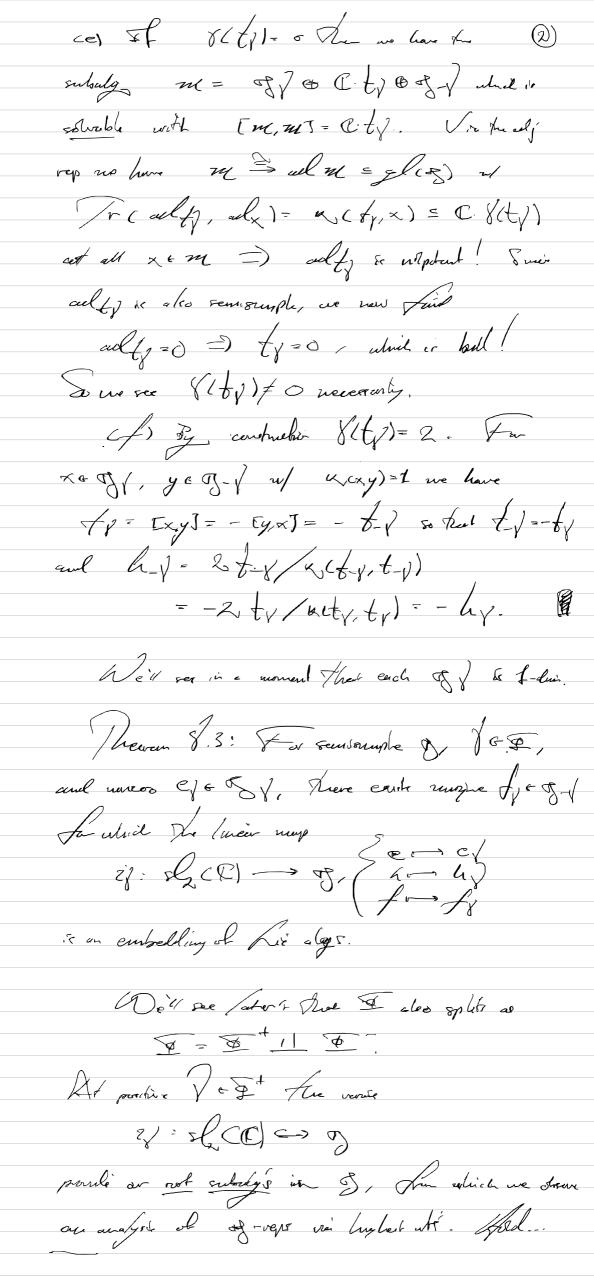
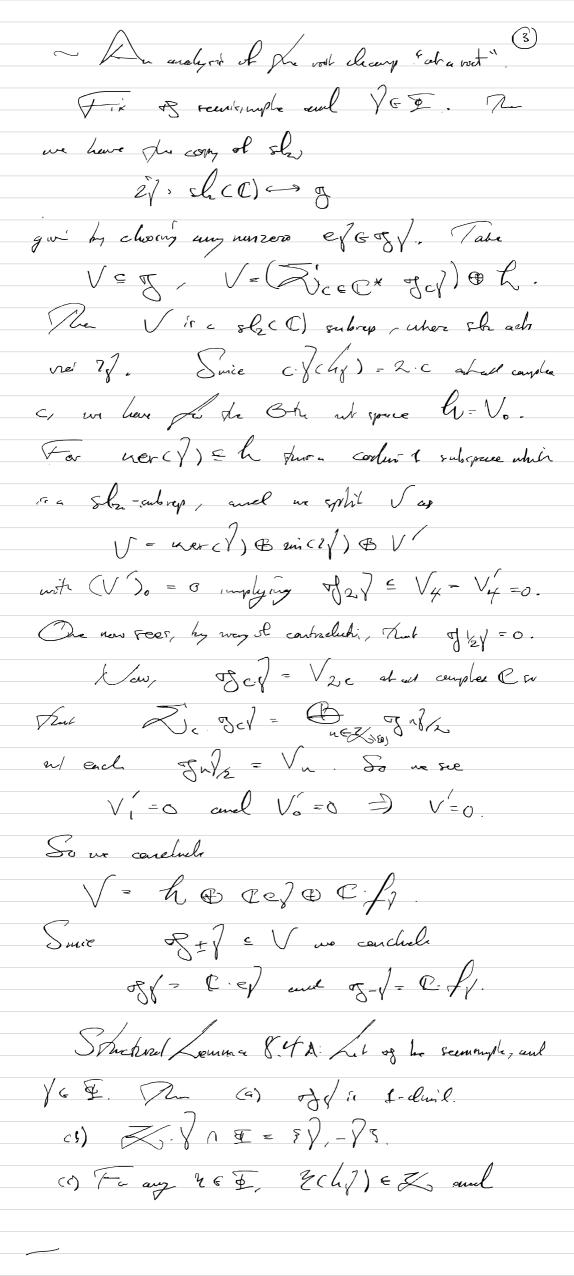
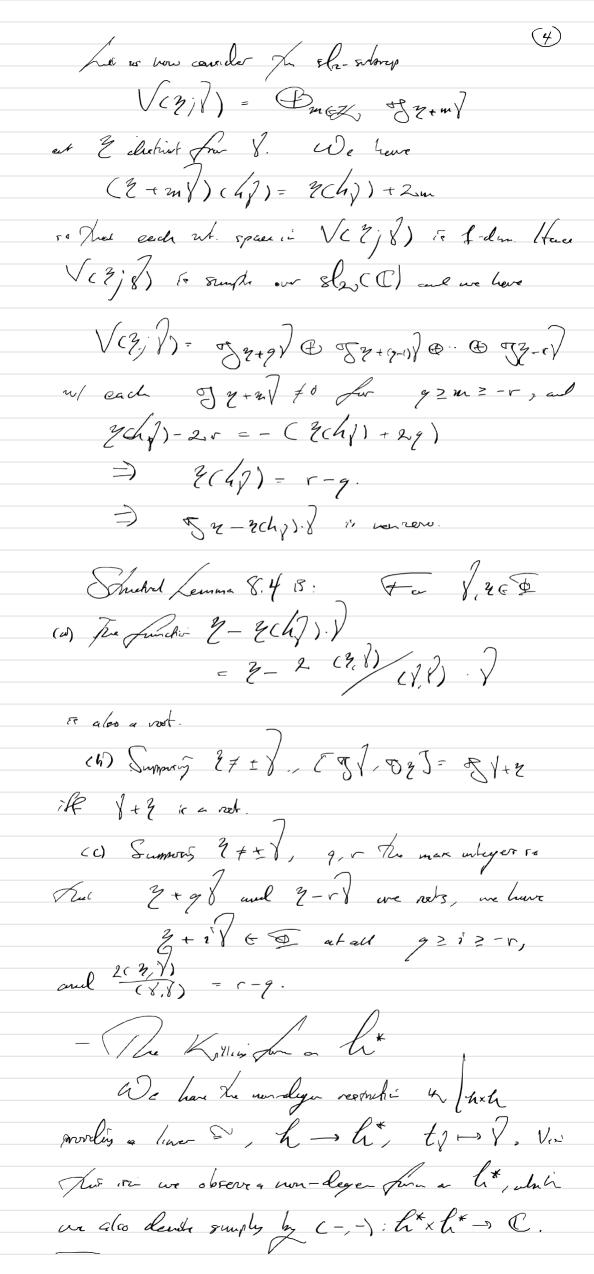
~ Roots and The root space decomp ~ We have

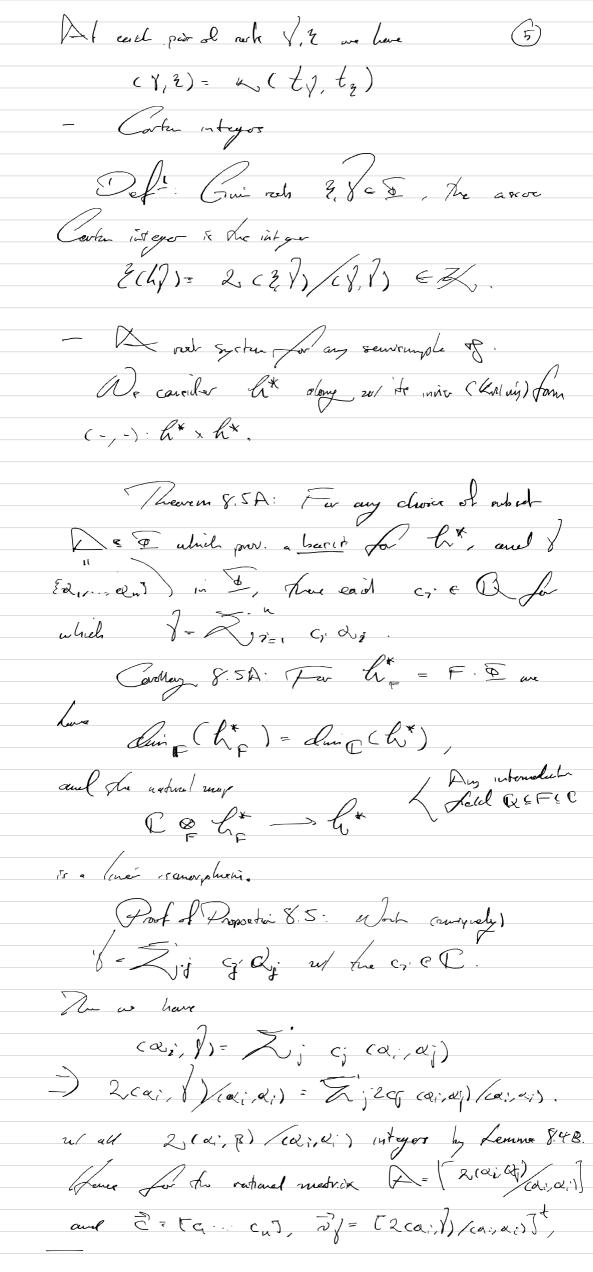
To how the for of

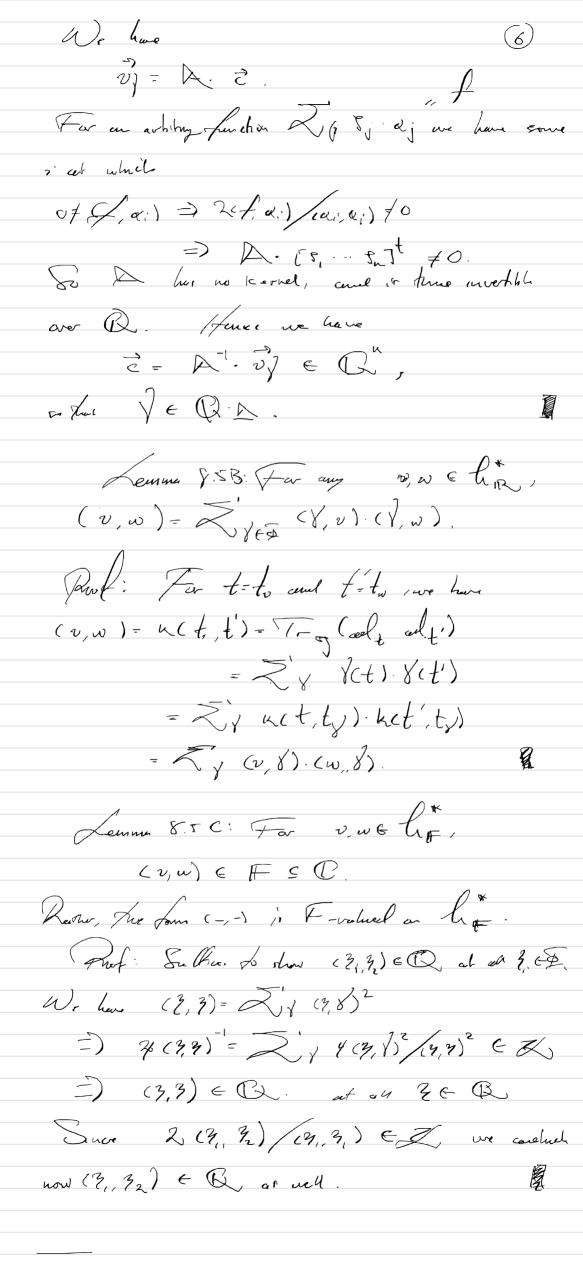
Take for each 16 the for of u(f,h) = f(h) at each he h. (Sud El exist, by non-deger of K/hxh.) Shekwal Lemmy 8:3: (4) \$ spens lix (b) If Vo \$ Ju - V€. (c) For Se D, XE of and y & of I, we have txy J= vxy) ty.
