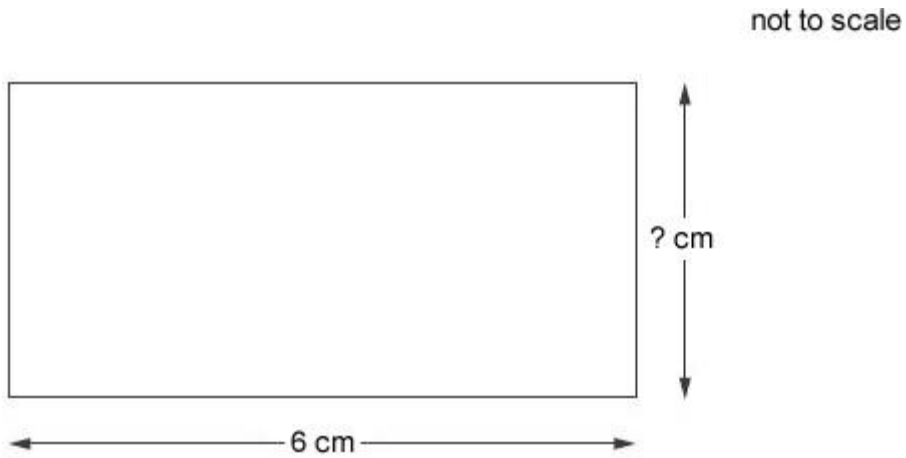


Q1.

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

The **length** is 6 cm.



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

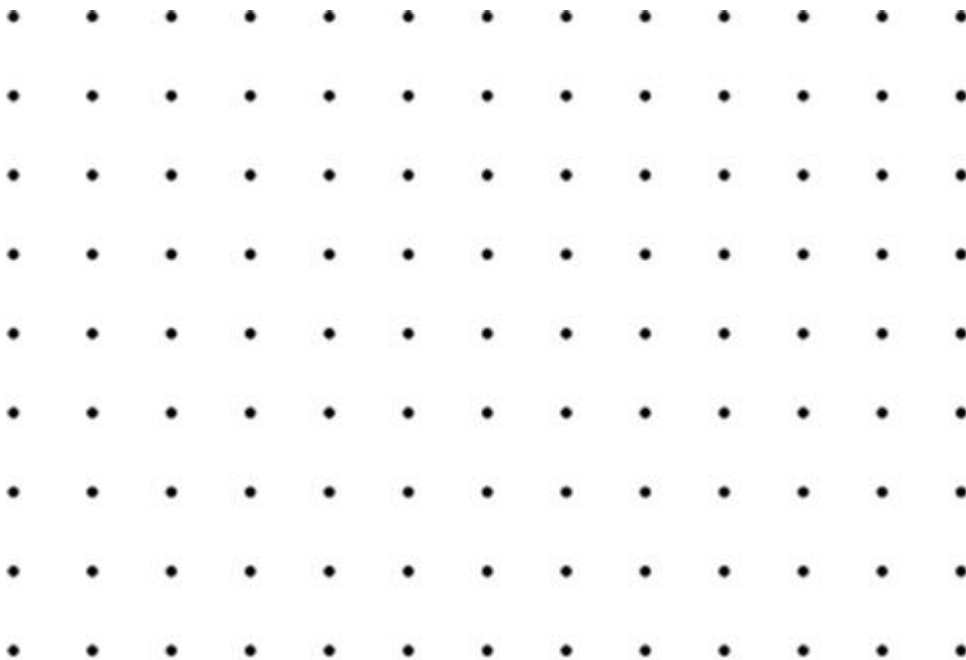
cm

1 mark

Q2.

Grace has a rectangle with sides of 4 cm and 5 cm.

