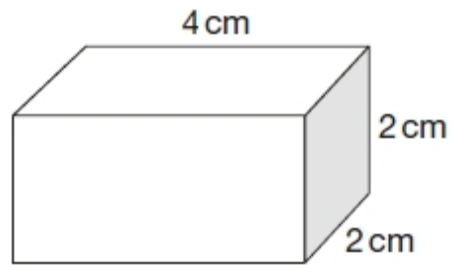
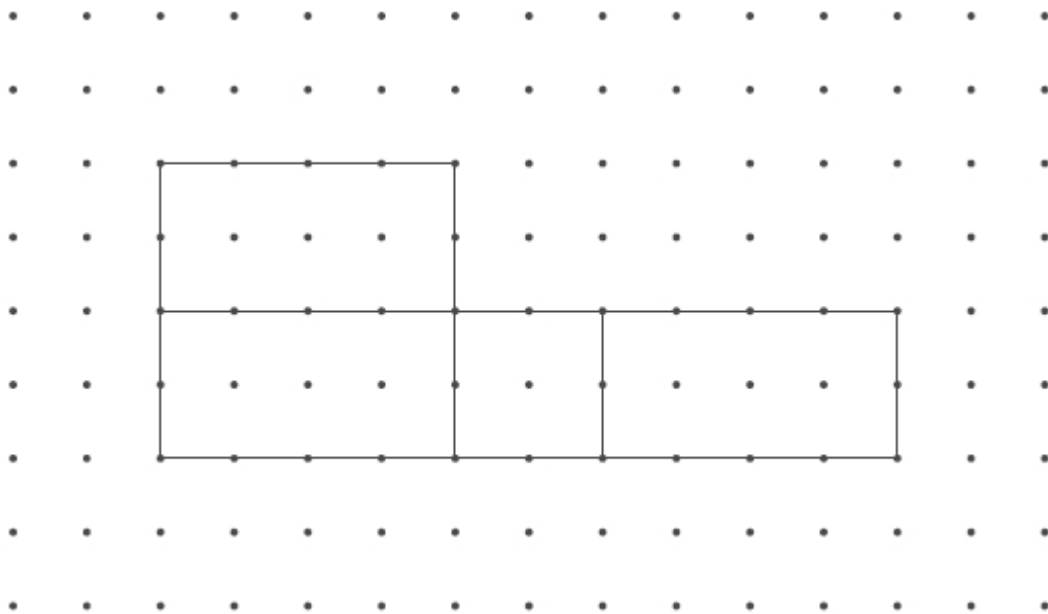


1.

Look at the cuboid below.



Draw **two** more faces to complete the net of the cuboid.

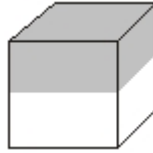


2 marks

2.

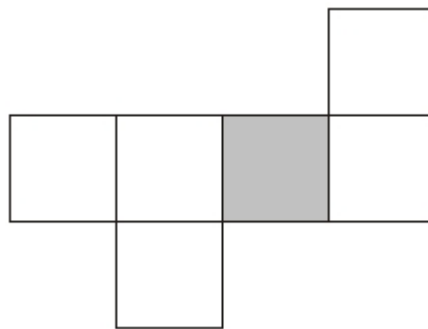
Here is a cube.

The cube is shaded all the way round so that the top half is grey and the bottom half is white.



Here is the net of the cube.

Complete the shading.



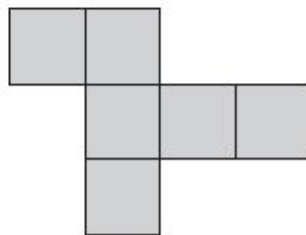
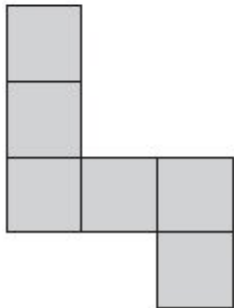
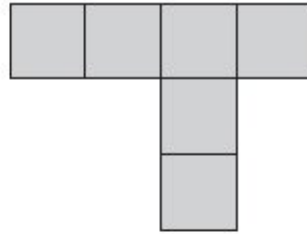
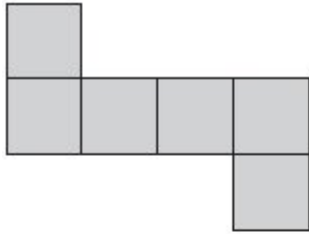
2 marks

3.

