1. The diagrams show some solid shapes and their nets.

An arrow has been drawn from one solid shape to its net.
Draw an arrow from each of the other solid shapes to its net.

2. Write down the mathematical name of each of these 3-D shapes.
(i)

(ii)

(i) $\qquad$
(ii) $\qquad$
3. Write down the mathematical name of each of these two 3-D shapes.
(i)

(ii)

(i)
(ii)
(Total 2 marks)
4.


Diagram NOT accurately drawn
$A B C$ is a straight line.
(i) Work out the size of the angle marked $x$.
$\qquad$
$\circ$
(ii) Give a reason for your answer.
$\qquad$
5. Here is a shaded shape on a grid of centimetre squares.

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(a) Find the perimeter of the shaded shape.
$\qquad$
cm
(b) Find the area of the shaded shape.
$\qquad$
(1)
(c) Write down the mathematical name of the shaded shape.
$\qquad$

1. See diagram

$$
\begin{aligned}
& \text { B3 all correct } \\
& \text { (B2 for } 3 \text { correct } \\
& \text { B1 for } 2 \text { correct) }
\end{aligned}
$$

2. (i) Cube

> B1 for 'cube' (accept 'cuboid') ignore spelling
(ii) Cylinder B1 for 'cylinder' ignore spelling 2
3. (i) Cylinder

B1 cao
(ii) Cone Bl cao 2
4. (i) 110 2 B1 cao
(ii)

B1 for $180^{\circ}$ on a (straight) line
5. (a) 16

1
B1 for 16 cao
(b) 15 B1 for 15 cao $\quad 1$
(c) rectangle 1

B1 for rectangle, quadrilateral, trapezium, parallelogram or oblong

1. Mathematics A Paper 2

About $95 \%$ of candidates gave a fully correct answer to this question and the other $5 \%$ scored 2 out of the 3 marks.

## Mathematics B Paper 15

The vast majority of the candidates were able to identify each solid with its appropriate net correctly.
2. Part (i) was almost always correct as a mark was given for cube or cuboid. In part (ii) candidates achieved less success, as they did not recognise the 3-D shape as a cylinder.
3. There were many correct answers although some gave quite imaginative answers such as 'rollergram' in (i). 'Pyramid' was a popular incorrect response in (ii).
4. Many candidates realised that $x$ was $110^{\circ}$ but many could not state a geometric reason which involved using the words 'line' and ' $180^{\circ}$ ' as part of their wording. Many preferred to merely show the calculation they did. This would have scored no marks. The mean mark for this question was 1.29.
5. A well understood question by most candidates; however a significant minority mixed up area and perimeter and some candidates found the area and perimeter of the grid on which the shaded shape was drawn. Almost all candidates wrote rectangle for the shape though some candidates did write quadrilateral, square or even kite.

