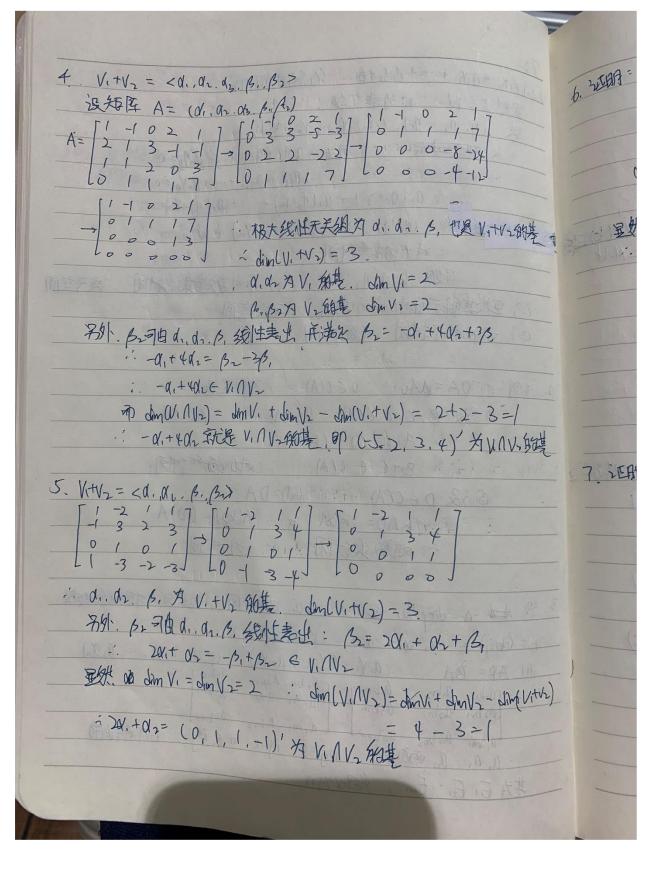
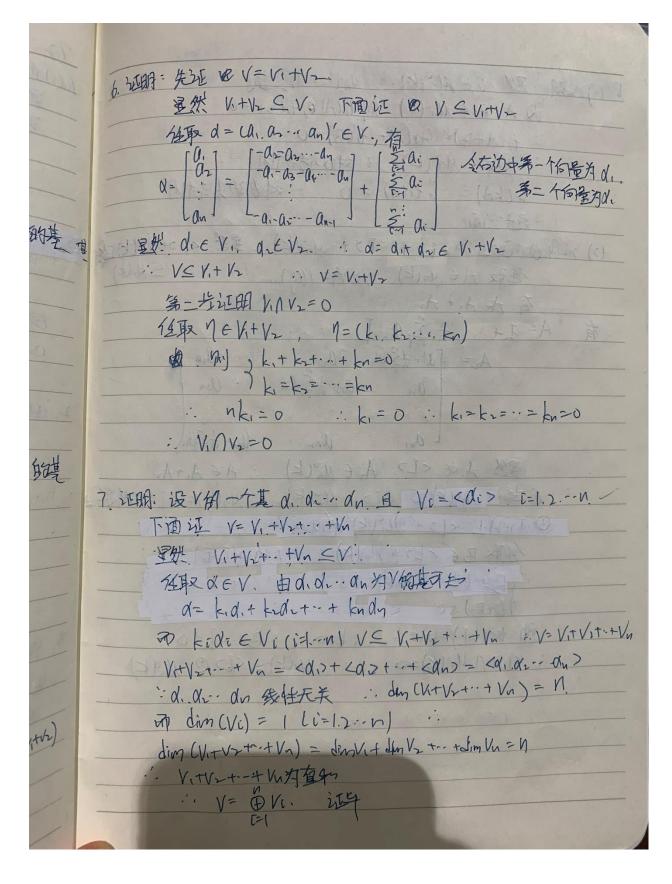
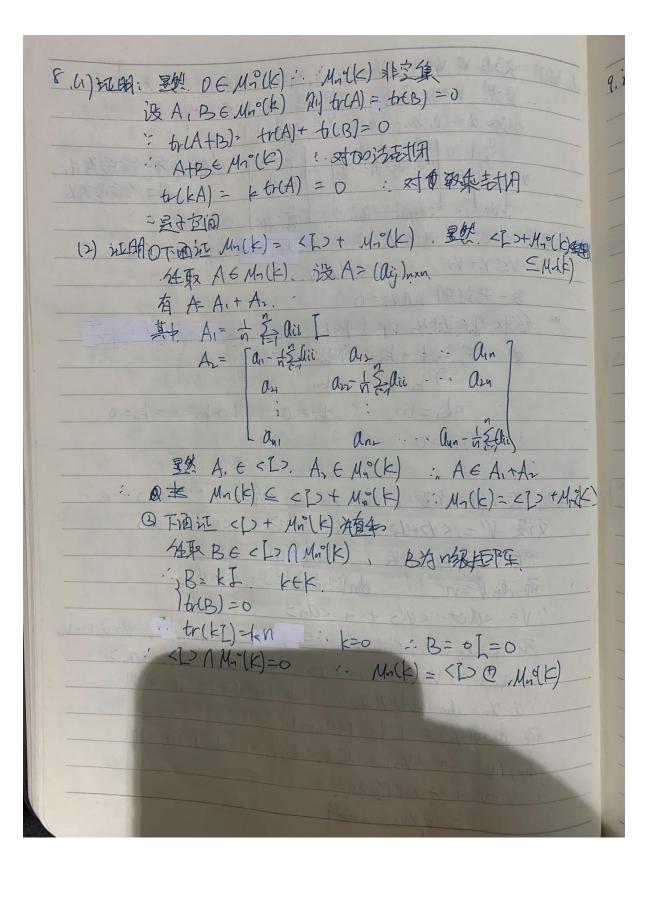
La) a. x. + a.x. + ··· + ansn=0 新海空间为W. 1.2. 显然 0∈ W. W为非空集 ₩ (1.12.1m), (1.12.1.1.1) € W. ic the y a. M. + any 2+... + any n= 0) a.V. + a.V. + . + anVn =0 : a ((1+ /1) + a (1)+1/2) + . . + an (1+1/0)=0 12 (1, 12, 10)+ (1,12-1/n) EW. :,对加法型封闭 显然 上(1,172-17) EW 即对数量实施专用 (2) 里然其解空间对办法不封闭 不多子空间 (3) 对加强不封闭、不图于空间 2. 证明: Q: DA = AAO : O E C(A) /: 內非空族 图设B,CECLA) AN AB=BA, AC=CA (A(B+C) = (B+C)A B+CE(LA) . Athora still @ 3& D & C(A). .. AD=DA 一对教兵封闭 .. 