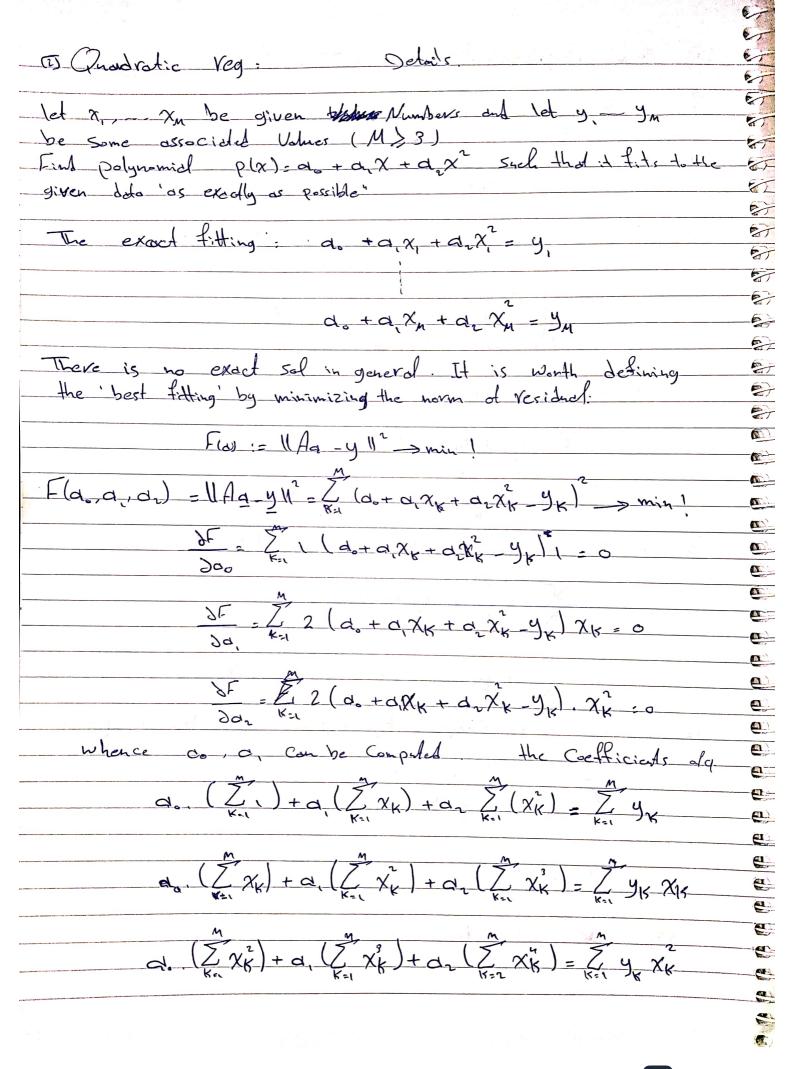
Solutions of linear systems of equations in the Souse of least 7 Let A e Maxo be a Matrix b e R. the Vector $x^{+} := Ab \in \mathbb{R}^{N}$ The generalized Solutions of the System Ax = b-There is examples in ld 6 The Jacobi iteration (1) A C Maxor be a regular Matrix, Let be is be 7 a Vector and Consider the System of equations -100 4 1 2 Z 2



1 Lina regression: Details let x, x xm be given numbers and let Find a polynomial p(x) = do +d, x Such that it fits to the given data as exactly as possible => the exact fitting -> do +d, x= yk for all (K=1,2_M) 1 x do y, solution. by minimizing the norm of the sesided Fig := UAa-y 1/2 -> min => F(a,a):= [(a,+a,xk-yk)2 min 3F = \(\frac{2}{40. + a_1 \chi_8 - y_8} \). \(\frac{1}{2} \) DF 5 \ 2. (a.+a, X_k-y_k), X_k=0 Myk = d. 2 1 + a, 2 xk \[
\frac{M}{\times_{k=1}} \frac{\chi_{k} \gamma_{k}}{\chi_{k}} = \frac{A_{0}}{\times_{k=1}} \frac{\chi_{k}}{\chi_{k}} + \frac{A_{0}}{\times_{k=1}} \frac{\chi_{k}}{\chi_{k}}
\] By Oracet Colculation > A* Aa = A* y