

Suppose G is the group defined by the following Cayley table.

*	1	2	3	4	5	6	7	8
1	1	2	3	4	5	6	7	8
2	2	1	8	7	6	5	4	3
3	3	4	5	6	7	8	1	2
4	4	3	2	1	8	7	6	5
5	5	6	7	8	1	2	3	4
6	6	5	4	3	2	1	8	7
7	7	8	1	2	3	4	5	6
8	8	7	6	5	4	3	2	1

1. Find $C(2)$, $C(5)$

2. Find $Z(G)$

3. Find the order of each element of G . How are these orders arithmetically related to the order of the group?