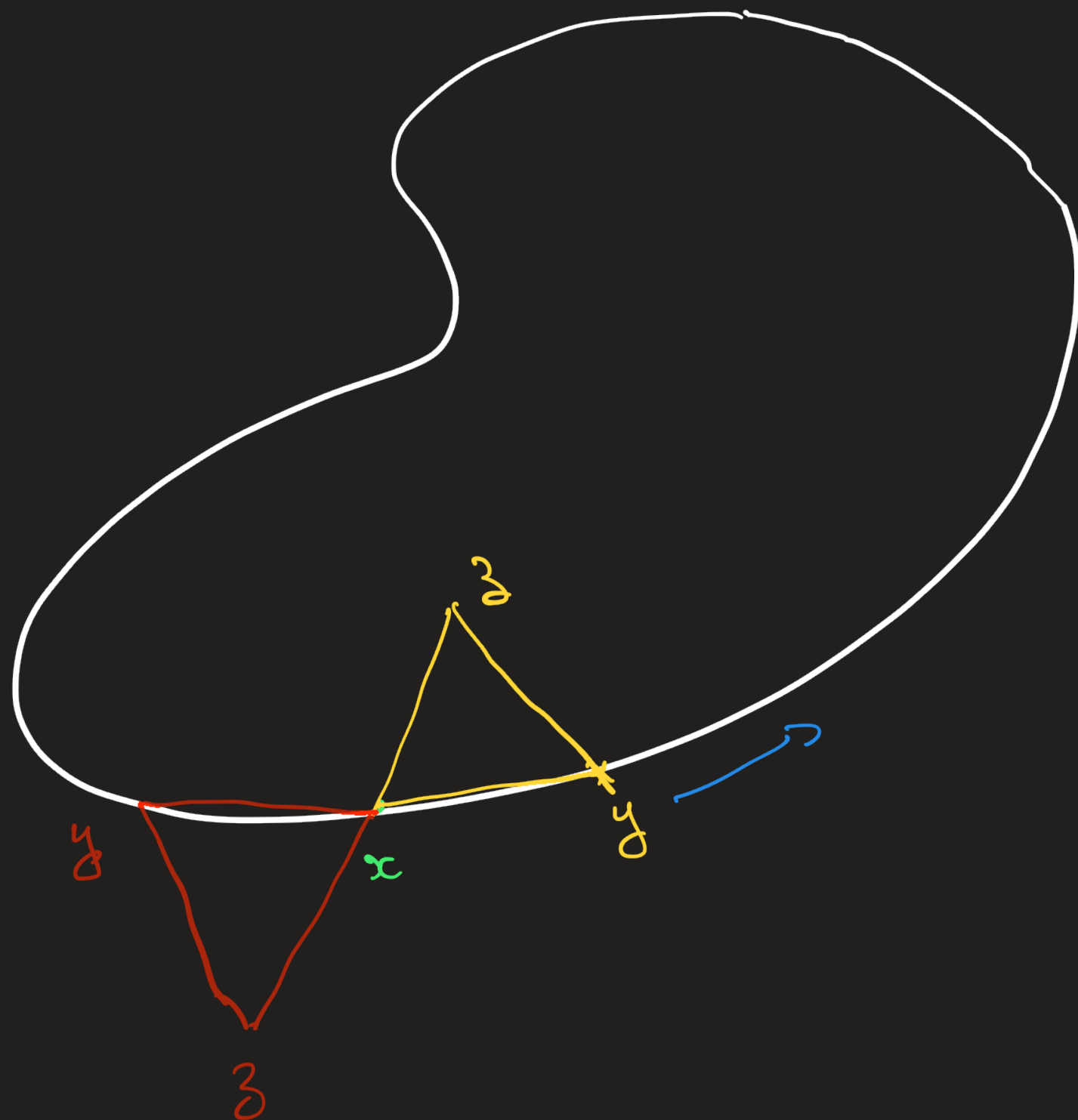
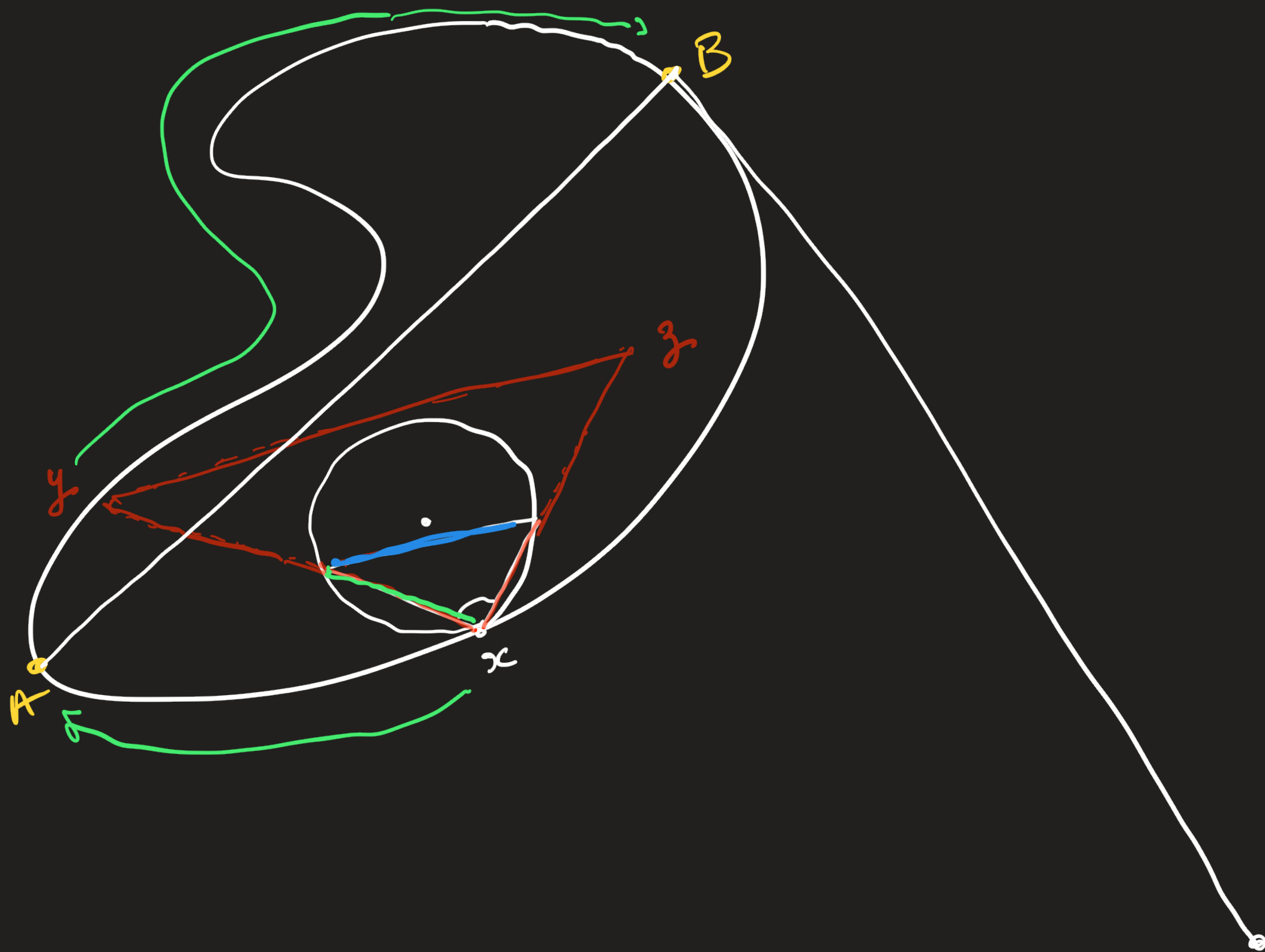