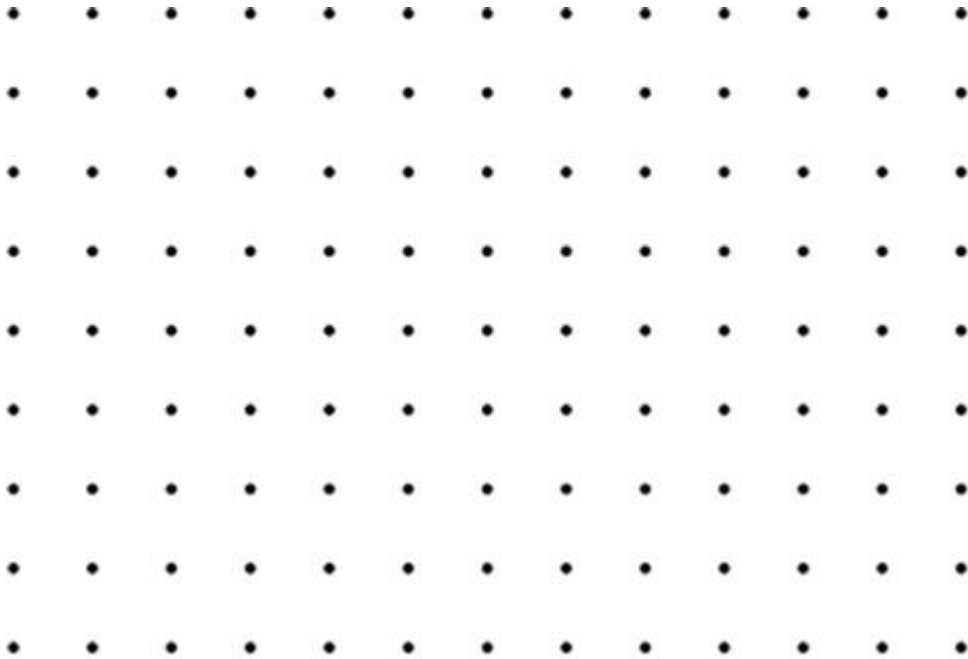
Draw a different rectangle that has the same perimeter.



1 mark

Q3.

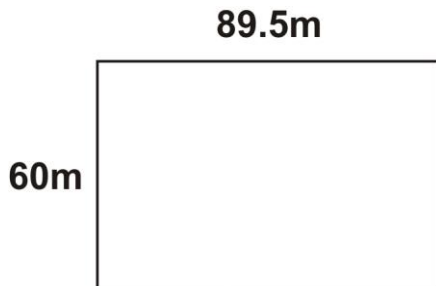
Join the dots to draw a rectangle that has an **area** of 20 cm^2 and a **perimeter** of 18 cm .



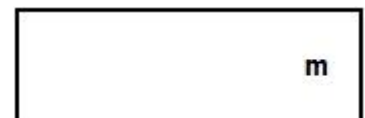
1 mark

Q4.

A field measures 89.5 m by 60 m .



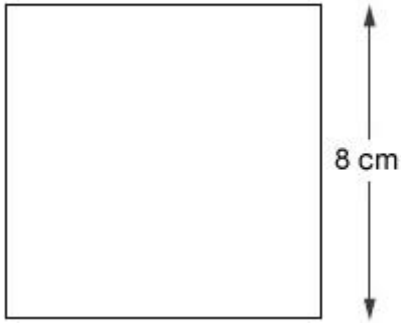
What is the perimeter of the field?



1 mark

Q5.

not actual size



Calculate the perimeter of this square.

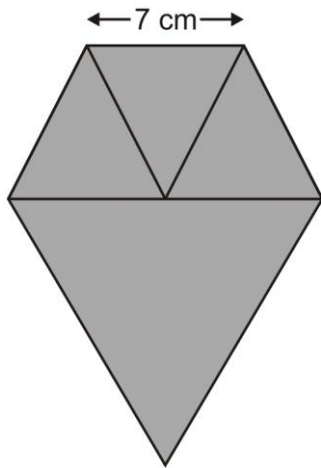
1 mark

Q6.

