



Help Code : 035

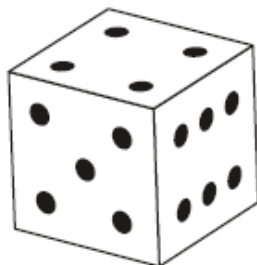
## 3D SHAPES NETS & VOLUME

17

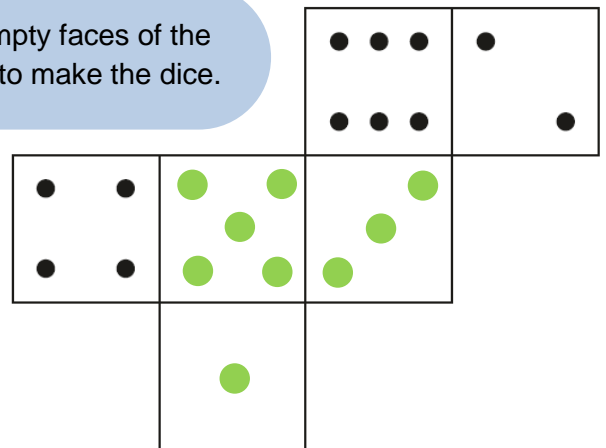
On a dice, the sum of the dots on opposite faces is always 7.

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

YouTube



**LAST YEARS**  
questions



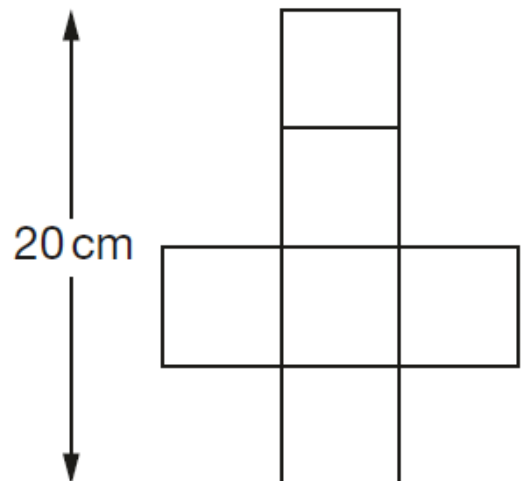
22

This is the net of a cube.

What is the **volume** of the cube?

YouTube

125 cm

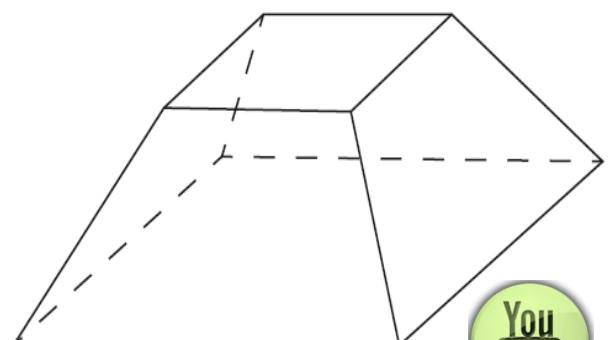


11

Here is a drawing of a 3D shape.

Complete the table.

Number of Faces	Number of Vertices	Number of Edges
6	8	12

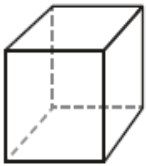


YouTube

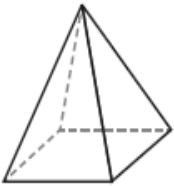
12

Here are diagrams of some 3-D shapes.

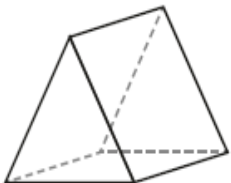
Tick each shape that has the same number of faces as vertices.



