

CHAPTER 09**CBSE CLASS X**

Some Applications of Trigonometry

Drawing figures to solve problems:

- When we try to find heights and distances at an angle of elevation or depression, we need to visualise geometrically.
- To find heights and distances, we need to draw figures and with the help of these figures, we can solve the problems.

Points to be remember when solve the problems of heights and distances:

- All the objects such as towers, trees, buildings, ships, mountains etc. shall be considered as linear for mathematical convenience.
- The angle of elevation or angle of depression is considered with reference to the horizontal line.
- The height of the observer is neglected, if it is not given in the problem.
- The angle of elevation and depression are always acute angles.

- If the height of the object becomes 'K' times and the distance between the foot of the object and the observer also becomes 'K' times, then the angle of elevation remains unchanged.
- As the distance between the object and observer increases, the angle of elevation or depression decreases and vice – versa.

