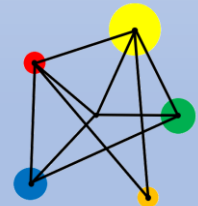


Plans & Elevations



Draw plans and elevations of shapes

Draw a shape given plans and elevations

Vocabulary

Plan

A drawing of an object viewed from above.

Dimensions

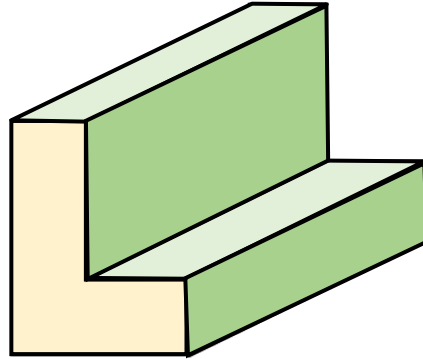
The measurements of an object i.e. length and width.

Elevation

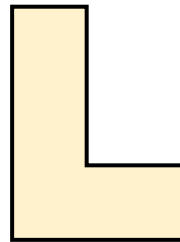
A drawing of a shape from a particular viewpoint, usually the front or side.

Key Facts

A 3-dimensional object can be described by a plan, a side elevation and a front elevation.



Plan



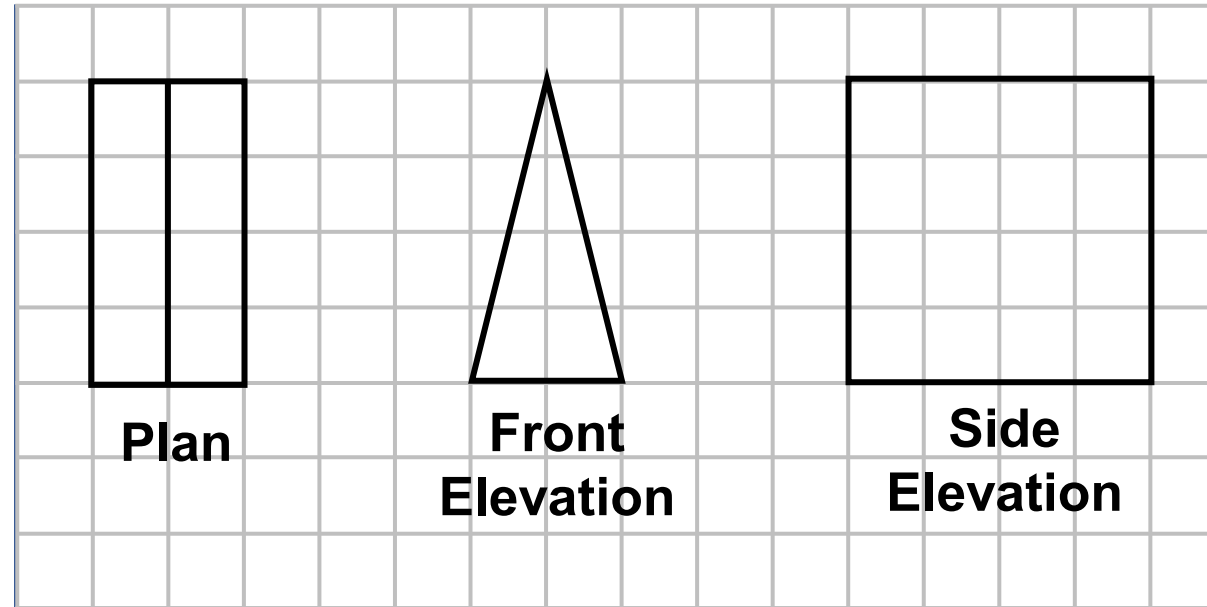
**Front
Elevation**



Side Elevation

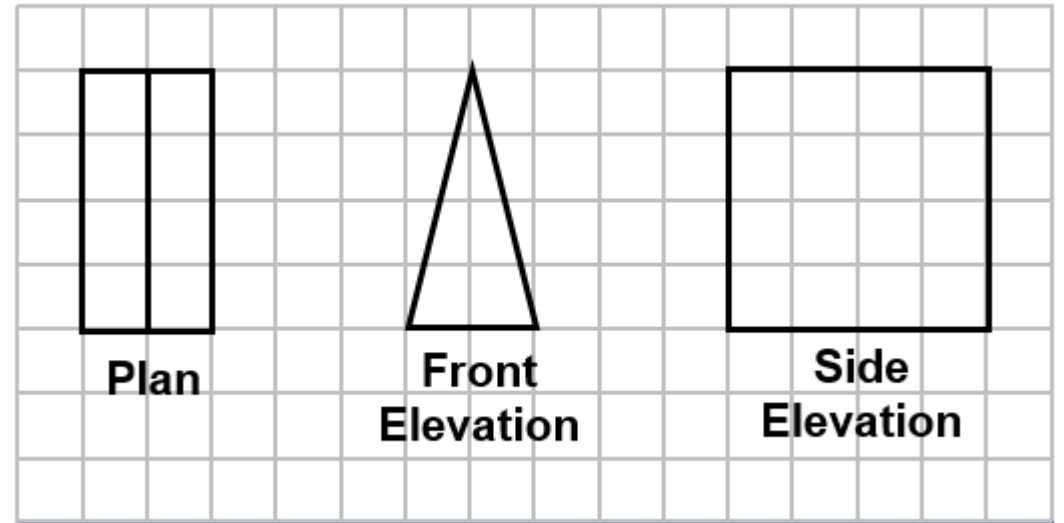
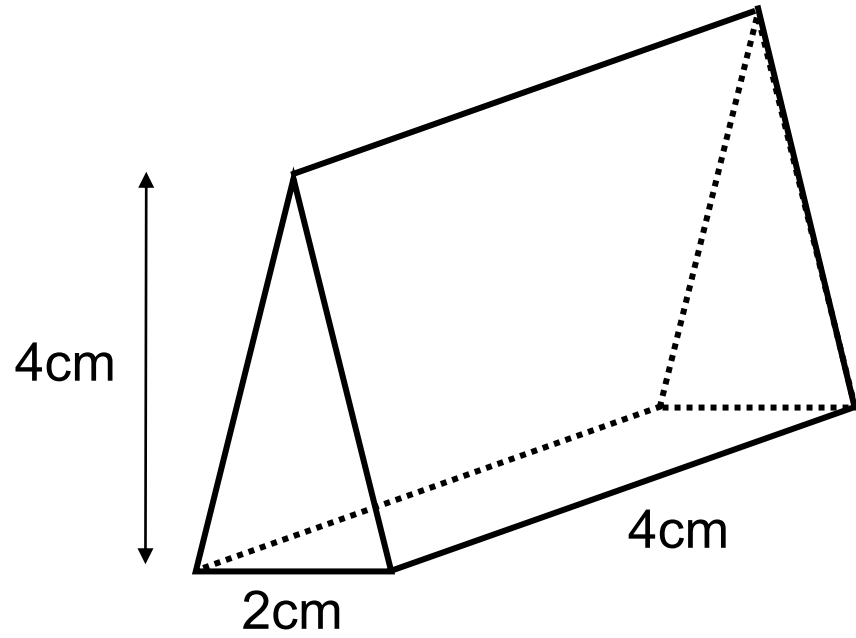
Example

