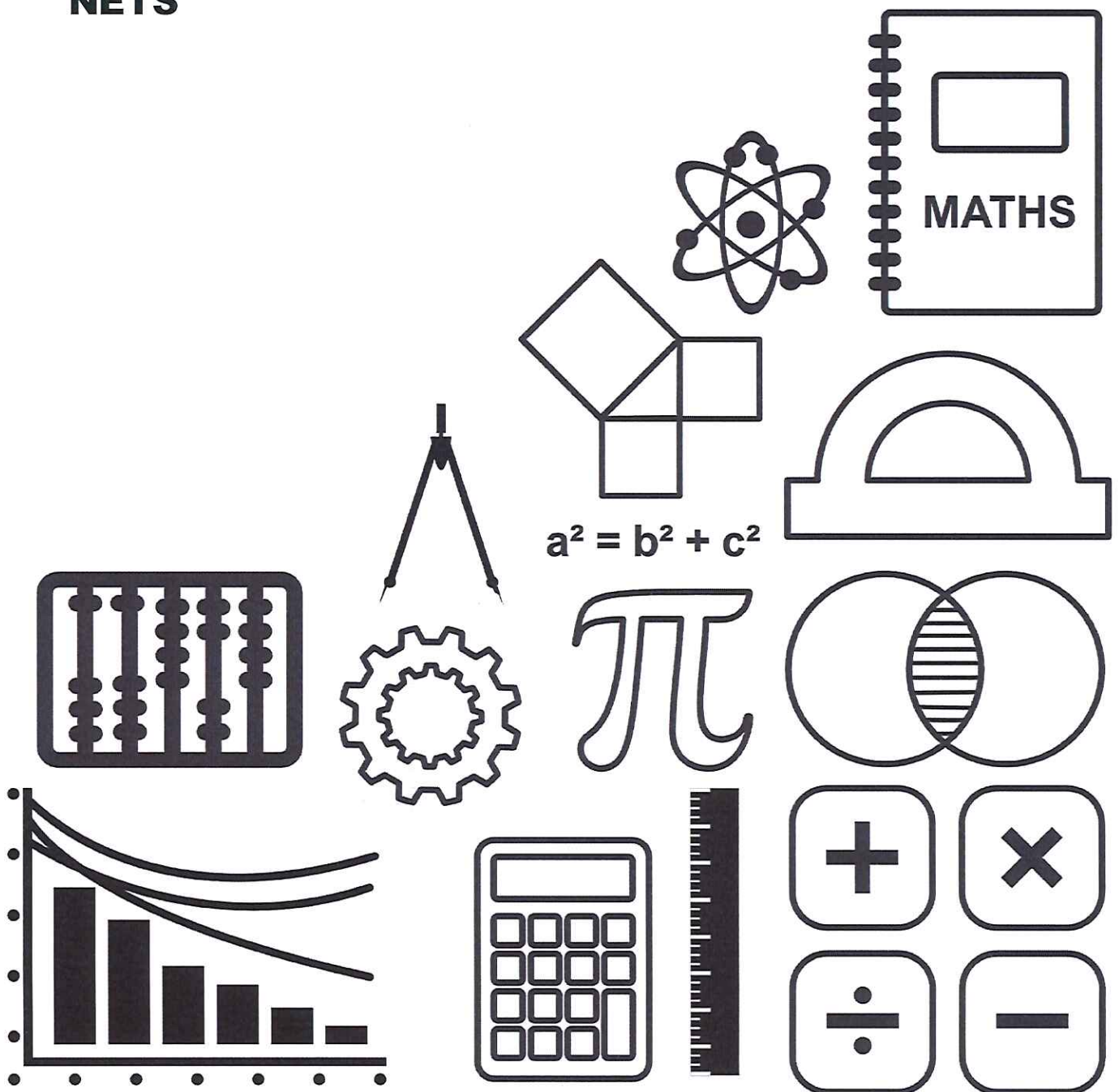


SOLUTIONS

GCSE TOPIC BOOKLET NETS

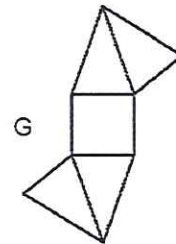
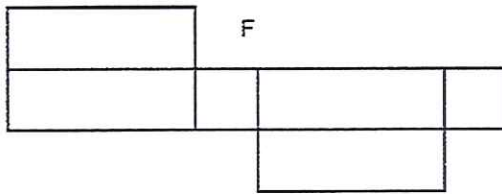
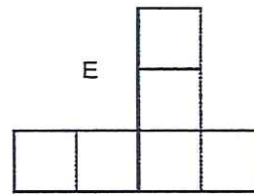
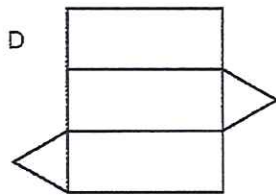
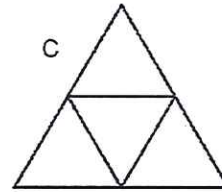
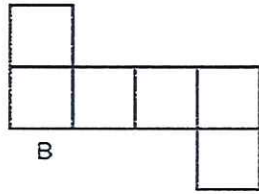
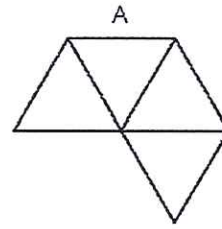


1.

Complete the table below to match each 3-dimensional shape with its correct net. One has been done for you.

[4]

3-dimensional shape	Net
cube	B
cuboid	F
triangular prism	D
square-based pyramid	G
tetrahedron	C

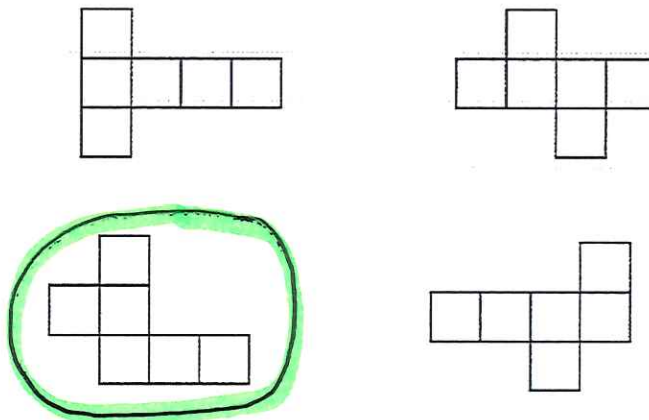


2.

A jewellery shop wishes to create boxes, in the shape of cubes, to use for packaging gifts.

- (a) Which one of the following patterns **cannot** be used to form a box in the shape of a cube?
Circle your answer.

[1]



- (b) The jewellery shop wants to cover all the sides of a box with paper.
The box is a cube with sides 7 cm.

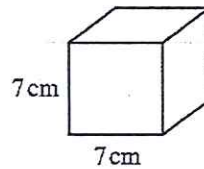


Diagram not drawn to scale

What is the total area of all the faces of this box?
State the units of your answer.

Six faces all of equal area

$$\begin{aligned}
 &= 6 \times (L \times w) \\
 &= 6 \times (7 \times 7) \\
 &= 6 \times 49
 \end{aligned}$$

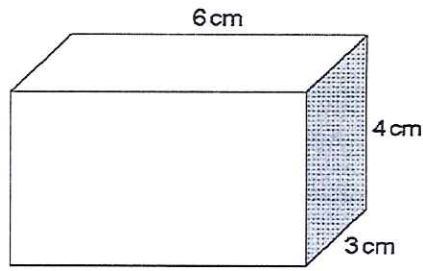
[4]

