

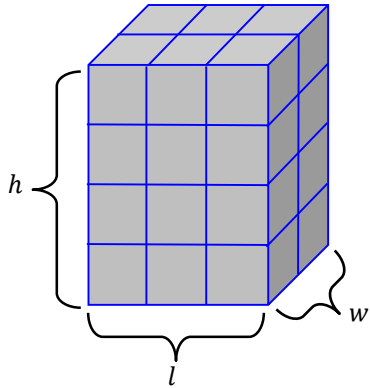
Possible Solutions

Recall that Volume is the measure of what it takes to fill an object. That means that you have to count the number of cubes that cover the base for every row of cubes in the height.

Rectangular Prism

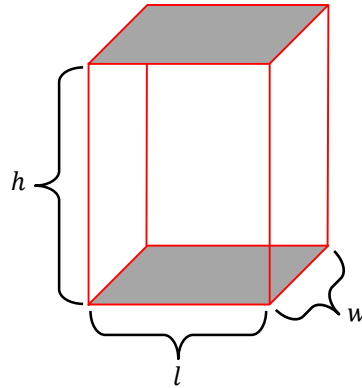
There are two slightly different formulas for finding the volume of a rectangular prism. The formula that is most familiar is $V = l \times w \times h$, where l represents the *length*, w represents the *width*, and h represents the *height* of the prism.

Model made with cubes



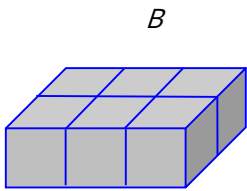
$V = l \times w \times h$

Model outline showing bases

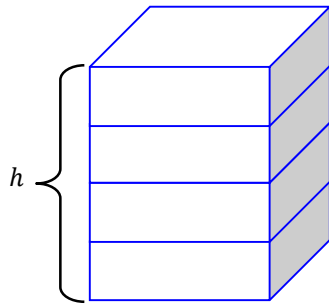


The other formula yields the same result, but uses a slightly different representation with cubes.

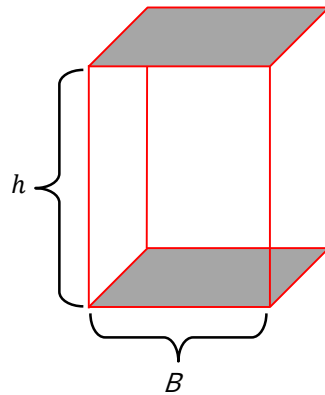
$V = B \times h$



B represents the area of the base of the prism ($l \times w$)



h represents the height of the stacked bases of the prism

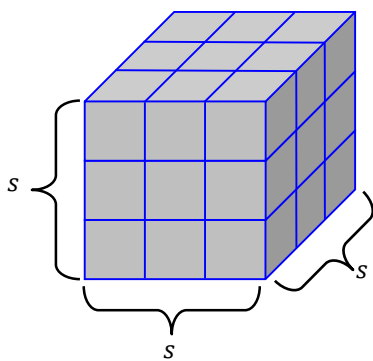


B represents the area of the base of the prism ($l \times w$)

Cube

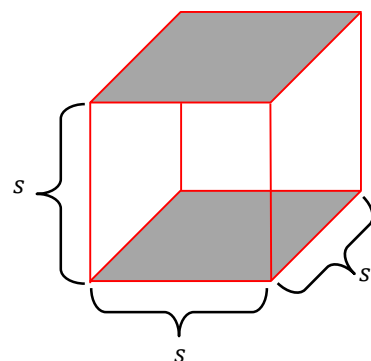
There are two slightly different formulas for finding the volume of a cube. The formula that is most familiar is $V = s \times s \times s$, where s represents the length of each *side* of the cube (all sides are the same length in a cube).

Model made with cubes

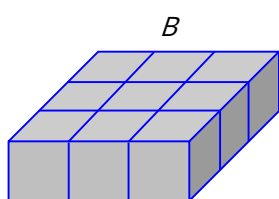


$V = s \times s \times s$

Model outline showing bases

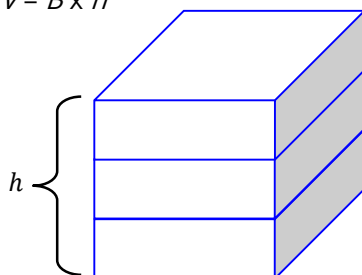


The other formula yields the same result, but uses a slightly different representation with cubes.

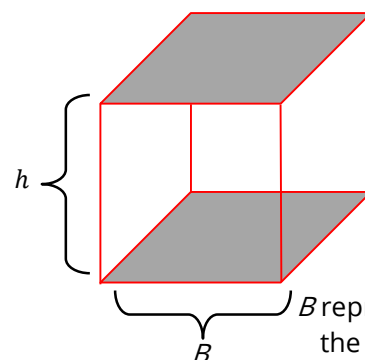


B represents the area of the base of the cube

$V = B \times h$



h represents the height of the stacked bases of the cube



B represents the area of the base of the cube