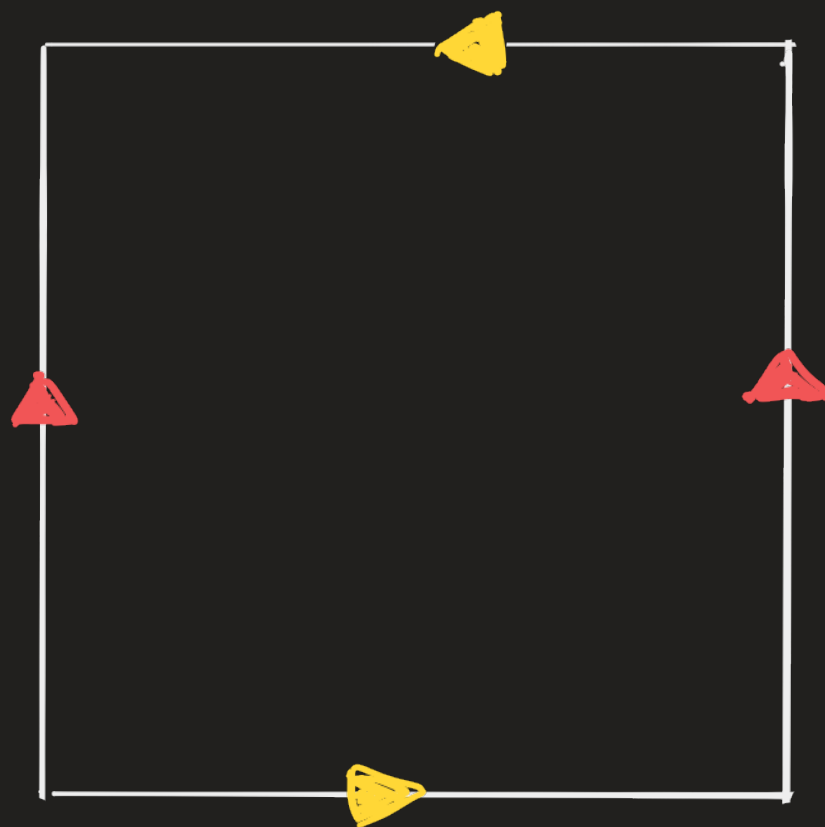


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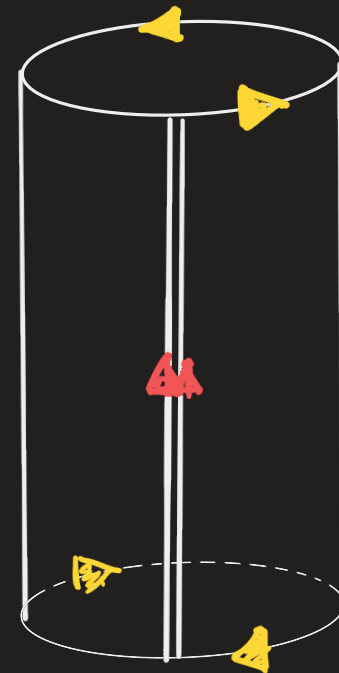
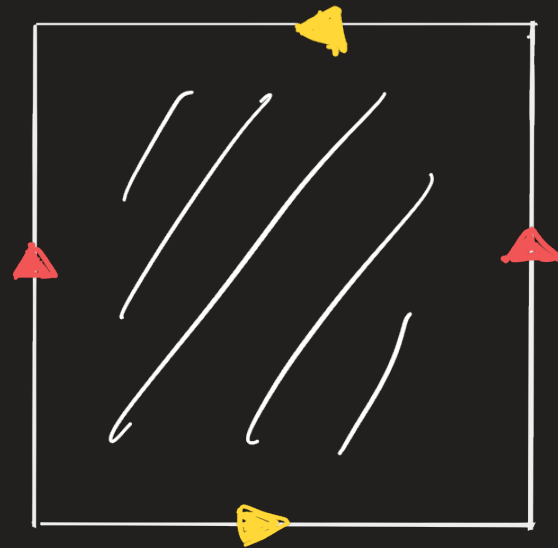




