Q1.
Chen has some right-angled triangular tiles.


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


## Not <br> actual <br> size

What is the perimeter of Chen's shape?


Q2.
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.

Q3.
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.

Q4.
Here are some shapes on a grid.


Which shape has the longest perimeter?


1 mark
Which shape has the largest area?


1 mark

Q5. Here are two shapes made with centimetre squares.
1 cm



Each shape has 5 squares.
Write ONE other thing which is the same about the two shapes.
$\qquad$
$\qquad$

Here are more shapes made with centimetre squares.
A

B

C
D


E

F

G

H

Which shape has a perimeter of 10 cm ?


1 mark

Q6.
Join the dots to draw a rectangle that has an area of $20 \mathrm{~cm}^{2}$ and a perimeter of 18 cm .

Q7.
A rectangle has an area of $36 \mathrm{~cm}^{2}$
How long could the sides of the rectangle be?
Give three different examples, using whole numbers.
$\ldots \ldots \ldots \ldots \ldots \ldots \ldots . \mathrm{cm}$ and $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \mathrm{cm}$
$\ldots \ldots \ldots \ldots \ldots \ldots . \mathrm{cm}$ and $\ldots \ldots \ldots \ldots \ldots \ldots . \mathrm{cm}$
$\ldots \ldots \ldots \ldots \ldots \ldots . \mathrm{cm}$ and $\ldots \ldots \ldots \ldots \ldots \ldots . \mathrm{cm}$

Q8.
Grace has a rectangle with sides of 4 cm and 5 cm .
Draw a different rectangle that has the same perimeter.

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Q9.
What is the perimeter of a square with an area of $64 \mathrm{~cm}^{2}$ ?

Now give an example of another rectangle with an area of $64 \mathrm{~cm}^{2}$ but a different perimeter.
length =

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width =
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Q10.
Here is a set of 20 squares around a shaded space.


What is the area of the shaded space?

Q11.
Here is a shaded shape on a 1 cm square grid.


What is the area of the shaded shape?


1 mark

Q12.
Lara has some identical rectangles.
They are 7 centimetres long and 2 centimetres wide.


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

Q13. 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.

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Q14. Here are some shapes drawn on a grid.


Write the letters of the two shapes that are equal in area.
$\qquad$ and $\qquad$

Q15. Match each shape on the left to one with equal area on the right.
One has been done for you.


Q16.
Draw one line from each shape to the rectangle which has the same area.
One is done for you.


Q17.
On the grid, draw a rectangle which has the same area as this shaded pentagon.
Use a ruler.


Q18.
Here is a centimetre square grid.
On the grid draw a shape which has an area of 10 square centimetres.


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


Q19.


Work out the area of each shape.
(a) Rectangle


1 mark
(b) Triangle
$\mathrm{cm}^{2}$

1 mark

Q20.
Here is a quadrilateral drawn on a square grid.


On the same grid, draw a different quadrilateral that has the same area.

Q21.
Grace has a rectangle that has sides of 4 cm and 5 cm .
Draw a different rectangle that has the same area.

