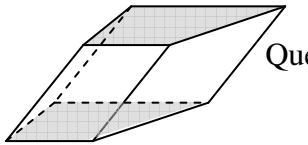
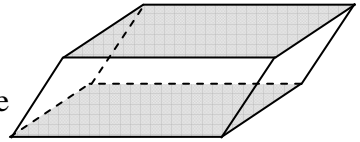
PRISMES ET CYLINDRES

PRISMES



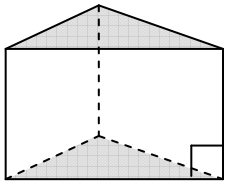
Quelconque



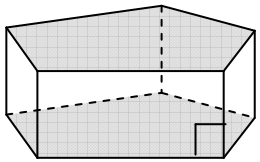
Parallélépipède

Prismes droits

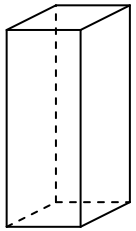
Solide dont les bases sont des polygones superposables (triangle, rectangle, parallélogramme, octogone, quelconque …) et les autres faces sont des rectangles.



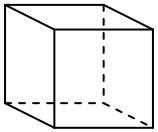
A base triangulaire.



Quelconque

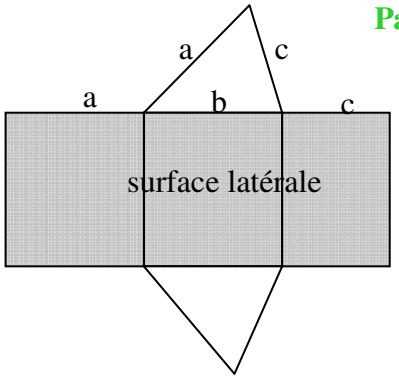


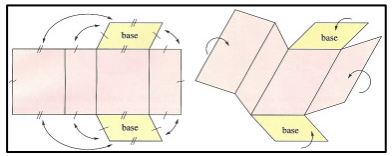
Parallélépipède rectangle ou pavé droit
V = L x l x h



Cube
$V = c^3$
= c x c x c

Patron





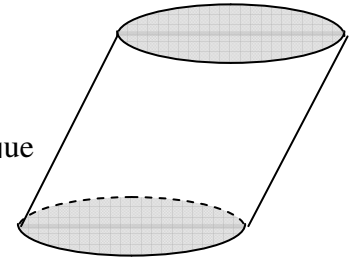
!!! Pour l'aire et le périmètre des bases, se référer au Formul'Aires. !!!
(fiche Longueurs et Surfaces 2)

Aire latérale = périmètre de la base x hauteur = (a + b + c) x h

Aire totale = aire latérale + aire des bases

Volume = aire de la base x hauteur

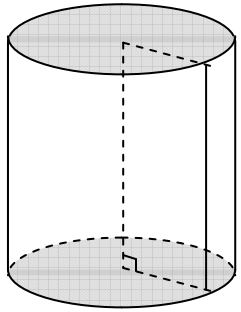
CYLINDRES

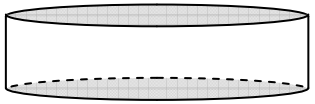


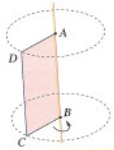
Quelconque

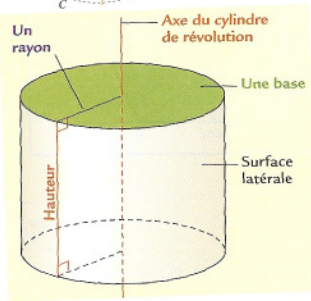
Cylindres de révolution

Solide décrit par un rectangle qui tourne autour de l'un de ses côtés.
Les deux **bases** sont des **disques** de même rayon.

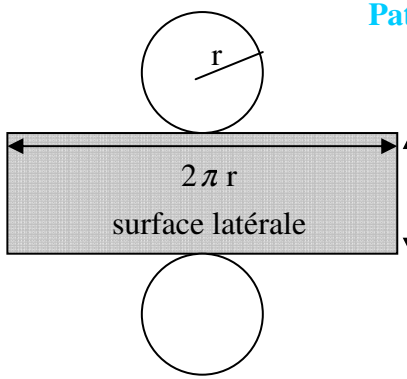


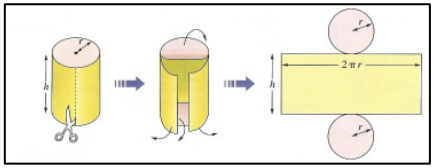






Patron





!!! Rappel !!!
Périmètre d'un cercle = $2\pi r$
Aire d'un cercle = πr^2

Aire latérale = périmètre de la base x hauteur = $2 \pi r h$

Aire totale = aire latérale + aire des bases = $2 \pi r h + 2 \pi r^2$

Volume = aire de la base x hauteur = $\pi r^2 h$