The diagram shows the plan, front elevation and side elevation of a solid shape, drawn on a centimetre grid.



Draw a sketch of the solid shape.
Give the dimensions of the solid on your sketch.

Solution

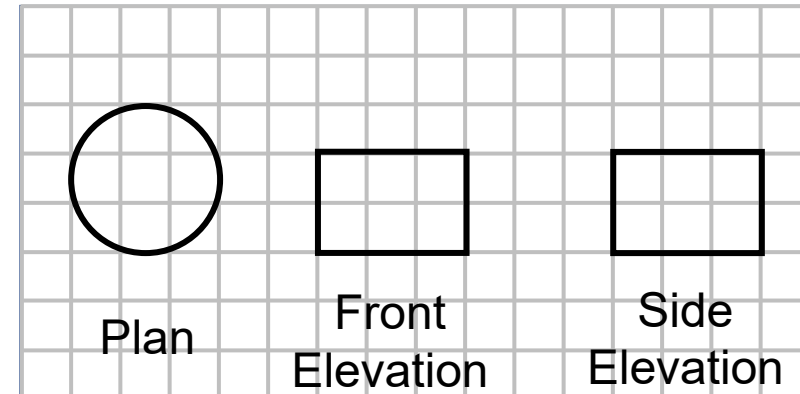
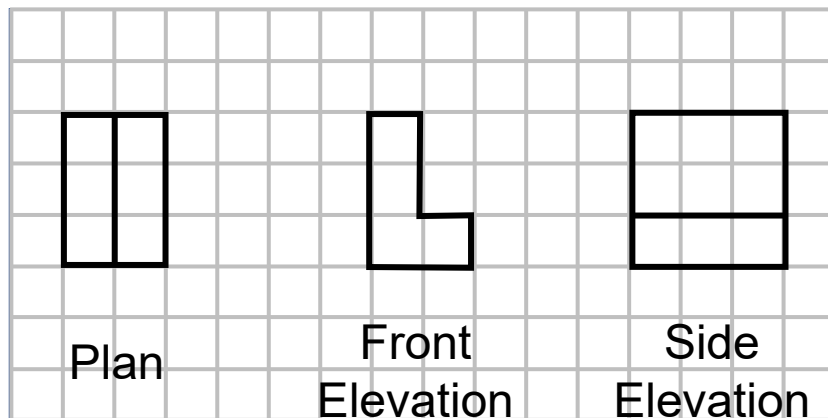
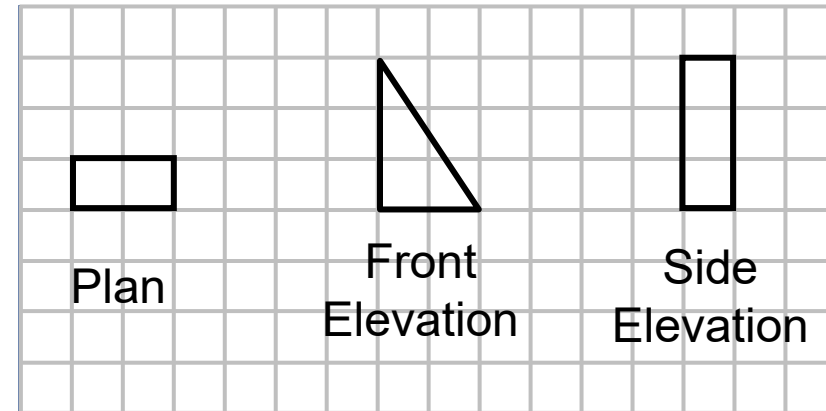
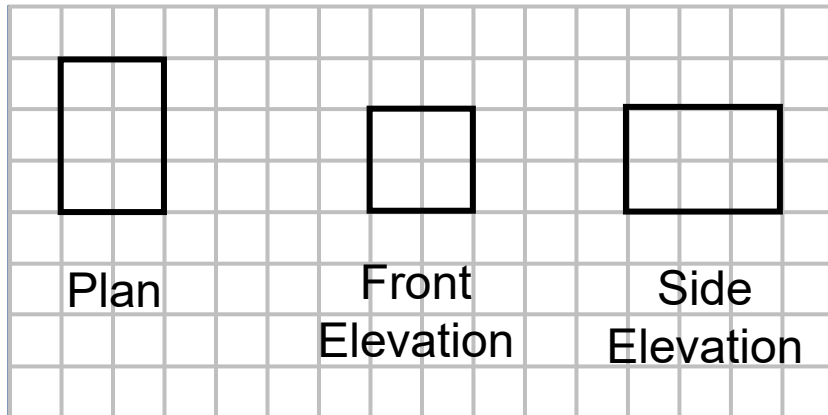