Cube



Square-based pyramid



Triangular prism



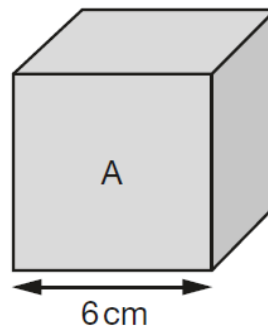
Triangular-based pyramid



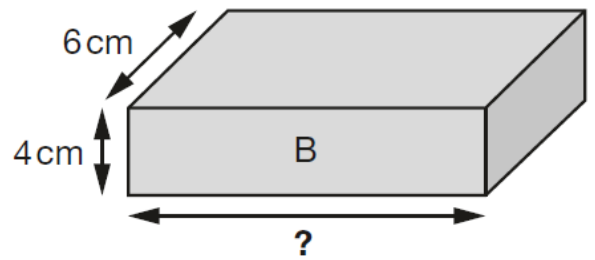
Show your method

24

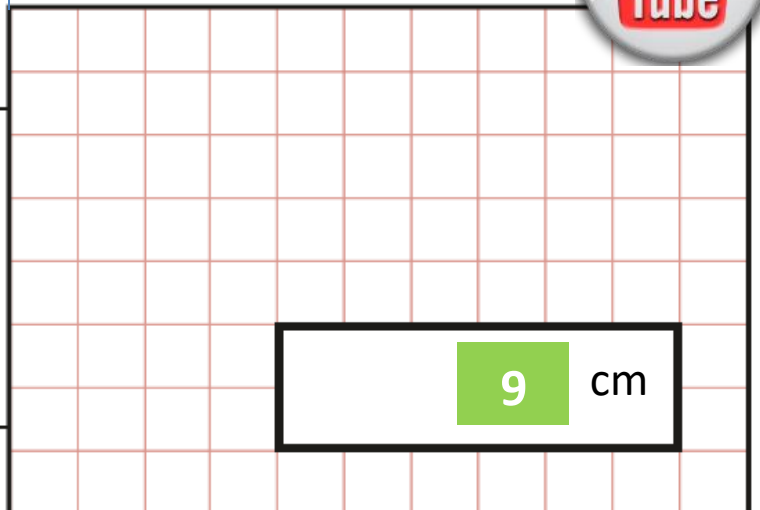
Cube A and cuboid B have the same volume.

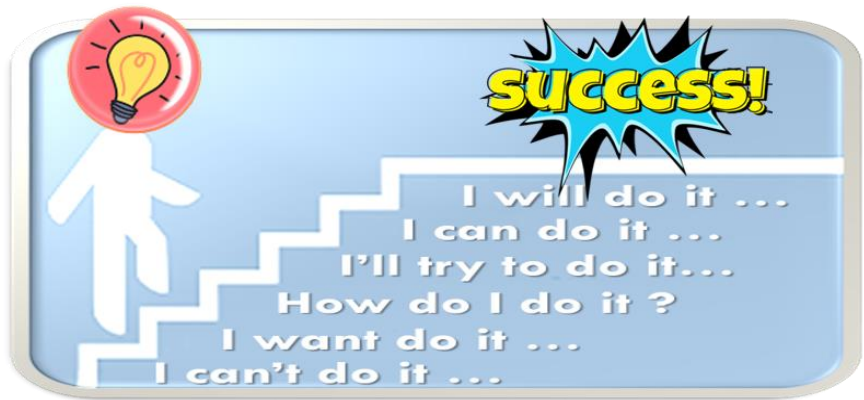


**Not to scale**



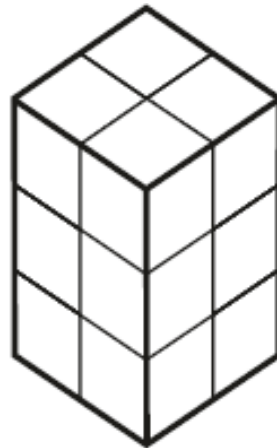
Calculate the missing length on cuboid B.



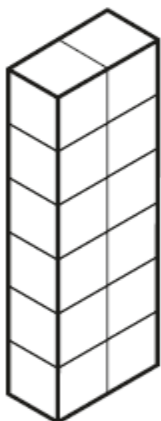


10

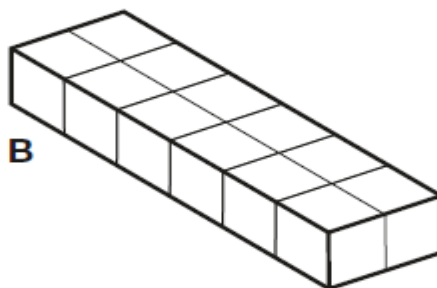
Emma makes a cuboid using 12 cubes.



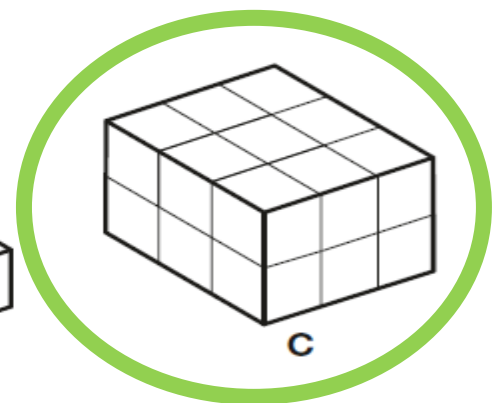
Write the letter of the cuboid that has a **different** volume from Emma's cuboid.



