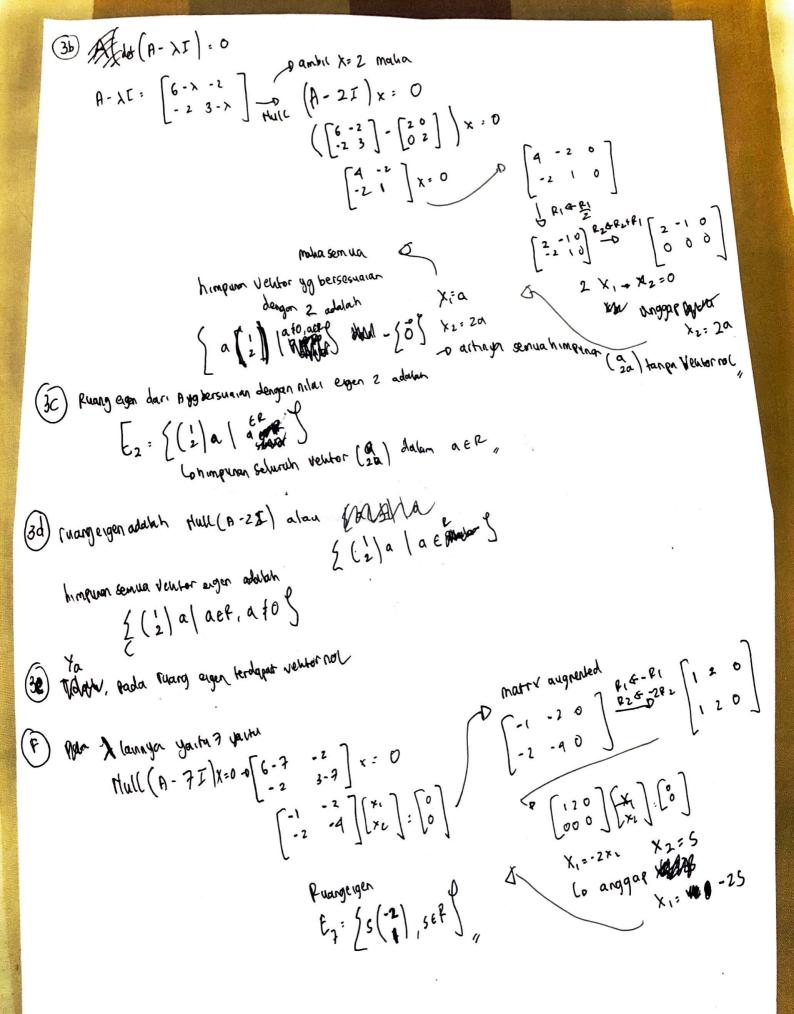
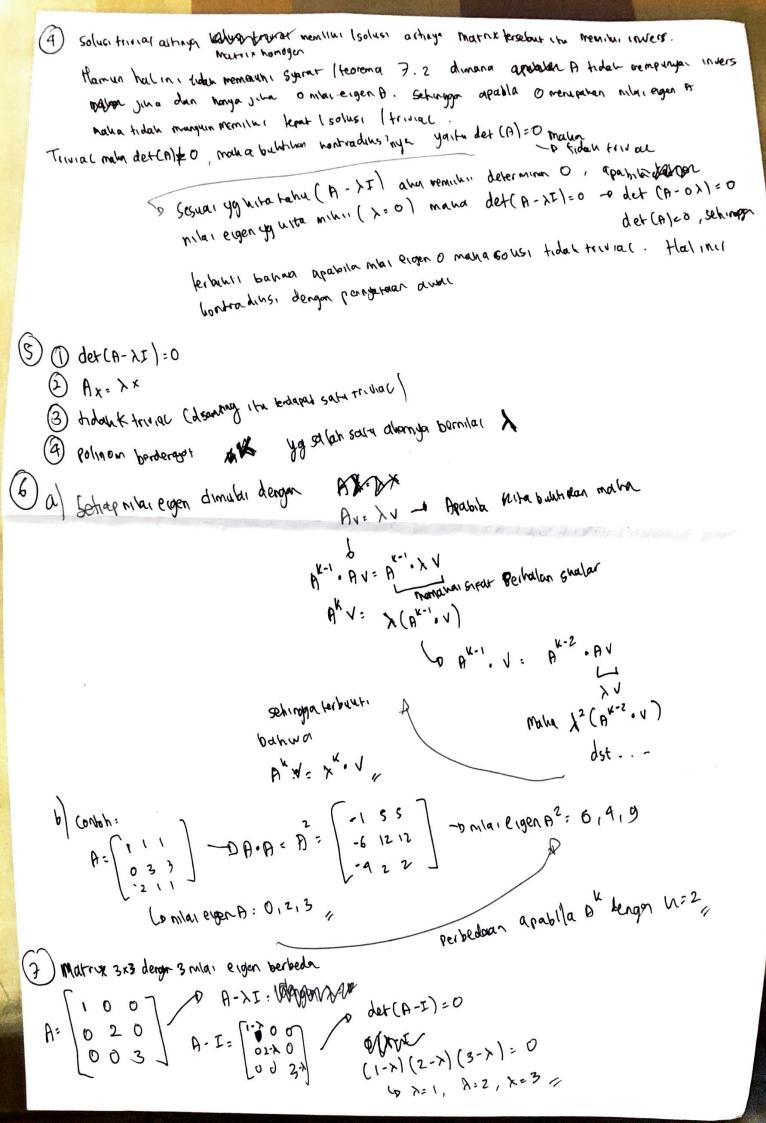
(1) Matrix A: [33] velutoreigen adalah apatula 33] AV: KV make i about tenter eigen apabla $a: \begin{bmatrix} 2 \\ 2 \end{bmatrix} \rightarrow \begin{bmatrix} 3 & 3 \\ 2 & 3 \end{bmatrix} \begin{bmatrix} 2 \\ 2 \end{bmatrix} : \begin{bmatrix} 12 \\ 12 \end{bmatrix} \rightarrow v=6$ main a velution eger p: [3] -0 [33][2]: [29] so untre Vishabe tolehada ya nemembro muna la buxan representa argumentousen milan ergen yg bersesuaran = 6; (1, dah, conton) (1-x)(-1-x) (1-x)(-1-x) (1-x)(-1-x) (1-x)(-1-x) (1-x)(-1-x) (1-x)(-1-x) (1-x)(-1-x) (1-x)(-1-x)(2) Tidah, conroh x = 1/ (5) $\left[6, \frac{2}{13}\right]$ a) $\left[6, \frac{2}{2}, \frac{-2}{3-x}\right] \left(6, \frac{-x}{3}\right) \left(6, \frac{-x}{3}\right) - \left(-2\right)\left(-2\right)$ >2-9×+19 (2-2) (2-2) 1:2 don 1:7

