Cosmo School

Class-4

Subject-Mathematics

Chapter - 14 (Triangle)
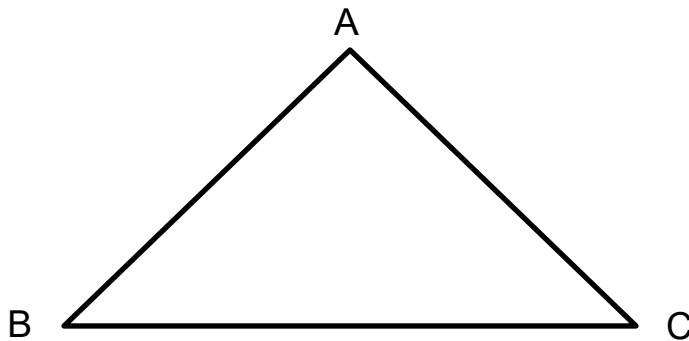
Date: 29/10/2020

Revision sheet

Triangle: A triangle is a closed figure with three sides.

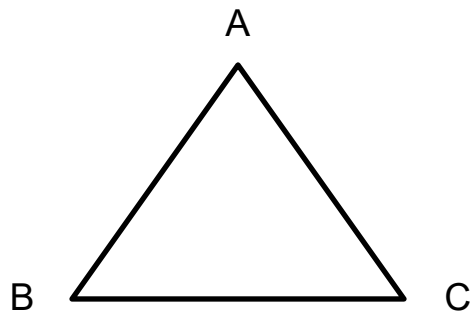Here, ABC is a triangle.

Characteristics:

1) It has three sides.

2) It has three corners / vertices.

3) It has three angles.

4) All triangles have angles adding up to 180°.

Types of triangles based on sides:

There are three types of triangle based on the sides. They are:

1) Equilateral triangle
2) Isosceles triangle
3) Scalene triangle

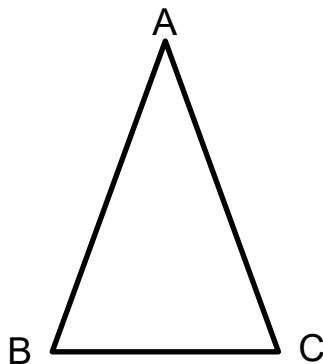**1) Equilateral triangle:** Equilateral triangle has three equal sides, three equal angles and they are always 60°.

A

B   C

Here, ABC is an equilateral triangle.

Characteristics:

    1) Three sides are equal.
    2) Three angles are equal.
    3) All angles are 60°.

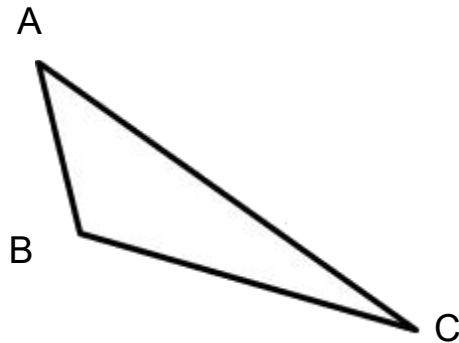**2) Isosceles triangle:** Isosceles triangle has two equal sides.

A

B   C

Here, ABC is an isosceles triangle.

Characteristics:

    1) Two sides are equal.
    2) Two angles are equal.

3) Scalene triangle: Scalene triangle has no equal sides.

A

B
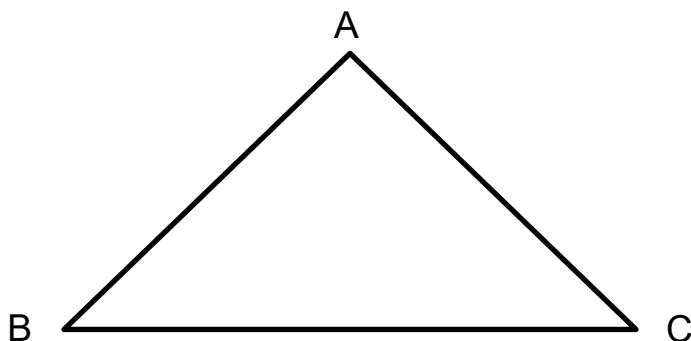
C

Here, ABC is a scalene triangle.

Characteristics:

1) No equal sides.
2) No equal angles.

Types of triangles based on angles:

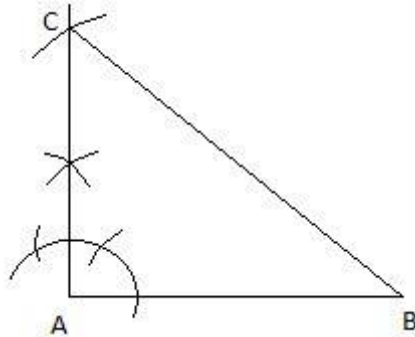There are three types of triangle based on the angles. They are:

1) Acute angled triangle
2) Right angled triangle
3) Obtuse angled triangle

1) Acute angled triangle: Acute angled triangles have all acute angles. All three angles are less than 90°.

A

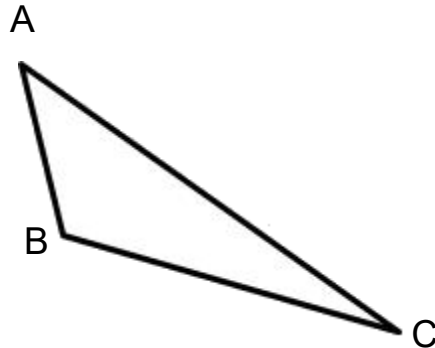B   C

Here, ABC is an acute angled triangle. Here $< A$, $< B$ and $< C$ are less than 90°.

2) Right angled triangle: Right angled triangles have one right angle. One of the angles is 90°.

Here, ABC is a right angled triangle. $< A = 90°$.

3) Obtuse angled triangle: Obtuse angled triangle have one obtuse angle. One of the angles is greater than 90°.

Here, ABC is an obtuse angled triangle. $< B$ is greater than 90°.

Exercise

1) Draw an equilateral triangle with sides of 6 cm.
2) Draw an isosceles triangle with sides of 9 cm, 7 cm and 7 cm.
3) Draw a scalene triangle with sides of 3 cm, 5 cm and 8 cm.
4) Draw an acute angled triangle with one of the angles is 60°.
5) What is obtuse angled triangle?
6) Draw a triangle with one of the angles is 90°.
7) Draw an obtuse angled triangle with one of the angles 120°.
8) How many types of triangles are there based on sides? What are they?
9) What is triangle?
10) Write three characteristics of triangle?
11) What is the sum of three angles of any triangle?
12) Which triangle has three 60° angles?
13) Which triangle has two equal sides?
14) A triangle that has no equal sides and no equal angles is known as what?
15) A triangle that has 2 equal sides and 2 equal angles is known as what?
16) A triangle that has 3 equal sides and 3 equal angles is known as what?
17) How many vertices does a triangle have?
18) How many sides are there in a triangle?
19) How many angles are there in a triangle?
20) If all the angles of a triangle are acute, the triangle is called _____
21) If one angle of a triangle measures 90°, the triangle is called _____
22) If one angle of a triangle is obtuse, the triangle is called _____

Prepared by –

Sadia khanam