$$\begin{array}{r}
 49 \\
 \times 6 \\
 \hline
 294 \\
 \hline
 5
 \end{array}$$

$$= \underline{\underline{294 \text{ cm}^2}}$$

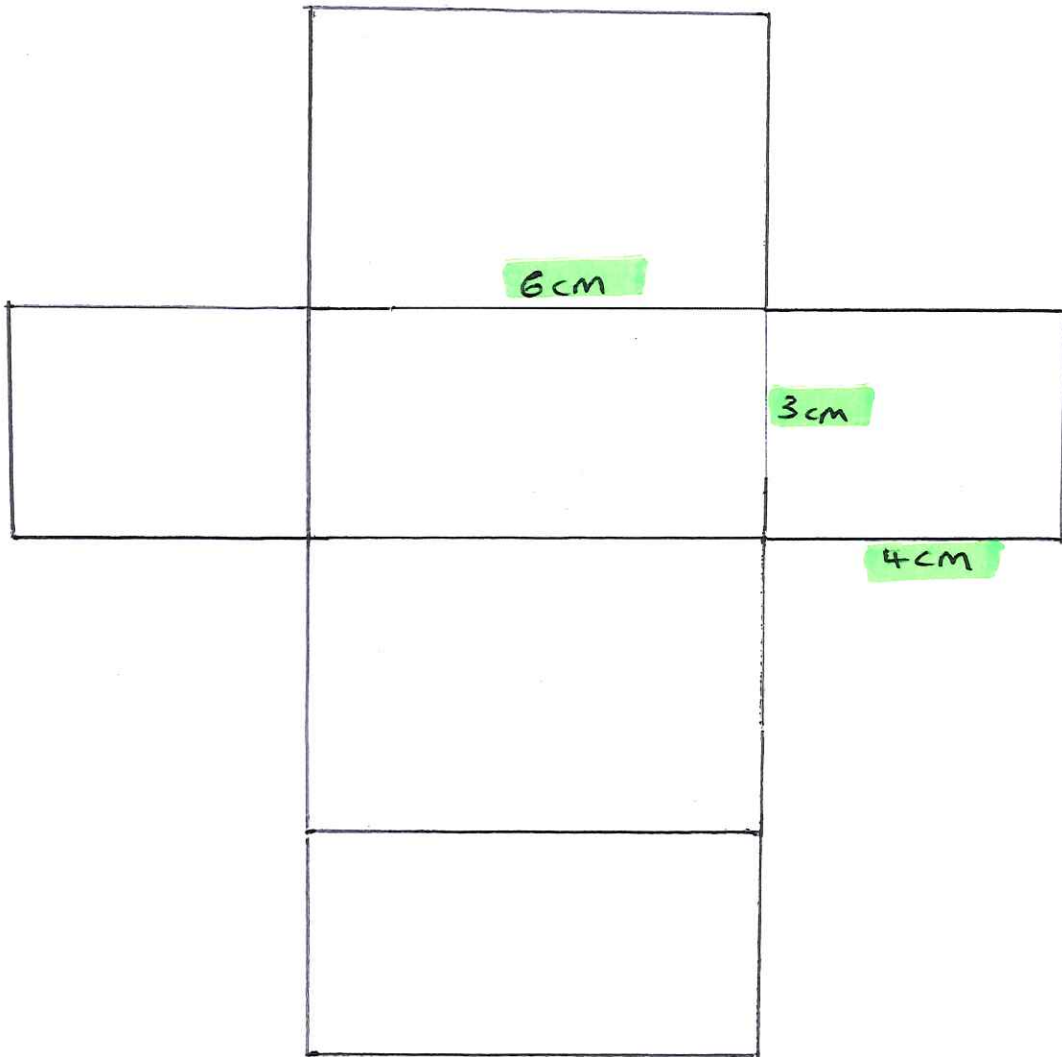
3.

The diagram shows a cuboid with measurements as shown.



Draw an accurate net for the cuboid.
A 6 cm by 3 cm face has been drawn for you.

[4]



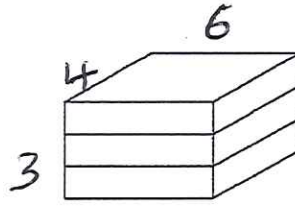
4.

A manufacturer makes cereal bars.

Each bar is a cuboid, measuring 6 cm by 4 cm by 1 cm.

The manufacturer wants to make a box, with a lid, in which to pack 3 cereal bars.

The bars are packed one on top of the other, so that no space is wasted, as shown in the diagram below.



