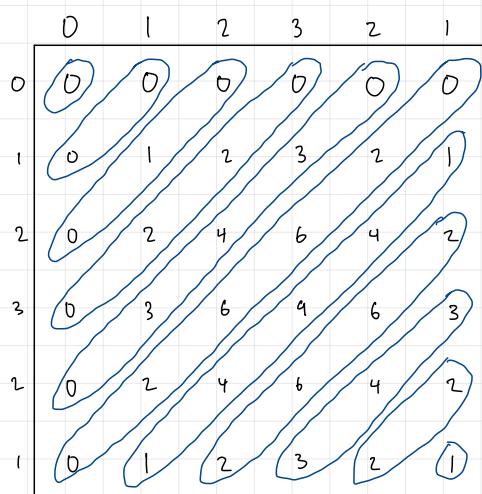
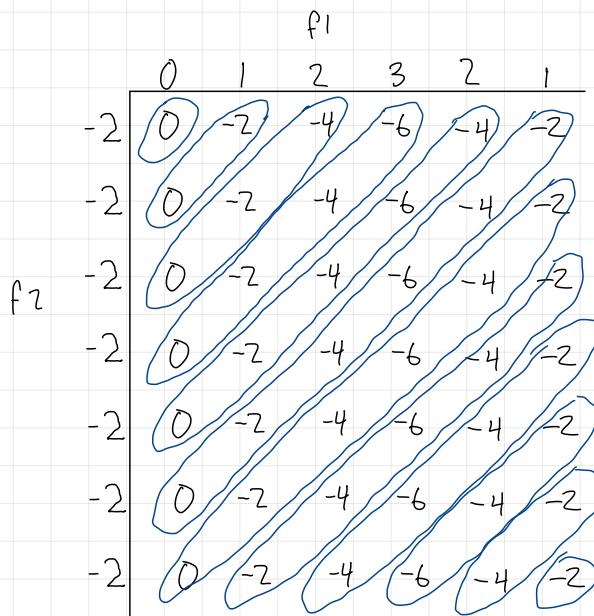


$$2.A.) f_1 * f_1 = 0, 0, 1, 4, 10, 16, 19, 16, 10, 4, 1$$



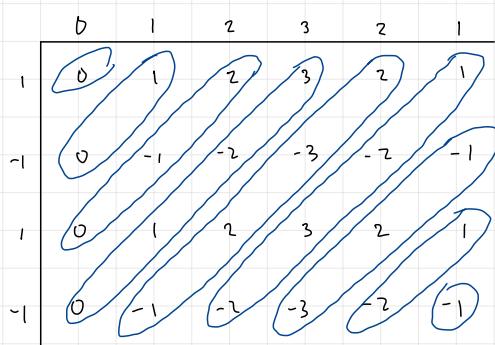
m	y[m]	
0	0	= 0
1	0+0	= 0
2	0+1+0	= 1
3	0+2+2+0	= 4
4	0+3+4+3+0	= 10
5	0+2+6+6+2+0	= 16
6	1+4+9+4+1	= 19
7	2+6+6+2	= 16
8	3+4+3	= 10
9	2+2	= 4
10	1	= 1

$$2.B.) f_1 * f_2 = 0, -2, -6, -12, -16, -18, -18, -16, -12, -6, -2$$



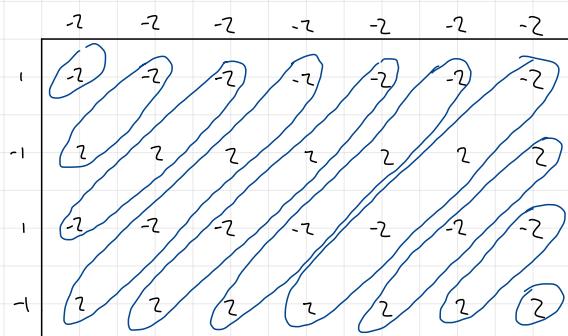
m	y[m]	
0	0	= 0
1	0-2	= -2
2	0-2-4	= -6
3	0-2-4-6	= -12
4	0-2-4-6-4	= -16
5	0-2-4-6-4-2	= -18
6	0-2-4-6-4-2	= -18
7	-2-4-6-4-2	= -18
8	-4-6-4-2	= -16
9	-6-4-2	= -12
10	-4-2	= -6
11	-2	= -2

$$2.C.) f_1 * f_3 = 0, 1, 1, 2, 0, 0, -2, -1, -1$$



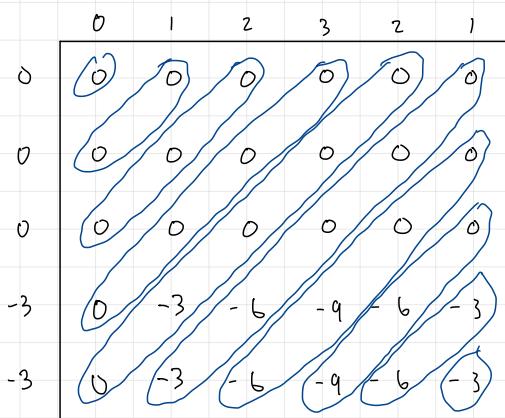
K	y[k]	
0	0	= 0
1	0+1	= 1
2	0-1+2	= 1
3	0+1-2+3	= 2
4	-1+2-3+2	= 0
5	-2+3-2+1	= 0
6	-3+2-1	= -2
7	-2+1	= -1
8	-1	= -1

$$2.D.) f_2 * f_3 = -2, 0, -2, 0, 0, 0, 0, 2, 0, 2$$



$k$	$y[k]$
0	-2
1	$2 - 2$
2	$-2 + 2 - 2$
3	$2 - 2 + 2 - 2$
4	$2 - 2 + 2 - 2$
5	$2 - 2 + 2 - 2$
6	$2 - 2 + 2 - 2$
7	$2 - 2 + 2$
8	$2 - 2$
9	2

$$2.E.) f_1 * f_4 = 0, 0, 0, 0, -3, -9, -15, -15, -9, -3$$



$k$	$y[k]$
0	0
1	$0 + 0$
2	$0 + 0 + 0$
3	$0 + 0 + 0 + 0$
4	$0 - 3 + 0 + 0 + 0$
5	$-3 - 6 + 0 + 0 + 0$
6	$-6 - 9 + 0 + 0$
7	$-9 - 6 + 0$
8	$-6 - 3$
9	-3