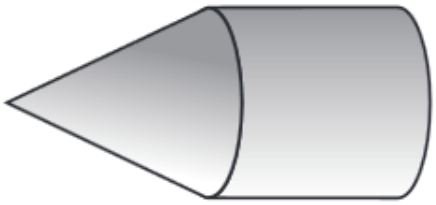
Year 8 Prisms

Question 1

Steve joined two blocks together to make this object.

He used a cone and a

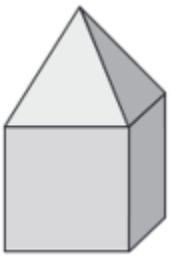


A Cube B Cylinder

C Square Pyramid D Rectangular Prism

Question 2

A square based pyramid and a cube have been glued together.



How many **faces** does the new object have?

A 4 B 8 C 9 D 11

Question 3

Here are two pictures of the same cube.
Each face has a different symbol on it.

Which face is opposite to the  face?

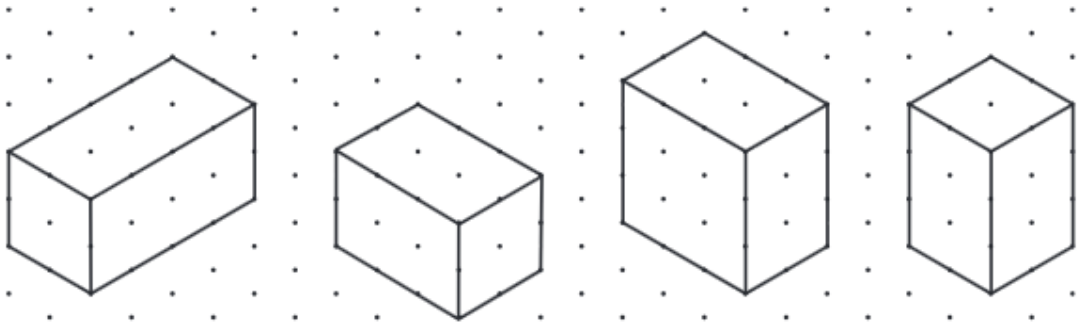
A

B

C

D

Question 4

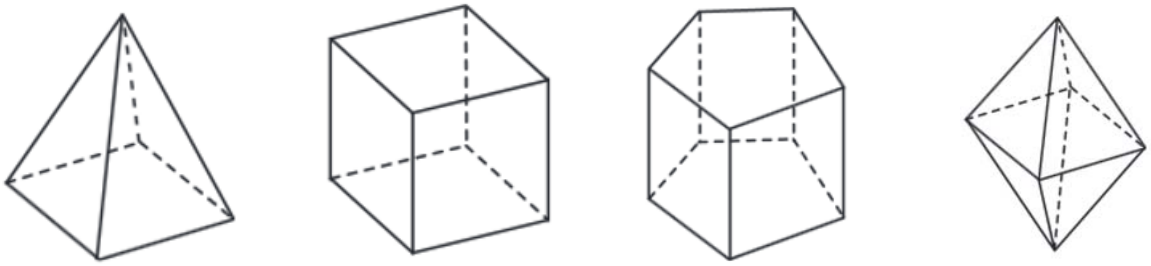


Which two drawings are of the same rectangular prism?

A A and B B B and C C C and A D B and D

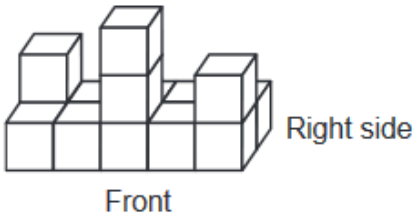
Question 5

Which object has exactly twice as many edges as faces?



Question 6

This object was made using identical cubes.



This is a drawing of the view from the front.

Which drawing shows the view from the right side?

A

B

C

D

Question 7

The dimensions of a large room are double the dimensions of a small room.

Both rooms are rectangular prisms. The volume of the small room is 10 cubic metres.

What is the volume of the large room?

A 20 cubic metres

B 40 cubic metres

C 80 cubic metres

D 160 cubic metres

Question 8

Peter wants to paint his bedroom walls.

What information will best help him decide how much paint to buy?

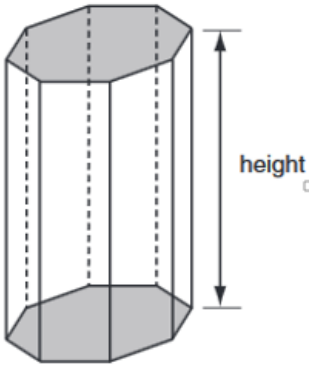
A Volume of room

B Capacity of room

C Perimeter of all walls

D Area of all walls

Question 9



For any prism the surface area (S) is calculated by multiplying the perimeter of its base (p) by its height (h) and adding twice the area of the base (A).

Which one of these formulas could be used for this calculation?

