

QUICK TIP!

Hey Kids! Time for a super fun math lesson, courtesy of Math Madness!

VOLUME

The volume of an object is the amount of space that the object occupies. It is expressed in terms of cubic units of distance.

In order to calculate the volume of a rectangular prism, multiply the length by the height by the base.

For example, for a box that is 3 m high by 2m wide by 2m deep:

$$\text{Volume} = 3\text{m} \times 2\text{m} \times 2\text{m} = 12\text{m}^3$$

Another way to think of it is the area of the base times the height. For example, say we want to flood a 200 square foot bathroom with 1.5 feet of water. We will need 300 cubic feet of water to accomplish this task!

$$\text{Volume} = 200\text{ft}^2 \times 1.5\text{ft} = 300\text{ft}^3$$

TRY IT!

Calculate the volume of the rectangular prisms described below. Be sure to include the units!

Dimensions

Volume

5 m x 5 m x 5 m

20 m x 3 m x 6 m

13 ft x 25 ft x 22 ft

22 mi x 31 mi x 2 mi

1 km x 42 km x 7 km

7 in x 12 in x 11 in

130 mm x 180 mm x 24 mm