# ⑤ La bouteille de Klein



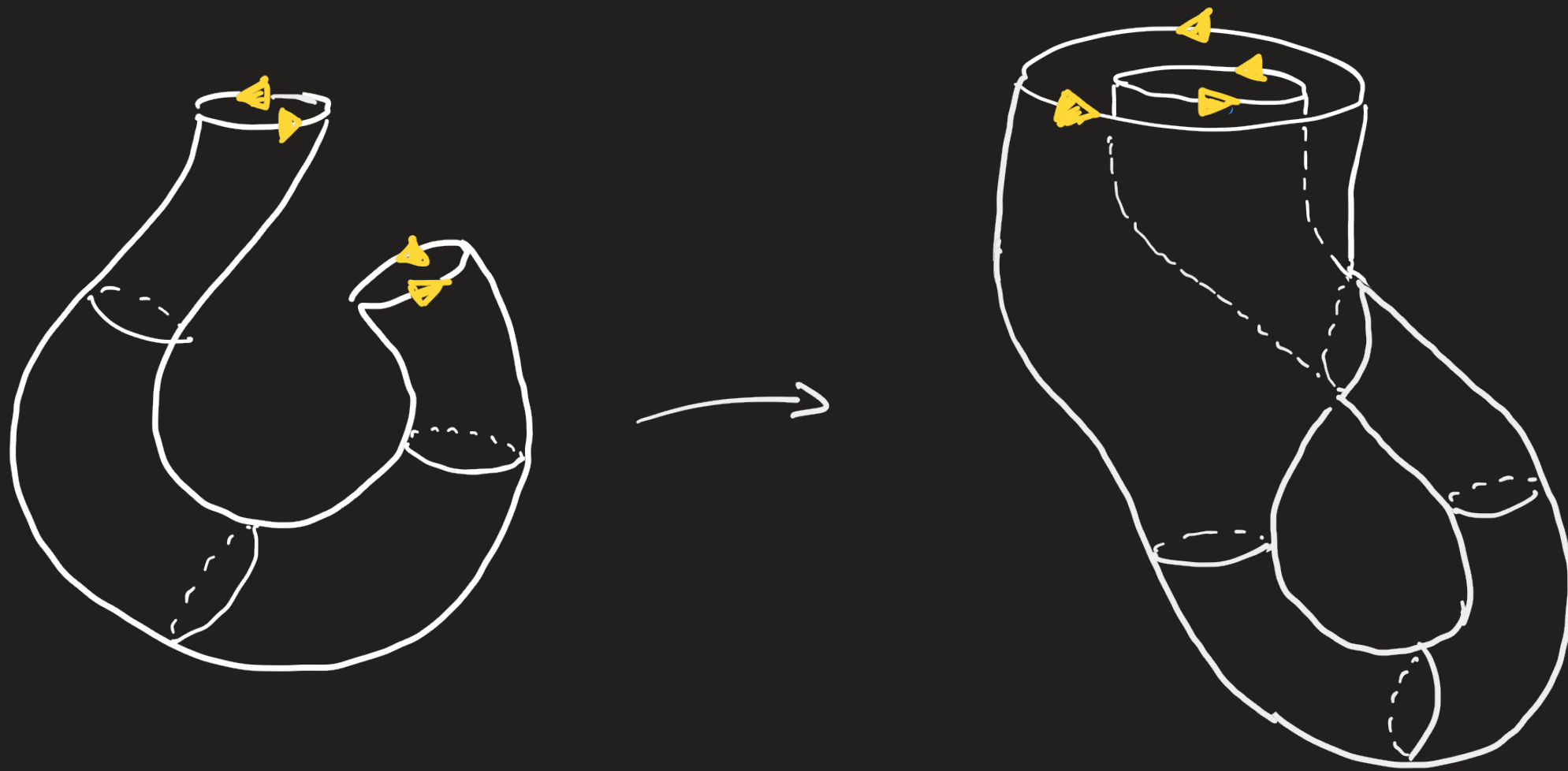
# La bouteille de Klein



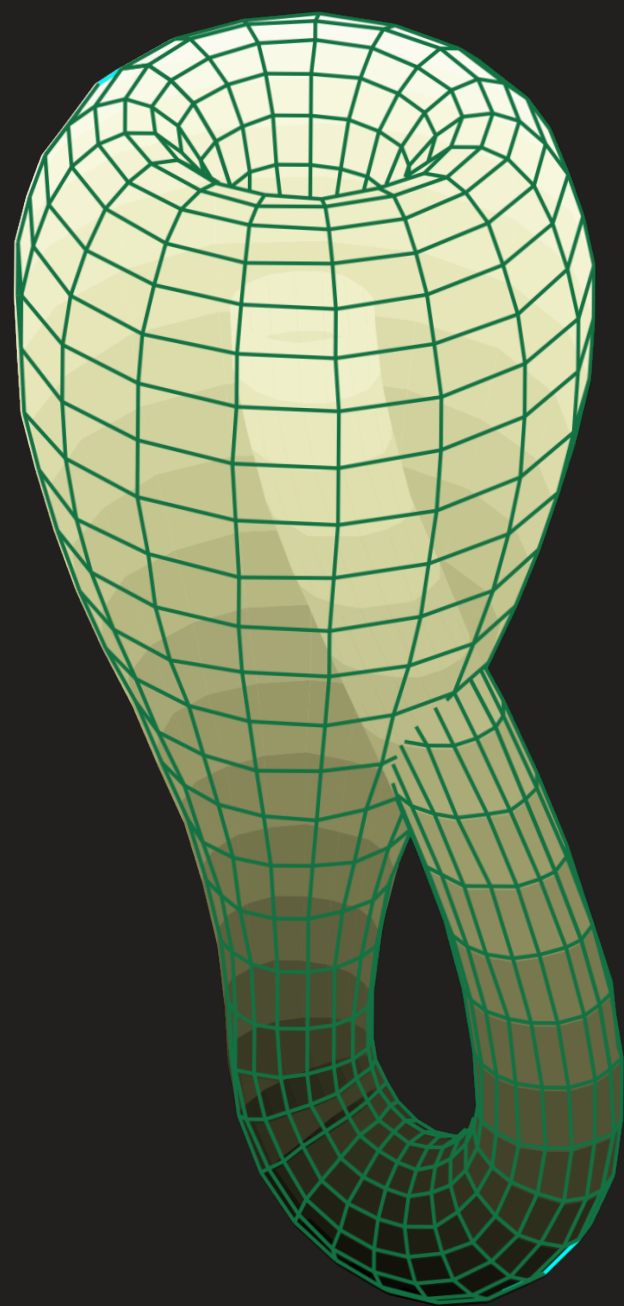




La bouteille de Klein

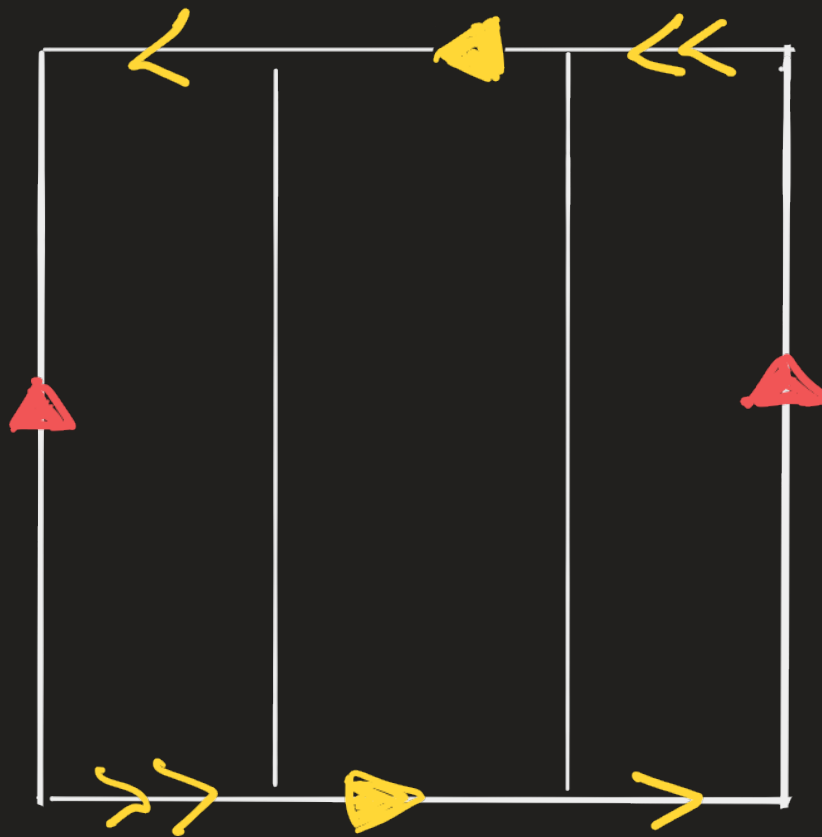




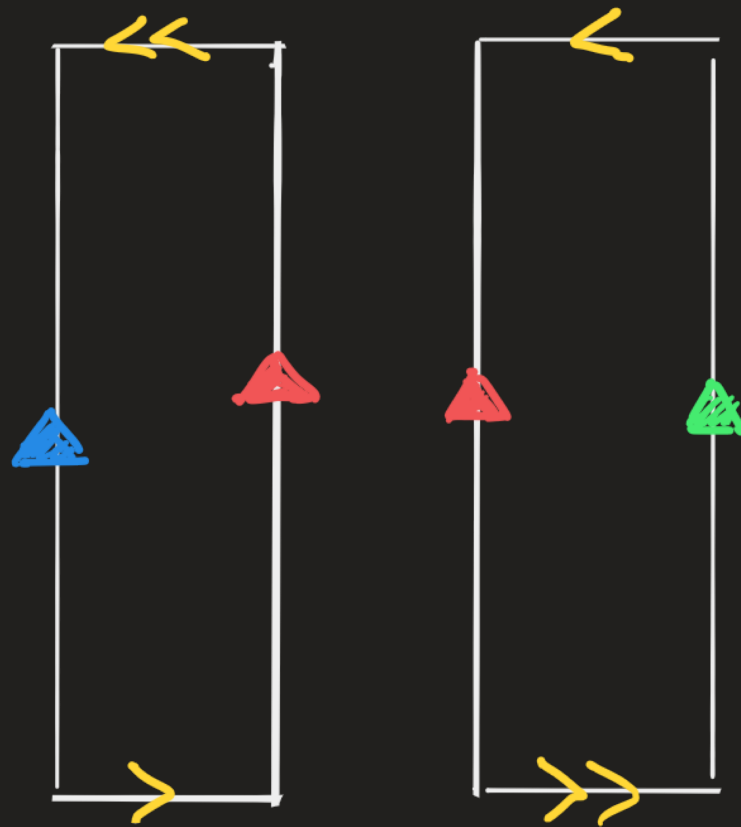


Bouteille de Klein.

