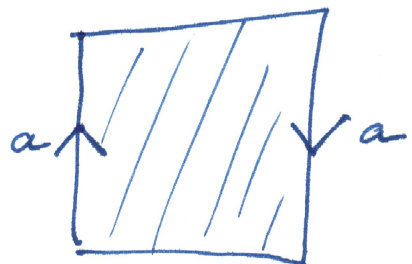


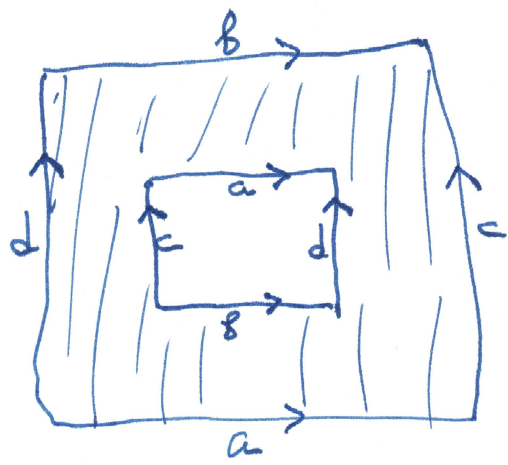
①



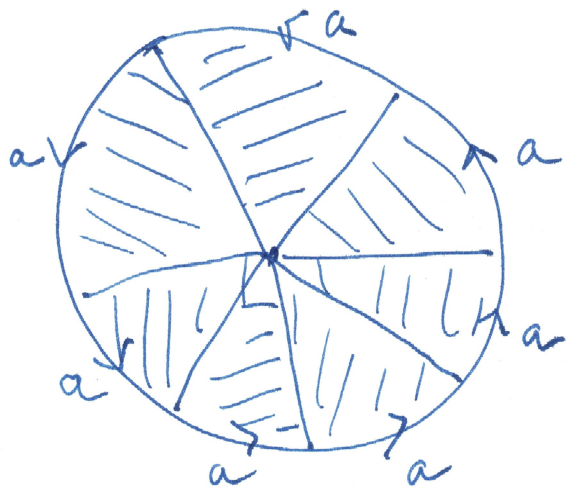
(Möbius strip.)

H_* , H^* , π_1 , coverings

②



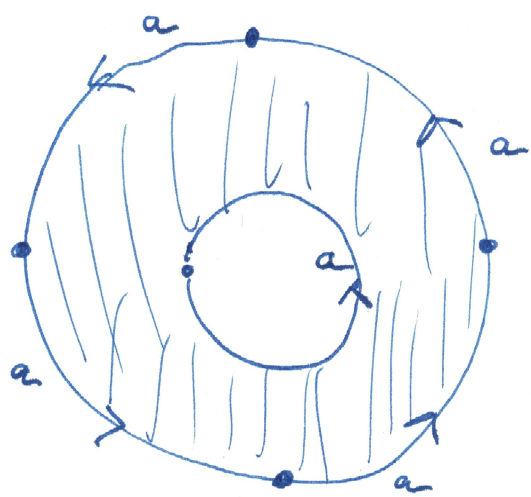
③



g triangles

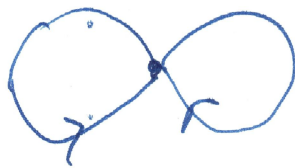
(can do $g=3$ first)

④



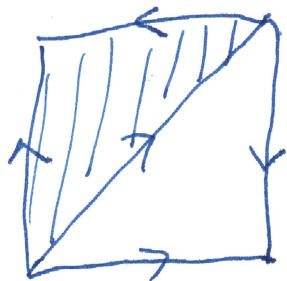
g a 's on the outer rim
and 1 a on the inner rim

(5)



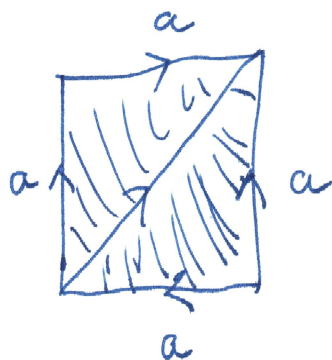
Classify all local systems with a typical fiber $\mathbb{Z}/2$ and compute the twisted homology.

(6)



Real projective plane with a disk cut out.

(7)



(8) Prove or disprove: an orientable surface of genus $g \geq 1$ admits a Galois cover of any degree $n \geq 1$.

(9)

