HANIF AHMAD SYAURI

Cateta M50 - Hawf A 5- 16(2161

· Ruzzy hasil keli de lam

$$\overline{U} = \begin{bmatrix} 2 \\ 0 \end{bmatrix} \overline{V} = \begin{bmatrix} 2 \\ 2 \end{bmatrix} \qquad ||\overline{U}|| = \sqrt{2^2 + 2^2} = 2$$

$$\overline{U} = \begin{bmatrix} 2 \\ 0 \end{bmatrix} \overline{V} = \begin{bmatrix} 2 \\ 2 \end{bmatrix} \qquad ||\overline{U}|| = \sqrt{2^2 + 2^2} = \sqrt{8} = 2\sqrt{2}$$

$$\frac{||\vec{u}|| - ||\vec{v}||}{2 + 2\sqrt{2}} = \frac{2 \cdot 2\sqrt{2}}{4\sqrt{2}} = \frac{2 \cdot$$

You'll never know till you have tried



HANIF AHMAD SUAUGI

Hasil Kali Silang Jika \bar{u} : $\begin{bmatrix} v_1 \\ v_2 \\ V_3 \end{bmatrix}$, \bar{V} : $\begin{bmatrix} v_1 \\ v_2 \\ V_4 \end{bmatrix}$ alabh waken $PJ3$ 30 Maka hasil Kalisahang $\begin{bmatrix} v_1 \\ v_2 \\ V_3 \end{bmatrix}$ Consult $\begin{bmatrix} v_1 \\ v_2 \\ v_3 \end{bmatrix}$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Hasil Kali Silang
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	[v,1 - [v,1
M242 h3 l k3 list shows $\begin{cases} u_1 u_2 \\ v_2 v_3 \end{cases}$ $ u_1 u_3 \\ v_1 v_2 \end{cases}$ Consch (250/3 h $u \times v$ dilugns $u : [1, 2, -2] v = [5,0,1]$. $ u_1 u_2 \\ v_1 v_2 \end{cases}$ $ u_2 u_3 v_2 v_3 v_2 v_3 $ $ u_2 u_3 v_2 v_3 v_2 v_3 v_2 v_3 v_3 v_3 v_4 v_5 $	
(onsch (onsch (zwish ti XV dilums ti = [1, 2, -2] V = [5,0,1]. [2 x v]	[14 tel]
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Meha hosil kalialons
Consche (2001) $U \times V \times $	Jui Us)
Consch (2001) $u \times V$ diagno $u = [1, 2, -2] V = [5,0,1]$. 12001) $u \times V$ $u \times [0, 2]$ $u \times [$	u > V: [V. Vs]
(onsch (zwish & XV dingro & = [1, 2, -2] V = [5,0,1]. Jerob: [uz us 2 -2 2 -2	141 42/
UXV = [3 0 1] = - u, u, = [1, 2, -2] [1 2 -2] [U XV = [3 0 1] = - u, u, = - 1 2 1 2 1 2 2 2 2 2	LIVIVall
$ \frac{1}{U \times V} = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & \frac{1}{3} & \frac{1}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \\ \frac{1}{3} \times V = \frac{1}{3} & \frac{1}{3}$	
$ \frac{1}{U \times V} = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & -\frac{2}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & \frac{1}{3} & \frac{1}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \end{bmatrix} $ $ \frac{1}{3} \times V = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} & \frac{1}{3} \\ \frac{1}{3} \times V = \frac{1}{3} & \frac{1}{3}$	(24-124 to XV dilmons to = [1, 2, -2] V = [5,0,1].
$\overline{U} \times \overline{V} = \begin{bmatrix} 1 & 2 & -2 \\ 3 & 0 & 1 \end{bmatrix}^2 - \begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix}$	Jens : Uz Us 2 -2)
W. W. 1 2 1	1 1 1 1
[U. 66.] 1121	UXV = [1 2 -2] = - u, th) = - 1 -2
	CONTRACTOR OF THE PROPERTY OF

$$= \begin{bmatrix} (2.1) - (-2.0) \\ -((1.1) - (-2.3)) \end{bmatrix} = \begin{bmatrix} 2 \\ -7 \\ -(1.0) - (2.5) \end{bmatrix}$$