Mary Alvanos Mem. 210675200 Velas: D Paster: Both Almas Asdos: F20





 $\begin{pmatrix}
1 & 0 & 0 \\
0 & 1 & 0 \\
0 & 0 & 2
\end{pmatrix}$ $\begin{pmatrix}
A - \lambda I \\
0 & 0 \\
0 & 2 - \lambda
\end{pmatrix}$ $\begin{pmatrix}
A - \lambda I \\
0 & 2 - \lambda
\end{pmatrix}$ $\begin{pmatrix}
A - \lambda I \\
0 & 2 - \lambda
\end{pmatrix}$ B: Natur dagan 2011a: eiger berbeda C: marrie Longan Inila: cigan : materie idealtites [100] - det (A-XI): det (1-x) (1-x) (1-x) ... Tidan wanguin banwa marnins beroido 3105 eempunyai Anilai eigen berbedon horena apalala diwantum Paka folius, beceaucau H-xI adalah 2, + (4-1 x, + (4-5 x, + (1/x) co \$ + Cn-1 x + ... + Co = 0 abouter librar makes made polinomial bersebut adabat ny paradon. Sehingga palingbongan naha eigen pada sudru marrix 3x3 sampingan ax3+ bx2+ cx +dlx/M = co, dangon a.b.c.d.6 ? Palny bonyan Anda eigen berberg words past when monderne (8) a lump to be report of happen: Immy person pay K-Ko wowen fopodan simply beyon gapundaprou homenteristing dans A georetis: direns, many eigen you berpadaron derapor Ko Rilar egen V ya ponspahan hacz b) Multituditas Boometa, vila Gebrumunas / mesta Karenas read matrix homogen you memilion solver nontrivolal, havena eigen of dagant dari matrixi dergan determina bernilai O. Oleh hanera non tribal pada sor Homogen Sehingga pastinga Liners, yodhasilua pasti bermba, setihakaya 1 Cari Multipistas geometris (C) $1 \mid A = \begin{pmatrix} 3 & 1 \\ 6 & 3 \end{pmatrix}$ $(3-\lambda)^2 = 0$ $\lambda = 3$ dergan finultipicles allyaba = 2000 1000 [0][xr][0] \t[']\\\

(i) [30] -0 [3-x] (3-x) -0 x=3 alyer geneetr= 3.

Schingga multipistas geometri: Multipustas albaba

(9) of Adapar didiagonalhan artings marrix A bersebet dupat disban negodi matrix diagonal. Systagg hous discount , wa terdapop p - AP = D is matrix disoprac

P merupahan , vento " nilai eigen. Schingga syaratratama adalah matrix A merupaha matrix rungular v pororgo vxv gav warra v acubandor v rentor-rentor

Debelum in: Bentuhan nilai eigen eigen yog belogs linear

Debelum in: Bentuhan nilai eigen eigen yog belogs linear

Debelum in: Bentuhan nilai eigen eigen yog belogs linear misallum eigen sel (A-XI)X-0

Tentuhan niehtoreigen yog belogs linear misallum eigen eigen eigen yog belogs linear misallum eigen eigen eigen yog belogs linear misallum eigen eigen eigen yog belogs linear

(2) O benton h mottins & Ad molem ; who biles best -- be

(3) Matrixs D = P" of P addlah marrix dagonal yaentri diagona (unamonya adalah), 2, 23, ...,

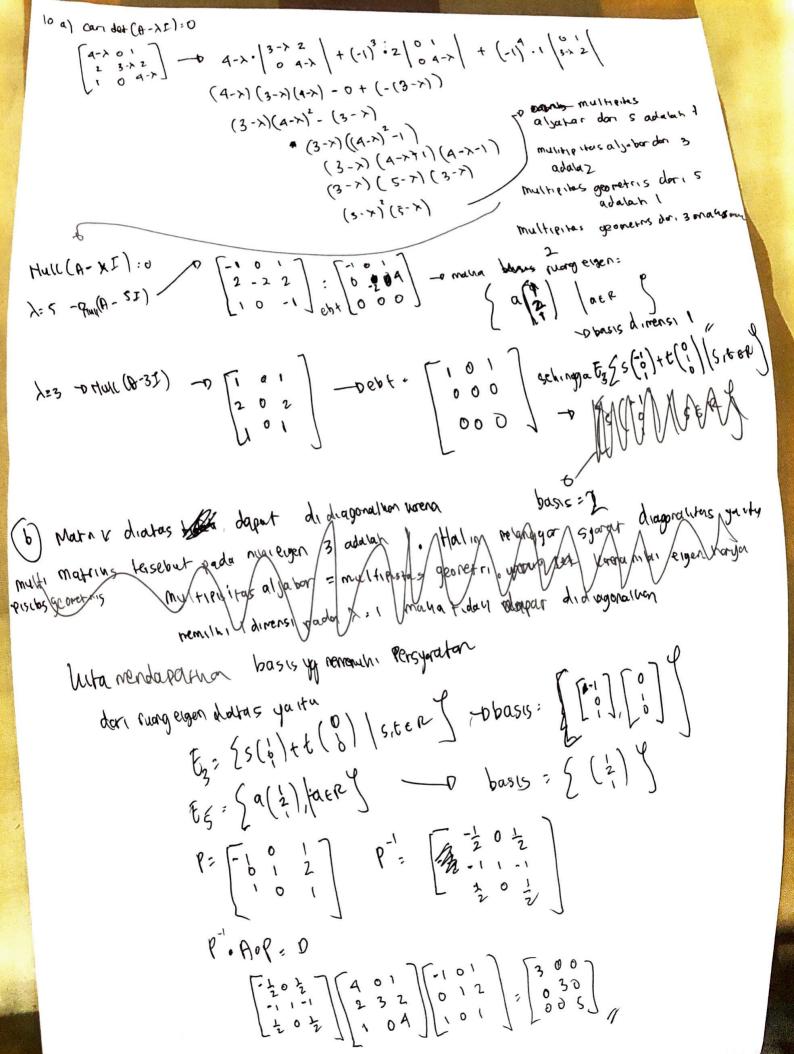
In denger h, adalah man organ dengen Pi whome 1,2,3, Marrixes A cerchagonalisas, seava Ortogonal artingo matrixs cinetres by datast dubat person matrius diagona. Syarat yg hans dieemhi adawn A penilui himpuran Ortonormae yg ferduri atas nuclità eigen dan A grenupellan metre x sinetres

