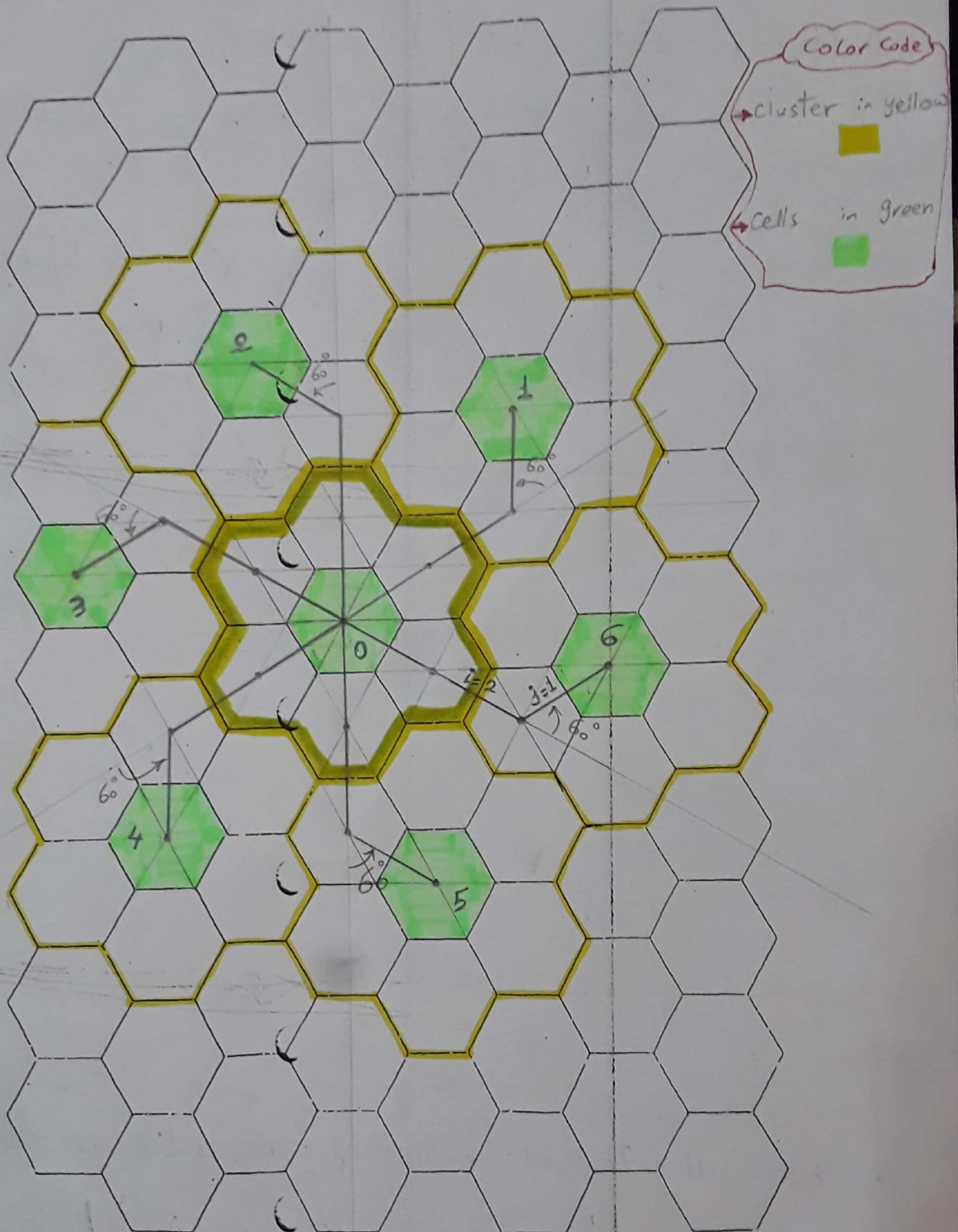


Task (1)

Find the co-channels cells when  $i=2, j=1$  :



\* if  $i=2, j=1 \rightarrow$  cluster size:  $N = i^2 + ij + j^2$   
 $= (2)^2 + (2 \times 1) + (1)^2 = 4 + 2 + 1$

\* Candidate cell num "0" :

$N = 7$  Cells

$\rightarrow$  always has 6 co-channel cells which uses the same set of RF channels, from cell num "1" to cell num "6" in green in the above sketching.

## Task ②

Fill the "i, j, N" table with values until you get  $N=25$ , let  $(i \geq j)$

SOL<sup>n</sup>

i	j	N
1	0	1
	1	3
2	0	4
	1	7
	2	12
3	0	9
	1	13
	2	19
	3	27
4	0	16
	1	21
	2	28
	3	37
	4	48
5	0	25
	1	31
↓	↓	↓
↓	↓	↓
↓	↓	↓
↓	↓	↓

$$N = i^2 + ij + j^2$$

Cluster Size

∴ there all possible values of N until  $N=25$

$N = 1, 3, 4, 7, 9, 12, 13, 16, 19, 21, 25, \dots$

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