

BASIC CONCEPT OF MENSURATION

For Class 7 & 9

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WHAT IS MENSURATION?

- Mensuration is a subject of geometry. Mensuration deals with the size, region, and density of different forms both 2D and 3D. Now, in the introduction to Mensuration, let's think about 2D and 3D forms and the distinction between them.

INTRODUCTION TO MENSTRUATION: IMPORTANT TERMS

Until we switch to the list of important formulas for measurement, we need to clarify certain important terms that make these measurement formulas:

Area (A):

- The area is called the surface occupied by a defined closed region. It is defined by the letter A and expressed in a square unit.

Perimeter (P):

The total length of the boundary of a figure is called its perimeter. Perimeter is determined by only two-dimensional shapes or figures. It is the continuous line along the edge of the closed vessel. It is represented by P and measures are taken in a square unit.

- **Volume (V):**

- The width of the space contained in a three-dimensional closed shape or surface, such that, the area by a room or cylinder. Volume is denoted by the alphabet V and the SI unit of volume is the cubic meter.

- **Curved Surface Area (CSA):**

- The curved surface area is the area of the only curved surface, ignoring the base and the top such as a sphere or a circle. The abbreviation for the curved surface area is CSA.

- **Lateral Surface Area (LSA):**

- The total area of all of a given figure's lateral surfaces is called the Lateral Surface Area. Lateral surfaces are the layers covering the artefact. The acronym for the lateral surface area is LSA.

- **Total Surface Area (TSA):**

- The calculation of the total area of all surfaces is called the Cumulative Surface Region in a closed shape. For example, we get its Total Surface Area in a cuboid by adding the area of all six surfaces. The acronym for the total surface area is TSA.

Square Unit (l):

- One square unit is simply the one-unit square area. When we quantify some surface area, we relate to the sides of one block square to know how many of these units will fit in the figure given.

Cube Unit (l):

- One cubic unit is the one-unit volume filled by a side cube. When we calculate the volume of any number, we refer to this cube of one unit and how many these component cubes will fit in the defined closed form.

- **Tools Require for Mensuration**

- **Calliper** - A tool for measuring the diameter.
- **Try Square** - A tool for determining the squareness and flatness of a surface.
- **Meter Stick** - A measuring device with a one-meter length.
- **Compass** - An arc and circle drawing tool.

Thanks and Regards

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