

# Volumes

## RAPPELS

### Périmètres

= le "tour", c'est une distance exprimée en m, cm, dm...

$$\text{carré} = 4 \times c$$

$$\text{rectangle} = 2 \times L + 2 \times l$$

$$\text{cerce} = \pi \times D = \pi \times R \times 2$$

### Aires

= une "surface", exprimée en  $m^2$ ,  $cm^2$ ,  $mm^2$ ...

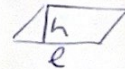
$$\text{carré} = c \times c$$

$$\text{rectangle} = L \times l$$

$$\text{triangle} = \frac{b \times h}{2}$$

$$\text{disque} = \pi \times R^2$$

$$\text{parallélogramme} = l \times h$$



## I-Formules

$$\text{cube} = c^3 = c \times c \times c$$

$$\text{paré droit} = \text{parallépipède rectangle} = L \times l \times h$$

$$\text{prisme droit} = \text{Aire de la base} \times h$$

$$\text{cylindre} = \pi \times R^2 \times h$$

$$\text{cône} = \frac{1}{3} \times \pi \times R^2 \times h$$

$$\text{pyramide} = \frac{1}{3} \times \text{Aire de la base} \times h$$

$$\text{boule} = \frac{4}{3} \times \pi \times R^3$$

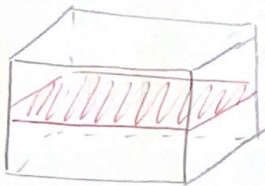


## II. Conversions

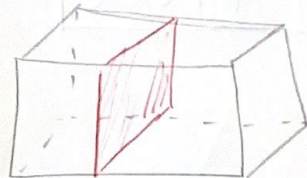
km <sup>3</sup>	hm <sup>3</sup>	dam <sup>3</sup>	m <sup>3</sup>	dm <sup>3</sup>				cm <sup>3</sup>			mm <sup>3</sup>	
				hl	hl	dal	L	dL	cl	mL		
				1	0	0	0					

$1 \text{ m}^3 = 1000 \text{ L}$

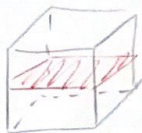
## III. Sections



un rectangle



un rectangle



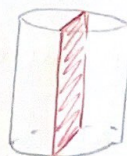
un carré



un disque



un disque



un rectangle



même forme que la base du prisme  
(ici c'est un triangle)