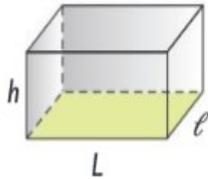


Les volumes

Volume d'un solide droit

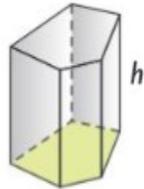
$$V_{\text{Solide droit}} = A_{\text{Base}} \times \text{Hauteur}$$

Parallélépipède rectangle



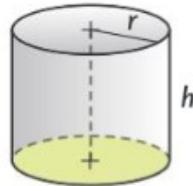
$$V = L \times l \times h$$

Prisme



$$V = A_{\text{base}} \times h$$

Cylindre de révolution

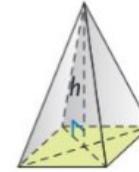


$$V = \pi \times r^2 \times h$$

Volume d'un solide pointu

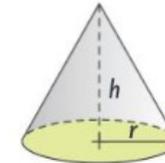
$$V_{\text{Solide pointu}} = \frac{A_{\text{Base}} \times \text{Hauteur}}{3}$$

Pyramide



$$V = \frac{A_{\text{base}} \times h}{3}$$

Cône de révolution

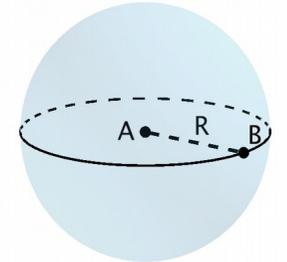


$$V = \frac{\pi \times r^2 \times h}{3}$$

Volume & aire d'une sphère

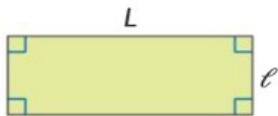
$$V_{\text{Sphère}} = \frac{4}{3} \times \pi \times \text{Rayon}^3$$

$$A_{\text{Sphère}} = 4 \times \pi \times \text{Rayon}^2$$



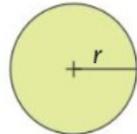
Rappels sur les calculs d'aires

Rectangle



$$A = L \times l$$

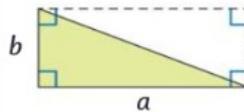
Disque



$$A = r \times r \times \pi$$

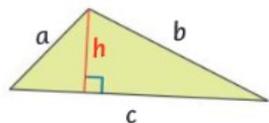
$$A = r^2 \times \pi$$

Triangle rectangle

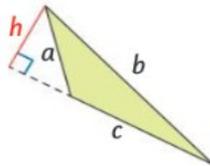


$$A = \frac{a \times b}{2}$$

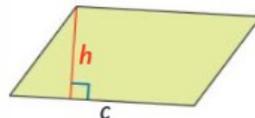
Triangle quelconque



$$A = \frac{c \times h}{2}$$



Parallélogramme



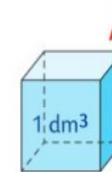
$$A = c \times h$$

Unités de volume

Un volume s'exprime en sous-unités du **mètre cube** ou en **litre**.

	km ³		hm ³		dam ³		m ³		dm ³		cm ³		mm ³
							kL	hL	daL	L	dL	cL	mL

$$1 \text{ dm}^3 = 1 \text{ litre.}$$



En versant le litre de lait, on remplit exactement le cube.