Here are four diagrams.

On each one put a tick (✓) if it is a net of a cube.

Put a cross (X) if it is not.



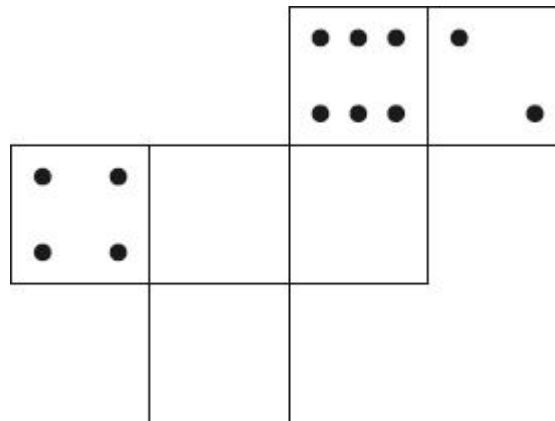
2 marks

4.

On a dice, the sum of the dots on opposite faces is always 7



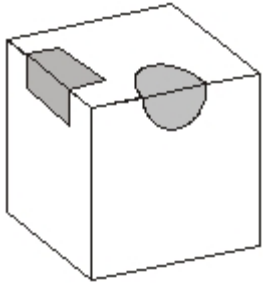
Draw dots on the three empty faces of the net so that it could fold up to make a dice.



1 mark

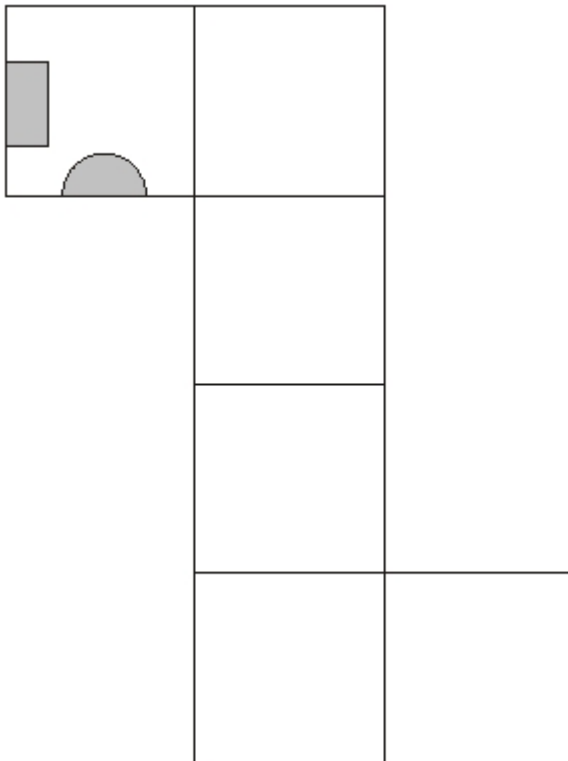
5.

A cube has shaded shapes on three of its faces.



Here is a net of the cube.

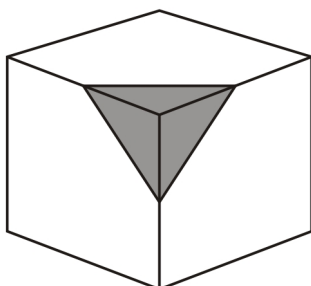
Draw in the two missing shaded shapes.