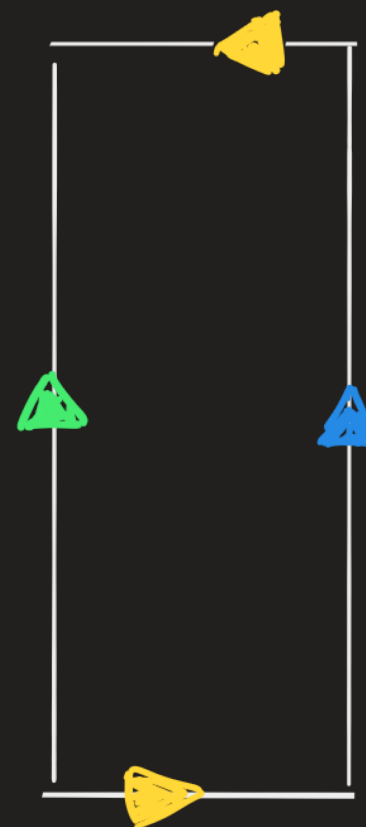
Découper la bouteille de Klein



Découper la bouteille de Klein

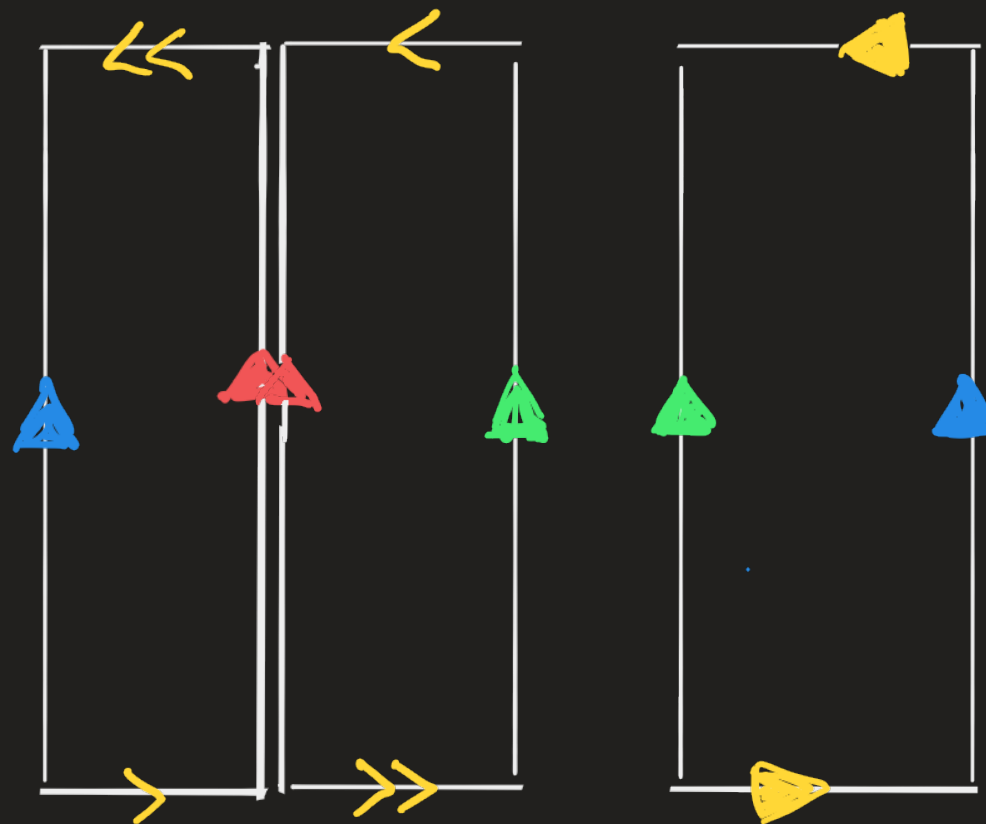


bande de  
Möbius

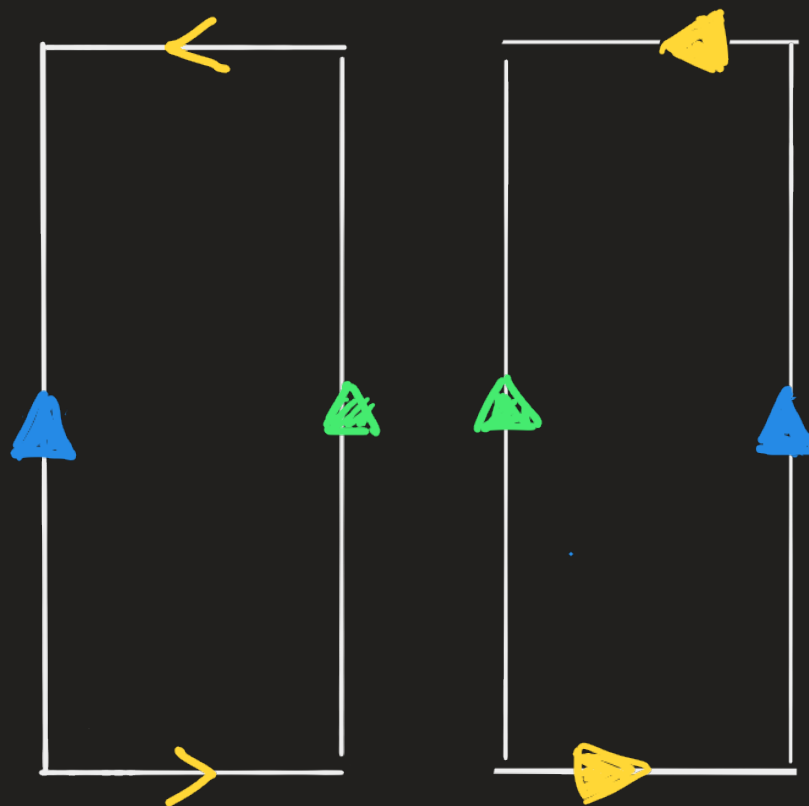


bande de  
Möbius

Découper la bouteille de Klein

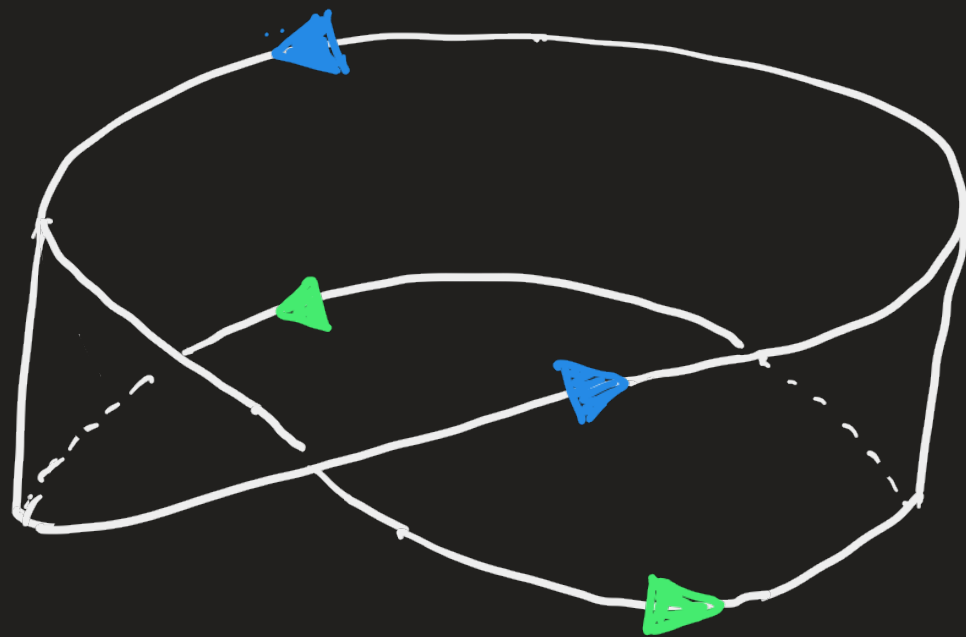


