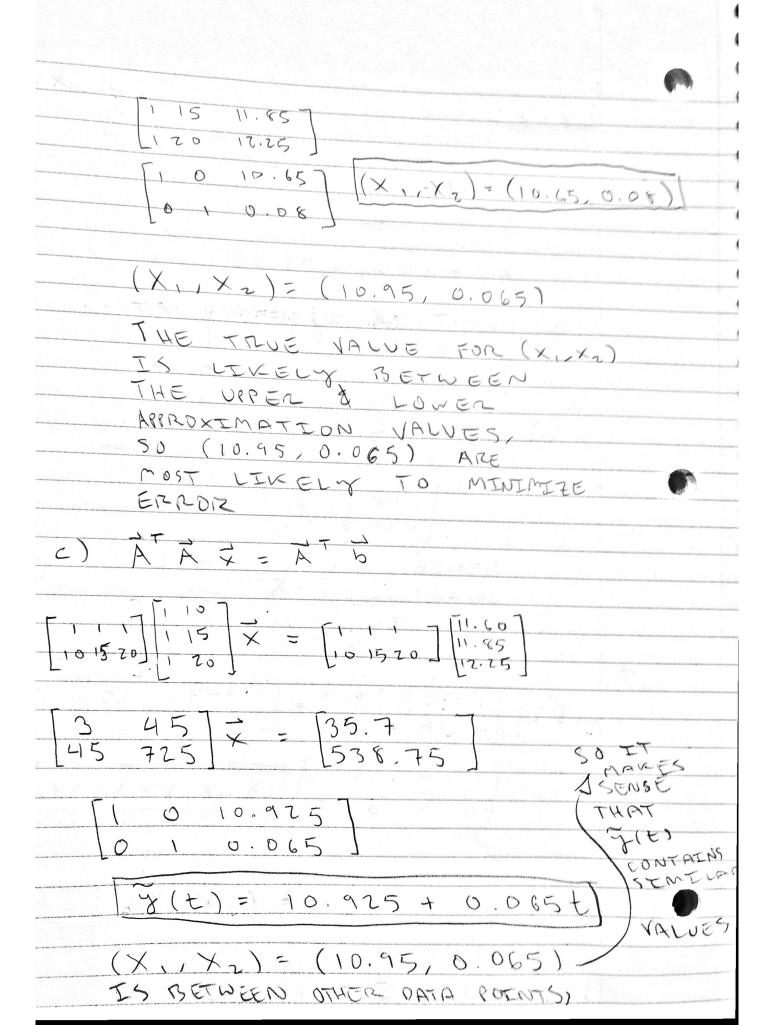
+ 10 x z = 11.60 (1) + 15 X7 = 11.85 (2) + 20 x2 = 12.25 (3) ブルルル メルシーズル SINCE NOT, IN GENERAL, CONSISTENT X, = [11.60] ((x,,x2) = (11.10,0.05) ) (x,, x2) = (10.95, 0.065



Ex 3.5 [0123] + 8 [0,23][-1] # Ø [0 1 2 3 ][-1] = 0 IF X IN LEAST SAVARES PROBLEM IS TO BE A SOLUTION, T=B-AZ MUST BE ORTHOGONAL TO SPAN(A) CONSEQUENTLY, AT 2 = \$

Ex 3.5

$$A = \begin{bmatrix} 1 & 1 & 1 \\ 2 & 0 & 3 \end{bmatrix} + A = ?$$

HA = H2H, A

$$V_1 = 0, - de, ; d = \sqrt{1+\epsilon^2} = 1$$

$$= \begin{bmatrix} \xi \\ 0 \end{bmatrix} + \begin{bmatrix} 0 \\ 0 \end{bmatrix} = \begin{bmatrix} \frac{2}{5} \\ 0 \end{bmatrix}$$

$$|\lambda, \alpha| = \left[\frac{1}{\xi}\right] - \left(2\frac{2}{2} \left(2\frac{1}{\xi}\right)\right) \left[\frac{2}{\xi}\right]$$

$$= \begin{bmatrix} 1 \\ \xi \end{bmatrix} - \left( 2 \frac{2 + \xi}{4 + \xi^2} \right) \begin{bmatrix} \frac{7}{\xi} \end{bmatrix}$$

$$= \begin{bmatrix} 1 \\ 0 \end{bmatrix} - \begin{bmatrix} 2 \\ E \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

$$H, \alpha_2 = \begin{bmatrix} 0 \\ \xi \end{bmatrix} - \left(2 \frac{\mathbb{Z} \times 0}{\mathbb{Z} \times 0} \frac{\mathbb{Z} \times 0}{\mathbb{Z} \times 0}\right) \begin{bmatrix} 2 \\ \xi \end{bmatrix}$$

$$= \begin{bmatrix} 1 \\ 0 \\ 1 \end{bmatrix} - \left(2 \frac{2}{1+2^2}\right) \begin{bmatrix} 2 \\ 0 \\ 0 \end{bmatrix}$$

$$=\begin{bmatrix} 1 \\ 2 \end{bmatrix} - \begin{bmatrix} 2 \\ 2 \end{bmatrix} = \begin{bmatrix} -17 \\ 2 \end{bmatrix}$$

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