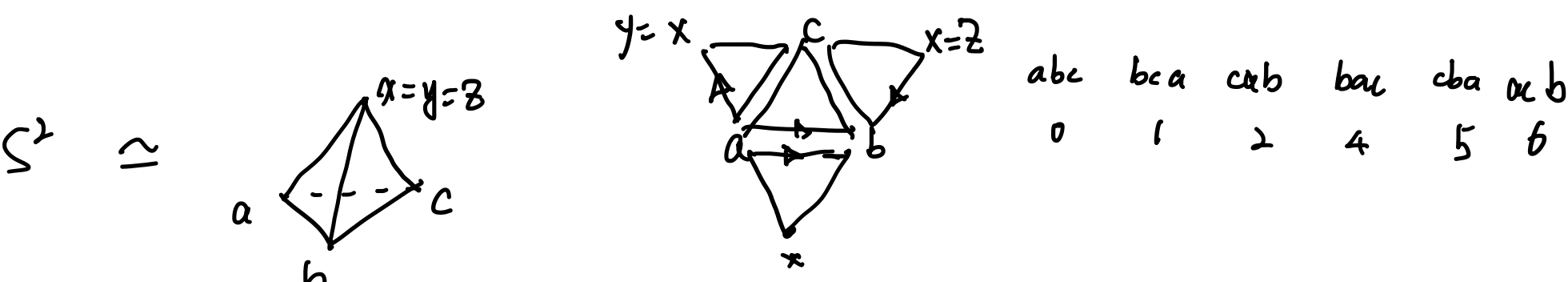


Ch2 orientation examples

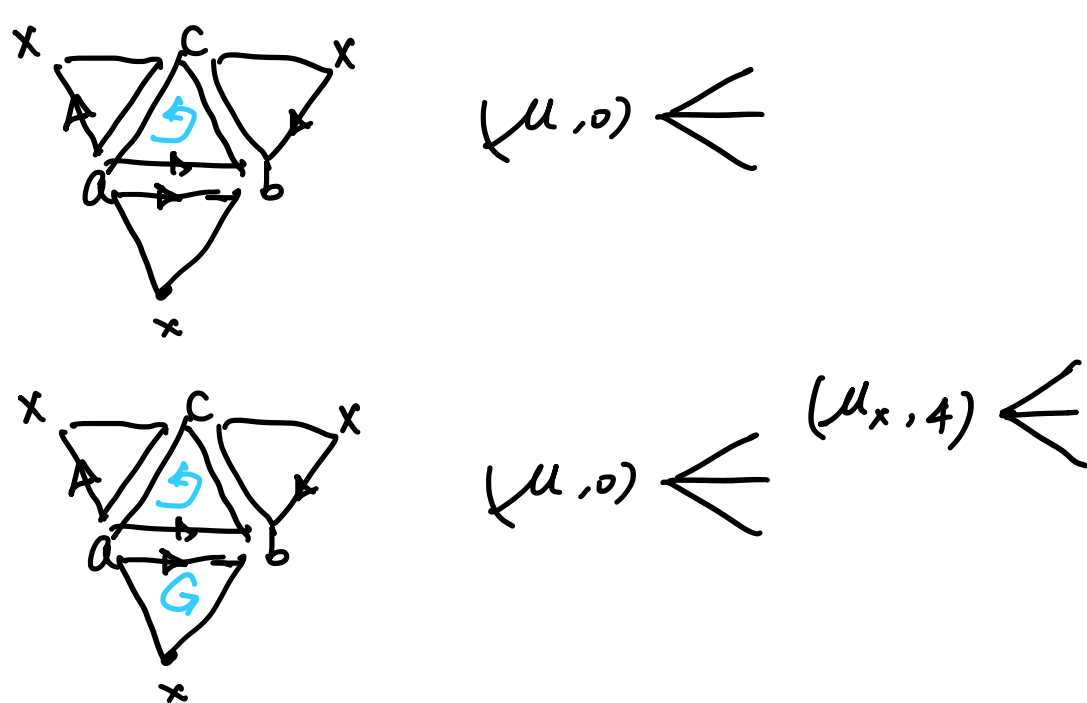
2020年10月13日 星期二

①. Since we apply SYM at each step, The orientation "induced" by previous orientation is actually consistent.