1 mark

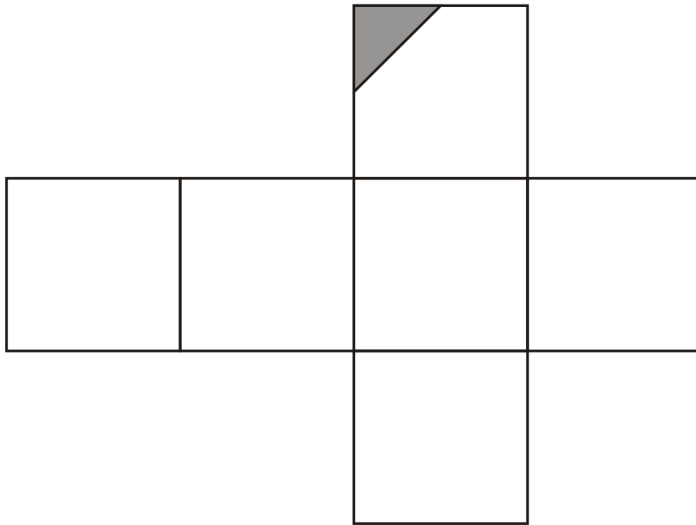
6.

A cube has shaded triangles on three of its faces.



Here is the net of the cube.

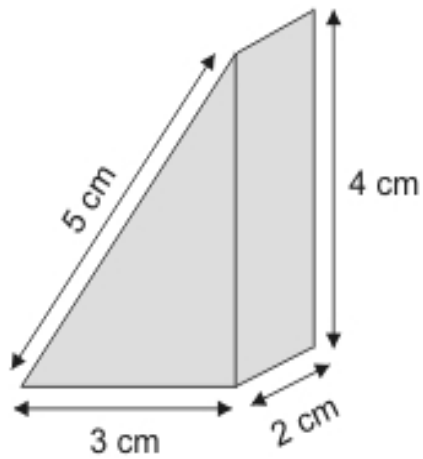
Draw in the two missing shaded triangles.



1 mark

7.

Here is a triangular box.



Below is part of the net of the box, but **two** of its faces are missing.

Draw **accurately**, full size, **ONE** of the missing faces on the diagram below.

You can use a ruler and protractor (angle measurer).

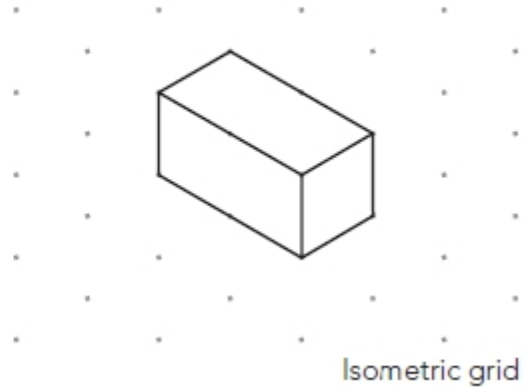
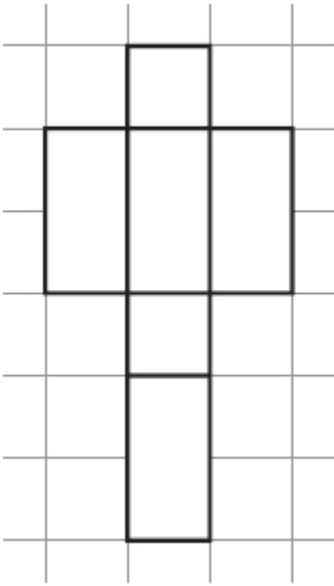


2 marks

8.

