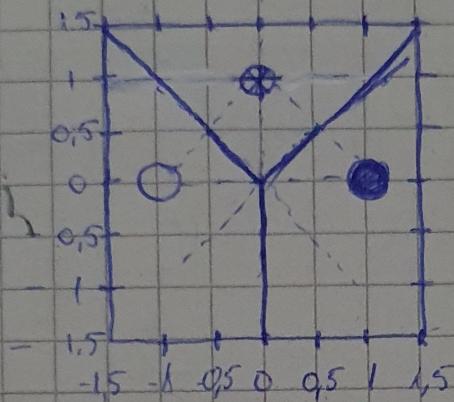


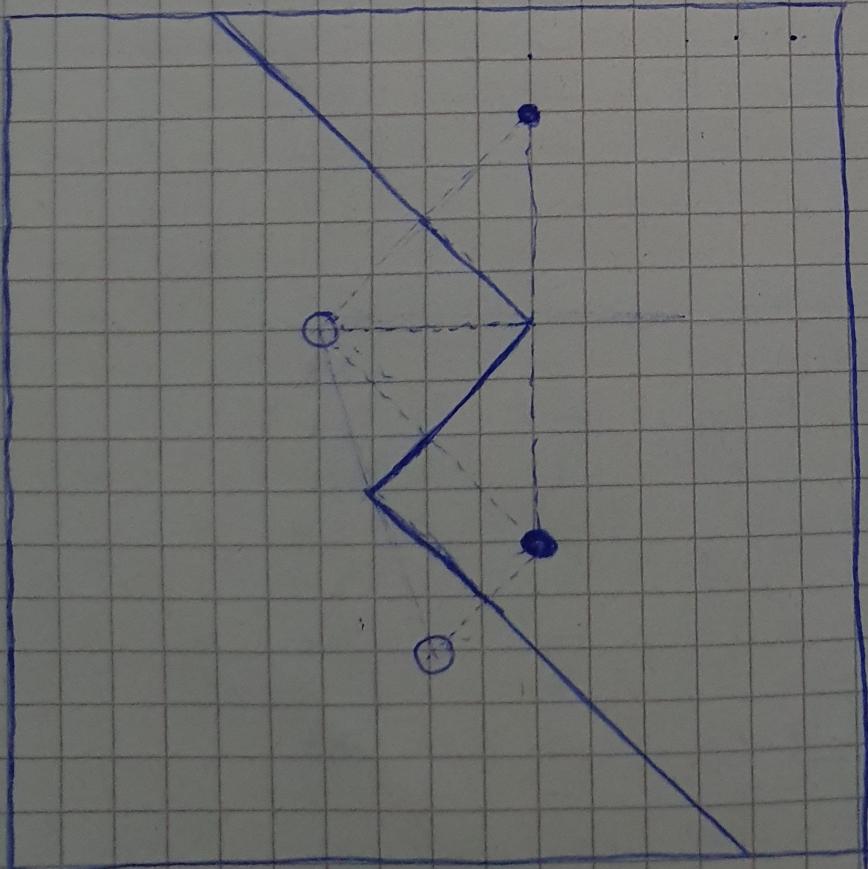
- INN
CV100
16. A: - \rightarrow - NU; $err_1 = 0$
- B: - $\underline{CV100}$ - NU; $err_2 = 0$
- C: - $\underline{CV100}$ + DK; $err_3 = 1$
- D: + $\underline{CV100}$ - DK; $err_4 = 1$
- E: + $\underline{CV100}$ + NU; $err_5 = 0$
-

$$err_{INN} = \frac{0+0+1+1+0}{5} = \frac{2}{5} = 40\%$$

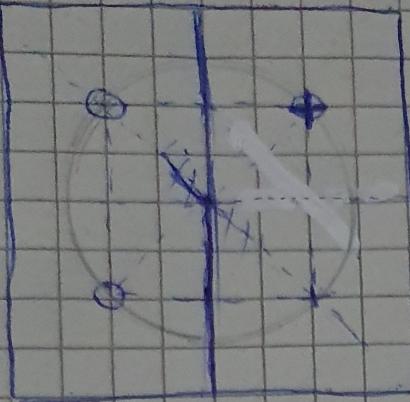
17.



