

# Laboratory Method Of Teaching Mathematics

प्रयोगशाला विधि

*pedagogy of mathematics*  
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## LABORATORY METHOD OF TEACHING MATHEMATICS

### गणित शिक्षण की प्रयोगशाला विधि

Laboratory method is based on the maxim “learning by doing.”

- This is an activity method and it leads the students to discover mathematics facts.
- In it we proceed from concrete to abstract.
- Laboratory method is a procedure for stimulating the activities of the students and to encourage them to make discoveries.
- This method needs a laboratory in which equipments and other useful teaching aids related to mathematics are available.
- For example, equipments related to geometry, mathematical model, chart, balance, various figures and shapes made up of wood or hardboards, graph paper etc.

## PROCEDURE OF LABORATORY METHOD

### प्रयोगशाला विधि की प्रक्रिया

- Aim of The Practical Work: The teacher clearly states the aim of the practical work or experiment to be carried out by the students.
- Provided materials and instruments: The students are provided with the necessary materials and instruments.
- Provide clear instructions: Provide clear instructions as to the procedure of the experiment.
- Carry out the experiment: The students carry out the experiment.
- Draw the conclusions: The students are required to draw the conclusions as per the aim of the experiment.

## APPLICATIONS OF LABORATORY METHOD

### प्रयोगशाला विधि का प्रयोग

Sum of three angles of a triangle is 180 degree. “How we can prove this in the laboratory.

Aims: उद्देश्य

To prove that sum of the three angles of a triangle is equal to two right angles or 180 degree.

Materials and instruments: उपकरण

Card board sheet, pencil, scale, triangle and other necessary equipments.

Procedure: प्रक्रिया

In the laboratory pupils will be given on cardboard sheet each and then they are told how to draw triangles of different sizes on it. After drawing the triangles they cut this separately with the help of scissors.

Observation: निरीक्षण

Student will measure the angles of the triangles drawn and write these in a tabular form.

Figure	Angle A +B+C			Total
no.	Angle A	Angle B	Angle C	
1	90	60	30	180
2	120	30	30	180
3	60	60	30	180

## गणना

Calculation: after measuring the angles of different triangles in the form of cardboard sheet.

We calculate and conclude their sum.

In this way by calculating the three angles of a triangle the students will be able to conclude with inductive reasoning that the sum of three angles of a triangle is 180 degree or two right angles.

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