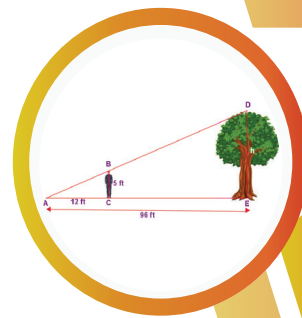




Learning Objectives

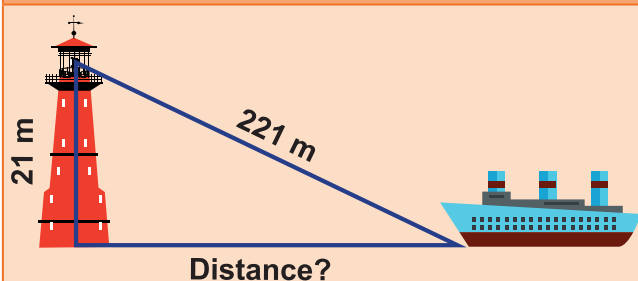
- ❖ To recall the similar and congruence properties and also the basic properties of triangles.
- ❖ To understand the theorems based on these properties and apply them appropriately to problems.
- ❖ To understand the Pythagorean theorem and solve problems using it.
- ❖ To know and understand the concurrency of medians, altitudes, angle bisectors and perpendicular bisectors in a triangle.
- ❖ To construct quadrilaterals of various types.



5.1 Introduction

Geometry, as we all know studies shapes by looking at the properties and relations of points, circles, triangles of two dimensions and solids. In the earlier classes, we have seen a few properties of triangles. In this class, we are going to recall them and also learn the congruence and the similarity properties in triangles. Also, we shall learn about the Pythagorean theorem and the concurrency of medians, altitudes, angle bisectors and perpendicular bisectors in a triangle. Also, we will also see how to construct quadrilaterals of various types.

MATHEMATICS ALIVE – GEOMETRY IN REAL LIFE



The Pythagoras theorem is useful in finding the distance and the heights of objects.



For better strength and stability, congruent triangles in the construction of buildings.