Mark schemes

Q1.
Award TWO marks for the correct answer of 72
If the answer is incorrect, award ONE mark for evidence of appropriate working, eg:

- $13 \times 4=52$
$5 \times 4=20$
$52+20=$ wrong answer
Working must be carried through to reach an answer for the award of ONE mark.

Q2.
90

Q3.
49

Q4.
(a) E
(b) B

Q5.
(a) A mathematical criterion such as:

- "They are symmetrical."
- "Each has three squares across."
- "Both have the same perimeter."
- "They have 4 joined-on lines."
- "They have the same area."

Do not accept criteria which are implicit in the fact that the shapes are made from cm squares, eg:

- "They have straight edges."
(b) E

Q6.
A $4 \mathrm{~cm} \times 5 \mathrm{~cm}$ rectangle

Q7.
Award TWO marks for three different factor pairs of 36, i.e. any three of the following:
1 and 36
2 and 18
3 and 12
4 and 9
6 and 6
Award ONE mark for two different correct factor pairs of 36

Q8.
A different rectangle with a perimeter of 18 cm , e.g. $3 \mathrm{~cm} \times 6 \mathrm{~cm}, 2 \mathrm{~cm} \times 7 \mathrm{~cm}$ etc

Q9.
32 cm

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.

## Q10.

11
Accept $11 \mathrm{~cm}^{2}$

Q11.
10

Q12.
(a) 34
(b) 70

Q13.
Any rectangle with an area of 8 squares, eg


OR


Accept slight inaccuracies in drawing provided the intention is clear.

Q14.
A and D
Both letters must be correct for the award of the mark.
Accept either order.
Accept any other clear way of indicating the two correct shapes, such as circling.

Q15.

Award TWO marks for the 3 shapes matched correctly as shown:


If the answer is incorrect, award ONE mark for any two shapes correctly matched.
Lines need not touch shapes or area boxes exactly provided the intention is clear.
Do not accept shapes on the left which have been matched to more than one area on the right.

Up to 2

## Q16.

Lines drawn as shown.
Lines need not touch the shapes or boxes, provided the intention is clear.


No mark is awarded in the case of two lines originating from one shape.
If two lines are drawn to the same rectangle, and one is correct, award ONE mark.

Q17.
Any rectangle with an area of 14 squares, eg


Rectangle need not be shaded or coincident with the grid lines. Accept extensions to the grid to allow, for example, a $14 \times 1$ rectangle.
Accept slight inaccuracies in drawing provided the intention is clear.

Q18.
(a) Any shape with an area of $10 \mathrm{~cm}^{2}$, eg


The shape need not be aligned with the grid.
Accept slight inaccuracies in drawing provided intention is clear.
(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.

Q19.
(a) Rectangle - 14
(b) Triangle - 12

Q20.

Any different quadrilateral with an area of $6 \mathrm{~cm}^{2}$, e.g.


Q21.
A different rectangle with area $20 \mathrm{~cm}^{2}$, e.g. $2 \mathrm{~cm} \times 10 \mathrm{~cm}$ rectangle

