

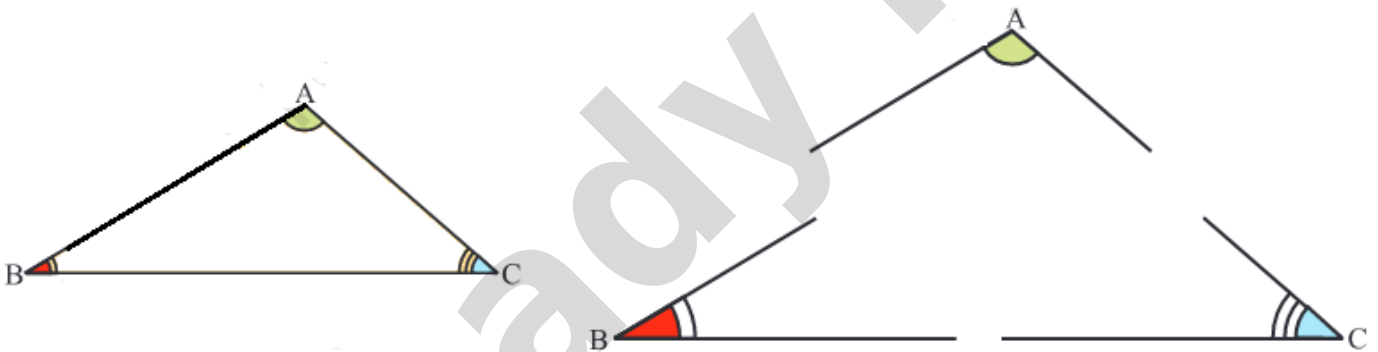
Lets verify that the sum of the angles of a triangle is 180° .

Materials Required

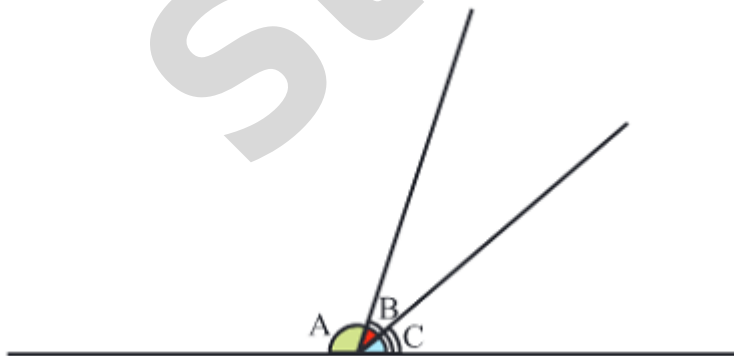
1. Hardboard sheet
2. Glazed papers
3. Sketch pens/pencils
4. Scissors
5. Tracing paper
6. Adhesive
7. Drawing sheet
8. Geometry box.

Procedure

1. Take a hardboard sheet of a convenient size and paste a white paper on it.
2. Cut out a triangle from a drawing sheet, and paste it on the hardboard and name it as $\triangle ABC$.
3. Mark its three angles.
4. Cut out the angles respectively equal to $\angle A$, $\angle B$ and $\angle C$ from a drawing sheet using tracing paper.



5. Draw a line on the hardboard and arrange the cut-outs of three angles at a point O. See the reference image below.



Demonstration

The three cut-outs of the three angles A, B and C placed adjacent to each other at a point form a line forming a straight angle = 180° . It shows that sum of the three angles of a triangle is 180° . Therefore, $\angle A + \angle B + \angle C = 180^\circ$.

Observation

Measure of $\angle A = \dots\dots\dots$

Measure of $\angle A = \dots\dots\dots$

Measure of $\angle A = \dots\dots\dots$

Sum ($\angle A + \angle B + \angle C$) = $\dots\dots\dots$

Result

Thus, the sum of the three angles of a triangle is 180°

Application

This result may be used in a number of geometrical problems such as to find the sum of the angles of a quadrilateral, pentagon, etc.

Steady Run