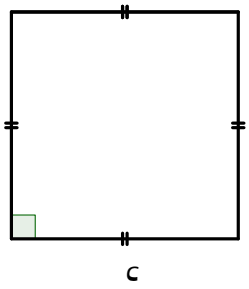
Formulaire

I les Aires

le Rectangle

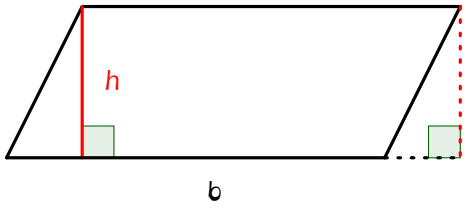
$$\mathcal{A} = \text{Longueur} \times \text{largeur} = L \times \ell$$

cas particulier : **le Carré**



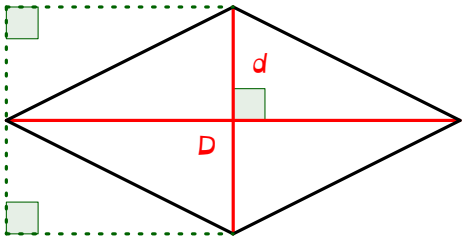
$$\mathcal{A} = \text{côté} \times \text{côté} = c \times c = c^2$$

le Parallélogramme



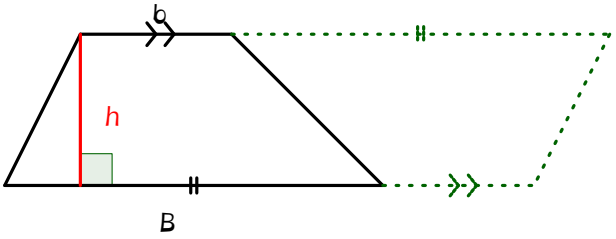
$$\mathcal{A} = \text{base} \times \text{hauteur} = h \times b$$

le Losange



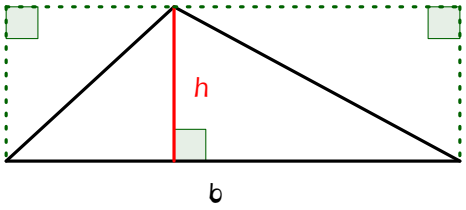
$$\mathcal{A} = \frac{\text{petite diagonale} \times \text{grande Diagonale}}{2} = \frac{d \times D}{2}$$

le Trapèze



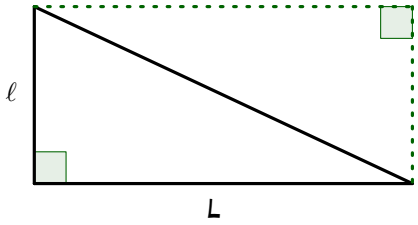
$$\mathcal{A} = \frac{(\text{petite base} + \text{grande Base}) \times \text{hauteur}}{2} = \frac{(b + B) \times h}{2}$$

le Triangle



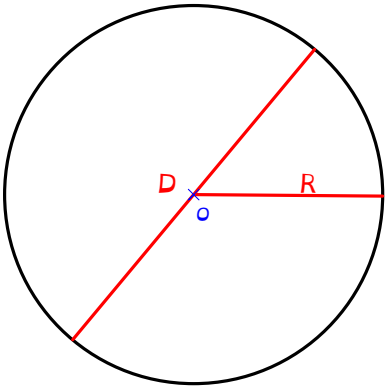
$$\mathcal{A} = \frac{(\text{base} \times \text{hauteur})}{2} = \frac{b \times h}{2}$$

cas particulier : **le Triangle Rectangle**



$$\mathcal{A} = \frac{\text{Longueur} \times \text{largeur}}{2} = \frac{L \times \ell}{2}$$

le Cercle

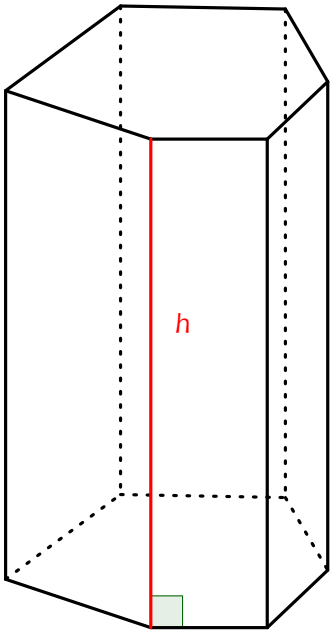


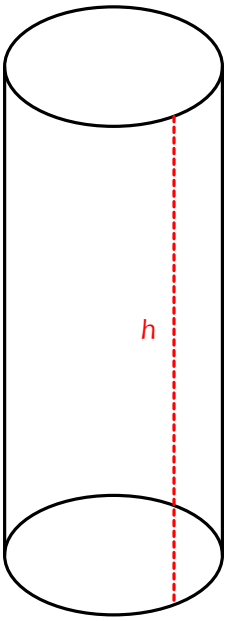
$$\mathcal{P} = 2 \times \text{Rayon} \times \pi = 2 \times R \times \pi = \text{Diamètre} \times \pi = D \times \pi$$

$$\mathcal{A} = \text{Rayon} \times \text{Rayon} \times \pi = R \times R \times \pi = R^2 \times \pi$$