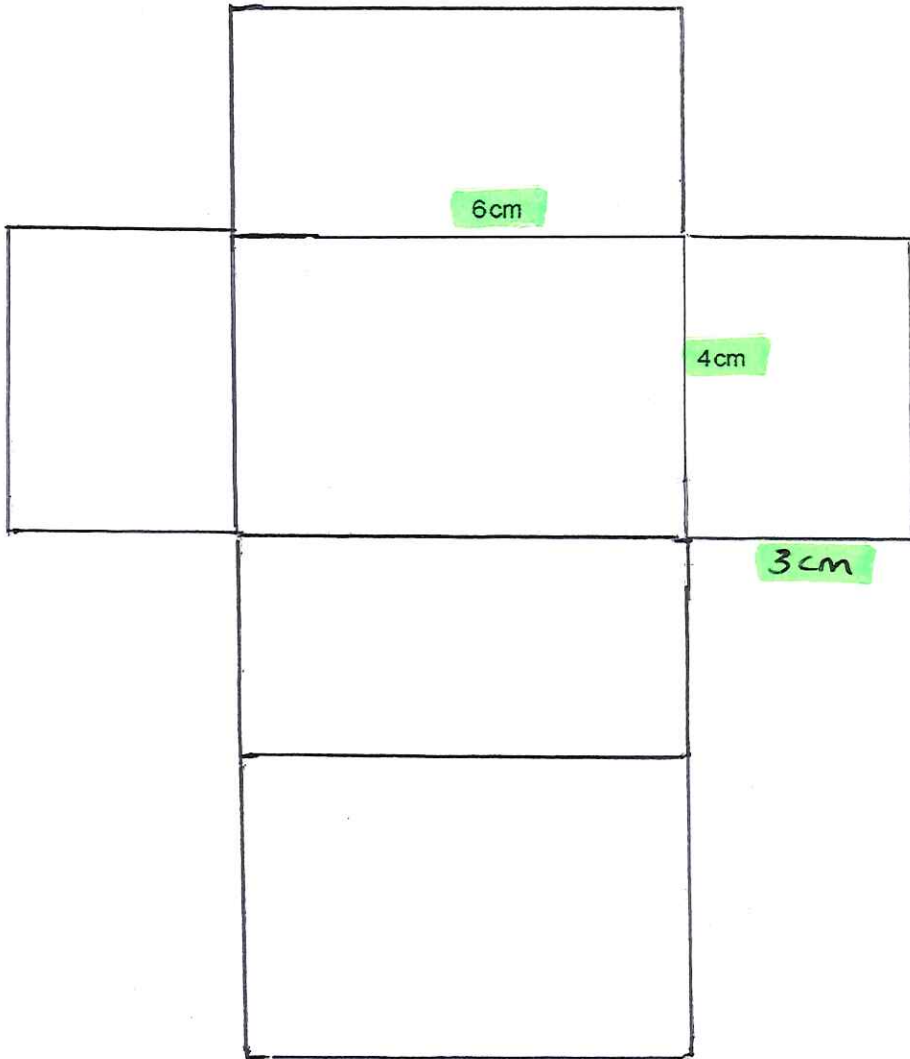
Must be

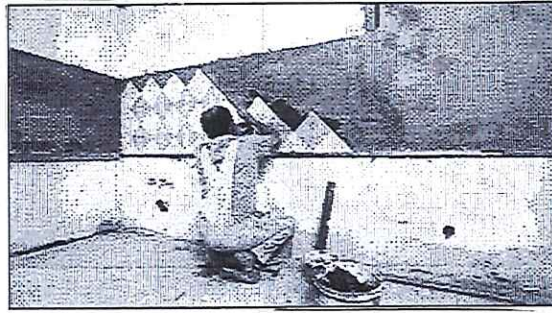
6 cm by 4 cm by 3 cm

Diagram not drawn to scale

Draw an accurate net of the box that will hold 3 cereal bars.
One face has been drawn for you.

[4]