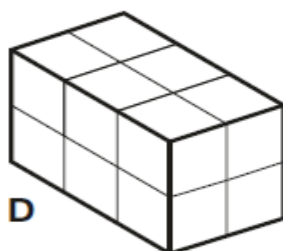
A



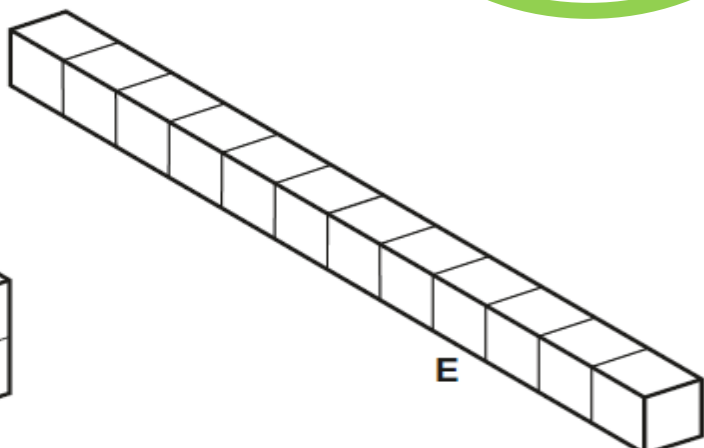
B



C



D

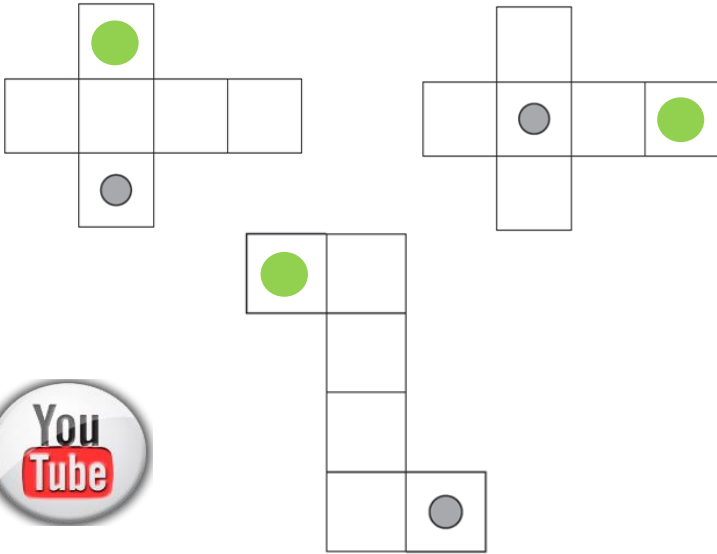


E

2013A KS2 Q5

Here are three nets of a cube.

On each net draw **one more dot** so that each cube will have dots on **opposite faces**.

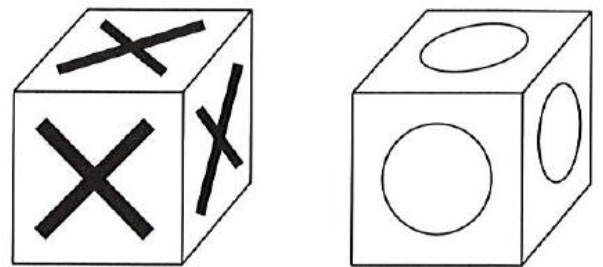


## BOOSTER

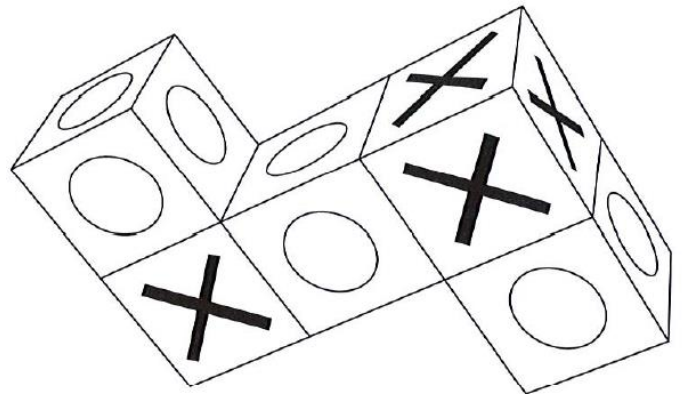
2012A KS2 Q20



Seb has some cubes with a cross on each face and some cubes with a circle on each face.



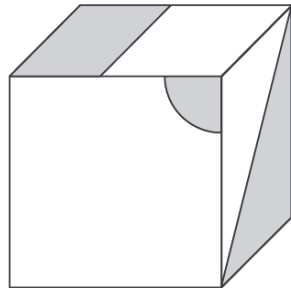
He sticks five cubes together to make this shape.



