Exercise 1.4

After computing the GF(8) and GF(9), I got these tables.

GF(8) addition table

+	0	1	2	3	4	5	6	7
0	0	1	2	3	4	5	6	7
1	1	0	3	2	5	4	7	6
2	2	3	0	1	6	7	4	5
3	3	2	1	0	7	6	5	4
4	4	5	6	7	0	1	2	3
5	5	4	7	6	1	0	3	2
6	6	7	4	5	2	3	0	1
7	7	6	5	4	3	2	1	0

GF(8) multiplication table

x	0	1	2	3	4	5	6	7
0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7
2	0	2	4	6	3	1	7	5
3	0	3	6	5	7	4	1	2
4	0	4	3	7	6	2	5	1
5	0	5	1	4	2	7	6	6
6	0	6	7	1	5	3	2	4
7	0	7	5	2	1	6	4	3

GF(9) addition table

+	0	1	2	3	4	5	6	7	8
0	0	1	2	3	4	5	6	7	8
1	1	0	3	2	5	4	7	6	7
2	2	3	0	1	6	7	4	5	6
3	3	2	1	0	7	6	5	4	5
4	4	5	8	7	0	1	2	3	4
5	5	4	7	6	1	0	3	2	3
6	6	8	4	8	2	8	0	1	2
7	7	6	5	4	3	2	1	0	1
8	8	7	6	5	4	3	2	1	0

GF(9) multiplication table

x	0	1	2	3	4	5	6	7	8
0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	3
2	0	2	4	6	3	1	7	5	2
3	0	3	6	5	7	4	1	2	3
4	0	4	3	7	6	2	5	1	5
5	0	5	1	4	2	7	6	6	4
6	0	1	2	1	5	3	2	4	3
7	0	2	5	2	1	6	4	3	2
8	0	3	2	3	5	4	3	2	1