Découper la bouteille de Klein

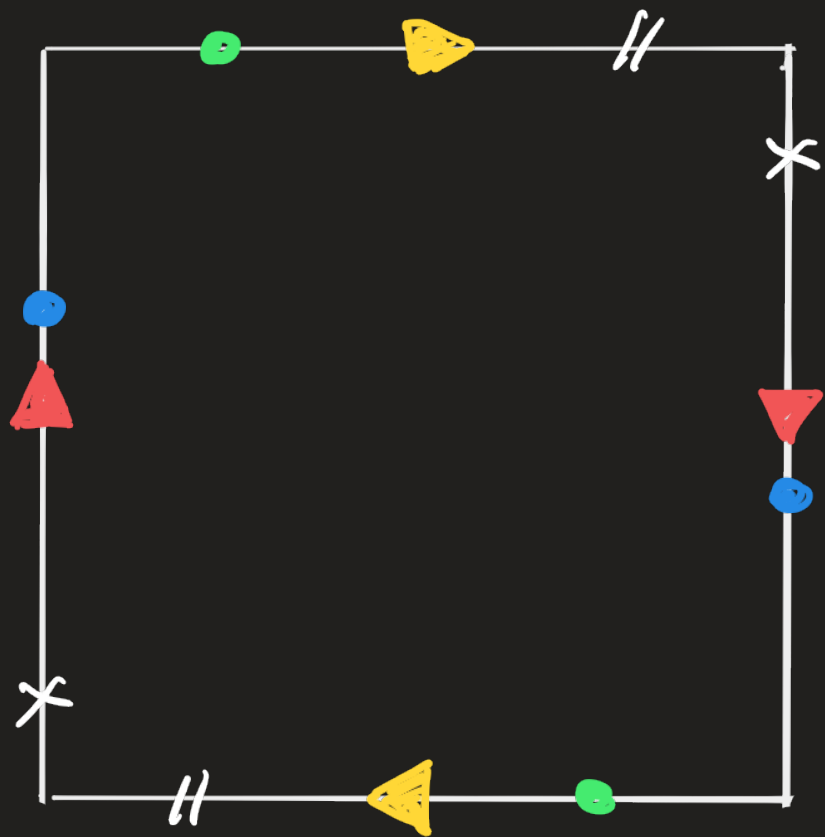


Deux bandes  
de  
Möbius.

Découper la bouteille de Klein

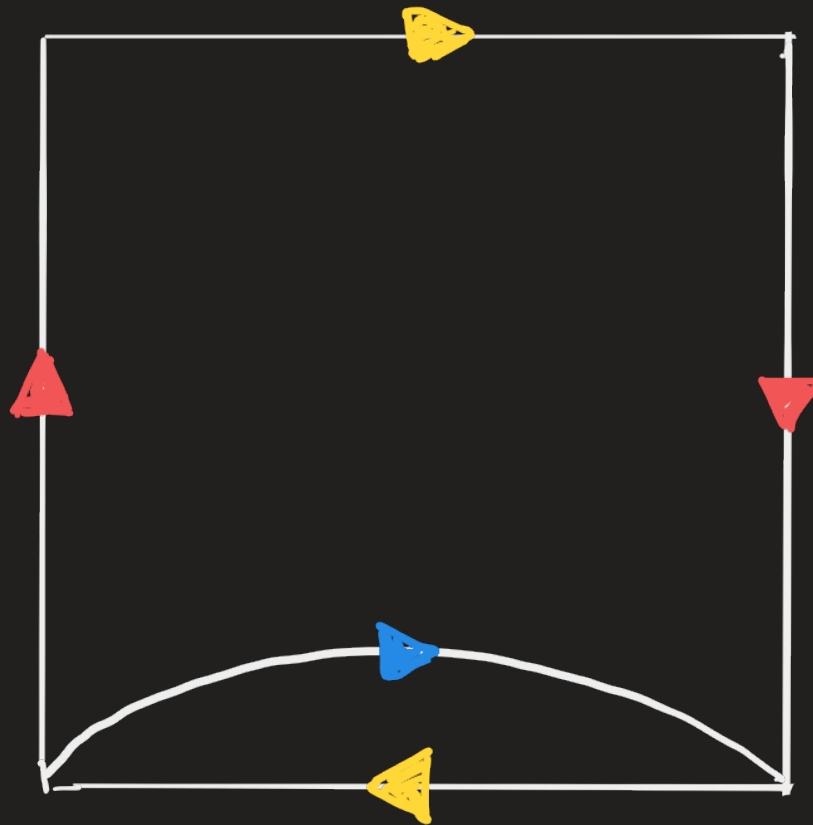


⑥ Le plan projectif réel  $\mathbb{RP}^2$



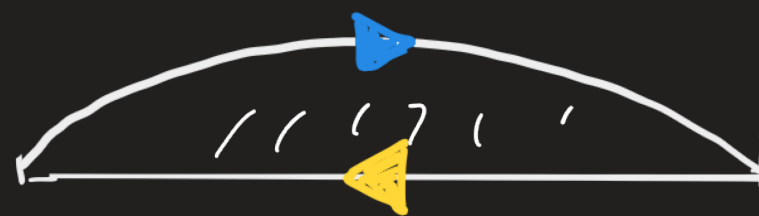
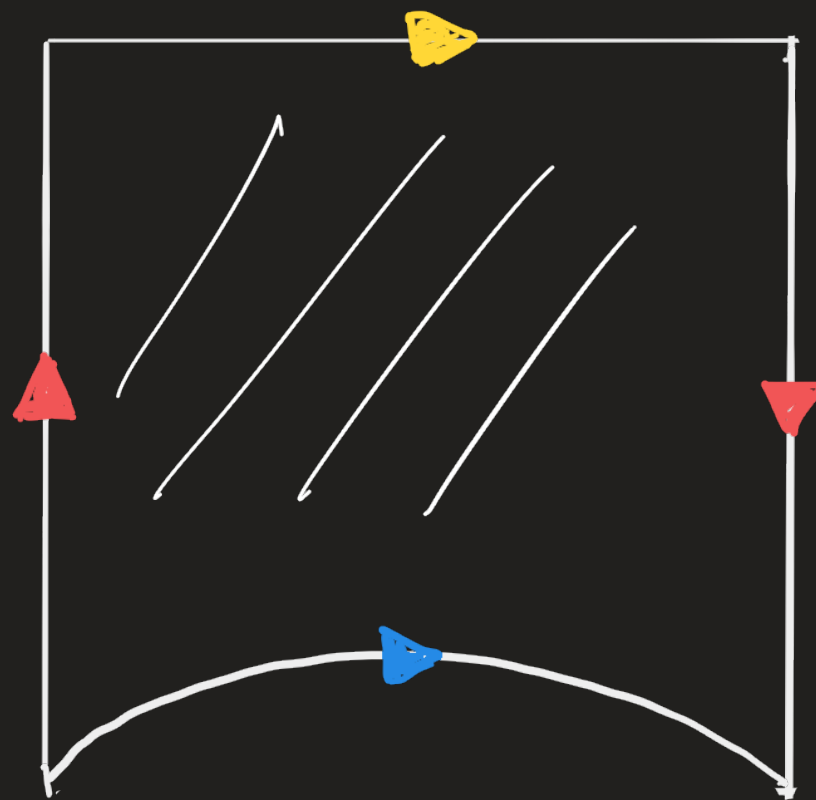


