

$$((11 \bmod 7) + (14 \bmod 7)) \bmod 7$$

$$(4 + 3) \bmod 7 = 0$$

$$(4 - 3) \bmod 7 = 1$$

$$(4 \cdot 3) \bmod 7 = 5$$

$$21 \bmod 8 = 5$$

$$24 \bmod 8 = 3$$

$$41 \bmod 8 = 1$$

$$5 \cdot 3 \cdot 1 = 15$$

$$15 \bmod 8 = 7$$

$$-44 \rightarrow -37 \rightarrow -30 \rightarrow -23 \rightarrow -16 \rightarrow -9 \rightarrow -2 \rightarrow 5 \bmod 7$$

+	0	1	2	3	4	5	6
0	0	1	2	3	4	5	6
1	1	2	3	4	5	6	0
2	2	3	4	5	6	0	1
3	3	4	5	6	0	1	2
4	4	5	6	0	1	2	3
5	5	6	0	1	2	3	4
6	6	0	1	2	3	4	5

*	0	1	2	3	4	5	6
0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6
2	0	2	4	6	1	3	5
3	0	3	6	2	5	1	4
4	0	4	1	5	.	.	.
5	0	5	3	1	.	.	.
6	0	6	5	4	.	.	.

number : 0 1 2 3 4 5 6

⊕ inverse 0 6 5 4 3 2 1

number 0 1 2 3 4 5 6

⊗ inverse none 1 4 5 2 3 6

$(\mathbb{Z}_7, +)$ is