② At P_1 , we store the orientation and view $0=1=2, 4=5=6$.
At P_3 , we just compare marked one and the orientation induced by previous one.



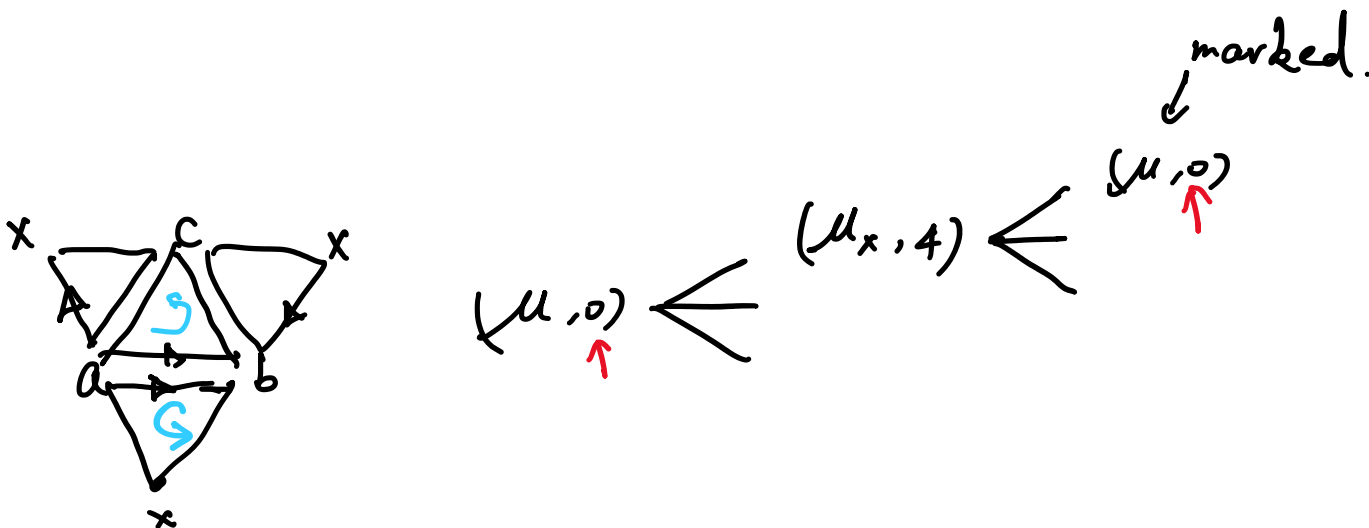
Red arrow $\uparrow \uparrow \uparrow$ means comparison at P_3 .



