

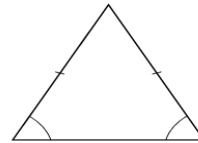
# 4 Trigonometry

## 4.1 Squares and Triangles

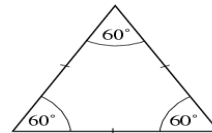
A *triangle* is a geometric shape with three sides and three angles. Some of the different types of triangles are described in this Unit.

A *square* is a four-sided geometric shape with all sides of equal length. All four angles are the same size.

An *isosceles* triangle has two sides that are the same length, and the two base angles are equal.



All the sides of an *equilateral* triangle are the same length, and the angles are all  $60^\circ$ .



A *scalene* triangle has sides that all have different lengths, and has 3 different angles.



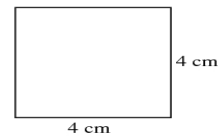
### Worked Example 1

Find the area of the square shown in the diagram.



### Solution

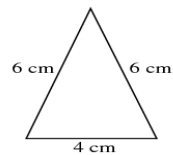
$$\begin{aligned}\text{Area} &= 4 \times 4 \\ &= 16 \text{ cm}^2\end{aligned}$$



### Exercises

1. For each triangle below, state whether it is *scalene*, *isosceles* or *equilateral*.

(a)



(b)