Lauren has **three small equilateral triangles** and **one large equilateral triangle**.

The small triangles have sides of **7 centimetres**.

Lauren makes this shape.



Not actual size

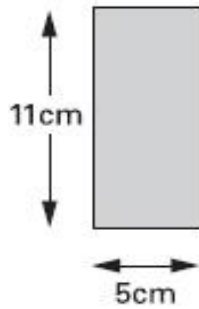
Calculate the **perimeter** of the shape.

Do **not** use a ruler.

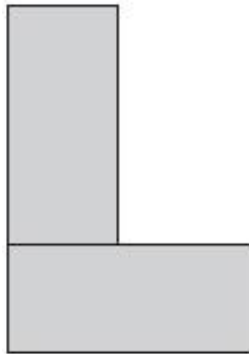
1 mark

Q7.

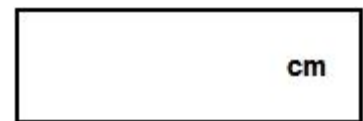
Liam has two rectangular tiles like this.



He makes this L shape.



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



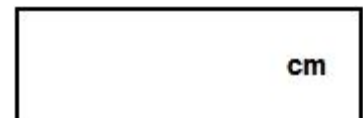
1 mark

Q8.

The area of a rectangle is 16 cm^2 .

One of the sides is 2 cm long

What is the perimeter of the rectangle?

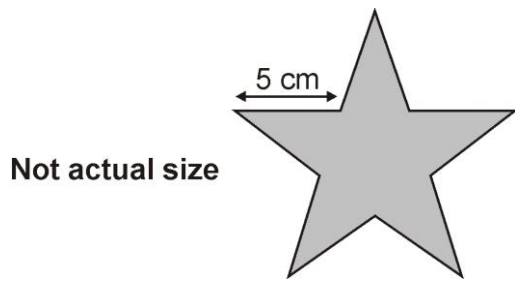


1 mark

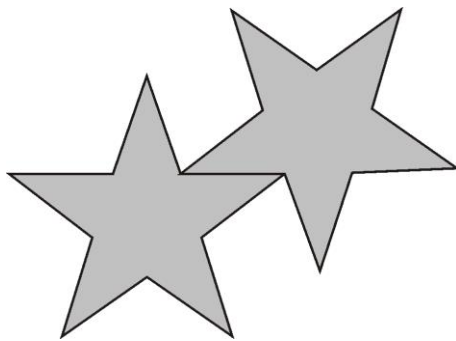
Q9.

Millie has some star-shaped tiles.

Each edge of a tile is 5 centimetres long.



She puts two tiles together to make this shape.



Work out the perimeter of Millie's shape.