Exercise

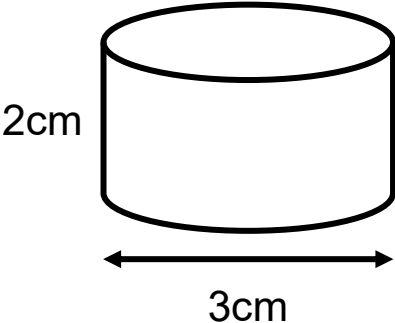
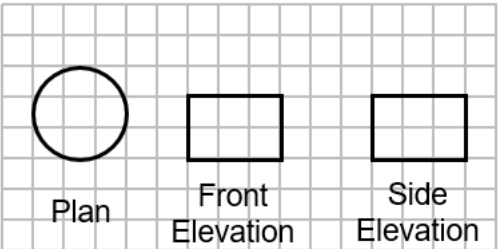
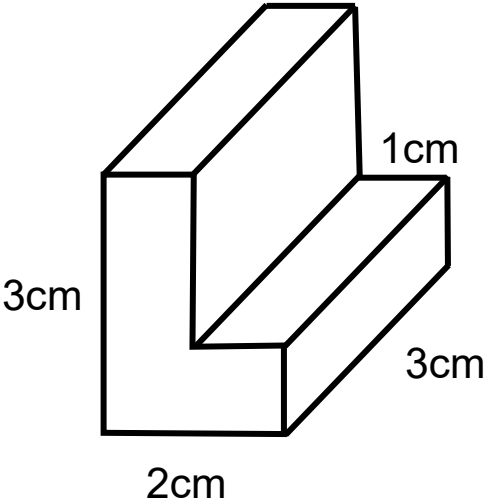
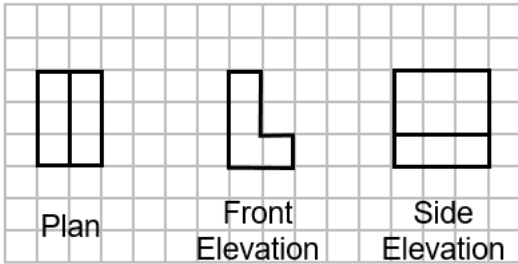
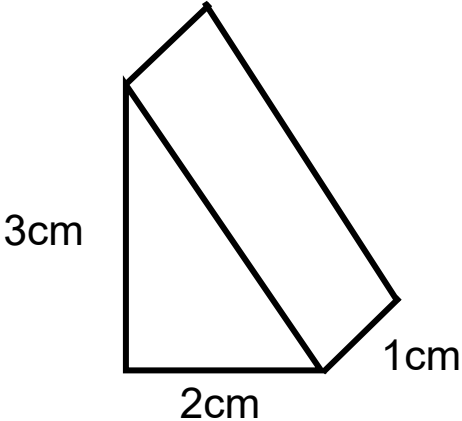
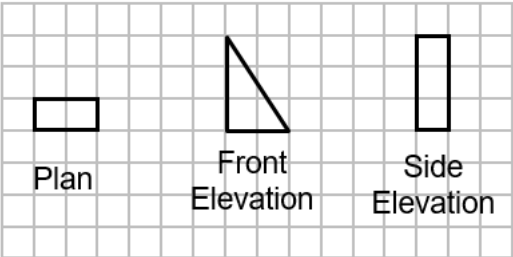
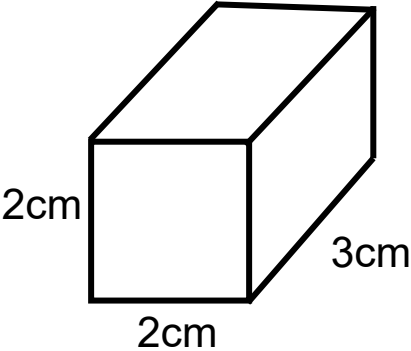
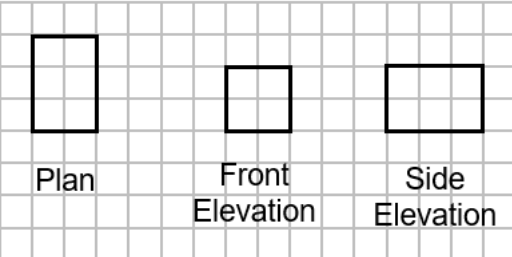
The plans and elevations below are each drawn on a centimeter grid.

Draw a sketch of each solid.

Give the dimensions of the solid on your sketch.

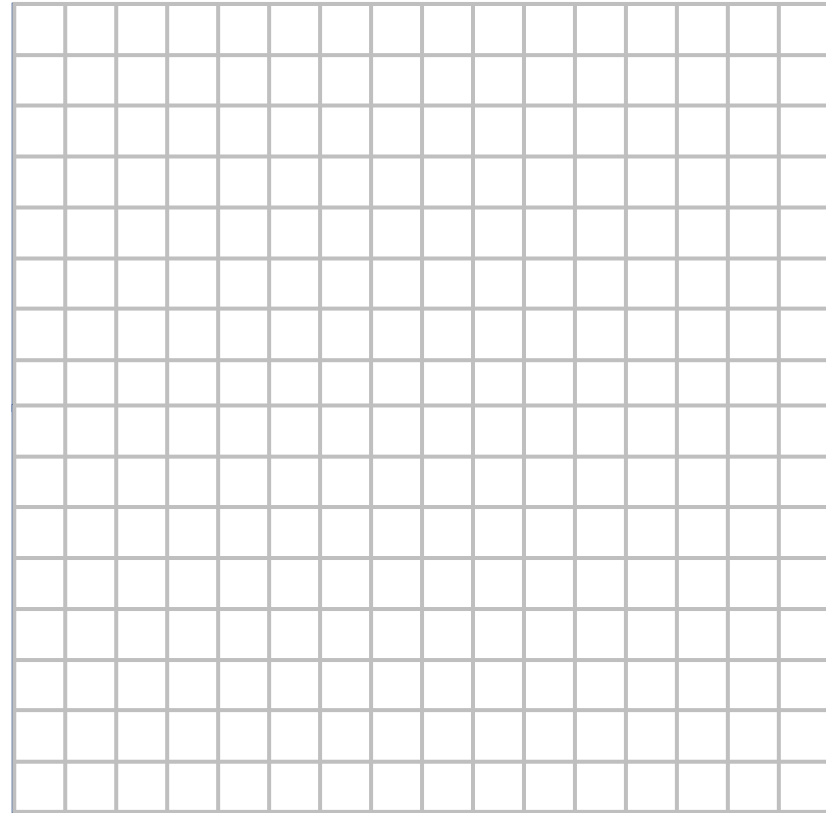
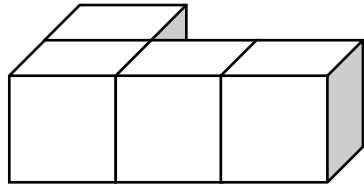


