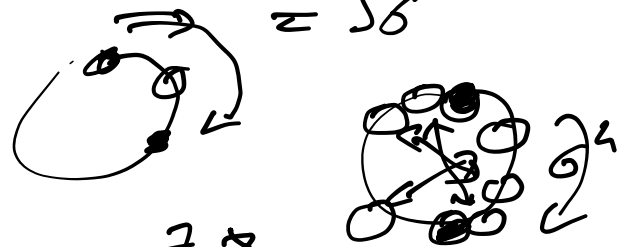


Collier 5 blancs / 3 noirs

$$X = \left\{ \text{colliers } \overset{1}{\circ} \overset{2}{\circ} \dots \overset{8}{\circ} \right\} \quad \#X = \binom{8}{3} = 56$$

$$G = \langle \sigma, \tau \rangle$$

: rotation
: retourner



$$G \cong D_8 = \{ e, \sigma, \dots, \sigma^7, \tau, \tau\sigma, \dots, \tau\sigma^7 \}$$

$g \in G$

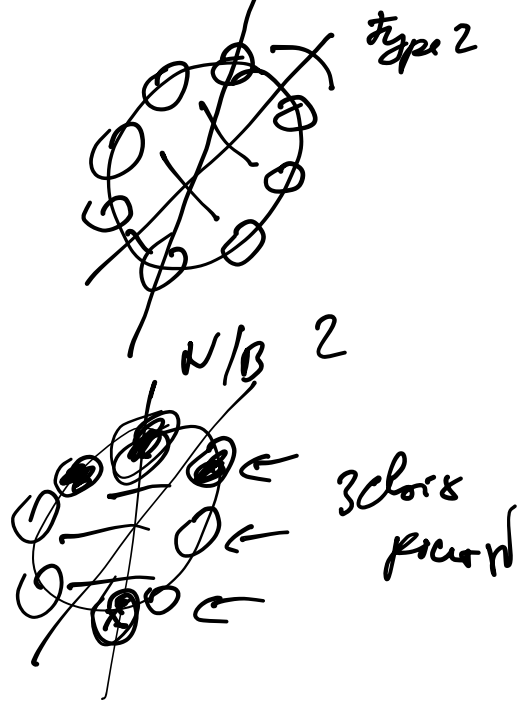
$$g \neq e: 56$$

$$\text{Card}(X/g) = \begin{matrix} g = \sigma, \sigma^2 : 0 \\ \sigma^3, \sigma^4, \sigma^6, \sigma^7, \sigma^5 \end{matrix}$$

$$4: \text{type 1} : 6$$

$$4: \text{type 2} : 0$$

$$\text{Card}(X/G) = \frac{1}{16} (56 + 4 \times 6) = 5$$



3 colors possible