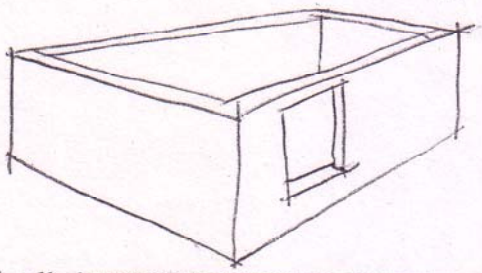
2 "The Way We Look at Things....."

1 PERSPECTIVE PROJECTION

Ever since birth we have seen objects as they appear in 3D.
Objects seem to get smaller and taper in size as they get further away from us but although the object appears "natural", we cannot measure any part accurately as seen in the following:

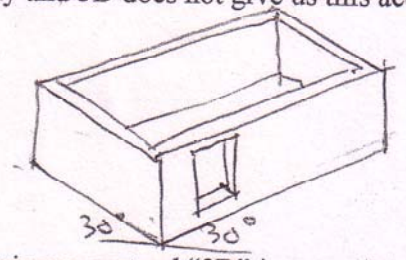


the sides taper. The lengths shorten into the distance and no part is its true size

This method called **PERSPECTIVE PROJECTION** produces natural views of an object for artistic or presentation use. This projection method will be discussed in detail later.

2 ISOMETRIC PROJECTION

For us to draw our designs and for people to build them, we need to be able to measure each part accurately and 3D does not give us this accuracy.

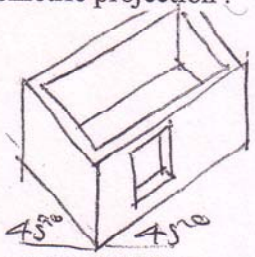


the sides are parallel. The lengths are drawn to size and most parts are shown true size but at an angle

This method gives a pretend "3D" image where all the lines of the sides going away from us are **drawn at an angle of 30 degrees**. (You will need your adjustable set square for this)
Only lines along the sides are true size and right-angles are not drawn true and it looks a bit weird though.
This projection method will be discussed in detail later.

3 AXONOMETRIC PROJECTION

This is similar to Isometric projection .



the sides are parallel. The lengths are drawn to size and most parts are shown true size but at an angle

This method gives a pretend "3D" image where all the lines of the sides going away from us are **drawn at an angle of 45 degrees**. (You will need your adjustable set square for this too)
All lines are true size and all angles are drawn true. This is getting pretty accurate now but it looks a bit weird and requires some more information that we can get in the next example.
This projection method will be discussed in detail later.