Solutions



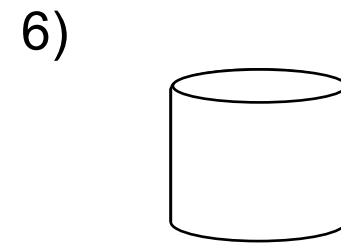
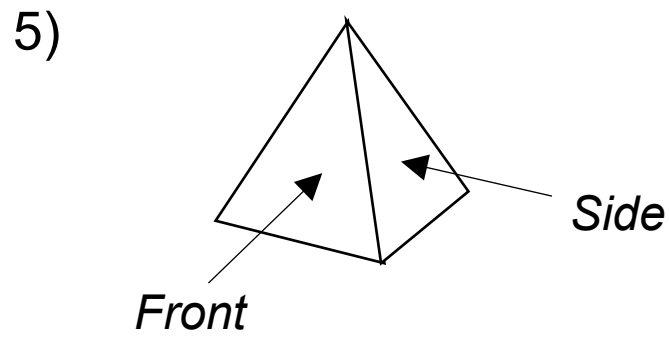
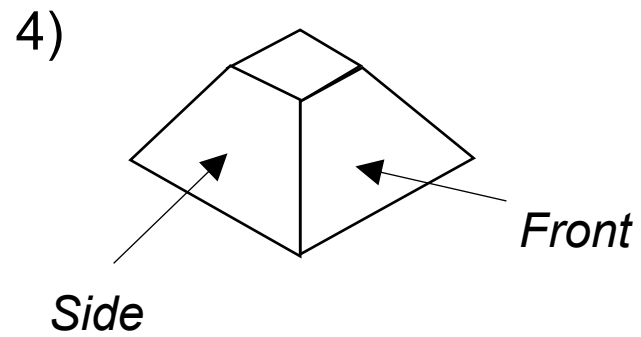
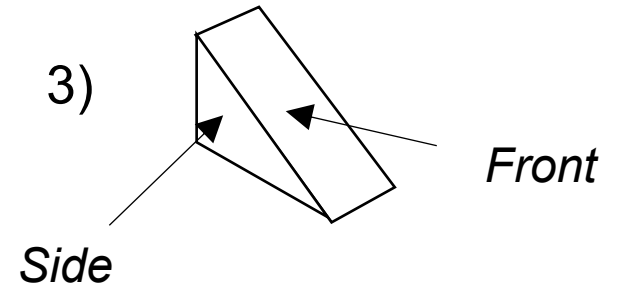
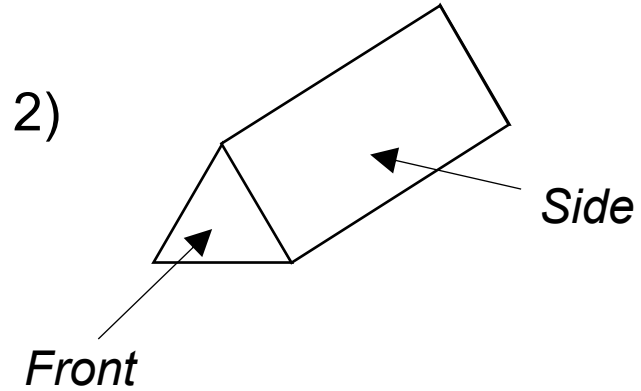
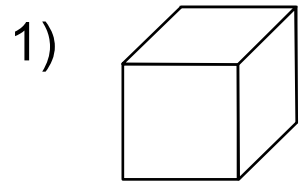
Example

Draw a plan, side elevation and front elevation of the solid below.



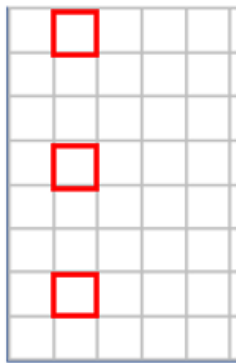
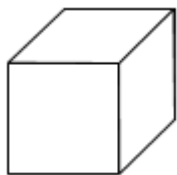
Exercise

Draw a plan, side elevation and front elevation for each of these solids.
You do not need to include dimensions.

