

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2	0	2	4	6	8	10	12	14	16	1	3	5	7	9	11	13	15
3	0	3	6	9	12	15	1	4	7	10	13	16	2	5	8	11	14
4	0	4	8	12	16	3	7	11	15	2	6	10	14	1	5	9	13
5	0	5	10	15	3	8	13	1	6	11	16	4	9	14	2	7	12
6	0	6	12	1	7	13	2	8	14	3	9	15	4	10	16	5	11
7	0	7	14	4	11	1	8	15	5	12	2	9	16	6	13	3	10
8	0	8	16	7	15	6	14	5	13	4	12	3	11	2	10	1	9
9	0	9	1	10	2	11	3	12	4	13	5	14	6	15	7	16	8
10	0	10	3	13	6	16	9	2	12	5	15	8	1	11	4	14	7
11	0	11	5	16	10	4	15	9	3	14	8	2	13	7	1	12	6
12	0	12	7	2	14	9	4	16	11	6	1	13	8	3	15	10	5
13	0	13	9	5	1	14	10	6	2	15	11	7	3	16	12	8	4
14	0	14	11	8	5	2	16	13	10	7	4	1	15	12	9	6	3
15	0	15	13	11	9	7	5	3	1	16	14	12	10	8	6	4	2
16	0	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

$\overline{F_8}$ value is where F_8 value equals 1 in Z_n (chart above)

$$F_8 = \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 9 & 13 & 15 & 16 & 8 & 4 & 2 \\ 1 & 13 & 16 & 4 & 1 & 13 & 16 & 4 \\ 1 & 15 & 4 & 9 & 16 & 2 & 13 & 8 \\ 1 & 16 & 1 & 16 & 1 & 16 & 1 & 16 \\ 1 & 8 & 13 & 9 & 16 & 9 & 4 & 15 \\ 1 & 4 & 16 & 4 & 1 & 4 & 16 & 13 \\ 1 & 2 & 4 & 15 & 16 & 15 & 13 & 9 \end{bmatrix} \quad \overline{F_8} = \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 2 & 4 & 8 & 16 & 15 & 13 & 9 \\ 1 & 4 & 16 & 13 & 1 & 4 & 16 & 13 \\ 1 & 8 & 13 & 2 & 16 & 9 & 4 & 15 \\ 1 & 16 & 1 & 16 & 1 & 16 & 1 & 16 \\ 1 & 15 & 4 & 2 & 16 & 2 & 13 & 8 \\ 1 & 13 & 16 & 13 & 1 & 13 & 16 & 4 \\ 1 & 9 & 13 & 8 & 16 & 8 & 4 & 2 \end{bmatrix}$$

$$n = 8, F_n \cdot \frac{1}{n} \overline{F_n} = \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{bmatrix}$$

$$F^{-1} = \frac{1}{n} \overline{F_n}$$