## Assignment on isomorphism

- 1) Make the Cayley table (演算表) of composition (積) of symmetries (対称性) of checker flag (チェッカーフラッグ)  $C = \{e, r, q_1, q_2\}$ .
- 2) Let  $\mathbb{Z}_8^* = \{1,3,5,7\}$  and  $\otimes$  be multiplication modulo 8 (8の剰余積). Make the Cayley table of  $\otimes$ .
- 3) Find an isomorphism  $f: C \to Z_8^*$ .