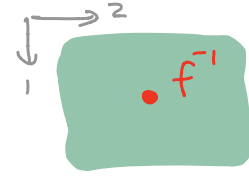
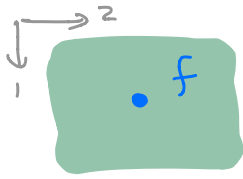
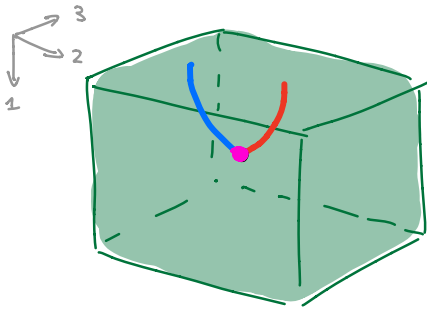


# ① The groupoidal Sphere computed $S^2$

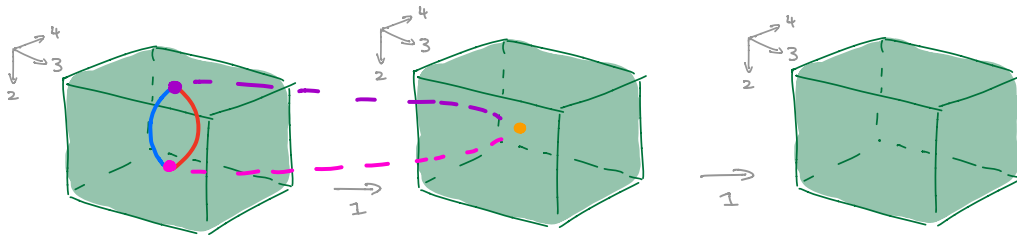
for



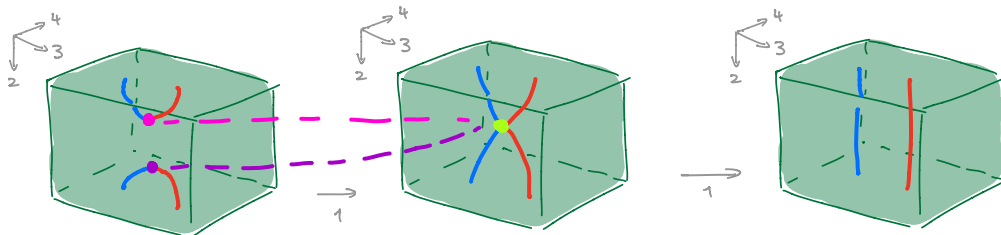
and



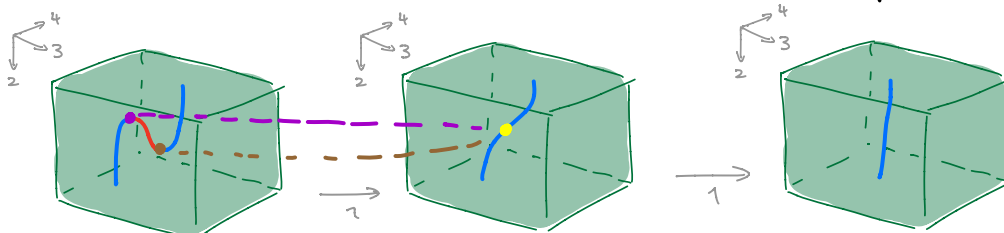
+ 3 other reflections  
(along 1- and 2- directions)



+ 3 other reflections



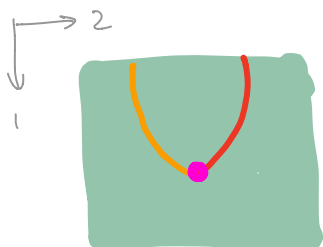
+ 3 other reflections



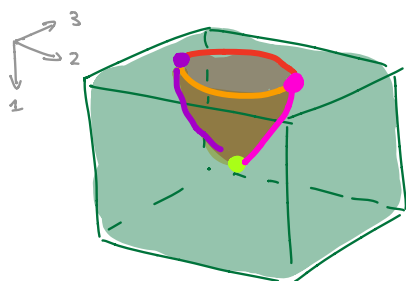
+ 7 similar morphisms

② The groupoidal tors computed

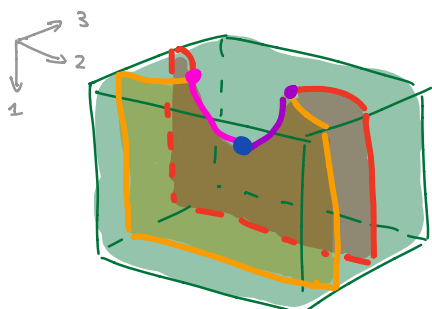
for  $\xrightarrow{f}$  add  $\xleftarrow{f^{-1}}$  as well as



