

Volume - In General

May-21-19 8:35 AM

* Volume is the amount of SPACE an object occupies

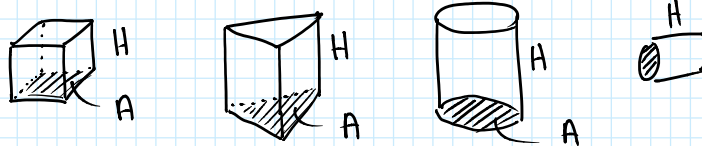
* Capacity is the volume of the contents in a container.

For any "right"
3D object:

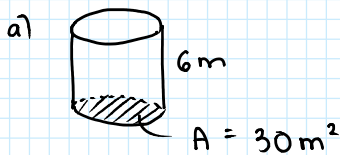
$$\text{Volume} = \frac{\text{Base Area}}{\text{Area}} \times \text{Height}$$

$$V = A \times H$$

For short



Ex. What is the volume of each 3D object?

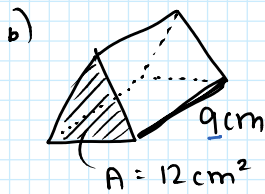


$$V = A \times H$$

$$V = 30\text{m}^2 \times 6\text{m}$$

$$V = 180\text{m}^3$$

The units for volume are CUBED
ex. cm^3

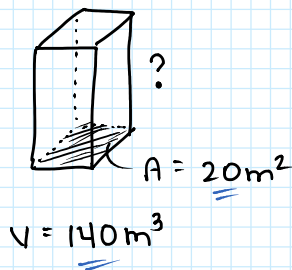


$$V = A \times H$$

$$V = 12 \times 9$$

$$V = 108\text{cm}^3$$

Ex. If this prism has a volume of 140m^3 and a base area of 20m^2 , what is the prism's height?



$$V = A \times H$$

$$140 = 20 \times H$$

$$\div 20 \quad \div 20$$

$$7 = H$$

$$\text{Height} = 7\text{m}$$