BAI 8: PHEP CHIÊU - PHUCHG PHAP BINH PANIONG TOI THIE'S B1: Tim hinh chien and be les de this chien vector a: Giãi: a, 1, Ta - có: a a = [1 2 1] $x = \frac{1}{2} =$ hinh chiến cuốn b là:

b, 1 Po co: 0 0 = [-1 -3 -2] -3 = 11 + X2 he : at a 2 = at b hand chien and b la: B2: Cho A= 01, or, Tim hint chien via b lên khan gian côt ais ma tran A.
b. Tris vecto sai 25° e.
c. Tim ma trân chiên P Corai: 0 1 0 0 (2)

$$A^{T}A = \begin{bmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \end{bmatrix} \begin{bmatrix} 1 & 1 \\ 0 & 0 \end{bmatrix} = \begin{bmatrix} 1 & 1 \\ 1 & 2 \end{bmatrix}$$

$$A^{T}b = \begin{bmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \end{bmatrix} \begin{bmatrix} 2 \\ 3 \\ 4 \end{bmatrix} = \begin{bmatrix} 2 \\ 5 \end{bmatrix}$$

4) Ket he ATA
$$\hat{\chi} = ATb$$

(7) 1 2 2 5

$$\hat{x} = \begin{bmatrix} 1 & 1 \end{bmatrix}^{-1} \begin{bmatrix} 2 \\ 5 \end{bmatrix}$$

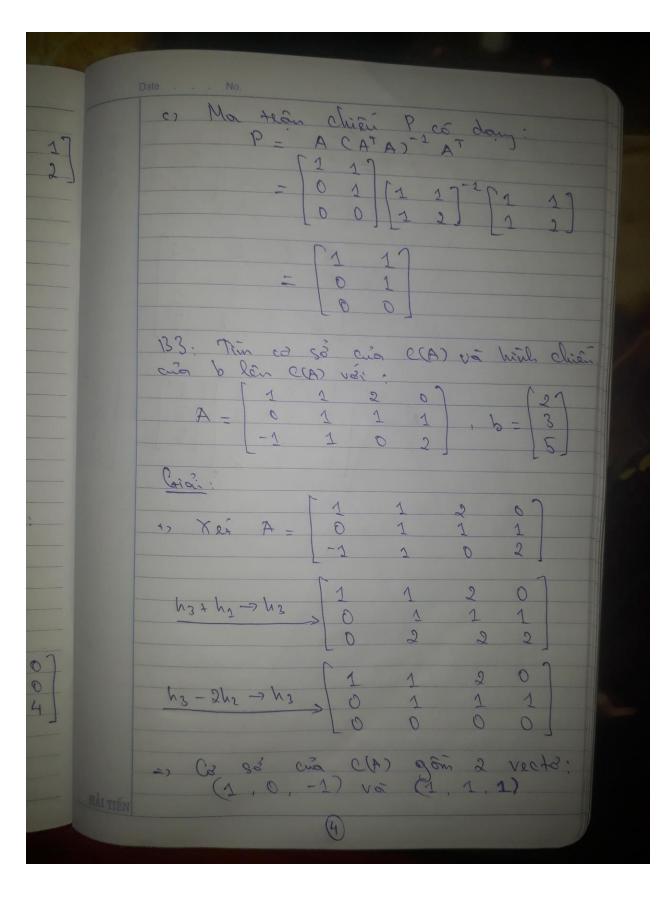
(c)
$$\hat{\chi} = \begin{bmatrix} -1 \\ 3 \end{bmatrix}$$