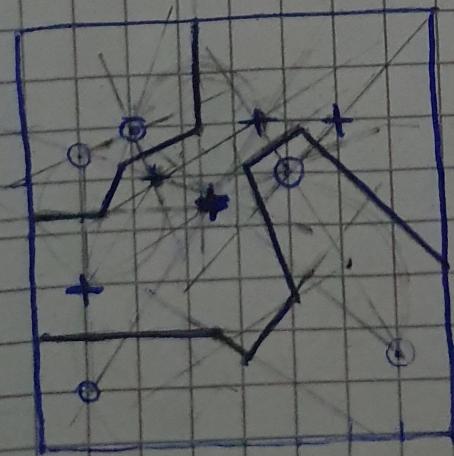
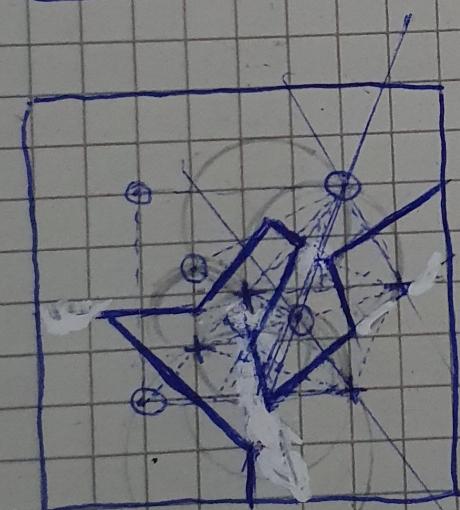
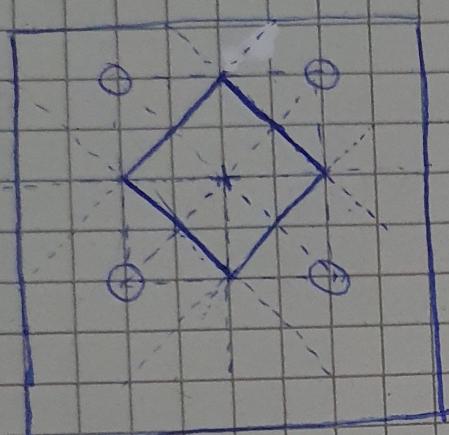
18.



19

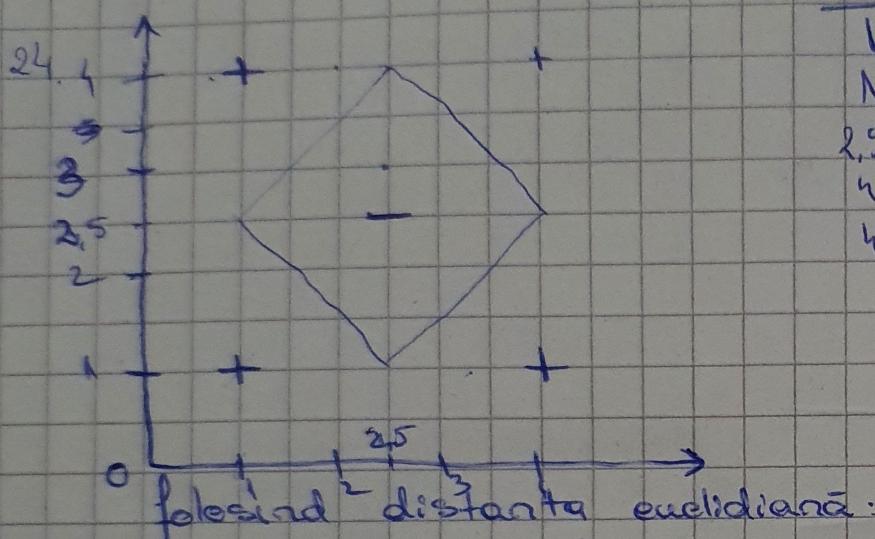


cereul
pt
atinge si



21. $K=14$. Pea mai mică rată a eroare la testare

23. ~~Dacă~~
~~fie căt măsură în care sunt amestecate datele~~
~~este mare atunci rata eroare va crește~~
 cu cat creștem coeficientul K .



X	Y	Z
1	1	+
1	4	+
2,5	2,5	-
4	1	+
4	4	+

$$\text{1NN : } \begin{cases} (1,1) \xrightarrow[\text{1NN}]{\text{CV LOG}} - \quad \text{err}_1 = 1 \\ (1,4) \xrightarrow[\text{1NN}]{\text{CV LOG}} - \quad \text{err}_2 = 1 \\ (2,5,2,5) \xrightarrow[\text{1NN}]{\text{CV LOG}} + \quad \text{err}_3 = 1 \\ (4,1) \xrightarrow[\text{1NN}]{\text{CV LOG}} - \quad \text{err}_4 = 1 \\ (4,4) \xrightarrow[\text{1NN}]{\text{CV LOG}} - \quad \text{err}_5 = 1 \end{cases} \Rightarrow \text{err}_{\text{1NN}} = 100\%.$$

$$\text{3NN : } \begin{cases} (1,1) \xrightarrow[\text{3NN}]{\text{CV LOG}} + \quad \text{err}_1 = 0 \\ (1,4) \xrightarrow[\text{3NN}]{\text{CV LOG}} - \quad \text{err}_2 = 0 \end{cases}$$

$$\begin{cases} (2,5,2,5) \xrightarrow[\text{3NN}]{\text{CV LOG}} + \quad \text{err}_3 = 1 \\ (4,1) \xrightarrow[\text{3NN}]{\text{CV LOG}} + \quad \text{err}_4 = 0 \\ (4,4) \xrightarrow[\text{3NN}]{\text{CV LOG}} - \quad \text{err}_5 = 0 \end{cases} \Rightarrow \text{err}_{\text{3NN}} = 20\%.$$

1
2
3
1 2 3

11 -
13 -
22 -
31 -
33 -

1 NN \rightarrow err 1 NN = 0%.

3 - NN \rightarrow err 3 NN = 0%.