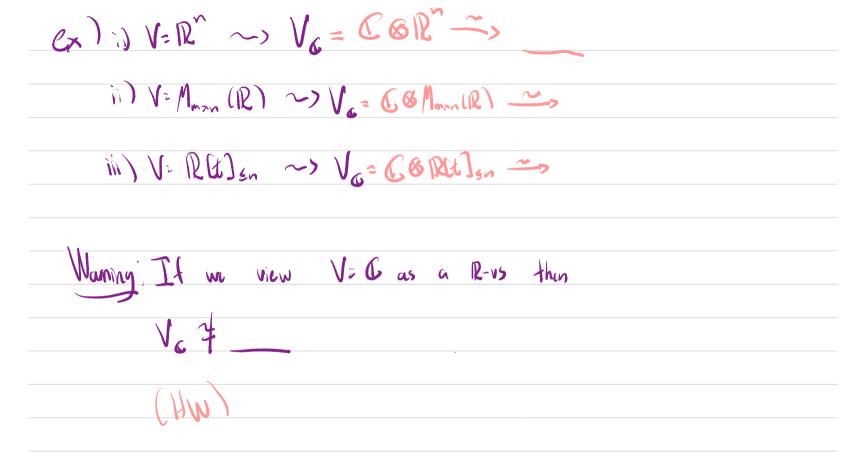
	omplexitiation	M	
Iden'. R=	•		
	-vs into	VS	
Reall: Gis a	- vectal gruce	of dm	

Def: Let V be 12-vs. Then the	of V
denotedis	
Prop: Va R-vs with busis B: (V. Vn). Tun	
1) _ is a G-vs (with scalar milt of. ()= /
UA Glows of V is B62	
Cie dim RV:	





The complexification is more than just a G-vs constructed
The complexification is more than just a G-vs constructed out of an IR-vs, It is "the best" (universal) one
Throm: V be an IR-vs und W a G-Vs. Suppose f:v->W is an IR-lineal map.
Then 3! C-lower map f:
Such that
V — > W
3:7
7 7 3:4

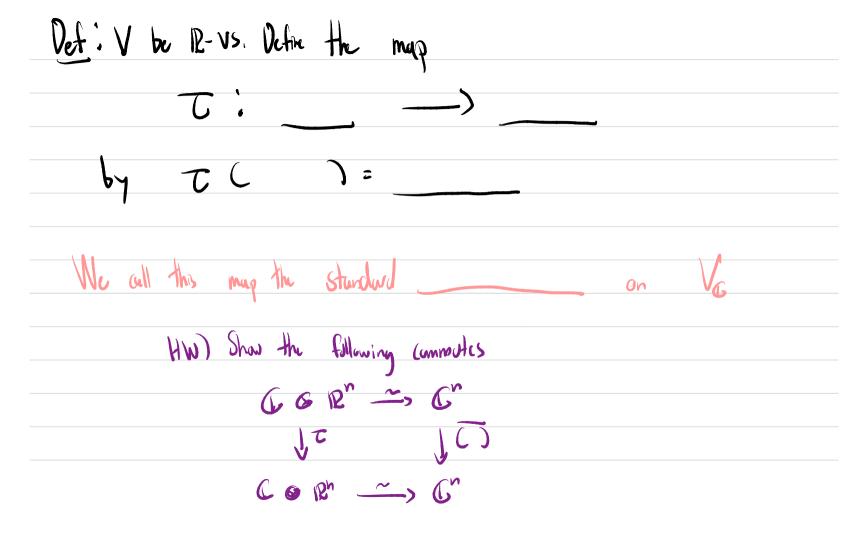
Now let	3. V -	->V' h	lnew map	of R-vs.		
		e luce o	•			
.						
	·	_ 0V —	~>	ØV		
		<u> </u>		U		
(12)						
Denti		; = _				

Thim! Ke	eping the natural	, a lue, la	d		
B _v	= (u vn) bas	s for VV	> B _{V6}	Complexified	busis
			Bu		
Then	[8]8,	-			
Dt)					
10 1					





Recall the function (5: 6->6
⊋ —>
other note that for KE
, and the second se
$(7)^2$
On the other hand if (2)=_
then
7100
\
-> that is we can recover as the



	(that is, this "rea	overs" the Standar	on C ⁿ)
Phy: In the	set-up about, the	fixed pulms of	
T		->	
is the	Subspuce		
Pt)			