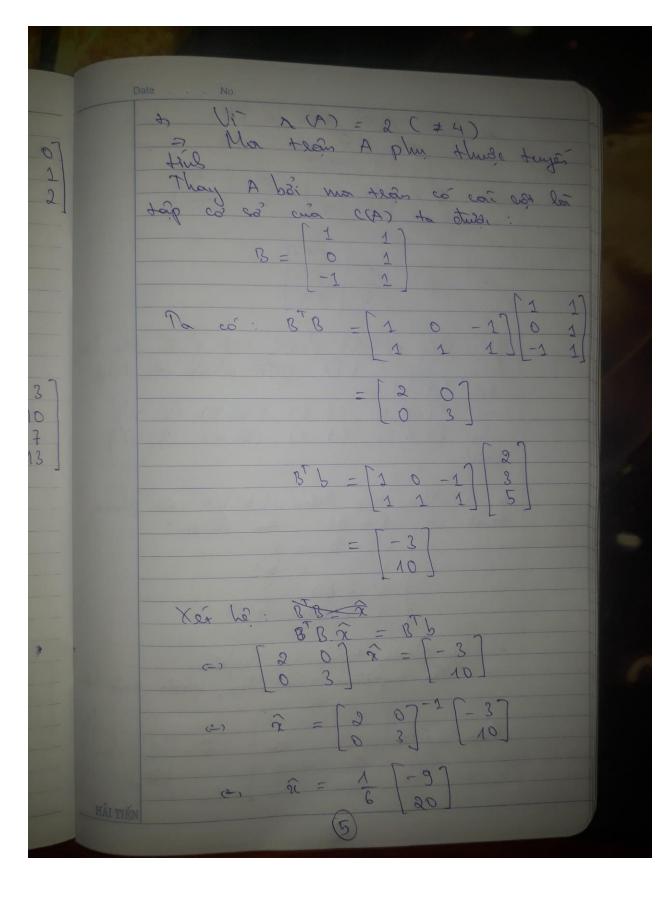
$$P = \begin{bmatrix} 1 & 1 \\ 0 & 1 \\ 0 & 0 \end{bmatrix} \begin{bmatrix} -1 \\ 3 \\ 0 \end{bmatrix}$$

$$e = b - p = \begin{bmatrix} 2 \\ 3 \\ 4 \end{bmatrix} - \begin{bmatrix} 2 \\ 3 \\ 6 \end{bmatrix} = \begin{bmatrix} 0 \\ 4 \end{bmatrix}$$

