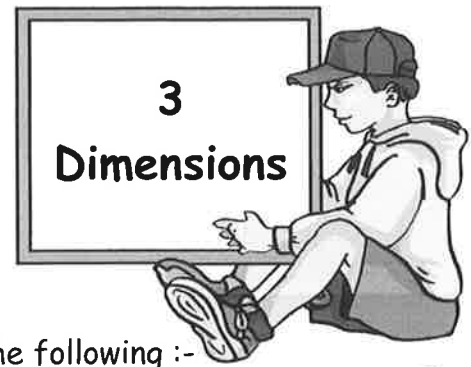
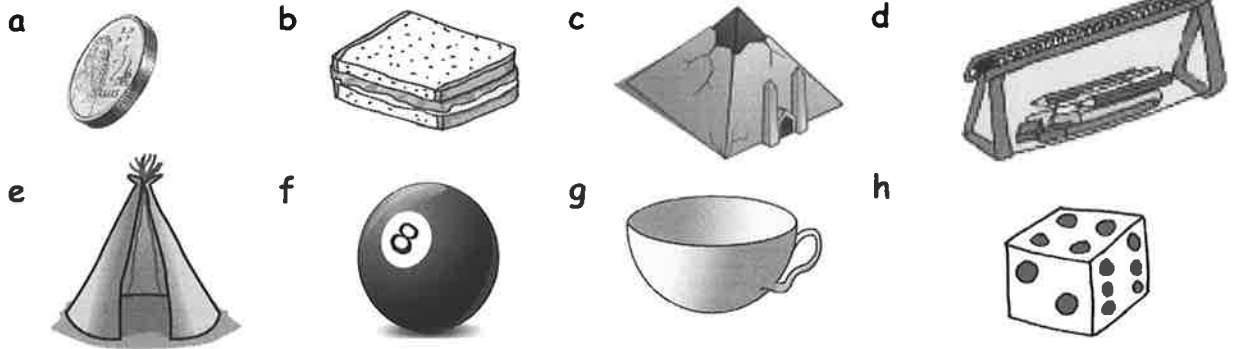


# CHAPTER 16



## Consolidation

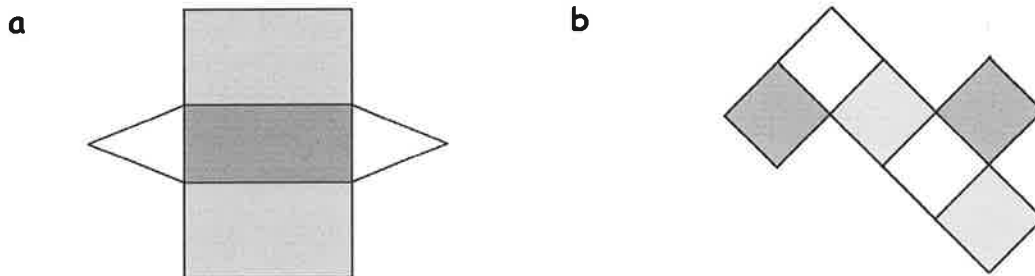
1. What 3-dimensional mathematical shape is each of the following :-



2. How many :-

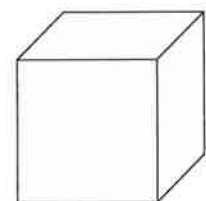
- a edges does a sphere have
- b faces does a hemisphere have
- c vertices does a cuboid have
- d vertices does a triangular prism have
- e edges does a square based pyramid have ?

3. Which 3D figure would you get when you cut out these shapes and fold them ?

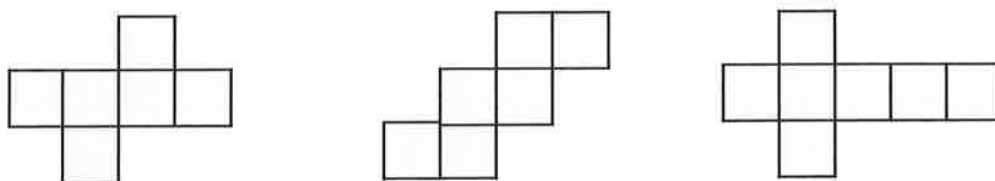


## Exercise 1

Squared Paper Needed



- 1. Draw a full size net of a cube with sides 4 centimetres.
- 2. There are 11 nets of a cube in total. Here are sketches of 3 of them.