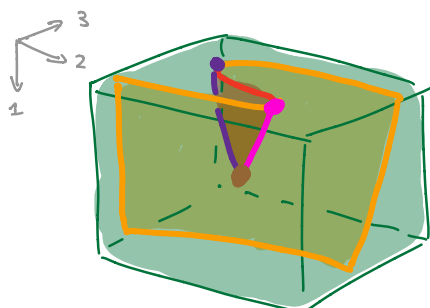
+ 3 other reflections



+ 3 other reflections



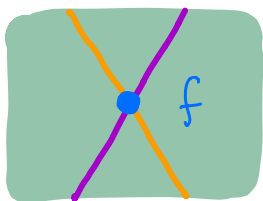
+ 3 other reflections



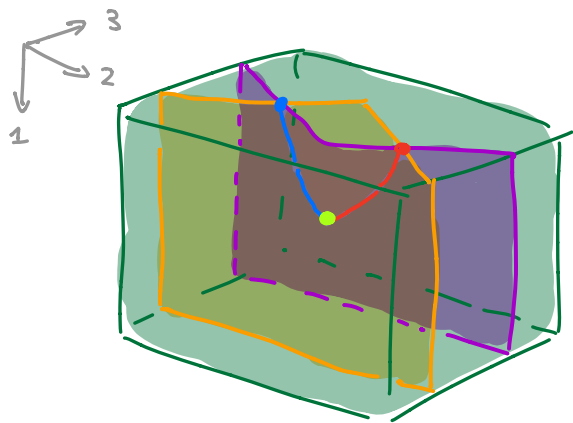
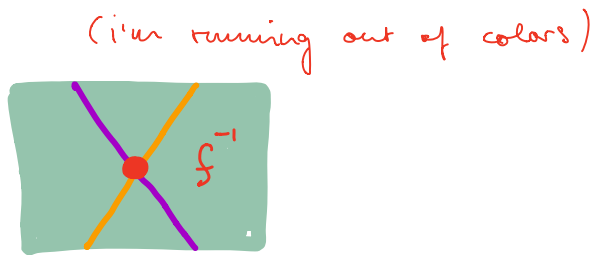
+ 7 similar morphisms

(similar data for  $\xrightarrow{f}$ )

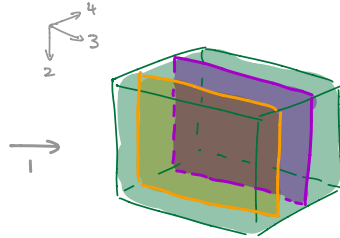
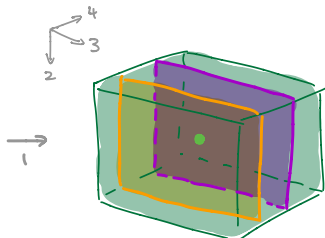
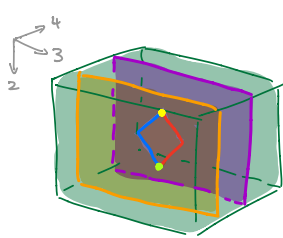
for



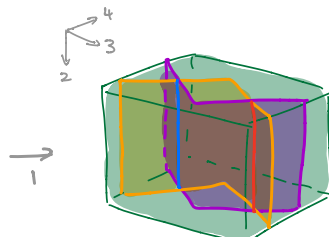
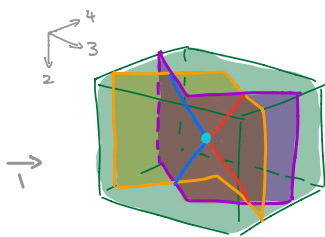
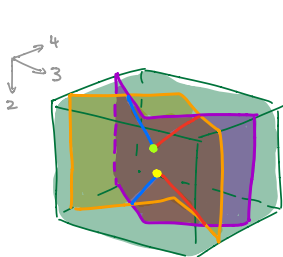
add



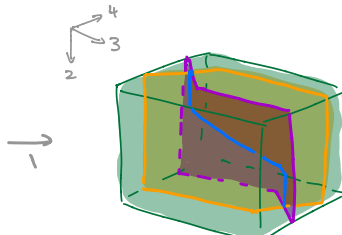
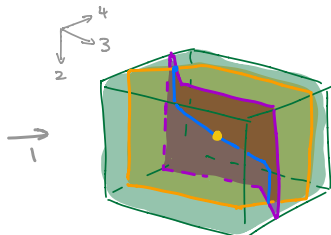
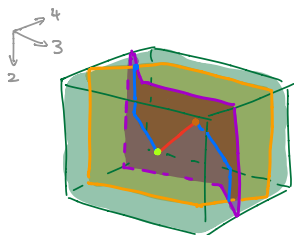
+ 3 similar morphisms



+ 3 similar morphisms



+ 3 similar morphisms



+ 7 similar morphisms