

Calculating max likelihood

For 1St term

2 nd Term

3 Term

$$0 = \frac{1}{2} \frac{1}{2}$$



$$\mu_{\alpha} = \sum_{i=1}^{N} \frac{1}{2(x_{i} - \mu_{i})^{T}} (-1) \sum_{j=1}^{N} \frac{1}{2(x_{j} - \mu_{j})^{T}} \sum_{$$

H, = - Esc;

For M2 = 1 = X;

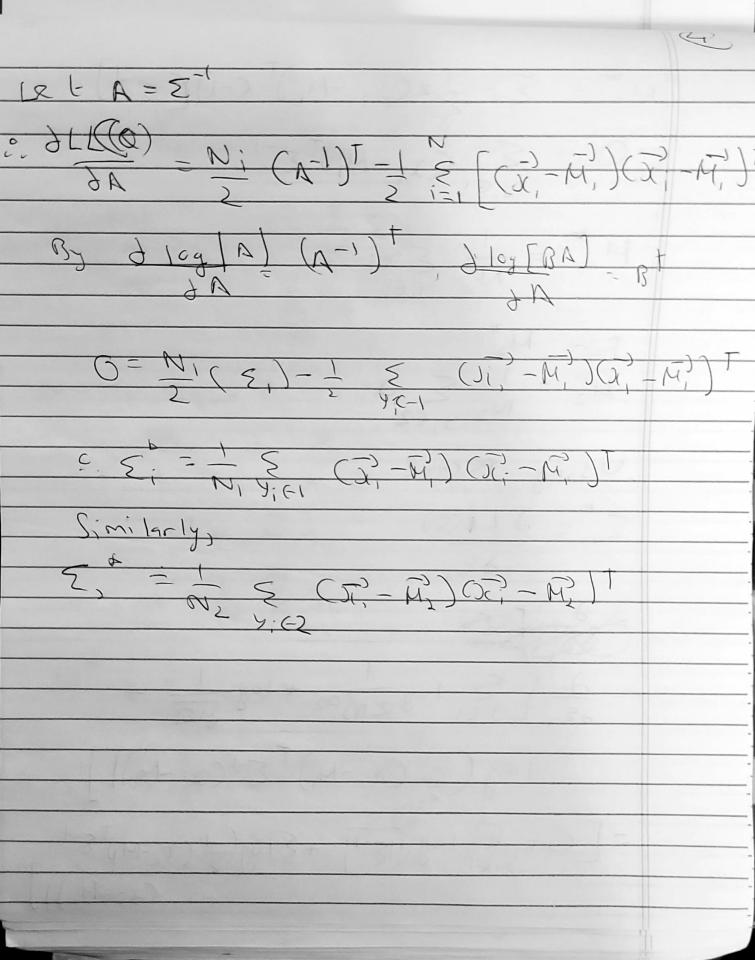
Using Perm ?

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- 35, [7; E1 09 RM) 012 + 109 JIE1 +

10y(-1(x;-M)) [2-1(x;-M)]

(x;-M)





Decision boundy

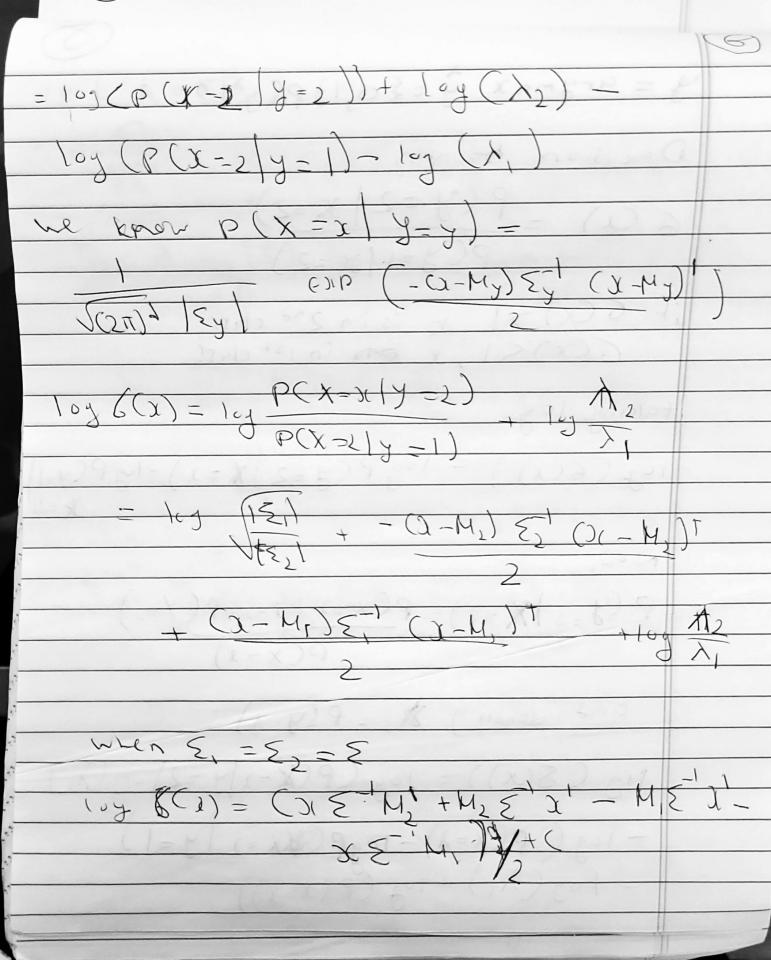
$$6(\alpha) = \frac{P(y=2|x=2)}{\alpha}$$

(F 6 (CX) < 1) x is in 2ⁿ² class

taking log

$$P(X=I)$$

and donoting & = P(y=)



7
where (= 10g /2 + M. E'M, +MEE'M,
fis 9 Gentlant form
1076 (A) = E X (M2-H1) +C
when 5, + 52
1 mg 6000 = 25/3' -25/2' 15/2' MZ
= E, J, M, +C