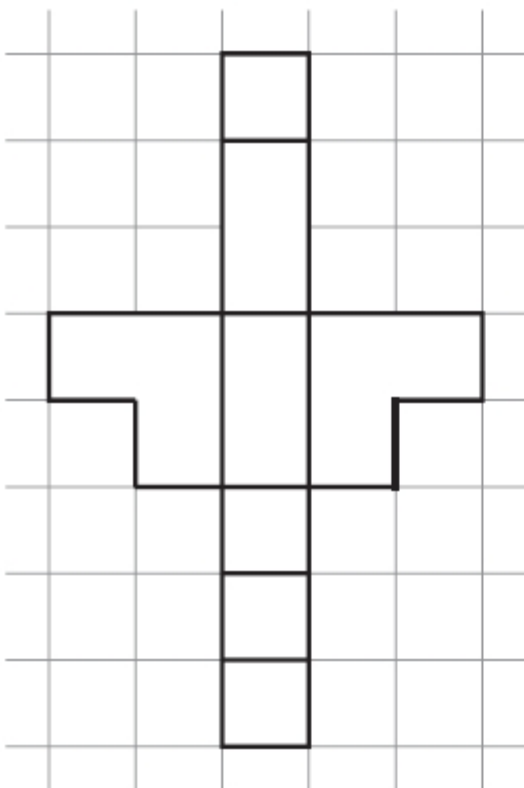
Look at the net drawn on square paper.

It folds to make a prism.



The net below folds to make a different prism.

Draw it on the grid.



Isometric grid

2 marks

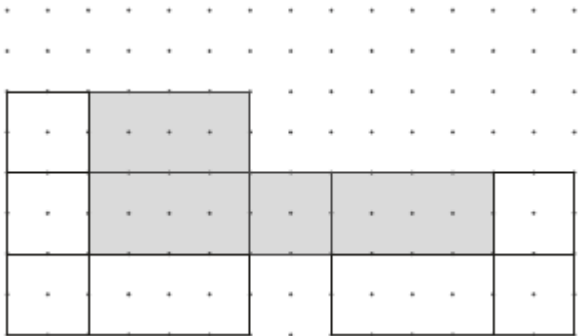
Mark schemes

1.

(a) Rectangle (oblong) drawn in one of the correct positions as shown in diagram below:

1

(b) Square drawn in one of the correct positions as shown in the diagram below:



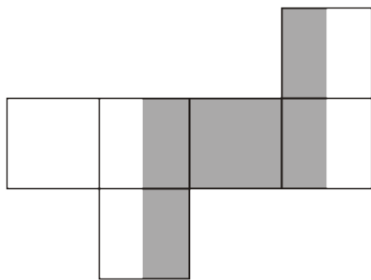
Only accept a square that is joined to the side of an adjacent rectangle (oblong).

1

[2]

2.

Award **TWO** marks for four faces correctly shaded as shown:



If the answer is incorrect, award **ONE** mark for:

- only the correct four faces marked **AND** at least two shaded correctly

OR

- four faces shaded correctly **AND** one shaded incorrectly

OR

- three faces shaded correctly **AND** none shaded incorrectly.

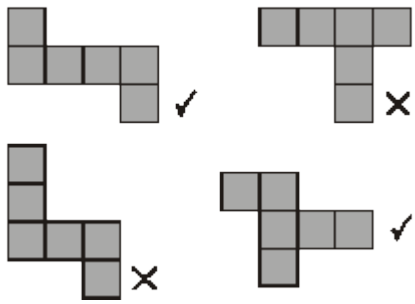
The width of each shaded rectangle is irrelevant provided the intention is clear.

Up to 2 (U1)

[2]

3.

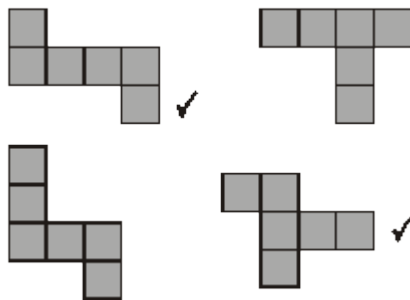
Award **TWO** marks for diagrams ticked or crossed as shown:



If the answer is incorrect, award **ONE** mark for three diagrams ticked or crossed correctly.

