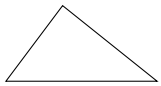
Formulaire figures géométriques

Formules usuelles de calcul de périmètres et d'aires

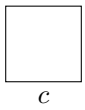
- **Triangle:**



– Périmètre : $\mathcal{P}_{triangle} =$ somme des longueurs

– Aire : $\mathcal{A}_{triangle} = \dfrac{\text{Côté} \times \text{Hauteur relative à ce côté}}{2}$

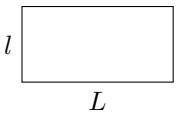
- **Carré:**



– Périmètre : $\mathcal{P}_{carré} = 4 \times c$

– Aire : $\mathcal{A}_{carré} = c^2$

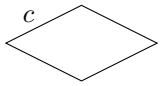
- **Rectangle:**



– Périmètre : $\mathcal{P}_{rectangle} = 2 \times (L + l)$

– Aire : $\mathcal{A}_{rectangle} = L \times l$

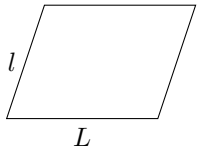
- **Losange:**



– Périmètre : $\mathcal{P}_{losange} = 4 \times c$

– Aire : $\mathcal{A}_{losange} = \dfrac{\text{Grande diagonale} \times \text{Petite diagonale}}{2}$

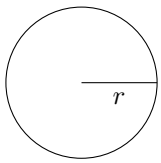
- **Parallélogramme:**



– Périmètre : $\mathcal{P}_{parallélogramme} = 2 \times (L + l)$

– Aire : $\mathcal{A}_{parallélogramme} =$ Côté × Hauteur relative à ce côté

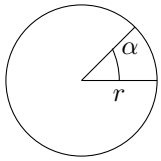
- **Cercle:**



– Périmètre : $\mathcal{P}_{cercle} = 2 \times \pi \times r$

– Aire : $\mathcal{A}_{cercle} = \pi \times r^2$

- **Arc de cercle:**

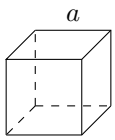


– Périmètre : $\mathcal{P}_{arc} = \alpha \times r$ pour α en radians

– Aire : $\mathcal{A}_{arc} = \dfrac{\alpha \times r^2}{2}$ pour α en radians

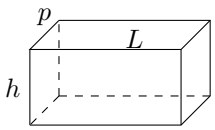
Formules usuelles de calcul de volumes

- **Cube:**



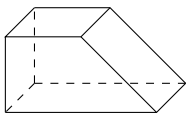
– Volume : $\mathcal{V}_{cube} = a^3$

- **Pavé droit:**



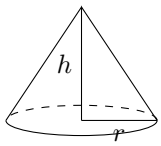
– Volume : $\mathcal{V}_{pavé} = L \times h \times p$

- **Prisme droite:**



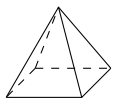
– Volume : $\mathcal{V}_{prisme} =$ Aire de la base $\times$ Hauteur

- **Cône:**



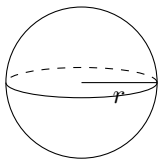
– Volume : $\mathcal{V}_{cône} = \dfrac{\pi \times r^2 \times h}{3}$

- **Pyramide:**



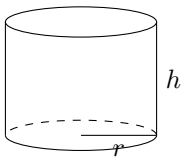
– Volume : $\mathcal{V}_{pyramide} = \dfrac{\text{Aire de la base} \times \text{Hauteur}}{3}$

- **Boule:**



– Volume : $\mathcal{V}_{boule} = \dfrac{4 \times \pi \times r^3}{3}$

- **Cylindre:**



– Volume : $\mathcal{V}_{cylindre} = \pi \times r^2 \times h$