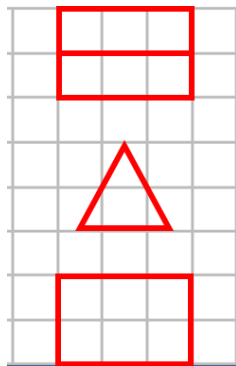
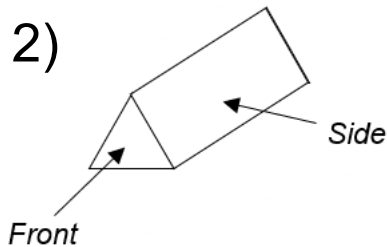


Solutions

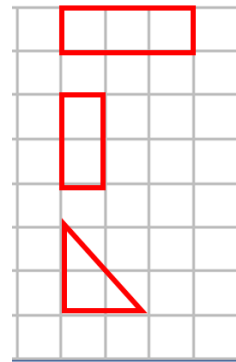
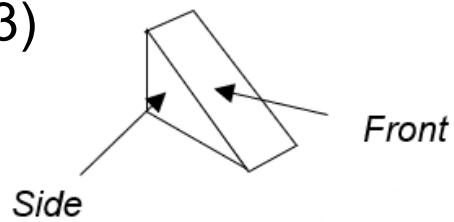
1)



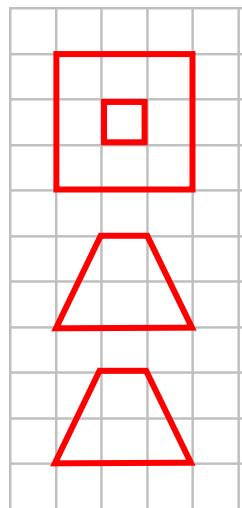
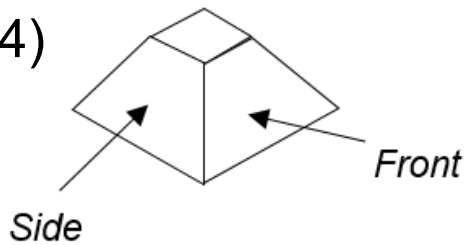
2)



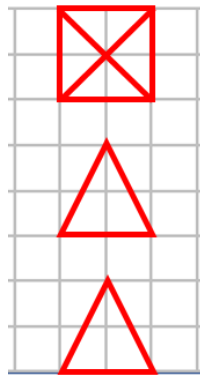
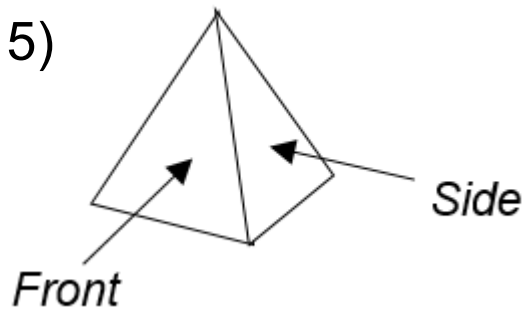
3)



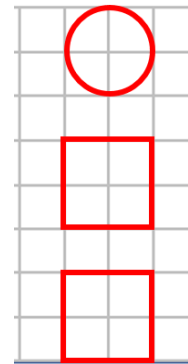
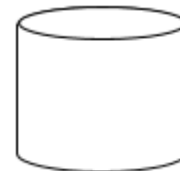
4)



5)

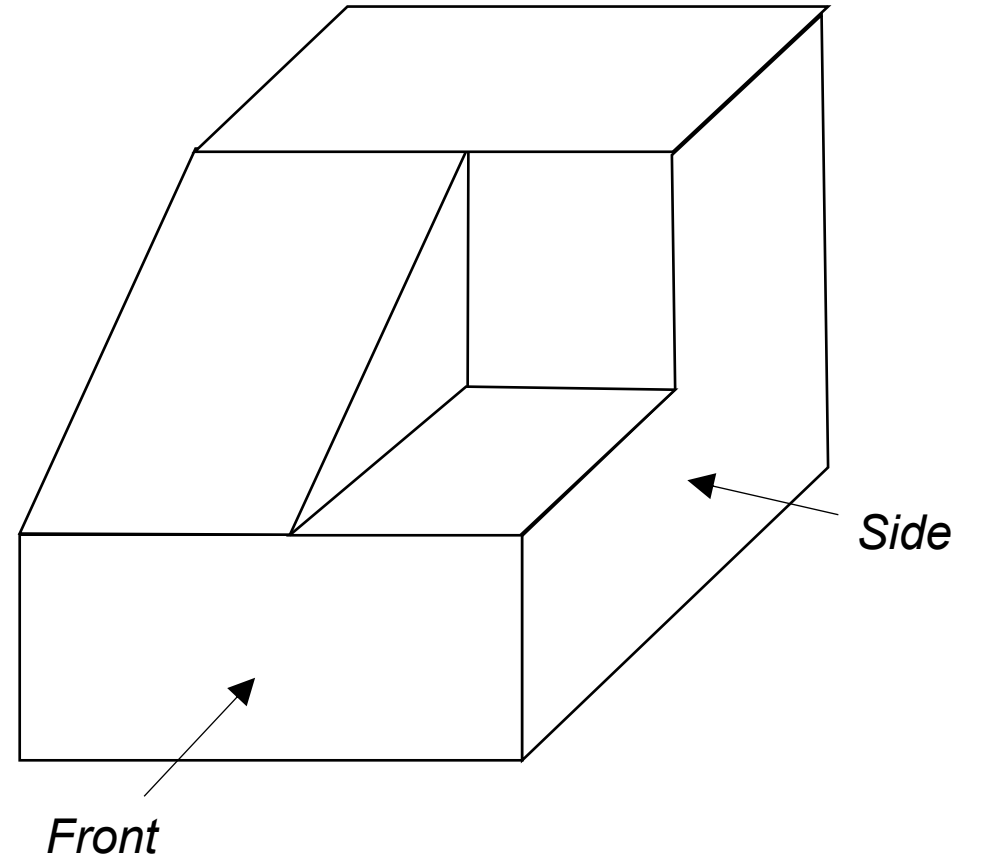
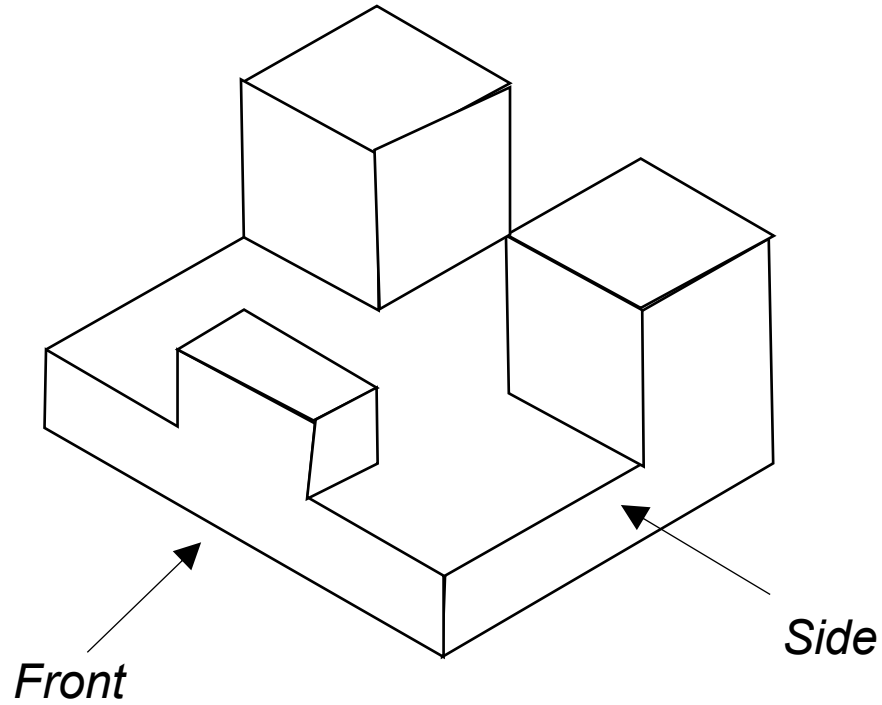


