Name:

# GCSE (1-9) <br> Area and Perimeter 

## Instructions

- Use black ink or ball-point pen.
- Answer all questions.
- Answer the questions in the spaces provided
- there may be more space than you need.
- Diagrams are NOT accurately drawn, unless otherwise indicated.
- You must show all your working out.


## Information

- The marks for each question are shown in brackets
- use this as a guide as to how much time to spend on each question.


## Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end

1 The diagram shows two shapes on a centimetre grid.

(a) Find the area of shape $\mathbf{P}$
$\qquad$
(b) Write down the mathematical name for shape $\mathbf{Q}$.
(c) Find the area of shape $\mathbf{Q}$.
$\qquad$ $\mathrm{cm}^{2}$

2 The length of a rectangle is two times the width of the rectangle.
The perimeter of the rectangle is 24 cm .
Draw the rectangle on the centimetre grid.


3 The length of a rectangle is three times the width of the rectangle.
The area of the rectangle is $48 \mathrm{~cm}^{2}$.
Draw the rectangle on the centimetre grid.


4 The base of a triangle is twice the height of the triangle.
The area of a triangle is $16 \mathrm{~cm}^{2}$.
Draw the triangle on the centimetre grid.


5 The base of a parallelogram is twice the perpendicular height of the parallelogram.
The area of the parallelogram is $50 \mathrm{~cm}^{2}$.
Draw the parallelogram on the centimetre grid.


6 Here is a rectangle.
7 cm


The six-sided shape below is made from two of these rectangles.


Work out the perimeter of this six-sided shape.
$\qquad$ cm

7 A square has an area of $64 \mathrm{~cm}^{2}$.


Find the perimeter of the square.
$\qquad$ cm

8 A square has a perimeter of 36 cm .
Find the area of the square.
$\qquad$ $\mathrm{cm}^{2}$

9 The diagram shows a right angled triangle and a parallelogram.


The area of the parallelogram is four times the area of the triangle.
The perpendicular height of the parallelogram is $h$.
Find the value of $h$.

$$
h=
$$

$\qquad$

10 The diagram shows a garden is in the shape of a trapezium.


Find the area of the garden.

11 Here is a trapezium drawn on a centimetre grid.


Find the area of the trapezium.
$\qquad$ $\mathrm{cm}^{2}$

12 The diagram shows a trapezium with an area of $30 \mathrm{~cm}^{2}$ and a perpendicular height $h \mathrm{~cm}$.


Find the value of $h$.

$$
h=
$$

$\qquad$

13 The diagram shows a trapezium with an area of $45 \mathrm{~cm}^{2}$ and a perpendicular height $h \mathrm{~cm}$.


Find the value of $h$.

$$
h=
$$

$\qquad$