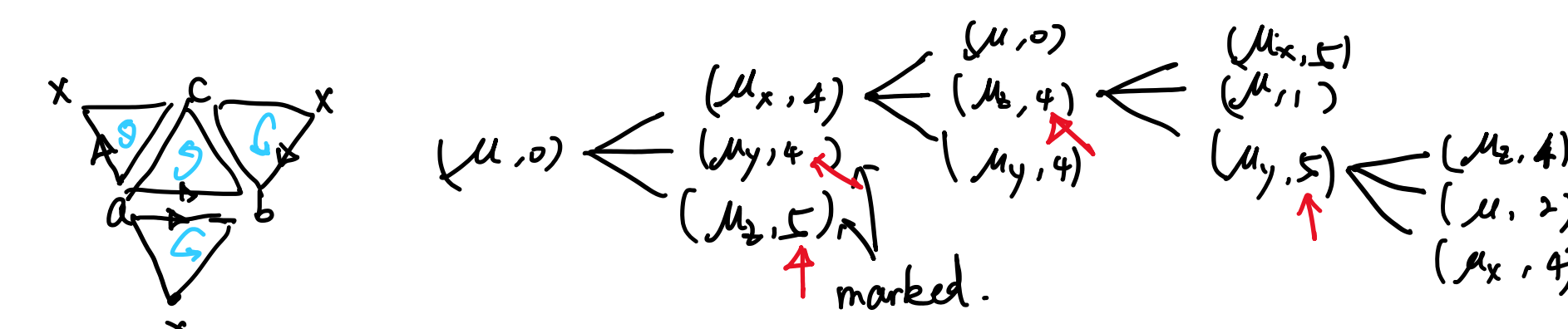
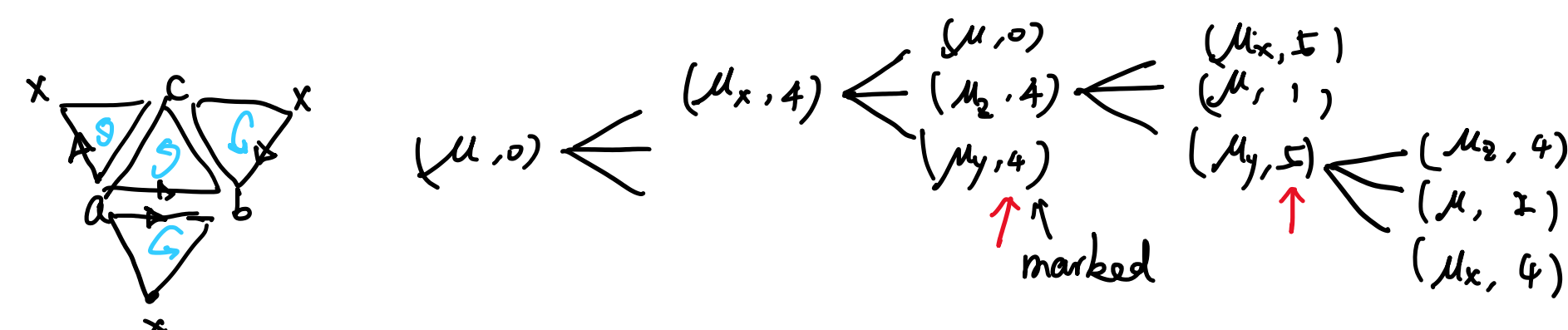
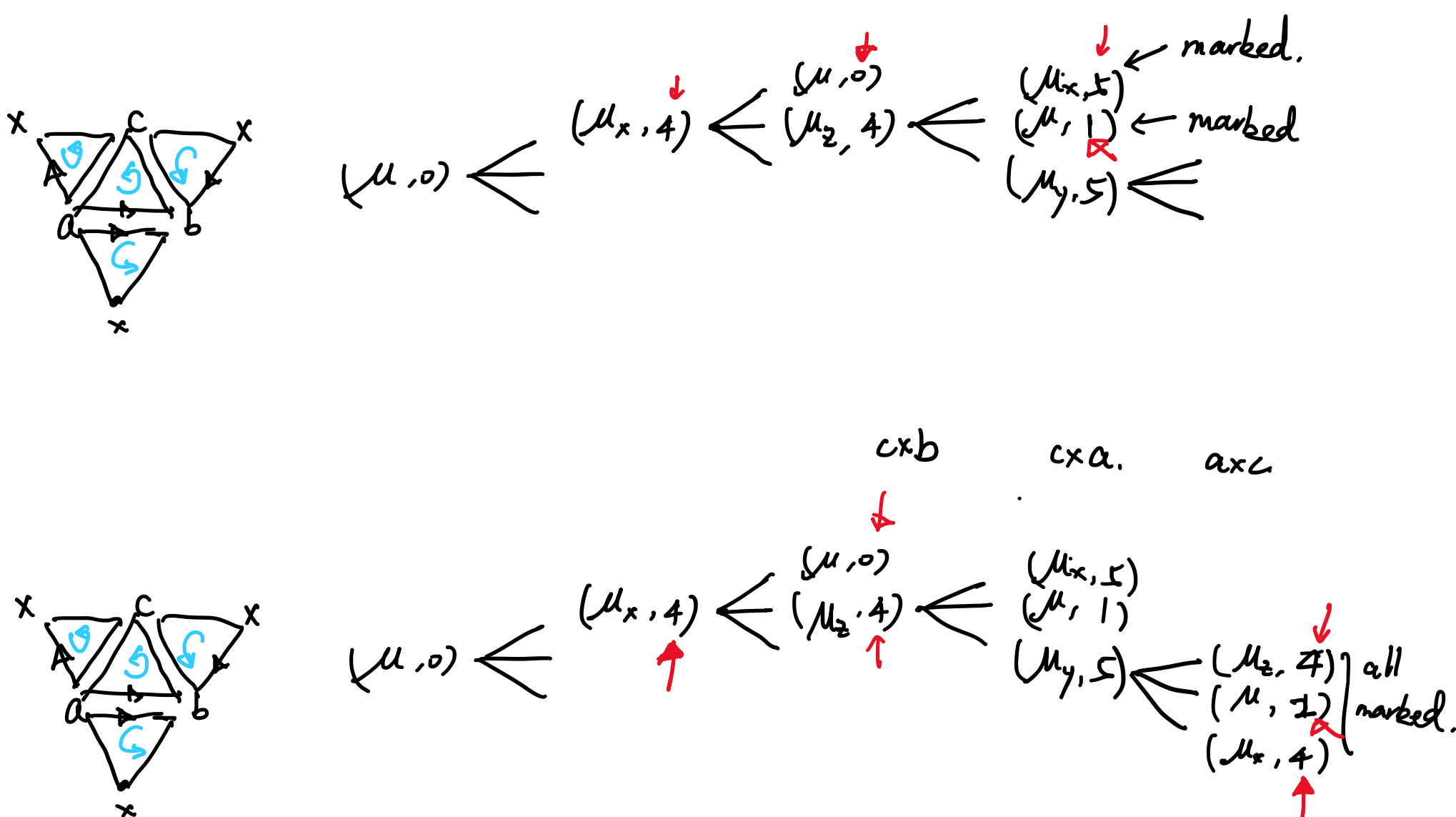
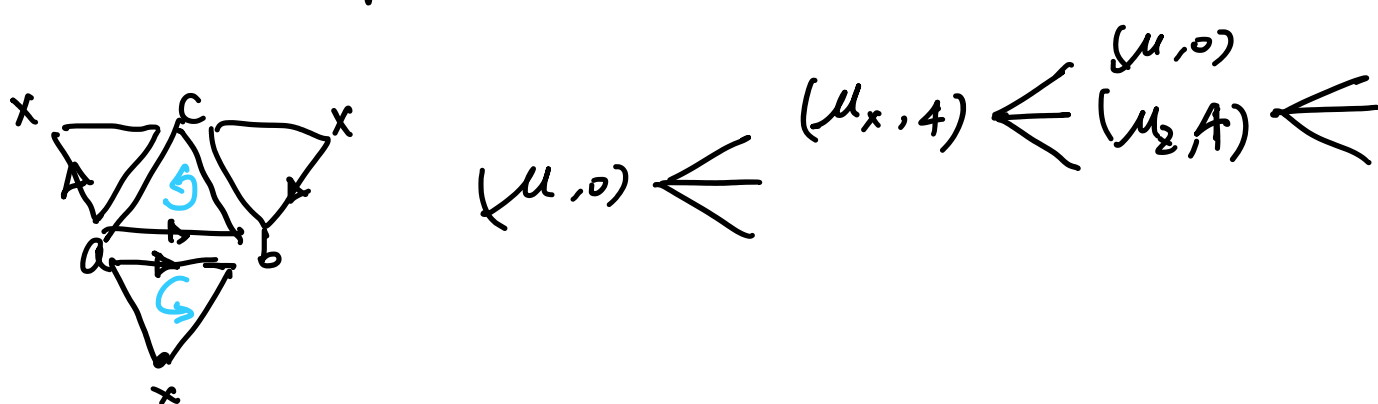
Now we consider b_x by b_z in $(u_x, 4)$

Here $T = 0, 1, 2, 4, 5, 6$
 $abx \quad bxa \quad xab \quad bax \quad xba \quad axb$

Hence $FNEXT(SYM(u_x, 4)) = FNEXT(u_x, 0) = (u, 0)$



Following steps are similar as above.



Above each pair " \uparrow " or " \uparrow " or " \uparrow " give the boolean value "true". Hence the sphere is orientable. #

The readers can also compute the projective plane if they are interested.