THE STATE OF THE S

De finisi halch hali dotom duntasihan 6,27 : <u, v7 = (V, u) N Simelars : 〈ロヤノ、ガフ = 〈ロ、ガフ+ (リ、ガ) Additivitis : (au, v7: d. (a, v7 Homogenitzs : (u, u) > 0 /m (u, u)20 (=> u20 Positifitis Rung Vekter yong dilengkapi dengan hopen tola dan Wasil Milit John. disepor readil Contoh Diketchii (U.V.) = -3, Q (u, w) = 5, || u| = 1, ||v| = 2 1 | w | = 4. + |ctronglish (u + V, v + w 7) the K steply to the sit to be sidens? (U+V,V+W) = (a,V+W)+(V,V+W) 0=(will)=(" 1 = 2+5+ 11V112+ C-3) evel + ov. 10+ ev. 3.19+22 V. N = (V.5) 0=1-0=081+1-0= (N.W) = V.W. + V2W2 = 18W3 21-1 + 0.0 + 100 + 1.15

JEAN)

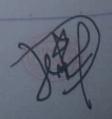
- Himliam Orthogazi

Diretihin V ablah. V My hasil Kali dalam dan Vi Va, Vn, E V- H = EVI Va, ..., Vn } disebut himilinan orthogonal Jika untik setian vakter dalam V salvay teak brus berlatu

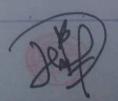
CVi, Vi = 0 1 #5 dn ij = 1,2, ...,h

Himpings Oldonormal

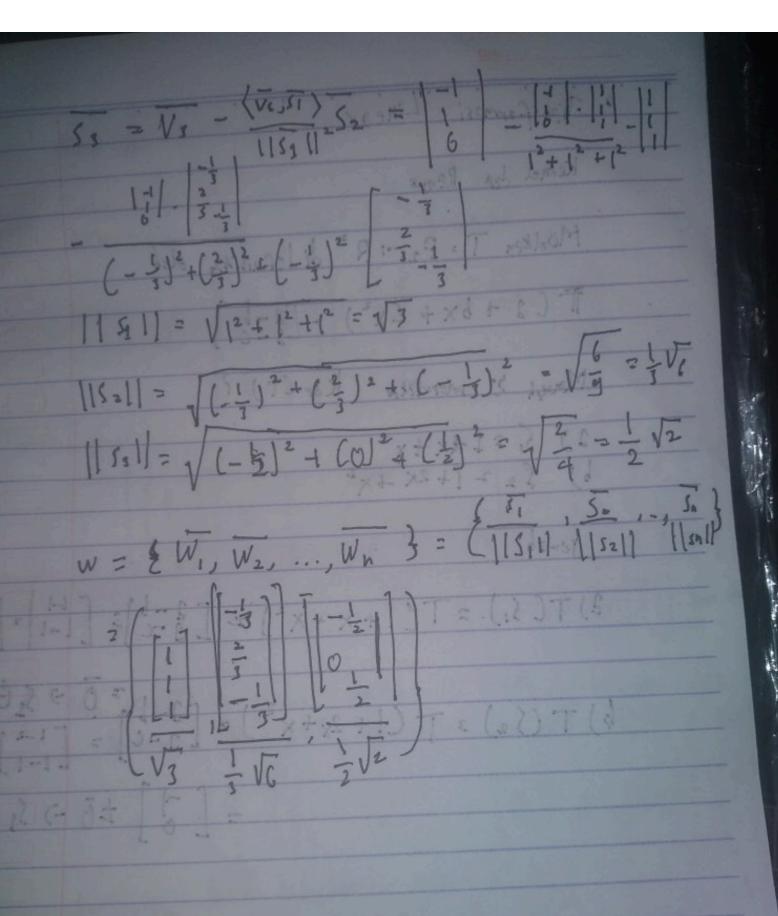
Dikethi Vadelah rang hasil kali dalam.



(U, W) = U.W = U1W1 + W2 W2 + V5 W3 = 6-1 + 1-0 + 0. (-1) = 0 jedi Ur, Uz, Us alslah voktor orthogonal 1 Diketshi UI = [] U = [] ER dan Bi addles king hard kall dalam. Tanjikum bahwa Untik membertiran orthonomal makes Perlu disnyrikan Ilüll = IIVII = Ilwil =1 $\frac{11\overline{u}11}{11\overline{v}11} = \sqrt{0^2 + 1^2 + 0^2 + 1^2} = \sqrt{2}$ $\frac{11\overline{v}11}{11\overline{v}11} = \sqrt{1^2 + 0^2 + 1^2} = \sqrt{2}$ $\frac{11\overline{u}11}{11\overline{u}11} = \sqrt{1^2 + 0^2 + 1^2 + 1^2} = \sqrt{2}$ Karenz IlūII = IIVII = IIWI = 1 Jak U, V, w. adelph laken vekter -vekter orthonormal