le plan projectif réel

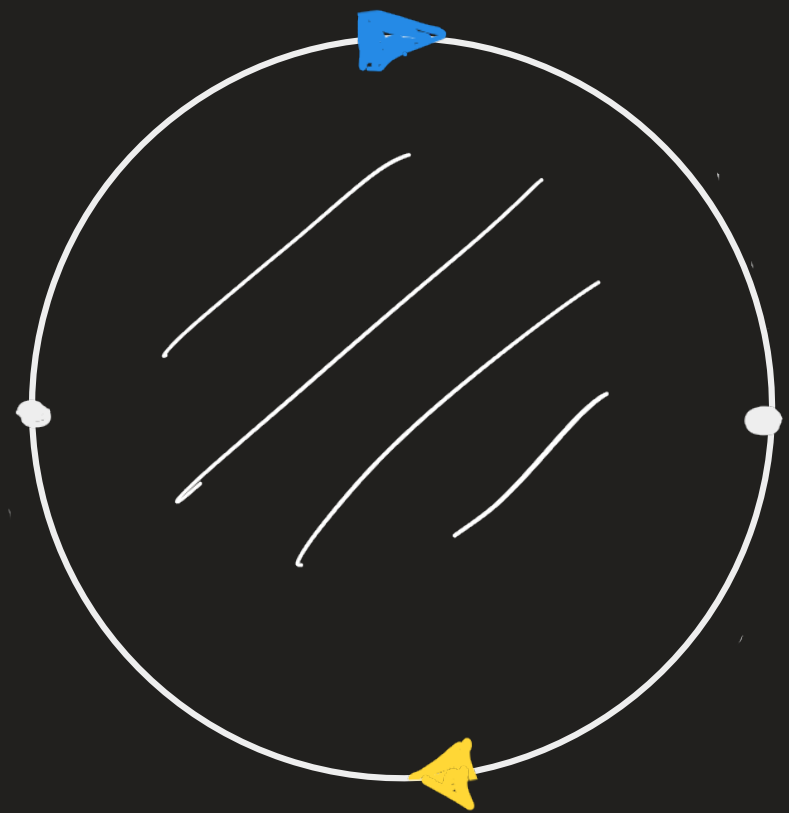
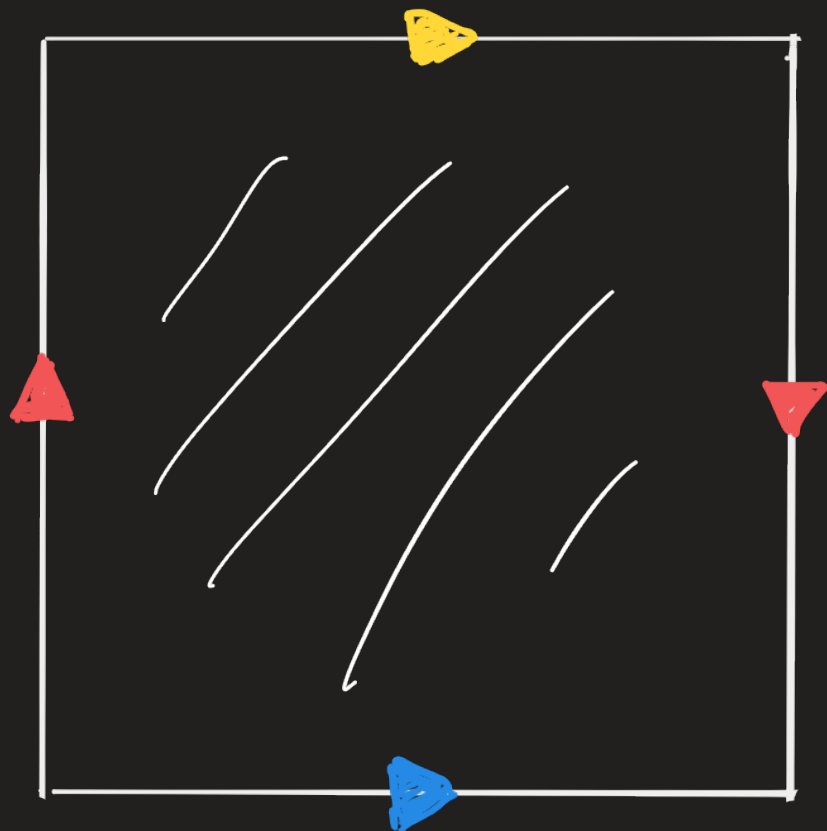




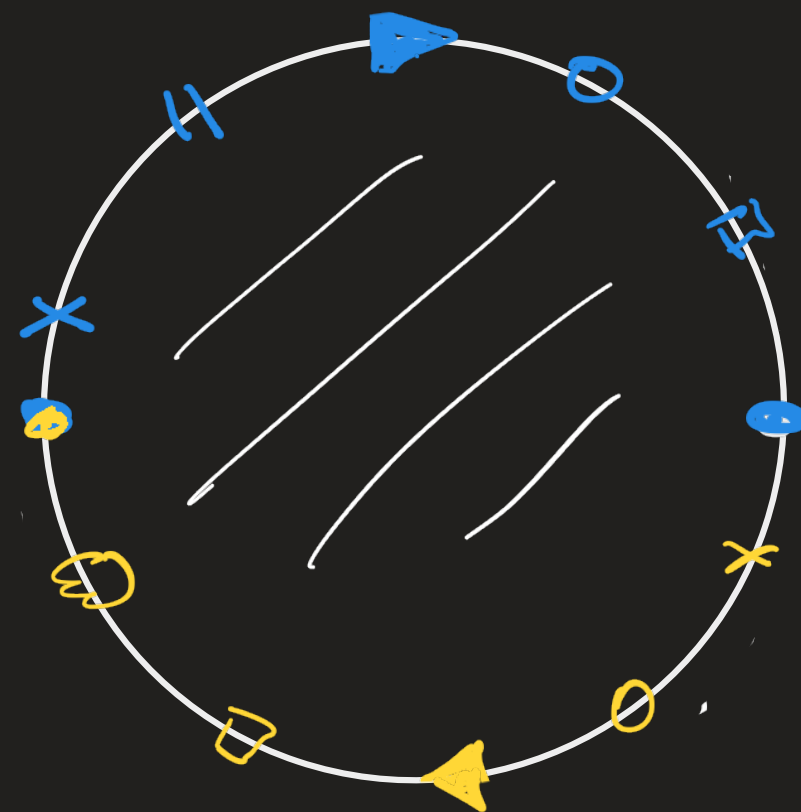
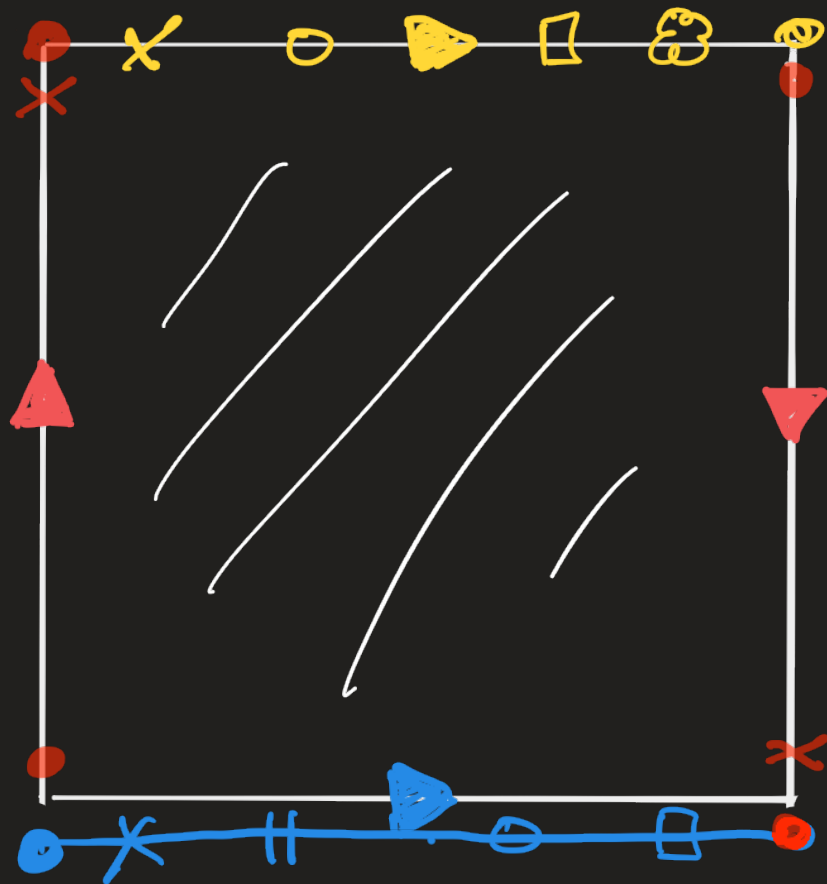
Le plan projectif réel.



