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	Page No.:	3 8
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suppose sois of A are linearly independent Seo A		
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	in in	ntible
(6) ~		TODIC
A) de mu vectors & A		-
let u) be subspace of From Spanned by de day		
let w be subspace of From spanned by x, x2, xn		
Since of des on one linearly independent idin(w)=		
since an are arearly independent idin (w) =	7	
D		
By as corollary, It wis a proper Subspace of a finite dimensional vers	Lr n	
Gaite dimensional & 1: 1136 1131	as space is the	en us is
Finite dimensional & dim w = dimy		
Papof By thm		
of wis a sperme A a fit to be a		
addressent when a 2 company of a time dimensional yester	space V, ever	4 linearly
finite saistor w		0
Adopendent subset of Di frite a isthere also a part of finite basis for w		
Since a is paper subspace	Ball Con ext	-
Hen up din	we dim V	
· · · · · · · · · · · · · · · · · · ·	D. CIM V	
W=fn Henup there exist Big in Fs.t Ei =	E Rij di	I EiEn A
12	1	BitCE
Where { G, E, - En} is standard basis of fn.		-d FL
the state of the s		
Thus too motion By with ordines Bij BA	+=I Hence /	A is inventible
		Joseph Hard
By IF W. 8 12 are finite dimensional Eubspaces of V than WI+ wz is finite di		
than Wit we is finite of	mensional &	din W, +dino,
V	= dim/as A	(W) 1 500 C)
Prod	<u> </u>	2) + am (virw)
every linearly independent subset of w is finite & is part of finite basis of there apray has finite basis of	val vector span	e V.
every unpearly independent when a Dicar	- Carrispa	
Is traite & is part of thate basis of	0	
Henre and has finite basis	{d, xx}	
which is part of havis & an de - ax, Bi, Bm } for w,		
Zan-ak Bin to y dot was		
By the Swi is subspace which is consord & white and for I	1) 12:	
By the Swi is subspace which is spanned by vector set formed by	11	
- Subspace W1 + D2 is Spanned by 5, or R.	Bm ?	- 2n 7
- 'Subspace W, + Dz is spanned by Ex, or, Bp	Pm) 47	3

A C C C C

Exidit Eyi Bj + Szx Yx = 0 - Szx Yx = Sxi xi + Eyj Bj By property of addition and because at is subspace. Ezx Yx belong to w, & also belongs to wz Hence Frack & winws - Szrer = Ecido for some (1) -- CK Because Stir-dh, Xi, -- 2n3 6 basis of wh - + + is independent Hence each of sealor 2 27=0 Exidi + EyjBj=0

Exidi + EyjBj=0

Also {dir--di, Bi, ---Bm} is also independent Set : each xi=0 & each yj=0 Henre Zdis--dx, Bi---Bm, --- 7, 5-- 2n J is basis for Witw, becan
it is linearly independed & Spans (W,+WL) Monae finally dimwit dimwiz = (K+m) + (K+n) = Kr (m+ k+n) = di-(w,nw) - dn(w+ w) Monceproud