6)

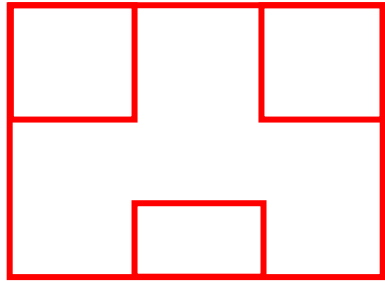
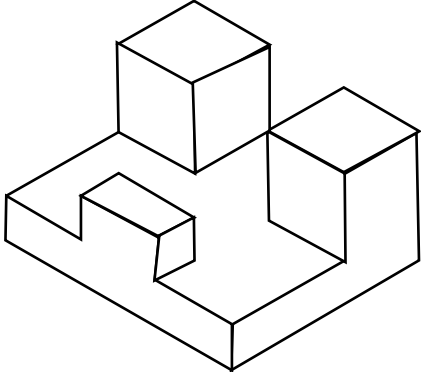


Extension

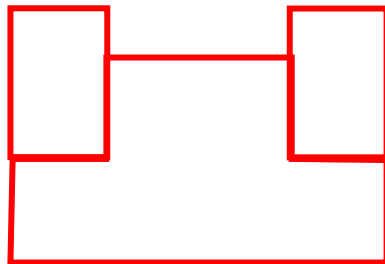
Draw a plan, side elevation and front elevation for each of these solids.



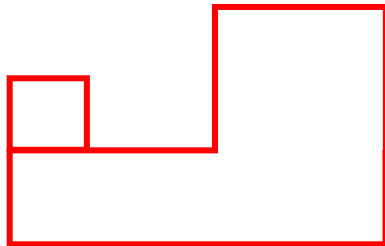
Solutions



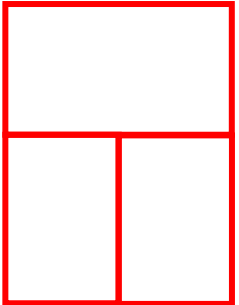
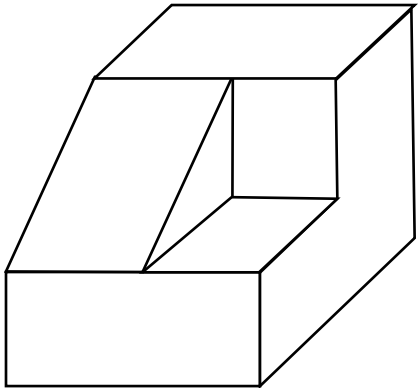
Plan



