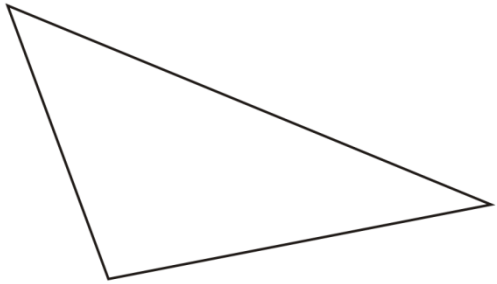
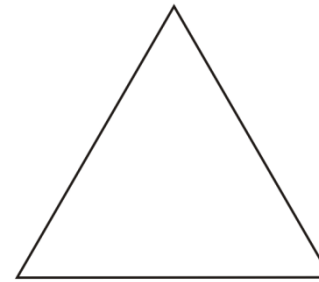
CONSTRUCTING TRIANGLES

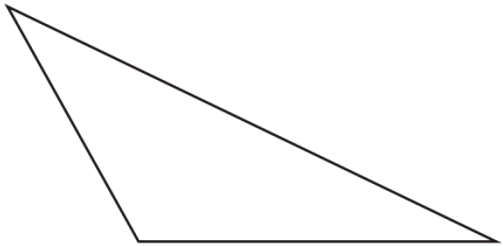
A triangle is a plane rectilinear figure with 3 sides. There are different kinds of triangles. They are obtuse angled triangle, equilateral triangle, right angled triangle, isosceles triangle, and scalene triangle.



Scalene triangle



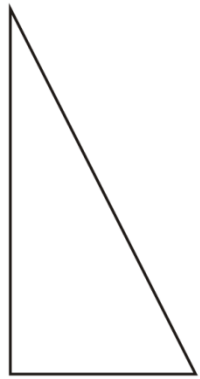
Equilateral triangle



Obtuse-angled triangle



Isosceles triangle



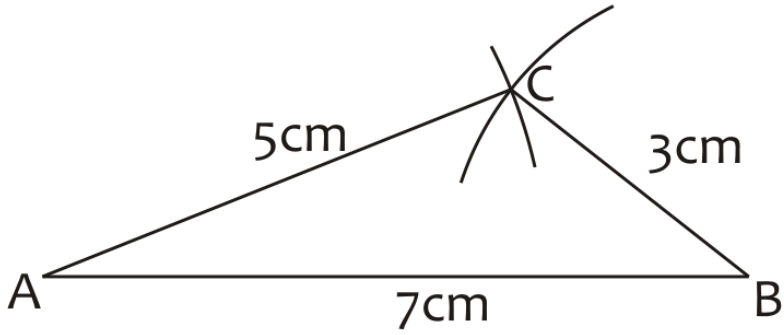
Right-angled triangle

To construct any triangle given the length of the three sides

1. Draw one side AB.
2. With centre A and a radius of one of the remaining sides draw an arc.
3. With centre B and a radius of the remaining side draw an arc to intersect the previous one at C.

Example: draw a triangle of side 7cm, 5cm and 3cm.

Constructing



- Draw the line AB 7cm.
- With centre A and radius 5cm to draw an arc.
- With centre B and radius 3cm to draw an arc to meet the previous one at C.
- Draw lines to join C to A and B.
- The ΔABC is the required triangle.

To draw a triangle when given two sides and the inclined angle

1. Draw one given side AB.
2. Construct the included angle CAB.
3. With centre A and a radius of the other given side, draw an arc to cut AC at D.
4. Join AD and DB. DAB is the required triangle.

Example: Construct a triangle with one inclined angle of 45^{o} and two sides 6cm and 8cm.

Constructing