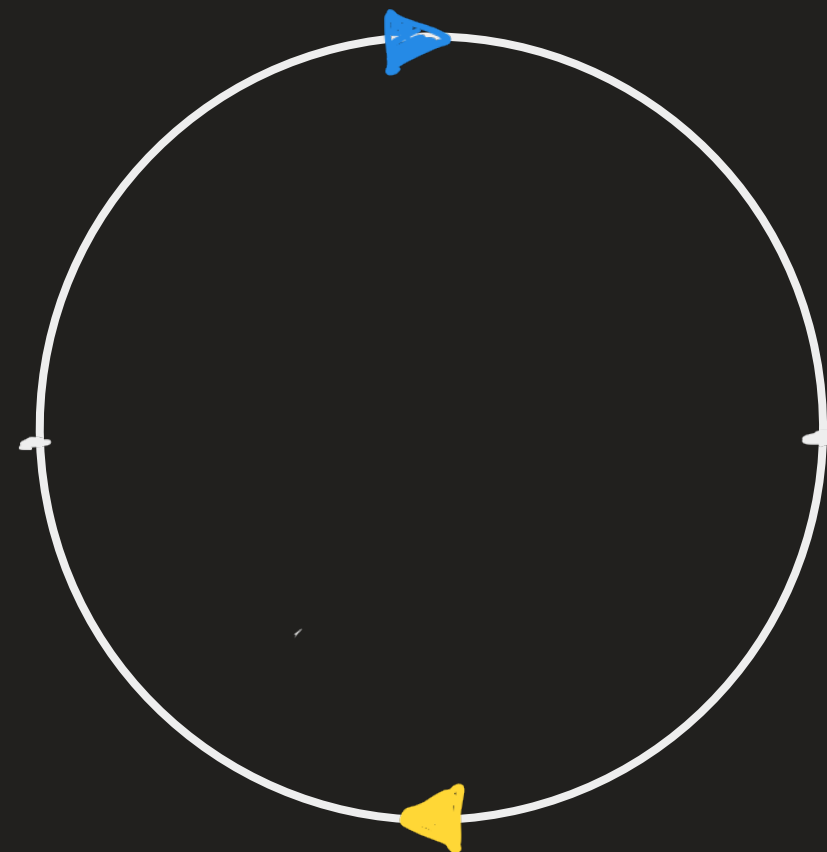
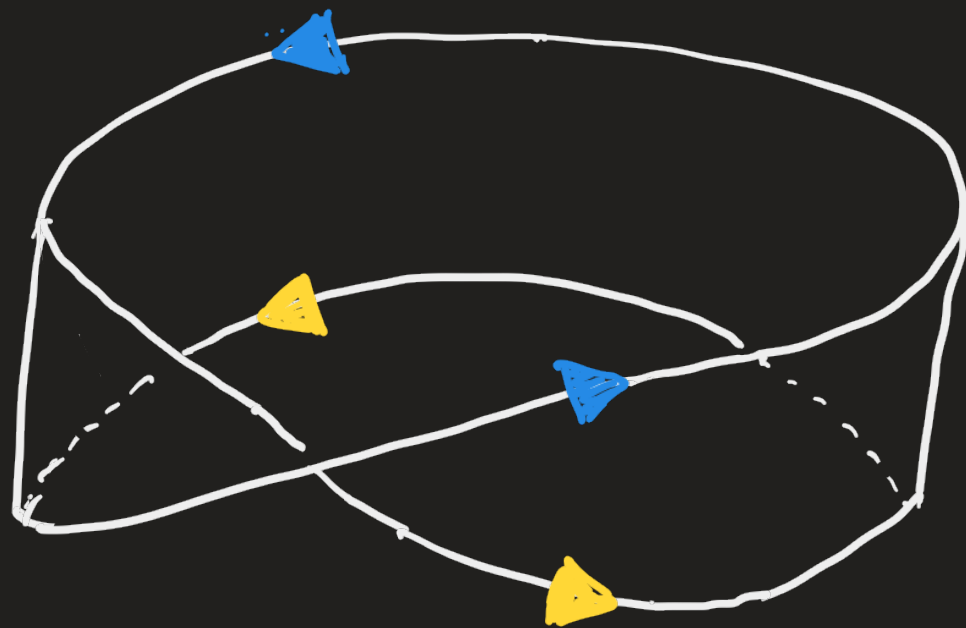
le plan projectif réel.

