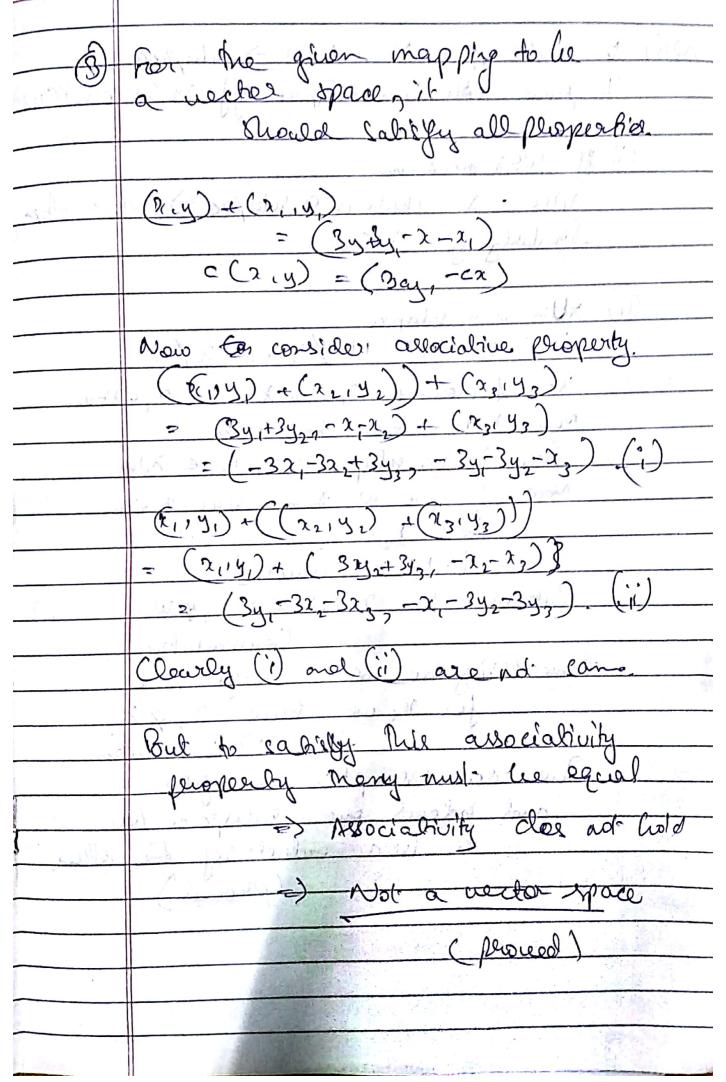
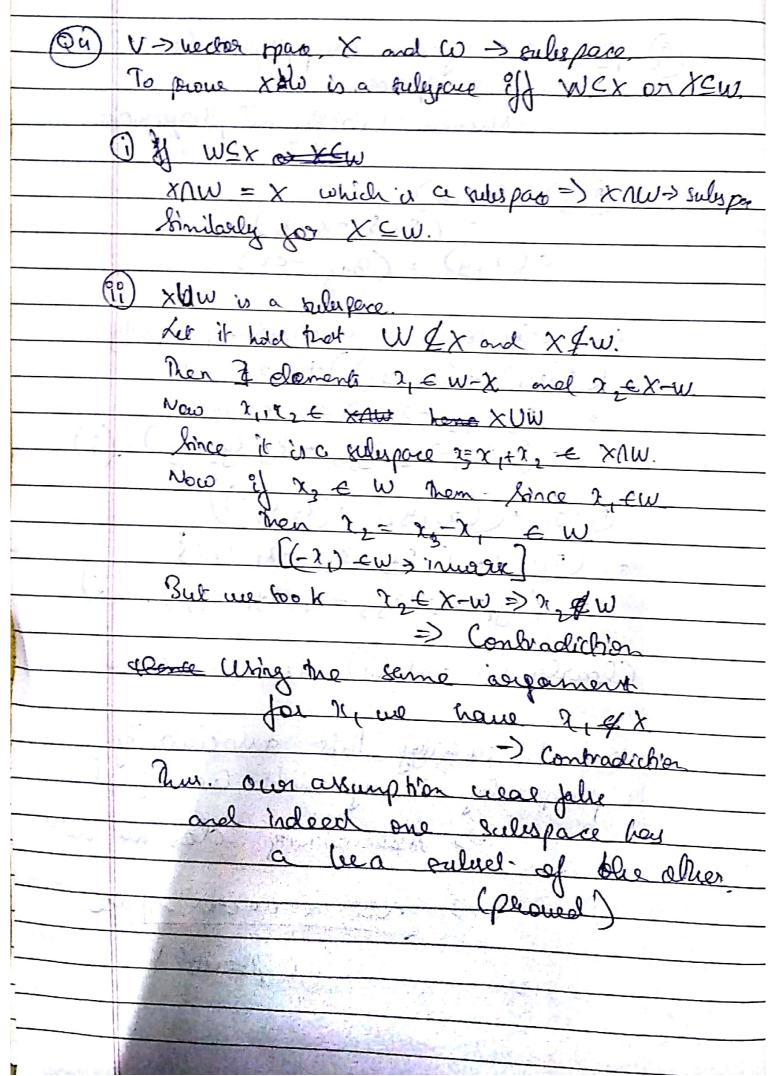
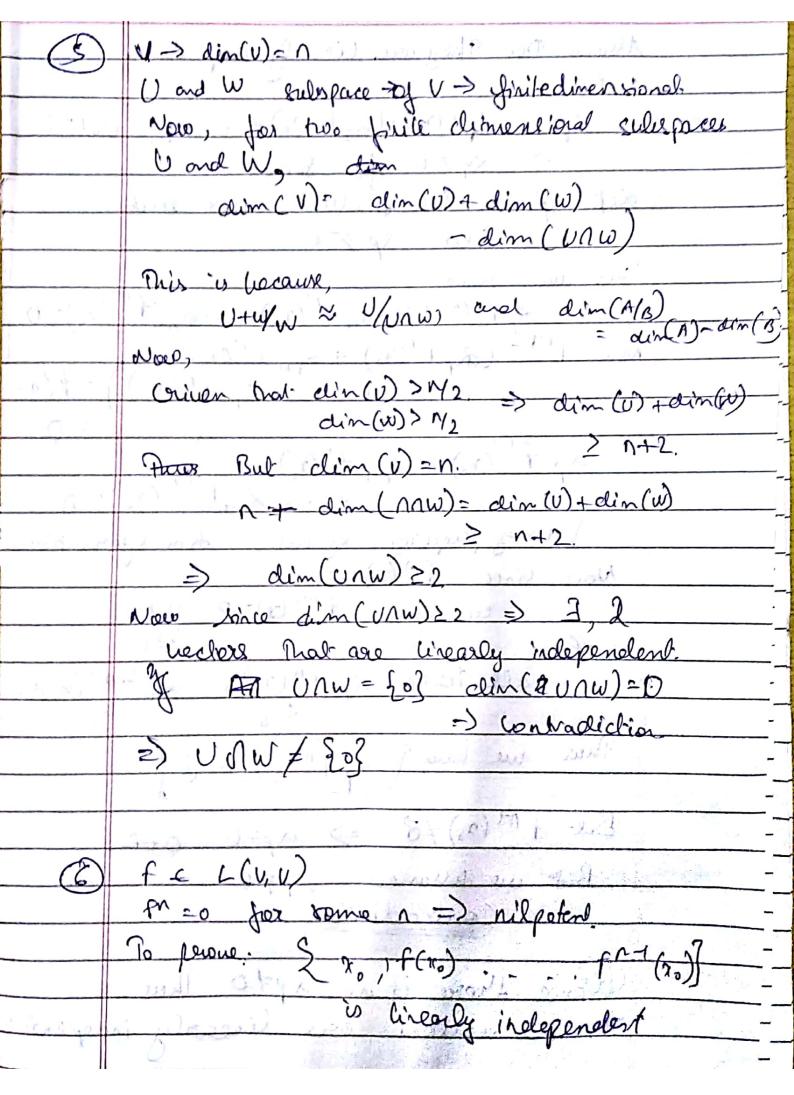
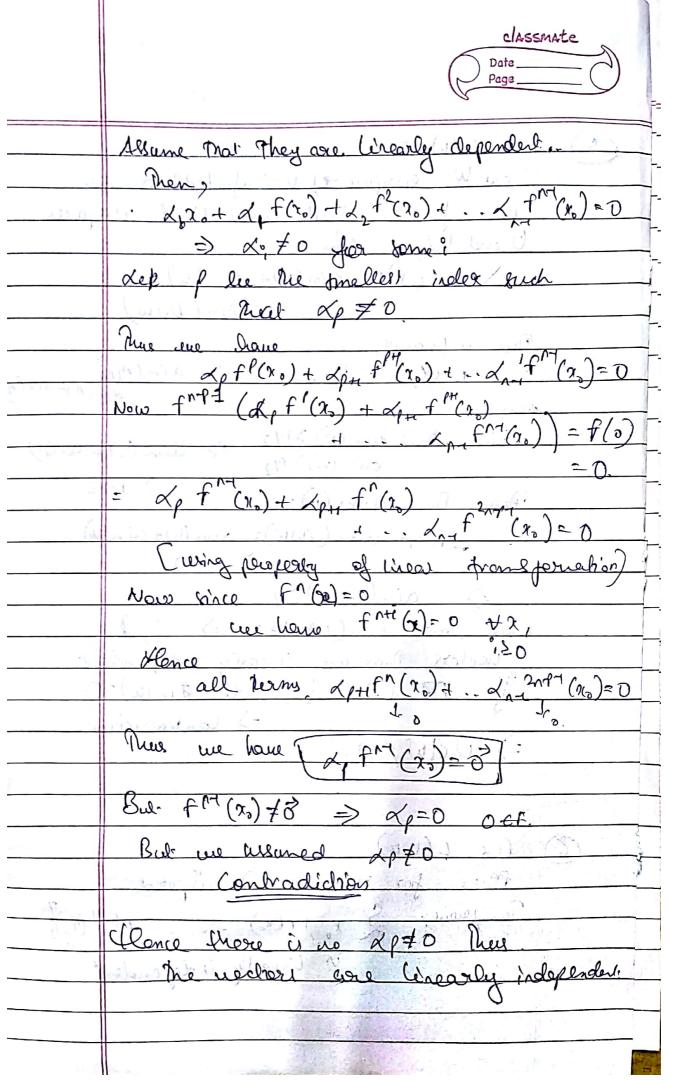


f -> V->W KelB=(4, v, ... V, les a lasis of U since it is a leasis, enedoug histor VEV am be expressed as a linear combination of here nectors V= X,V, +X2V2-1. . . X,Vx LEF V, V, CB Now consider that we need to find F(v) for some UEV. f(v)= f(x,v,+ L2v,...dx/2 = f(x,v,)+ f(x,v,) + .f(x,v,)+ .. f(x,v, [since it is a timear transformation f(x+y) = f(x) + f(y)] = x, f(v,) + x2f(v2) + x2f(v7) .. x, f(vm) [linear f(ch) = cf(x)] Hence if me know the nelnes for $f(X_1) \cdot \cdot \cdot \cdot f(v_n)$ rue can find The mapping for any wester This also means that if we have The effect of complete linear frankformation can les evaluated.









(7)	go (fif) (x)
	$= a \cdot (f(x) + f_{i}(x))$
	$= g \circ (f(x) + f_i(x)) \leftarrow chang$ $= g (f(x)) + g (f_i(x)) \leftarrow chang$
i i	= gof + gof, property
	'h're enf (x)
	hince gof (2) = q (f(x))= Tronsformalia
	Phus
	Rus une get a mapping fuer V > W
	(9-19) of (2)
	$= (q+q_1) \circ f(x)$
	= 9(E(1) -1 9, (F(2))
	JC3 . J()
	= qof + grof.
	This is becaus q(F(x))= (gof)(x)
	Mus proved.
,	