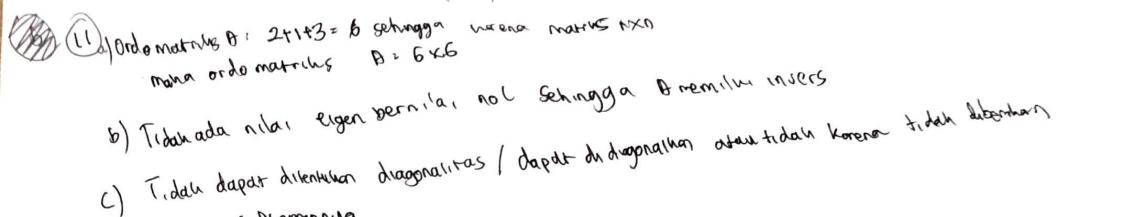
Tidak tentu, untuk mendapathan makriks ya dapak di diagonalikan separa ortogonak, maka makriks lersebut horns memilini signit smetis. Homen mother yo depart didiagonalism tidali kentu merupahan

matring yorsinetris

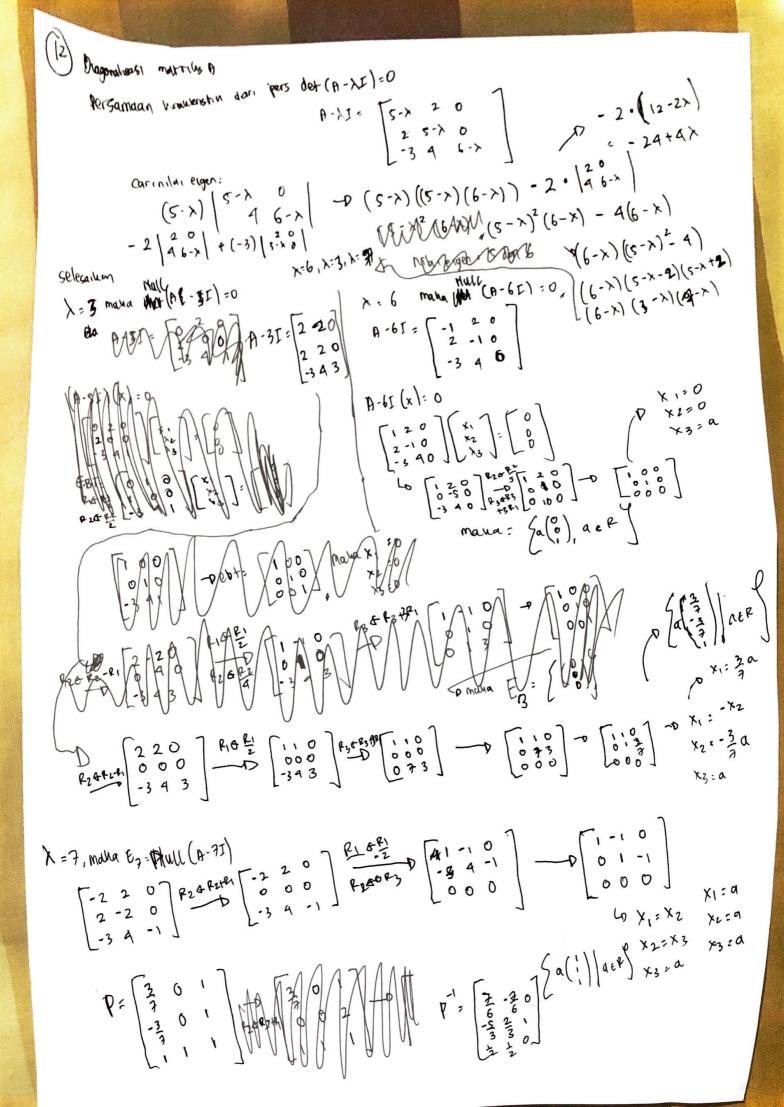
A: [5-6] -pt.day dapat didingonal war havena but an marrix smetric