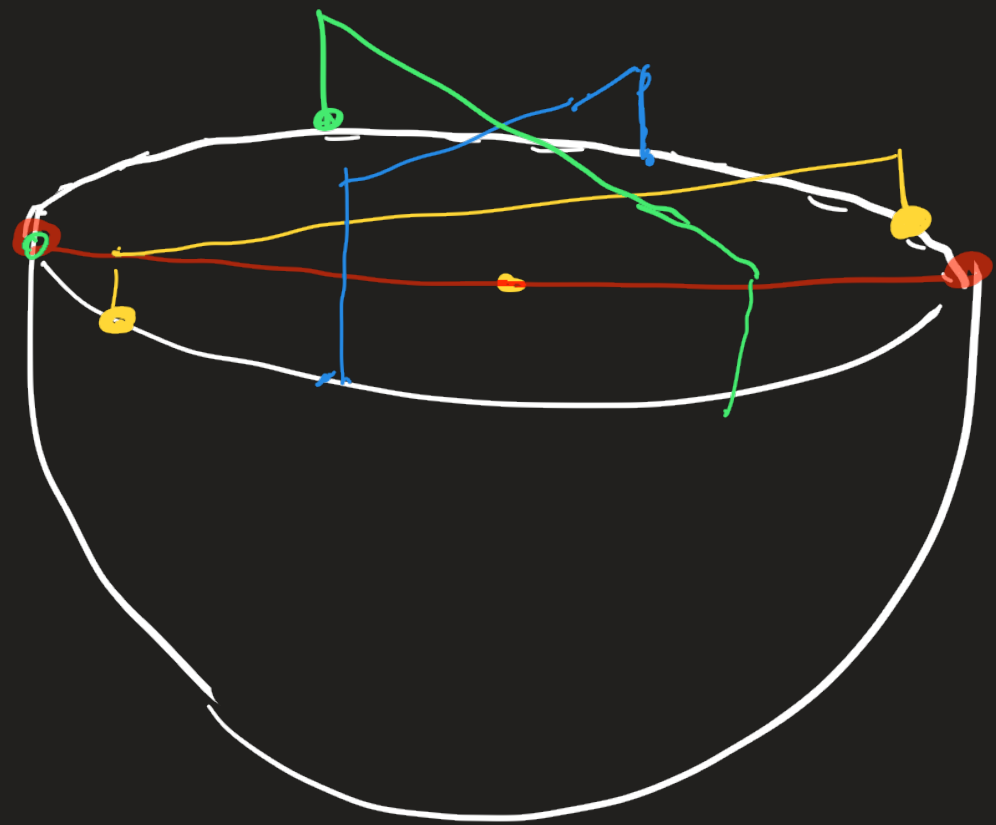


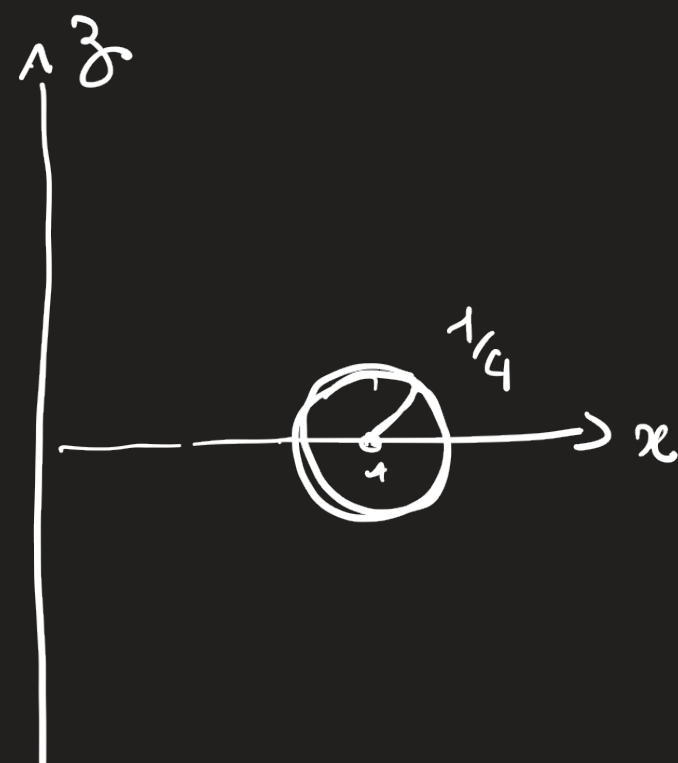
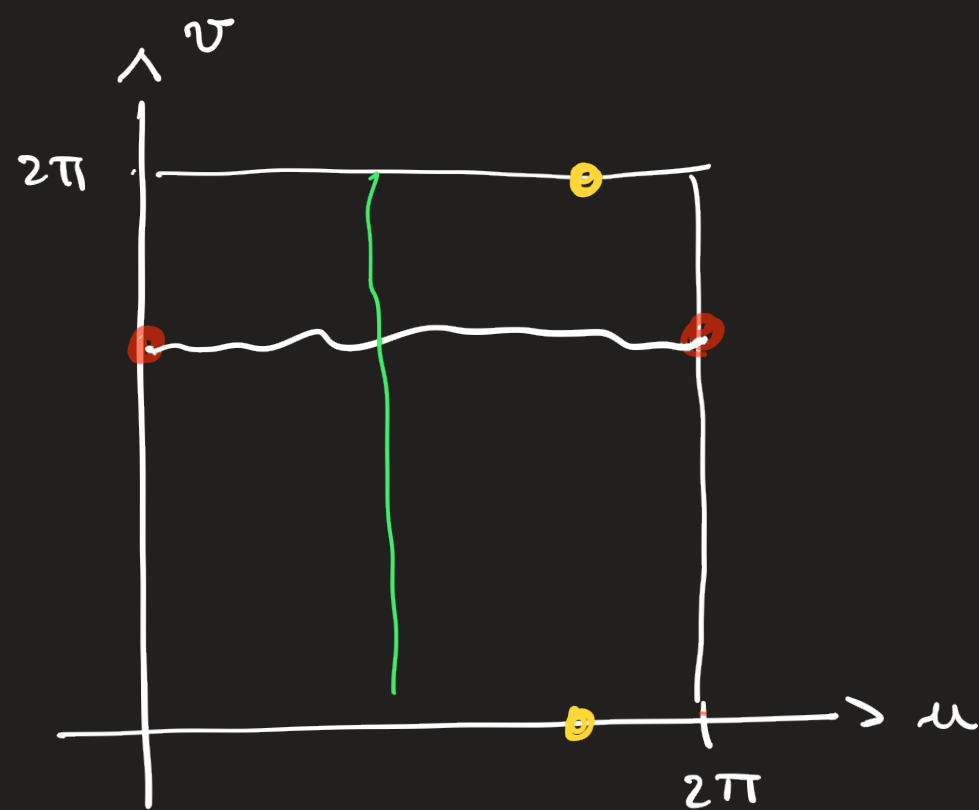
le plan projectif réel.



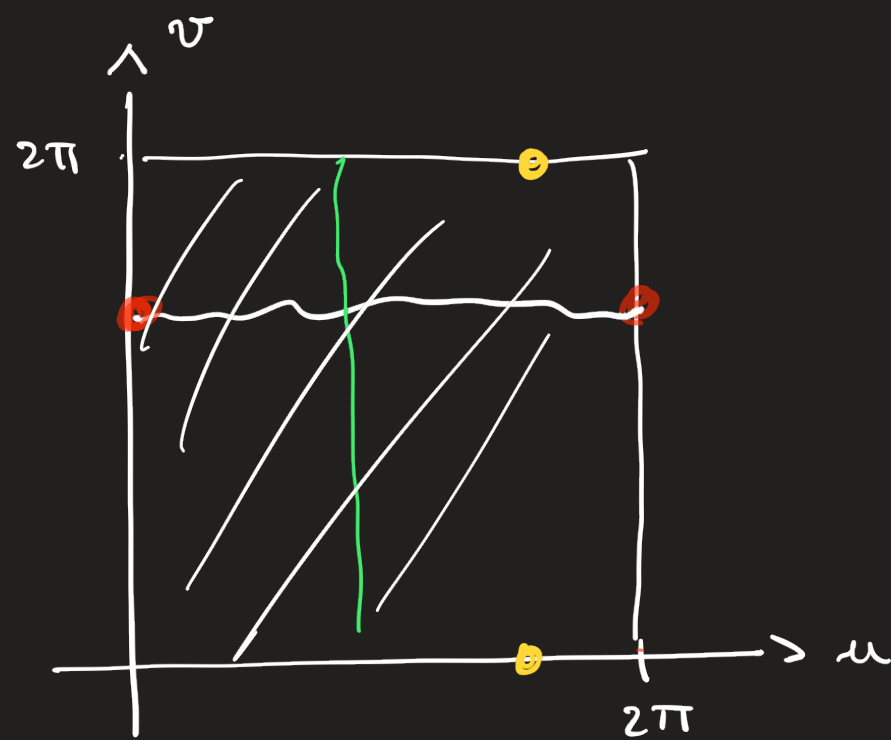
le plan projectif réel.







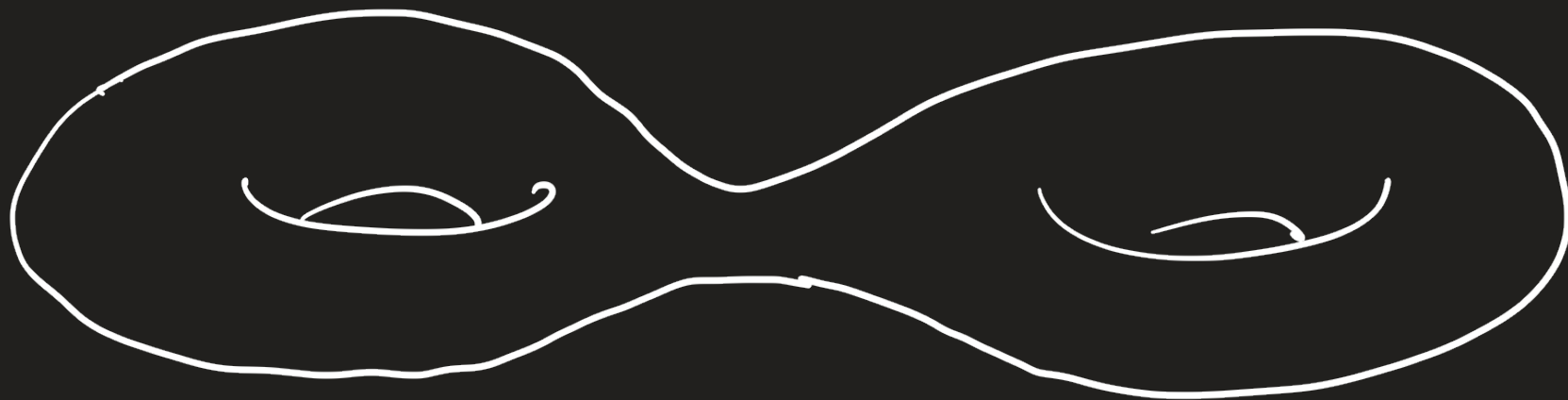
$$\begin{cases} x = \left(1 + \frac{1}{4} \cos u\right) \cos v \\ y = \left(1 + \frac{1}{4} \cos u\right) \sin v \\ z = \frac{1}{4} \sin u \end{cases}$$



$$\left\{ \begin{array}{ll} x = \frac{1}{\sqrt{2}} & \cos u \\ y = \frac{1}{\sqrt{2}} & \sin u \\ z = \frac{1}{\sqrt{2}} & \cos v \\ t = \frac{1}{\sqrt{2}} & \sin v \end{array} \right.$$



Somme connexe









$\mathbb{R}P^2$