*Accept alternative unambiguous indications such as **Y** or **N**.*

*For **TWO** marks accept:*

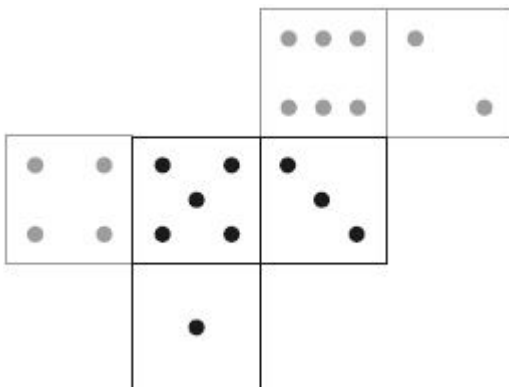


Up to 2

[2]

4.

Net completed, as shown:



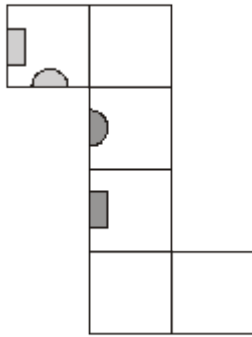
Accept unconventional arrangements of the dots, provided the intended number is clear and correct.

Accept numbers instead of dots.

[1]

5.

Diagram completed as shown:

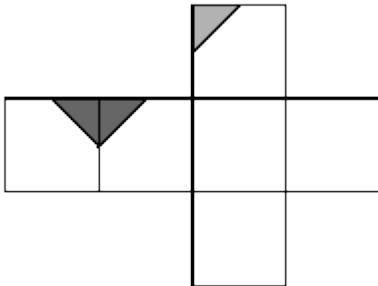


*Accept: inaccuracies in drawing provided the intention is clear.
Shapes need not be shaded.*

[1]

6.

Diagram marked as shown:



*Both triangles must be correctly marked.
Accept slight inaccuracies in drawing, provided the intention is clear.
Triangles need not be shaded.*

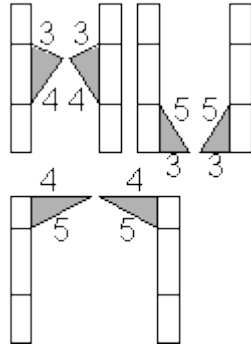
[1]

7.

(a) Award **ONE** mark for correct position of triangle as shown in one of the diagrams below.

1

- (b) Award **ONE** mark for accurate drawing of one triangle with right angle ($90^\circ \pm 2.5^\circ$) **AND** length of lines as indicated ± 2 mm.



No marks awarded for triangles **not** attached to main stem.

1

[2]

8.

Draws a correct view of the prism in any orientation, using the isometric grid, eg:

•



•

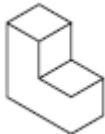


2

or

Draws a correct view, using the isometric grid, but the only error is either to omit one external line or to show some incorrectly indicated hidden lines, eg

•



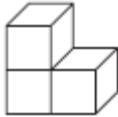
OR

Draws a view of a prism with an L-shaped cross section, using the isometric grid with all external lines and no incorrectly indicated hidden lines shown, but with incorrect dimensions

OR

Shows an understanding that the net forms a prism with an L-shaped cross-section, showing all external lines and no incorrectly indicated hidden lines, but does not use the isometric grid, eg

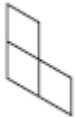
•



OR

Draws a correct view of the cross-section, using the isometric grid, eg

•



1

Accept some or all internal lines drawn, eg

•



! Lines not ruled or accurate

Accept provided the pupil's intention is clear

! Extended edges

Condone

! Prism enlarged

For 2 m or 1 m, accept provided a consistent scale factor has been used for all lengths

! For 2 m, some or all hidden lines shown

Do not accept unless hidden lines are dotted or otherwise shown as hidden

eg, do not accept

•



Do not accept for 2 m, any external line omitted

! For 1 m, L-shaped cross-section

The cross-section must have a line of symmetry eg, for 1 m do not accept

•



! For 1 m, additional lines shown with correct cross-section

Ignore

[2]