eigen: 2 dan-1 o maka matriks diagonal: [20]





morrius ecomonida



Man bulkhan Pi'A P > D

$$\begin{bmatrix}
7 & 7 & 0 \\
7 & 7 & 0 \\
7 & 7 & 0 \\
7 & 7 & 0
\end{bmatrix}
\begin{bmatrix}
5 & 2 & 0 \\
2 & 5 & 0 \\
7 & 7 & 7 & 0
\end{bmatrix}
\begin{bmatrix}
3 & 0 & 0 \\
7 & 7 & 0 \\
7 & 7 & 7 & 0
\end{bmatrix}
\begin{bmatrix}
3 & 0 & 0 \\
0 & 6 & 0 \\
0 & 0 & 7
\end{bmatrix}$$

Schingga Krbunt, bahwa A dapot didagonalua

(b) Basis ya terdri dor, ventor? eigen A adalah

$$y + \frac{7(a-b)}{6} + \frac{0+b}{2} = C$$

$$y + \frac{7(a-b)}{6} + \frac{10+b}{2} = C$$

$$y + \frac{10+b}{2$$

(13 b) Det (A) = det(B) AcpBP-1 , det(P) det(O) det(P-') Jelle), delle) dete der van ferter)

B

- (b) Betul boend mai det (n) den milai det (o) pastisama lunga. Halitu halau p tidau Punya invers (det(19 =0) maha det(0) juga o ygberat. Fidar hemilic. invers
- (Betul harna sika det(A)= det(B) mana det(A-XI) = det(B-XI)= 0 Jugar
- (1) Betul hoera rulai dari Badabah menufallar metrius hagonai kerga milai? eigen peda diegurulnya... Ehragaa warena bersi fat similar maha B aha juga nemini. nila, e yen ta sana sehingga mlar.
 Adan a sana sehingga mlar
- (e) Butoi = Eiden Adon B gabat perpega rentar = eidenvitor paouv Bapaganpoentry war ne the Hersephrit
- (1) The Galato, Benor, havena vernor export bordir, dari talehinggaya nemun ventoreigen tidale daport bernilai W Voltornol.
- A tidah memili. (2) Salah, apabila A= (20) dan D= [0] Adan Bekursalen boris namun nilai erger yg sama lengan A
- Benon harrie apatorla ocrasar for many engenty suma multa veletar tersebut also nompalm Wombinus linear dan basis awat pada rain Salah, while mather (dentities # = [0] which >-1 Schungga Hull (A-I) = [00] [xi] = [0] alehkannaih X (= 5 x Es[o] + E[o] | s, t & R

Apabilalitaanbil 91: [i] don 92 = [z] maka 9, robah dapat dinyabahan Sebagui nombinasi I mear I z mangon Geballimya