How many crosses and how many circles are there on the **outside** of the shape?

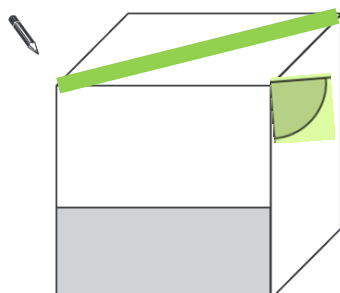
2011A KS2 Q22

This cube has shapes drawn on three of its faces.



The cube is turned to look like this.

Draw and shade the missing shapes.



Number of crosses

8

Number of circles

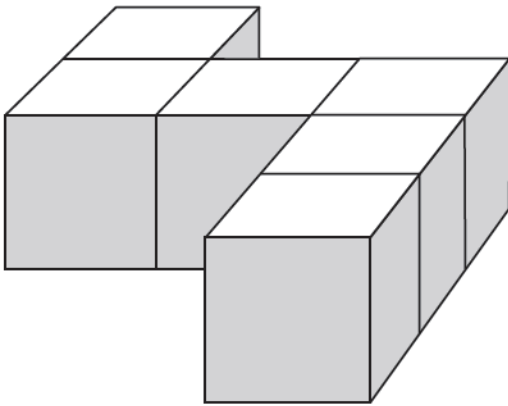
14

2008A KS2 Q17



Emily has 6 cubes.

She sticks them together to make this model.



She paints the sides of the model grey all the way round.

She leaves the top and the bottom of the model white.

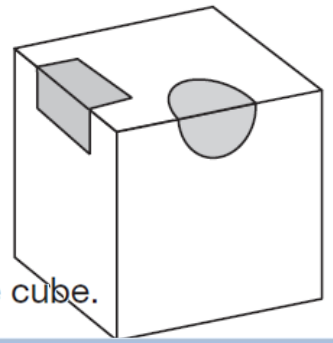
How many of the cubes in the model have **exactly two** faces painted grey?



14

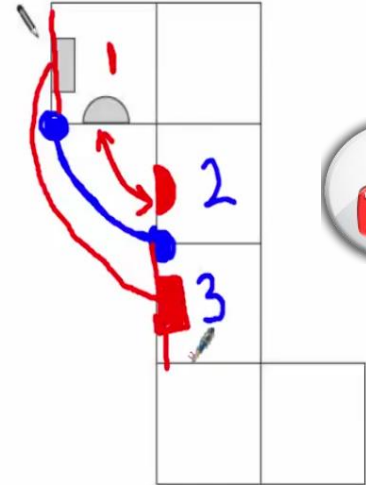
2007A KS2 Q22

A cube has shaded shapes on three of its faces.



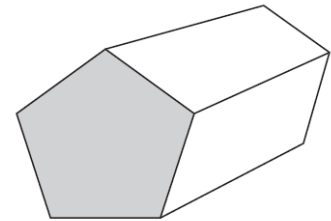
Here is a net of the cube.

Draw in the two missing shaded shapes.

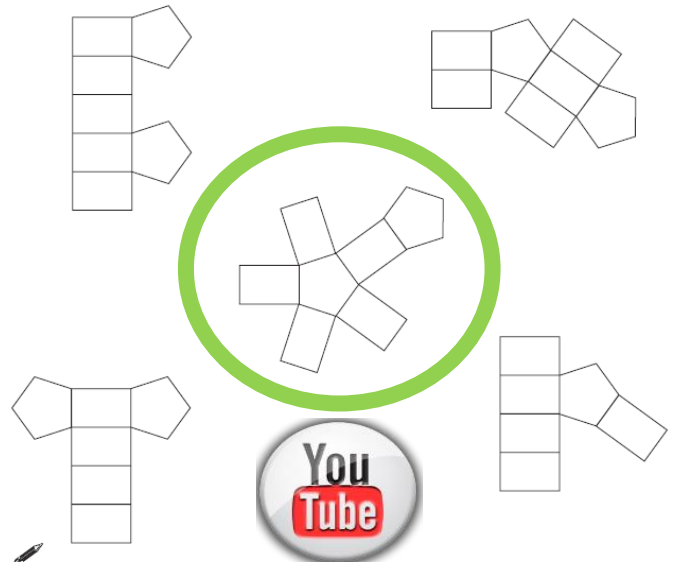


2004A KS2 Q13

This is a drawing of a pentagonal prism.



Tick (✓) the one shape that is a net for the pentagonal prism.



2005A KS2 Q16



Here are four diagrams.

On each one put a tick (✓) if it is a net of a cube. Put a cross (✗) if it is not.