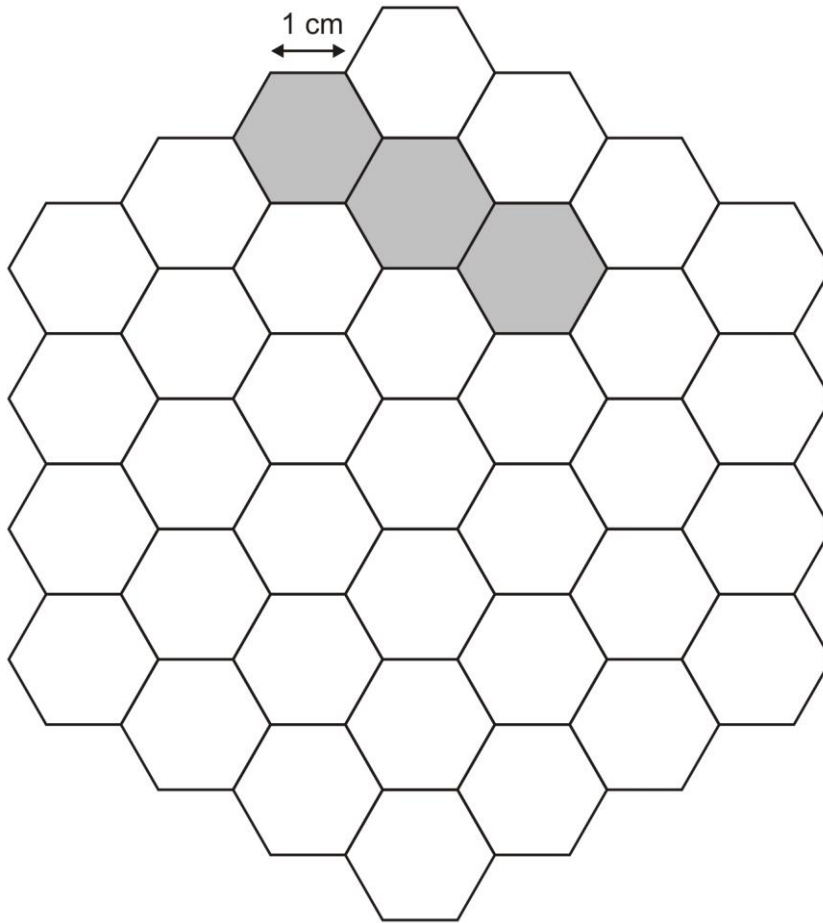
1 mark

Q10.

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.

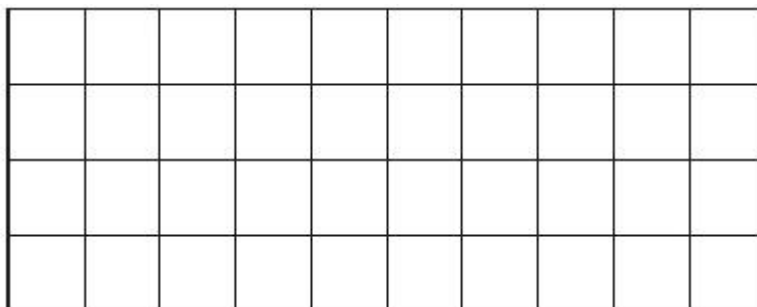


1 mark

Q11.

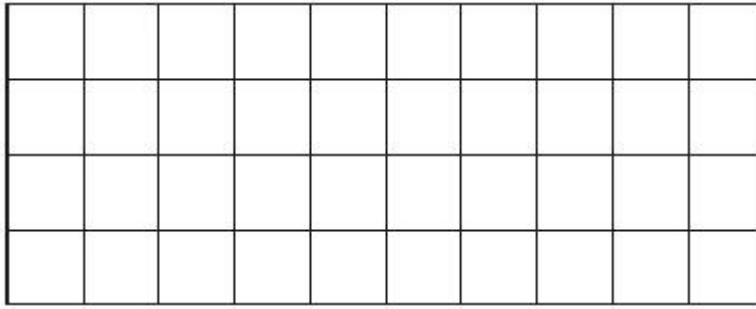
Here is a centimetre square grid.

On the grid draw a **shape** which has an **area** of **10** square centimetres.