A $S = 2phA$

B $S = ph + A$

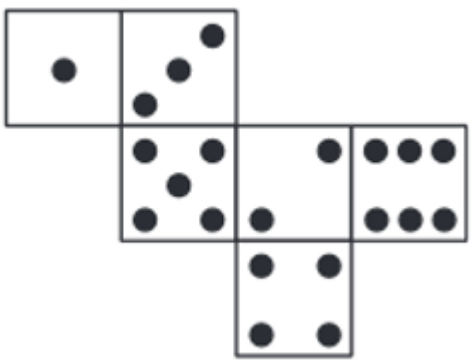
C $S = ph + 2A$

D $S = 2ph + 2A$

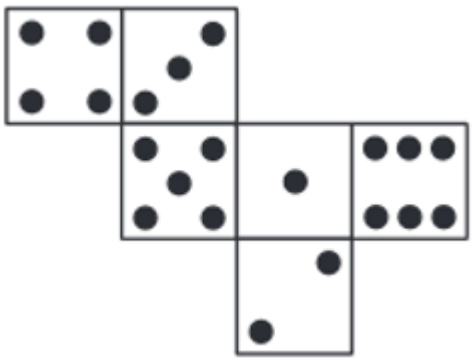
Question 10

Opposite faces on a standard die always add up to 7.

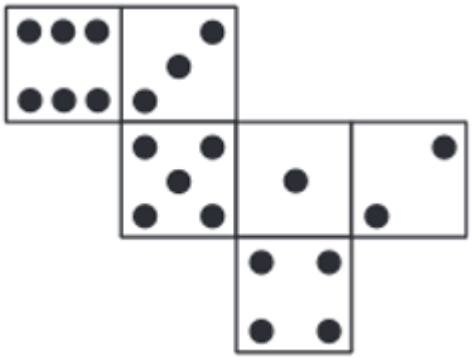
Which is a correct net for a standard die?



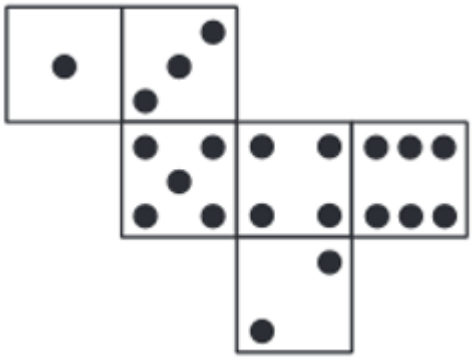
A



B



C

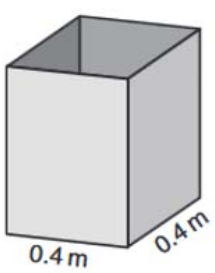


D

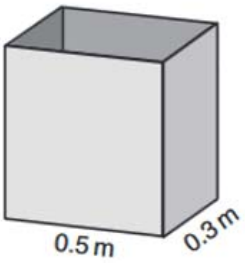
Question 11

A factory makes metal boxes. The base and sides of the boxes are rectangular. The height of each box is 0.8 metres.

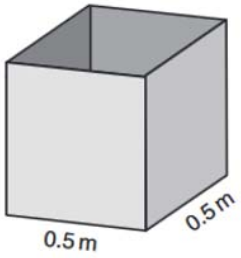
Which box has a volume of 0.16 cubic metres?



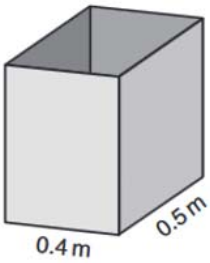
A



B



C



D

Question 12

Seven cubes are joined to form the following object.

What will the shape look like from above?

A

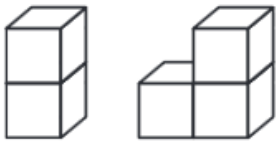
B

C

D

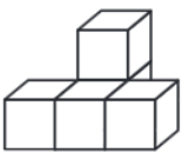
Question 13

Kevin made these 2 objects by gluing cubes together face-to-face.



He then joined the 2 objects together.

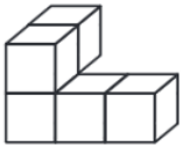
Which object below could **not** be made using Kevin's 2 objects?



A

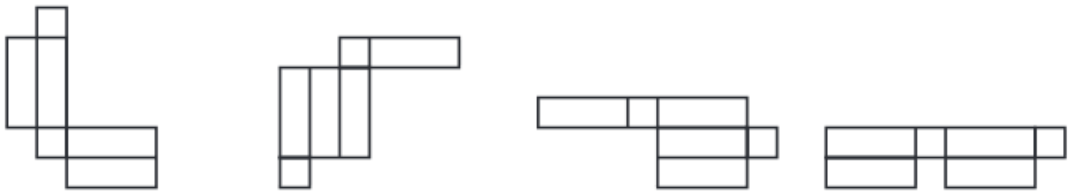
B

C



D

Question 14



P Q R S

Only two of these nets form a closed rectangular prism.

Which two nets are they?

A P and R

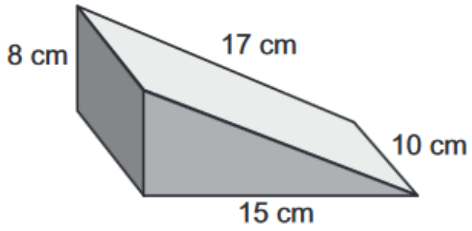
B P and Q

C Q and R

D R and S

Question 15

This right triangular prism has five faces.



What is its total surface area (in cm^2)?

A 440

B 520

C 600

D 640