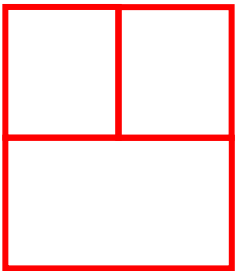
Front
Elevation



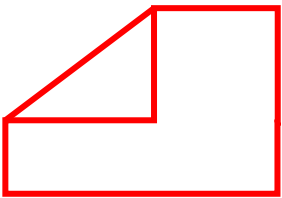
Side
Elevation



Plan

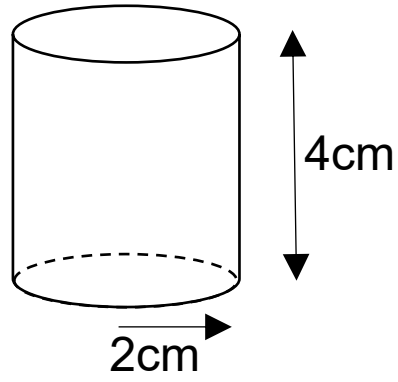


Front
Elevation

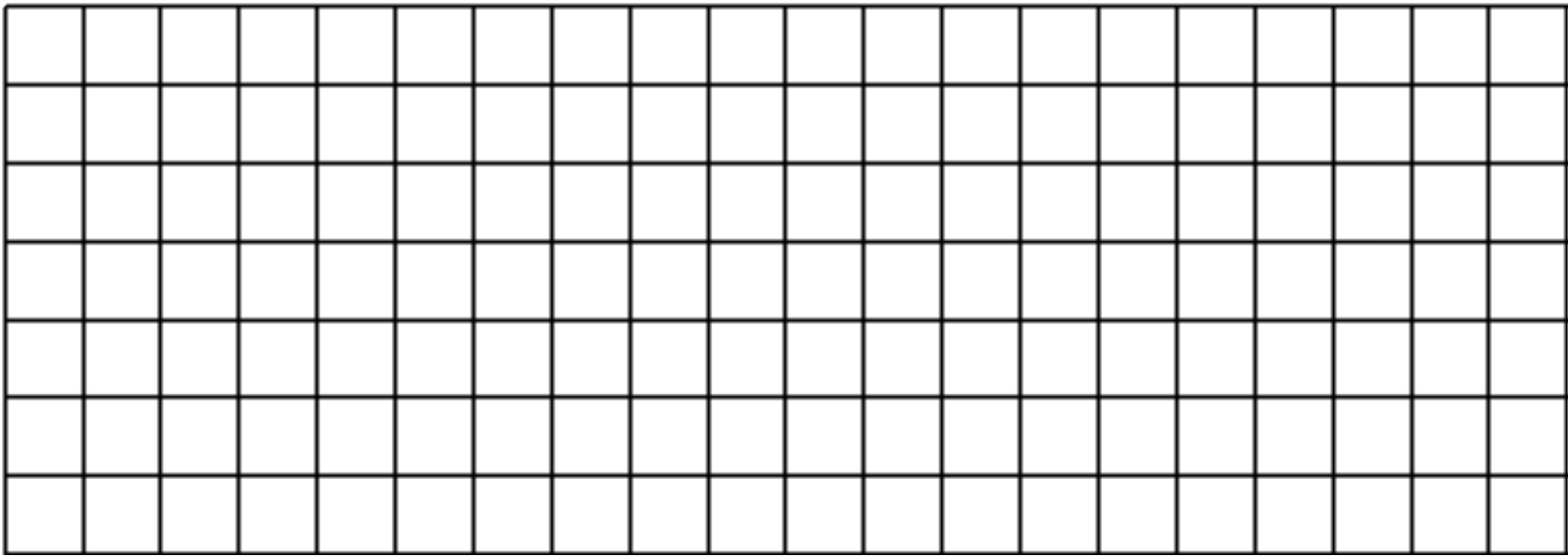


Side
Elevation

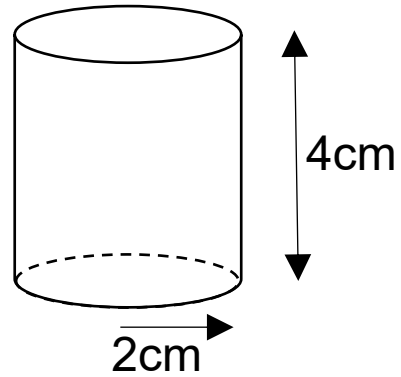
Here is a cylinder.



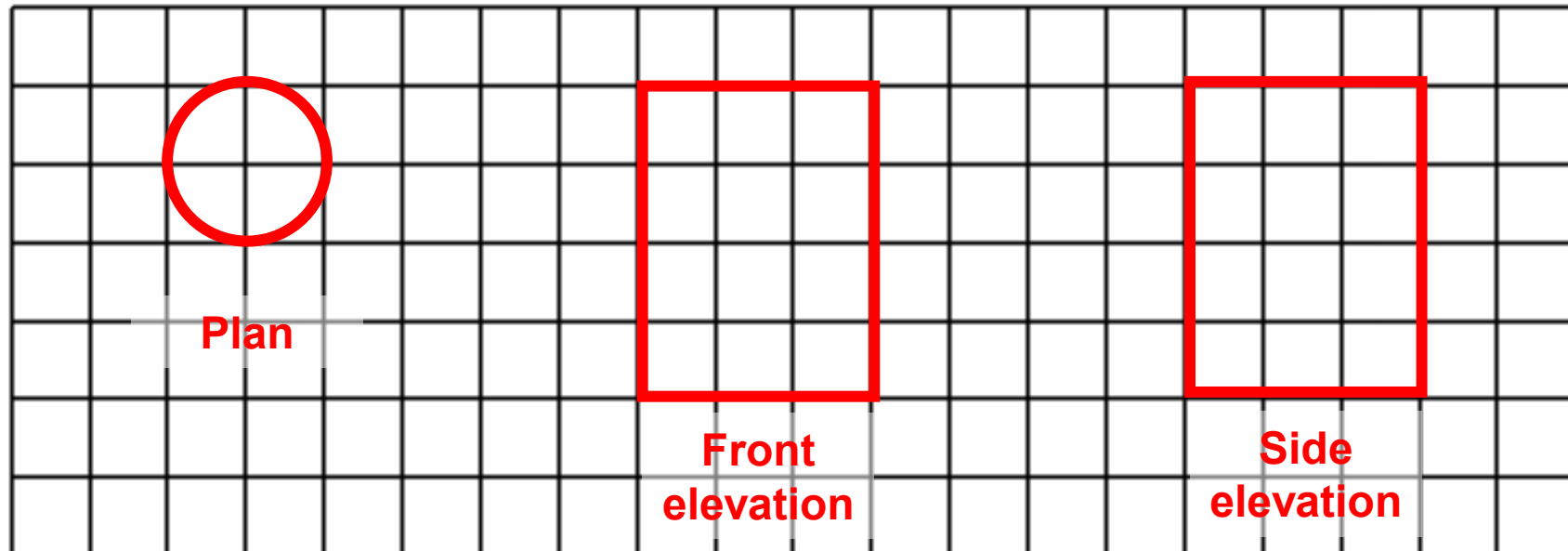
On the centimeter grid, draw a plan, front elevation and front elevation of the cylinder.



Here is a cylinder.