1 mark

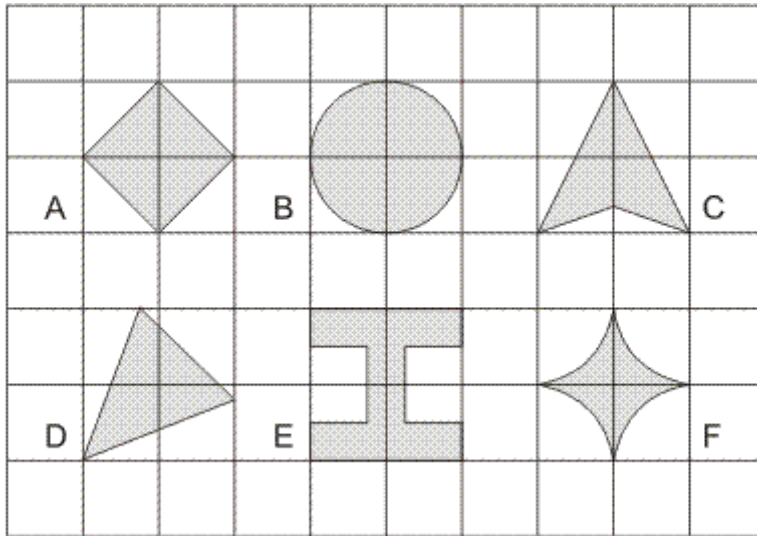
On the grid below draw a **rectangle** which has a **perimeter** of **10** centimetres.



1 mark

Q12.

Here are some shapes on a grid.



Which shape has the **longest perimeter**?

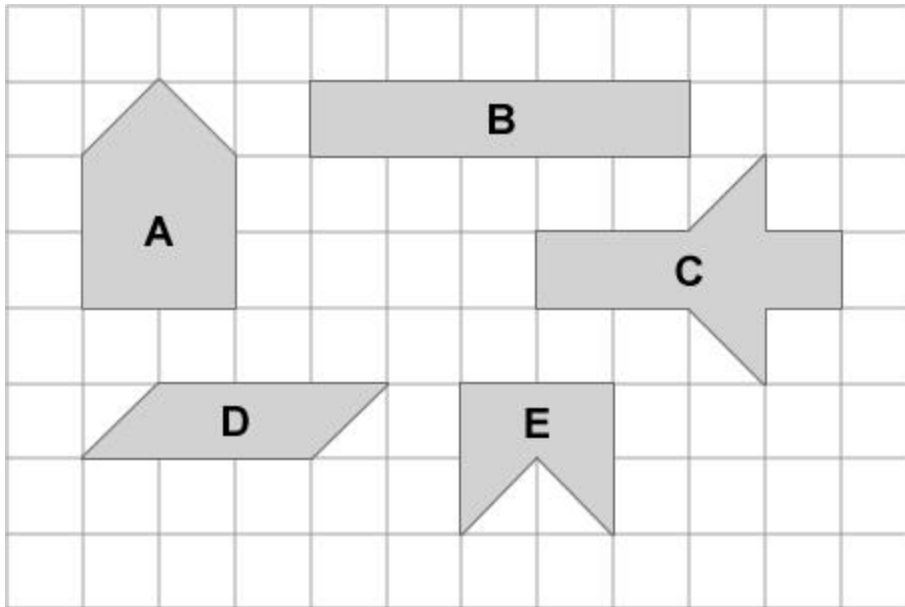
1 mark

Which shape has the **largest area**?

1 mark

Q13.

The diagram shows some shapes on a centimetre square grid.



Which two shapes have the same **area** as shape A?

and

1 mark

Which two shapes have the same **perimeter** as shape A?

and

1 mark

Q14.

What is the **perimeter** of a square with an area of 64 cm^2 ?

1 mark

Now give an example of another rectangle with an area of 64 cm^2 but a different perimeter.