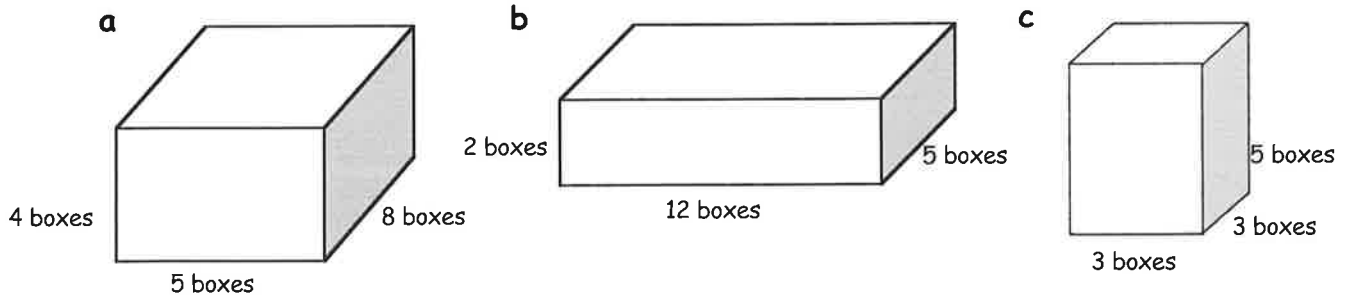


Try to make sketches of at least another 4 of the eight which remain.

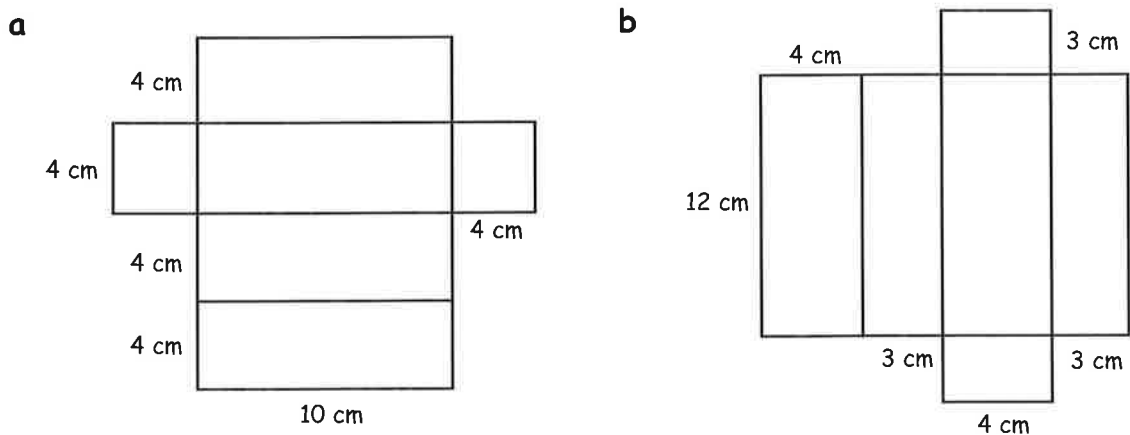
## Exercise 2

### Squared Paper Needed

1. Neatly, draw nets of the following cuboids. Use squared paper boxes.



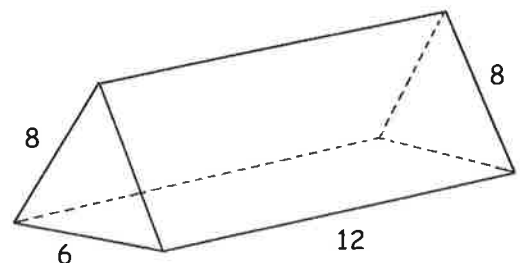
2. Make sketches of the cuboids with these nets and fill in their dimensions :-



## Exercise 3

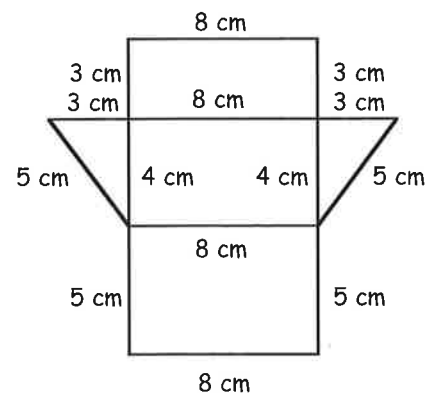
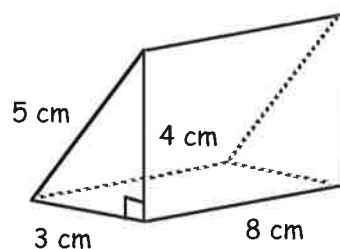
### Squared Paper Needed

1. Draw a full size net of this triangular prism, units are boxes.



2. A sketch of the net of this **right angled** triangular prism is shown beside it. Make an accurate drawing of the net.

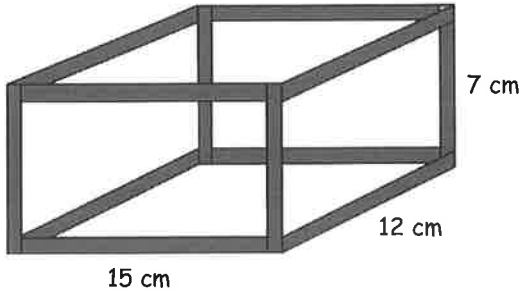
Units are centimetres.