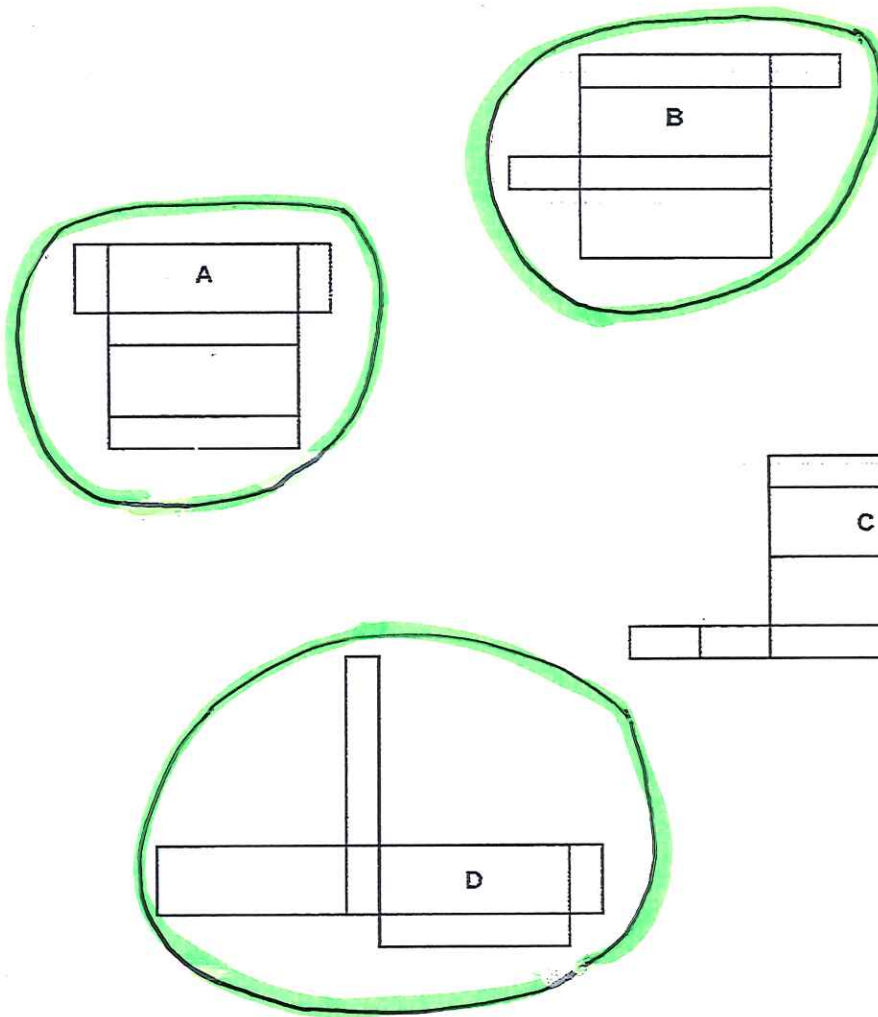


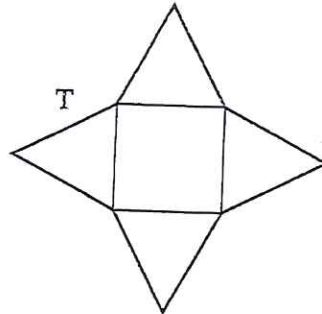
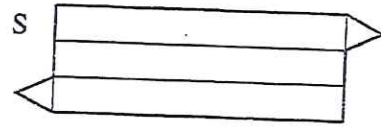
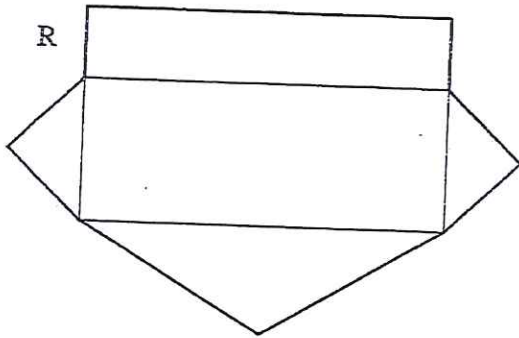
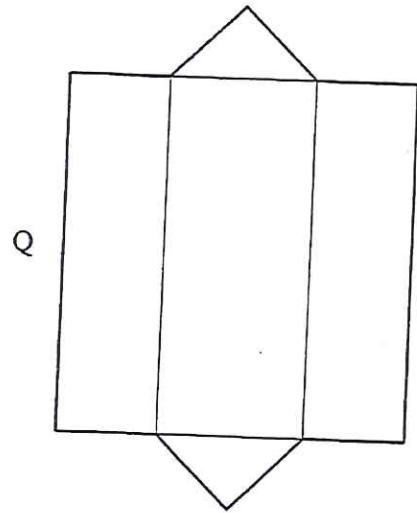
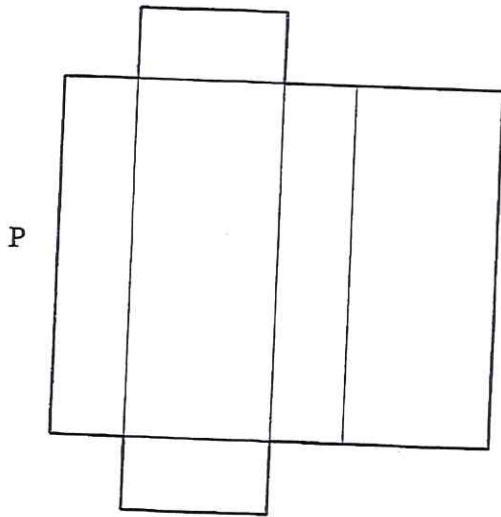


Christopher is tiling his kitchen walls.

The boxes that contain the tiles are cuboids.
Circle the possible nets that could be used to form the boxes for the tiles.

[2]





Which of the above diagrams represent nets of triangular prisms? **Q and S**

[2]