(d) [\$\f\], \$\f\] = \C\ t\}. (e) Y(t)) \$0 dent /6. Prof: an For he had y(h)=0 at all not I we have $4-x=8(h)\cdot x=0$ for each red recht X & J. / Some G & Zog). By soursuip, Zet)- a so hat how. Hence C. D = L*. do) Follows from the free trul Of Colo 100) -K(\$ / \$ -8). a) Af ea he he of a we check uch, Exys) - ucthers, y) = (ch) wexy) = u (h, ucx,y) {) Exy = Mexy) &f.











Coolley 8.5 (: For any nouron v & hill, Prof: W. Love (v,v) = Tyer (8,v)2 with M (Y, V) real by Lemme 8.5. C. By hur-dynericy we also have (Y, V) \$0 at com I, so that (y, V) & [12] >0. The rest geten coronated to remounte of / Leaven D: For any semsunde of no chose of Cortan le. Re Kill mis fait prender a real, symmetrie, prositivis defentes four (-,-): h* & h* -> 2 an the real open of the roots Gr. R. D. Furtemor, the rock I & Cing satisfy the polony: v) & fuite end speus li* R. 2) For r = EV-13 iii) For any, VEZ, the reflective across It of: he - 201/1) } preserves Y. iv) (= each /360, 2(8,3)/(1/1) is an Deft A rook system it the paring (E. D.) La Eudilon R-velor space my a funto set & which satisfiée condition: (27) - (vv) from (hum D.