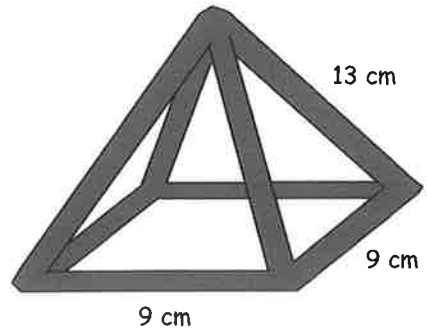
## Exercise 4

1. Find the total length of straw required to make each of these skeleton models :-

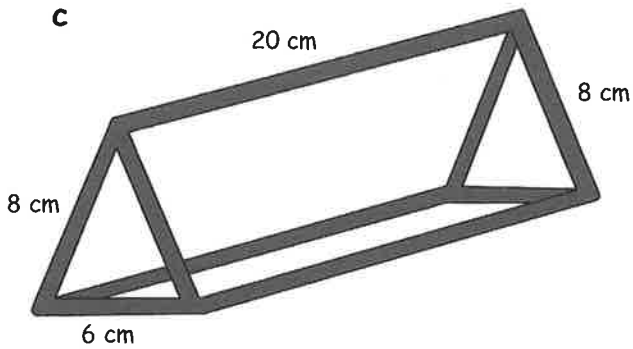
a



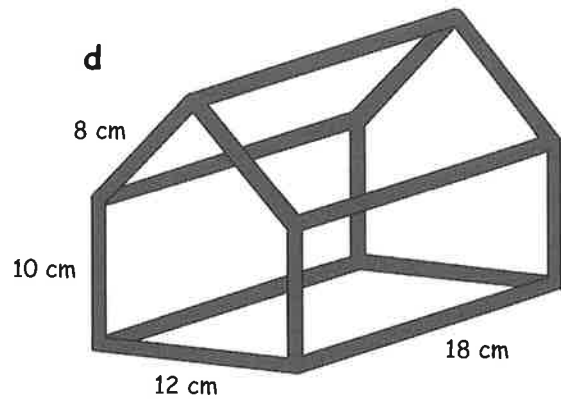
b



c



d



## Revision Exercise

1. Name the 2-dimensional and the 3-dimensional mathematical shapes shown below :-

a



b



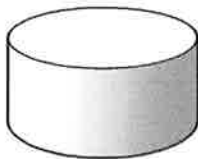
c



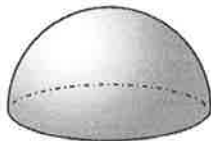
d



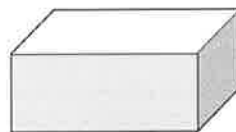
e



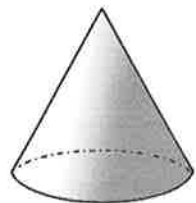
f



g



h



2. How many sides/edges has a :-

a pentagon

b nonagon

c dodecagon

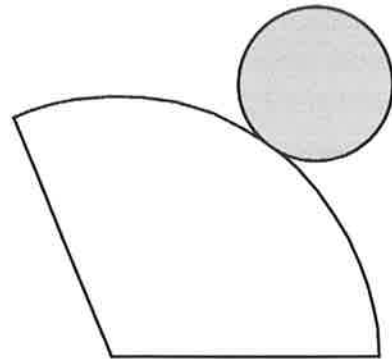
d square based pyramid

e hemisphere

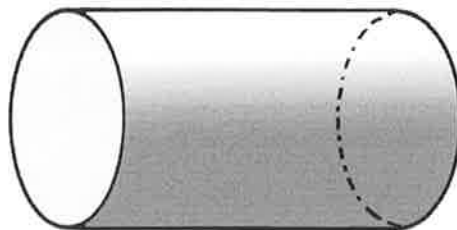
f cylinder ?

3. How many **faces** has a :-  
 a cuboid    b cone    c cylinder ?
4. How many **vertices** has a :-  
 a square based pyramid                      b cone    c sphere ?
5. Name a 2D shape which has :-  
 a no lines of symmetry                      b only one diagonal bisecting the other  
 c 4 sides equal and end angles of  $90^\circ$     d 8 sides.

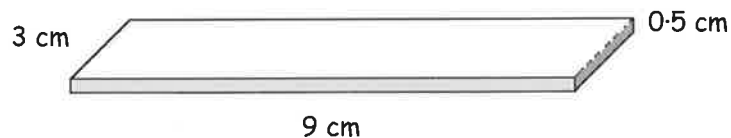
6. Which 3D shape has a net which looks like this ?



7. Make a neat sketch of a **net** for the 3D shape below.



8. Make an **accurate drawing** of the **net** of this cuboid.



9. Make a neat sketch of a :-  
 a parallelogram                      b rhombus    c isosceles triangle  
 d cylinder    e cone    f hemisphere.