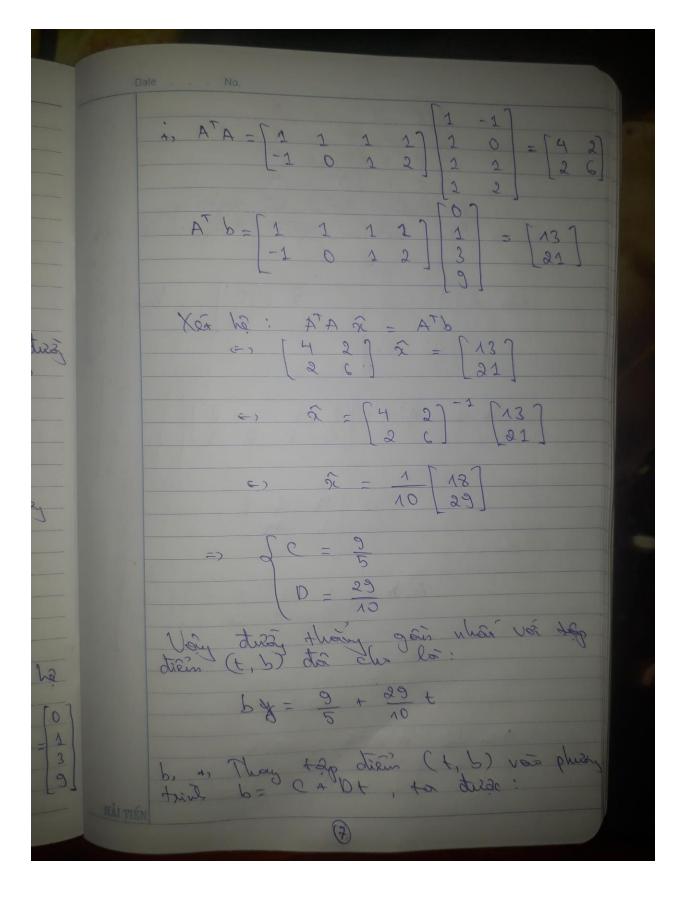
HẢI TIẾN

HÀ





hinh chiến của lo là: p = B 20 B4: Ding pp bind phuse to: thier tim dus thoing b= C+D+ gon what voi top trêm (+,5) san: 0, 9(-1,0), (0,1), (1,3), (2,9) b, {(0,8), (1,2), (2,4), (3,4) 4 Gial: trink b = C+Dt, to duly; C+8D-3 C + 2D= => he phiss triul vo ughiens => Pin nghiens gan dung what end he Dei A= 0