length =

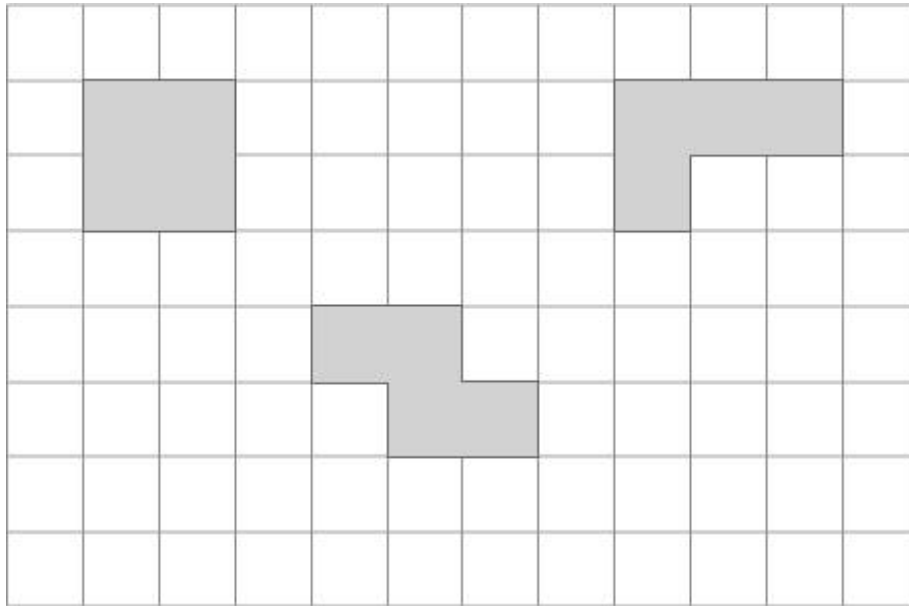
width =

1 mark

Q15.

Rose made shapes using four squares.

She calculated the perimeter of each shape.



What is the length of the **shortest** perimeter?

1 mark

What is the length of the **longest** perimeter?

1 mark

Mark schemes

Q1.

4 cm

[1]

Q2.

A different rectangle with a perimeter of 18 cm ,
e.g. 3 cm × 6 cm, 2 cm × 7 cm etc

[1]

Q3.

A 4 cm × 5 cm rectangle

[1]

Q4.

299

[1]

Q5.

32 cm

[1]

Q6.

49

[1]

Q7.

54

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

[1]

Q8.

20 (cm)

[1]

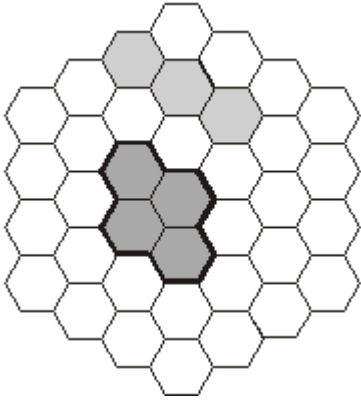
Q9.

90

[1]

Q10.

Shape drawn on grid as shown:



Accept: shape in any position or orientation.

Accept: slight inaccuracies in drawing provided the intention is clear.

Accept: alternative unambiguous indications of the correct shape provided the intention is clear.

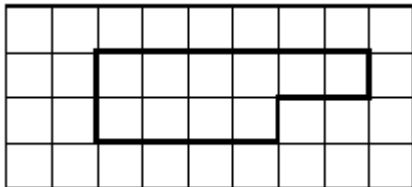
Accept: mathematically correct answers involving fractions of a hexagon.

Shape need not be shaded.

[1]

Q11.

- (a) Any shape with an area of 10 cm^2 , eg

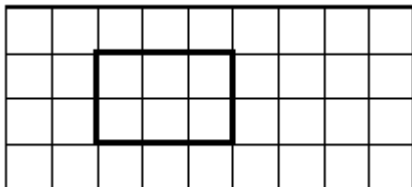


The shape need not be aligned with the grid.

Accept slight inaccuracies in drawing provided intention is clear.

1

- (b) Any rectangle with a perimeter of 10 cm , eg



The rectangle need not be aligned with the grid.

Accept slight inaccuracies in drawing provided the intention is clear.

1

[2]

Q12.

(a) E

1

(b) B

1

[2]

Q13.

B and C

1

D and E

1

[2]

Q14.

32 cm

1

Any factor pair of 64, other than 8 and 8, i.e. any of the following:

64 and 1

32 and 2

16 and 4

Accept dimensions where the width is longer than the length.

1

[2]

Q15.

8 units

1

10 units

1

[2]