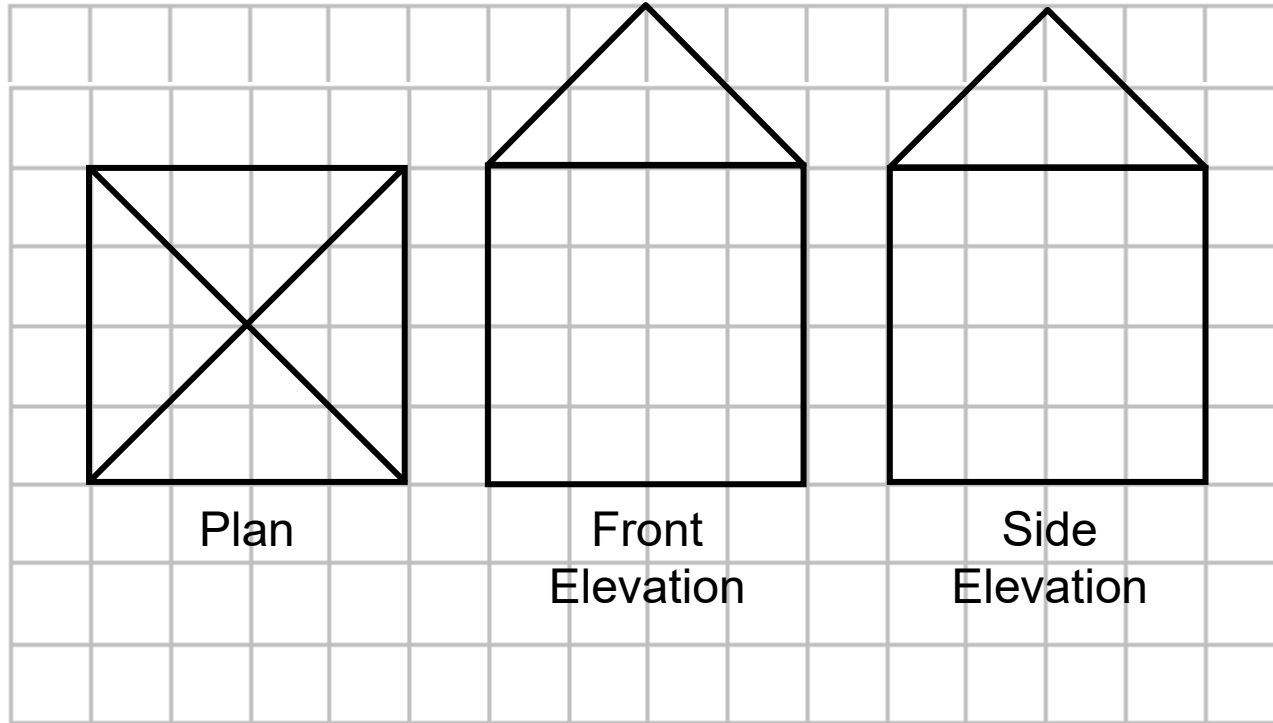


On the centimeter grid, draw a plan, front elevation and front elevation of the cylinder.



Exam Style Question

The diagram below shows the plan, front elevation and side elevation of a solid shape, drawn on a centimeter grid.

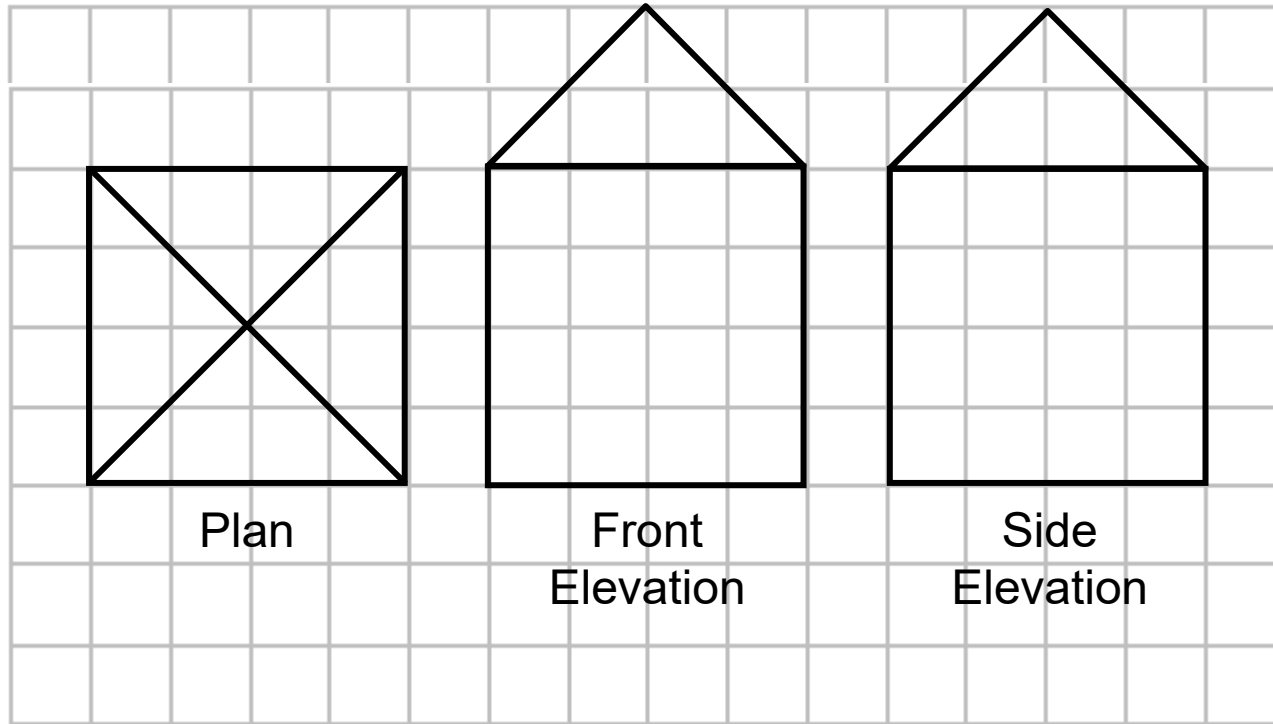


In the space below, draw a sketch of the solid shape.

Give the dimensions of the solid on your sketch

Solution

The diagram below shows the plan, front elevation and side elevation of a solid shape, drawn on a centimeter grid.



In the space below, draw a sketch of the solid shape.

Give the dimensions of the solid on your sketch

