

Les aires et volumes de solides

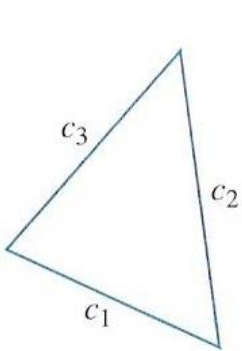
Mathovore
Boostez vos résultats en maths



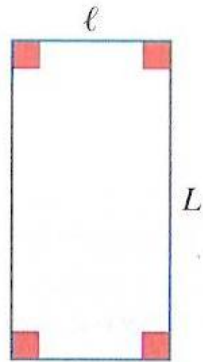
AIRES et VOLUMES usuels

Surfaces usuelles planes

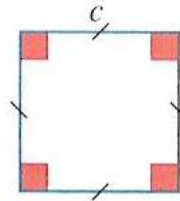
- Périmètre d'un polygone : c'est la somme des longueurs de tous les côtés.



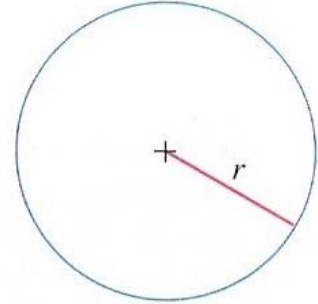
Triangle
 $p = c_1 + c_2 + c_3$



Rectangle
 $p = (L + l) \times 2$



Carré
 $p = c \times 4$



Cercle – Disque
 $p = 2\pi r$
avec
 $\pi = 3,141\ 592\ 653\ 5\dots$

- Aire

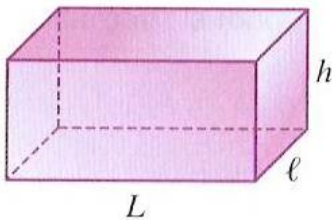
$$\mathcal{A} = \frac{\text{base} \times \text{hauteur}}{2}$$

$$\mathcal{A} = L \times l$$

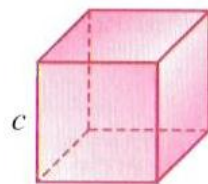
$$\mathcal{A} = c^2$$

$$\mathcal{A} = \pi r^2$$

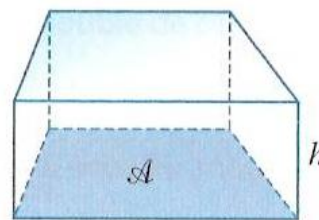
Solides usuels



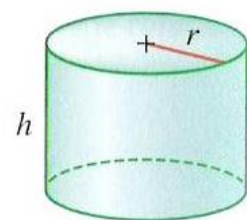
Parallélépipède
rectangle
 $V = L \times l \times h$



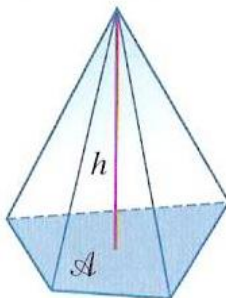
Cube
 $V = c^3$



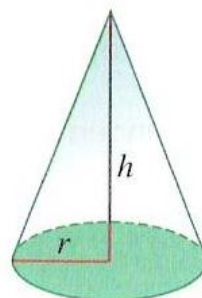
Prisme
droit
 $V = \mathcal{A} \times h$



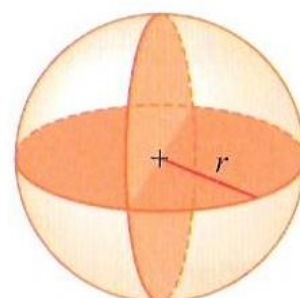
Cylindre
droit
 $V = \pi r^2 h$



Pyramide
 $V = \frac{\mathcal{A} \times h}{3}$



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



Boule – Sphère
 $\mathcal{A} = 4\pi r^2$ $V = \frac{4\pi r^3}{3}$