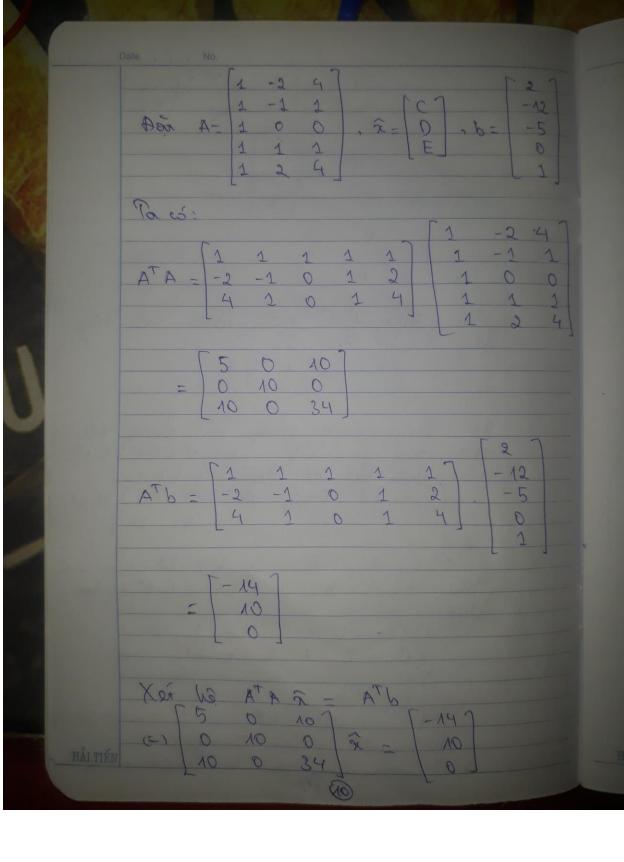
C + 2D = 4

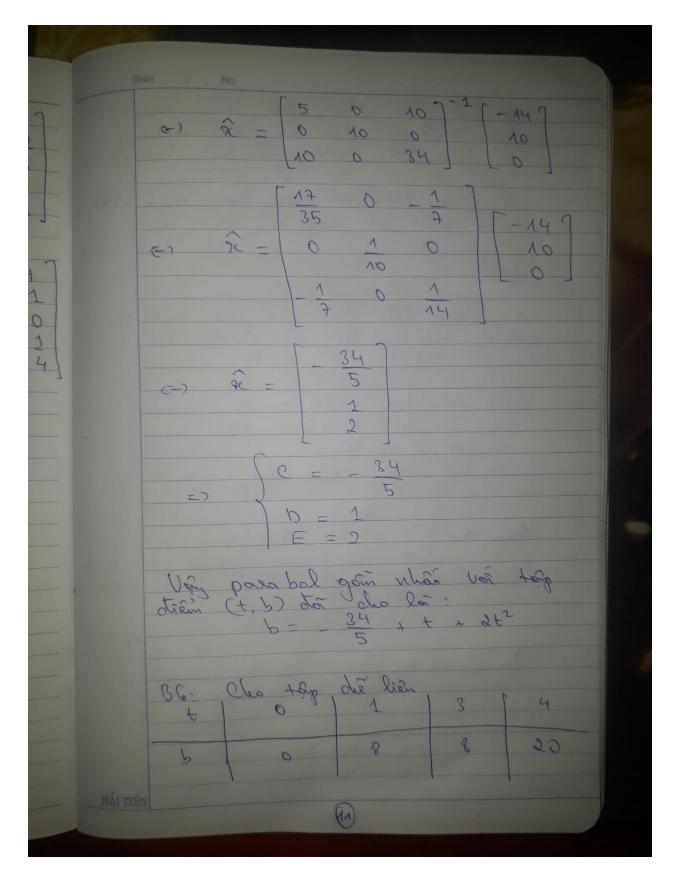
C + 3D = 4

Le phrzy triul us nghiêm

Tim nghiêm gain dung what our he 3244 012 3 @

- he lay tree the gain what ver tag B5: Dung plusey phap binh plusey tois thisis tim possibol: b= C+DE+Et gans mas vá: tap diêm (+, b) san: { (-2, 2), (-1, -12), (0, -5), (1, 0), (2, 1) 4 may tap diens (+, b) da che vai C + 2D + 4E he phiese trink is ughilin Tim nghiệm gián tung nhất của hệ





on Tim die they co day b = C+D+ gam what ver tap die lien tren

by Tim tree; that co day b - Ot gam

what ver tap due lien tren.

c. Tim para bal co day b - C + Ot + Et'

gam what ver tap due lien tren. Grai: a. Thay top dien de cho ver plus, b= c+D+, to dust C + 4D = hpt và nghiêm Pim nghiêm gan đưng của là 4 Pacé: ATA-4 8 26 (12)

3 = 36 12 ATA R = ATB => [4 8] R = [36] 18 26] 112 Vary dussy thany gain what usi top diein doi cho los in 44 b. They tag dien doi che voir
pluse, teine b= Dt, to otrop

100=0

10=8

10=8

10=8

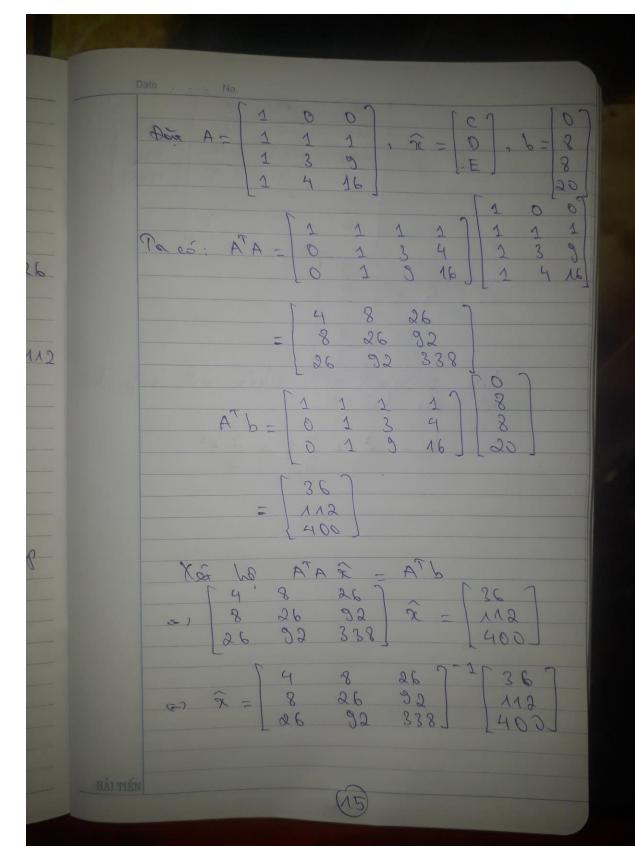
10=20

hpt v8 ughien

Trum ughiem gain duy ceis he 43

4 20 Pacs: ATA -26 = 112 Key Lo ATA R 13 56 13 56 13 26 2 Voly dies their gen when véi dien der die la b-56 t c. Thay top diein do cho vow pt b = c + Ot + Et , to died: C+D+E + 30 + 3E C + 4D + 16E

HAI



9 - 13 36 163 (=) qc -13 112 15 2513213 (16)