II les Volumes

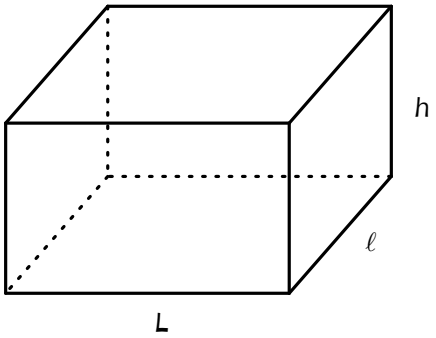
les Prismes et les Cylindres





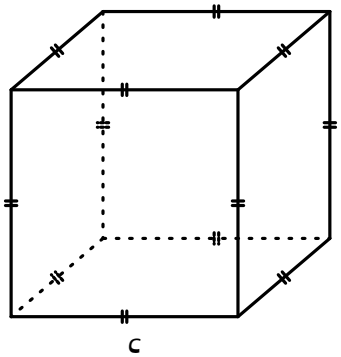
$$\mathcal{V} = \mathcal{A}ire_{base} \times hauteur = \mathcal{A}_{base} \times h$$

cas particulier : **les Parallélépipèdes Rectangle** ou Pavé Droit



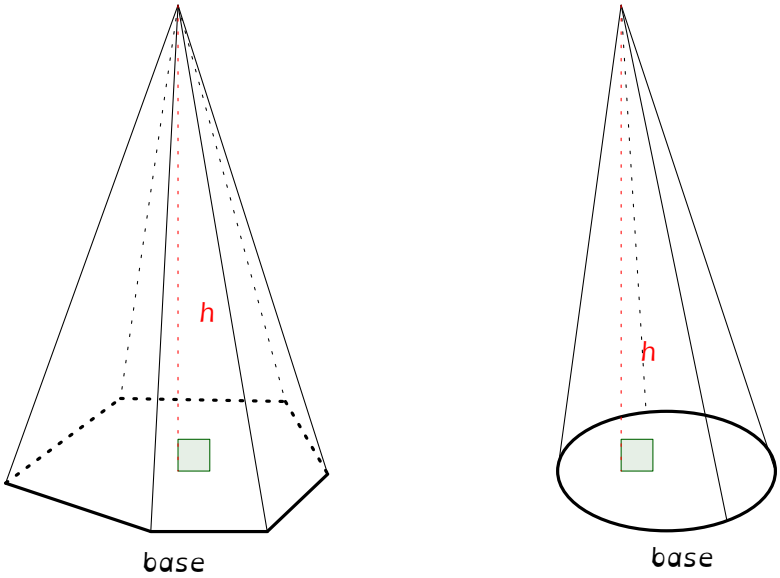
$$\mathcal{V} = Longueur \times largeur \times hauteur = L \times \ell \times h$$

cas particulier : **le Cube**



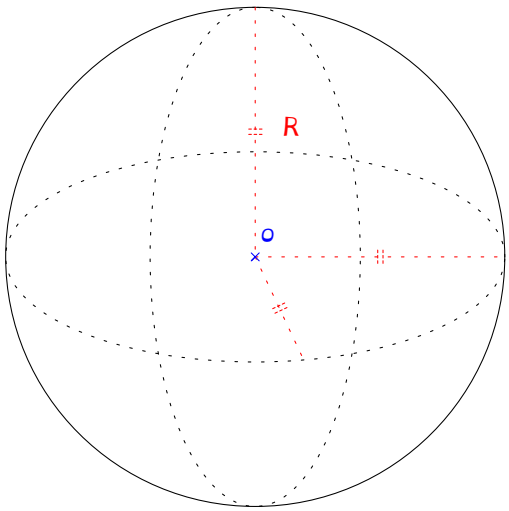
$$\mathcal{V} = \text{côté} \times \text{côté} \times \text{côté} = c \times c \times c = c^3$$

les Pyramides et les Cônes



$$\mathcal{V} = \frac{\mathcal{A}ire_{base} \times hauteur}{3} = \frac{\mathcal{A}_{base} \times h}{3}$$

la Sphère



$$\mathcal{A}_{surface} = 4 \times Rayon \times Rayon \times \pi = 4 \times R^2 \times \pi$$

$$\mathcal{V} = \frac{4 \times Rayon \times Rayon \times Rayon \times pi}{3} = \frac{4 \times R^3 \times \pi}{3}$$