

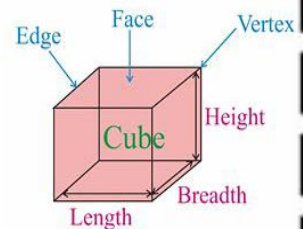
Volume



Volume of a Cube

A cube is a three-dimensional box-like figure represented in the three-dimensional plane. A cube has 6 square-shaped equal faces.

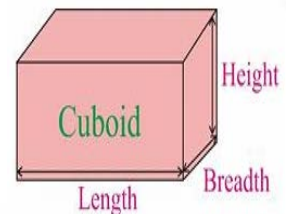
The volume of a cube is equal to the product of the edge length three times.



Volume of a Cuboid

A cuboid is a three-dimensional box-like figure represented in the three-dimensional plane.

The volume of a cuboid is obtained by multiplying the length, breadth, and height.



Determining Volume by Calculation

Volume of Cube = Side \times Side \times Side

Volume of Cuboid = Length \times Breadth \times Height



Let us understand with some examples:

Example 1: Find the volume of a cuboid of length 20cm, breadth 12cm, height 10cm.

Solution:

Given: length = 20cm, breadth = 12cm, height = 10cm.

Volume of a Cuboid = length \times breadth \times height

$$\Rightarrow V = 20 \times 12 \times 10$$

$$\Rightarrow V = 2400\text{cm}^3$$

Volume



Example 2: Find the volume of a cube whose edge is 11 cm.

Solution:

Given: Length of an edge of the cube = 11 cm

Now, volume of the cube = edge \times edge \times edge

$$= 11 \text{ cm} \times 11 \text{ cm} \times 11 \text{ cm}$$

$$= 1331 \text{ cm}^3.$$