Hetele Gram - schimidt H= & V, V2, V. } adeleh las.s 6.) Ubshibh & V. V. V. I menseli basis - basis orthornal 5 200 5 1 = Viv 2 (1, 11, 1) Till more should WHOLE THEN DOWN IN THE



of transformasi Linear Kernel der Rame Mulken T : P2 - , R di Je Gnisikon olch TC3+bx+ (x2) - [3-1] Mary 32 merulates Ker Ct)? 6) Se 2 [+2x +x2 W = & W. W. W. B = CIISdems? [] 2) T(5,) = T(1+x+x*)=[3-6]=[1-1]=[6] b) T (52) 2 T (1+2x+x2) = [2-1] 0 = 51 = koth = [] +0 -> SI & KarCT

500 P

Rax dan Hollitzs 1983 weeks miss willing Trades basis & dimensi dan Ker(T) dan RCT) dani transformer linear Tirke-R deng 24 T (6 - 2-6 + C-2) Marz Dasis Jangkaran RCT) = { | 0 | 1 | Rom 22 Make JonBaken Les Dass Ker (T) don Jamensi Nolitzs don dot domes & ter Dertsoren hass OBE Seletans [3 0 0 0] [2 2 [0] =) 2+6 = 0 > 2=-6 gens tiden tende 92t 1 utemes => 2= 7 212 Pole Kolnon Cd 20 d

Postkin Vector dough Poznany MS10 1842 - KE- CD = { | 1 | 6 } Hyles = 5

ASTVA-Charer 6 Defermingen C23 = (-1) 2+3 17 = =4-13

SAR SAR

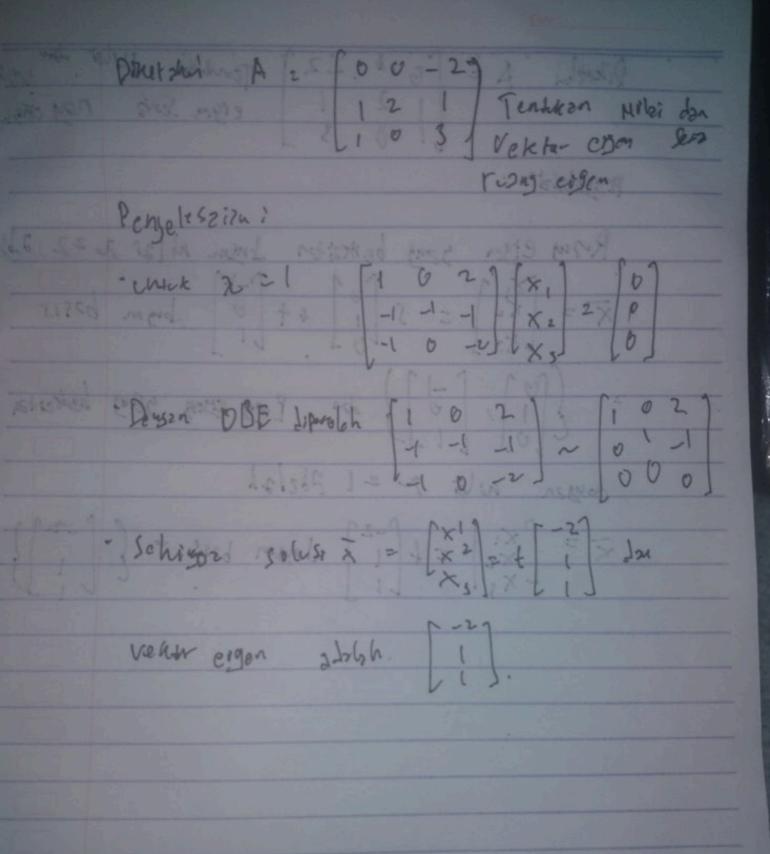
3(-9)+(-17(-11)+0=+

Schrysz doperoleb

Jag .

Reay Eign = [1 2 1] Tensulan: Nilei 1 0 3] Ian Vektor Cigon & dan vekter cogen Erts rungergon 1 Penjel+szt74 1 det (21-4) = B = 2(2-2)(2-3) + 2(0+2-2) P - 25 -522 +82 -9 =0 (2-1) 20 mars milit eigen dalh 2 da 1

Daketkhii A = [1 2 3] Tenskon 2 Miles den [1 2 3] Verster erger serte Tung ergen Pensilszion! en vila -vilat egen ke personeen (A-ZE) à 0 yet: [202] [X] [0] Liperoleh [-12-2-1] [X2] = [0] chuk 2 = 2 1-10-1 X1 -= [0] Likefoleh deugn OBE [202] ~ [000] Schings Sold x 20 x2 25 15 4 14 0 mykz voktor ergen stalety !!!



Jess)

