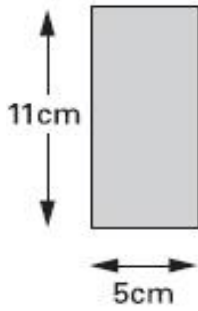
Q6.

The area of a rectangle is 16 cm^2.

One of the sides is 2 cm long
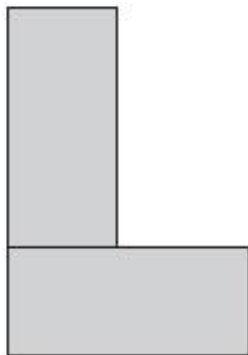
What is the perimeter of the rectangle?

1 mark

Q7.

Liam has two rectangular tiles like this.

He makes this L shape.

What is the **perimeter** of Liam's L shape?

Q8.

Rectangle **ABCD** has a perimeter of **24 centimetres**.

Sides AB and DC are **twice as long** as sides AD and BC.

Not actual size

Calculate the length of side **AD**.

Do **not** use a ruler.

Mark schemes

Q1.

Award **TWO** marks for the correct answer of 18

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg

$50 \div 2 = 25$

$25 - 7 =$ wrong answer

OR

$7 \times 2 = 14$

$50 - 14 = 36$

$36 \div 2 =$ wrong answer

> *Working must be carried through to reach an answer for the award of **ONE** mark.*

Up to 2

[2]

Q2.

(a) 14

1

(b) C

> *Accept 5*

1

[2]

Q3.

Explanation that recognises that the areas are the same BUT the perimeters are different, e.g.

- Sam is half right because the rectangles both contain the same number of squares, so they have the same area, but the perimeters are different – one is 14 cm and the other is 16 cm.

- The areas are both 12 cm^2, but the perimeters are 2 cm different.

- Sam is wrong because the perimeters are different. One has a perimeter of 14 cm and the other 16 cm.

[1]

Q4.

4 cm

[1]

Q5.

   (a)   34

                                                                  1

   (b)   70

                                                                  1

[2]

Q6.

   20 (cm)

[1]

Q7.

   54

                               Accept figures written on the diagram, provided a total is given.

[1]

Q8.

   4

                                                             U1

[1]