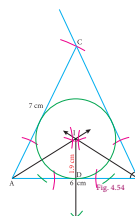


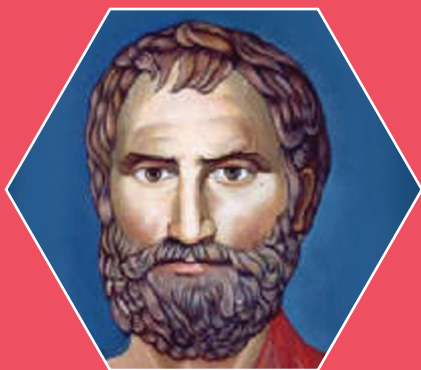
4



GEOMETRY

Inspiration is needed in geometry just as much as in poetry.

- Alexander Pushkin



Thales
(BC (BCE) 624 – 546)

Thales (Pronounced THAYLEES) was born in the Greek city of Miletus. He was known for theoretical and practical understanding of geometry, especially triangles. He used geometry to solve many problems such as calculating the height of pyramids and the distance of ships from the sea shore. He was one of the so-called Seven Sages or Seven Wise Men of Greece and many regarded him as the first philosopher in the western tradition.



Learning Outcomes



- To understand theorems on linear pairs and vertically opposite angles.
- To understand the angle sum property of triangle.
- To understand the properties of quadrilaterals and use them in problem solving.
- To understand, interpret and apply theorems on the chords and the angles subtended by arcs of a circle
- To understand, interpret and apply theorems on the cyclic quadrilaterals.
- To construct and locate centroid, orthocentre, circumcentre and incentre of a triangle.

4.1 Introduction

In geometry, we study **shapes**. But what is there to *study* in shapes, you may ask. Think first, what are all the things we do with shapes? We draw shapes, we compare shapes, we *measure* shapes. *What* do we measure in shapes?