为十空间 3. 没 A = drag far and. an 两两个同, B为与 A 可交换的是图 B= (bij) = (d. dr. (n) = (V. . Vz. Vn) A) AB= BA . (a, Vi, a, Vi) = (a, di, a, di, ..., a, and n)

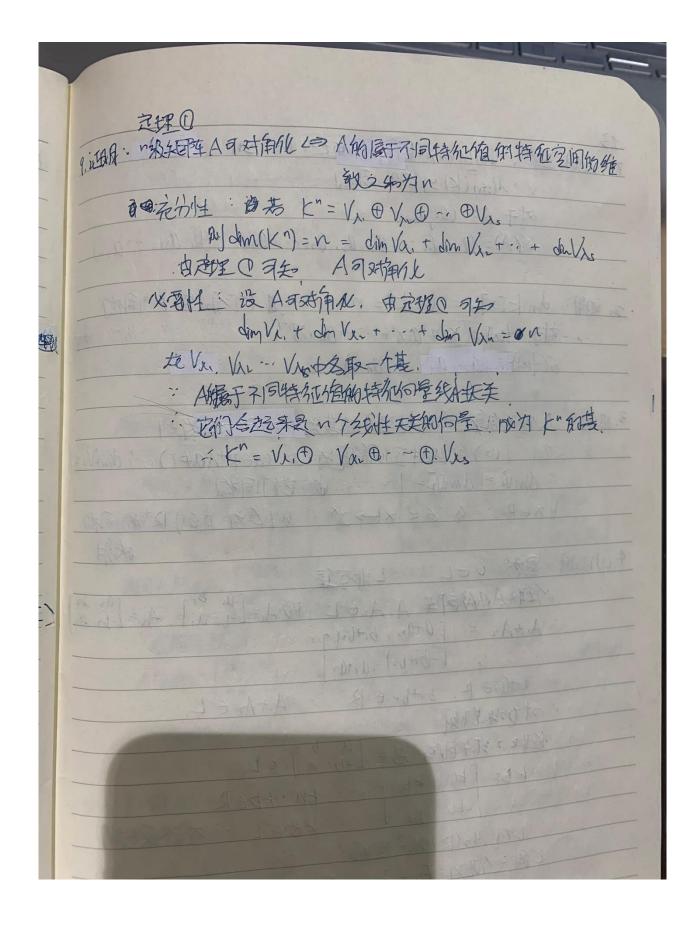
[a,bii a,biz ... a,bin] = [a,bii a,bix ... a,bin]

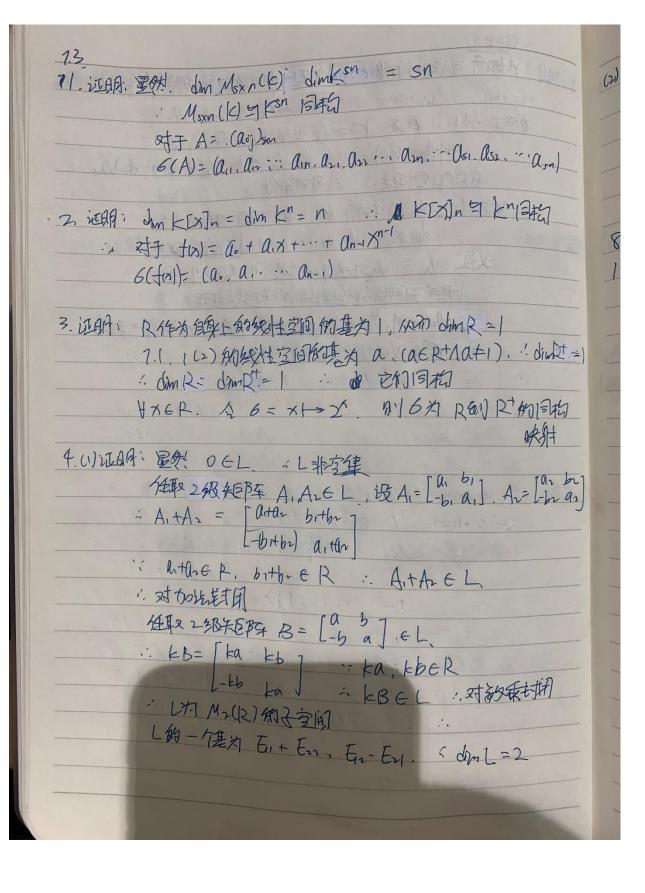
[a,bii a,bix ... a,bix] = [a,bii a,bix ... a,bix] -anbri anbriz - anbin] Laibni arbriz "an brin] · a. a. · an 两种 一 bij = D. i.j=1.···n 且 i+j · B内对称时限 港为 E1. En. En., 维致为 n.

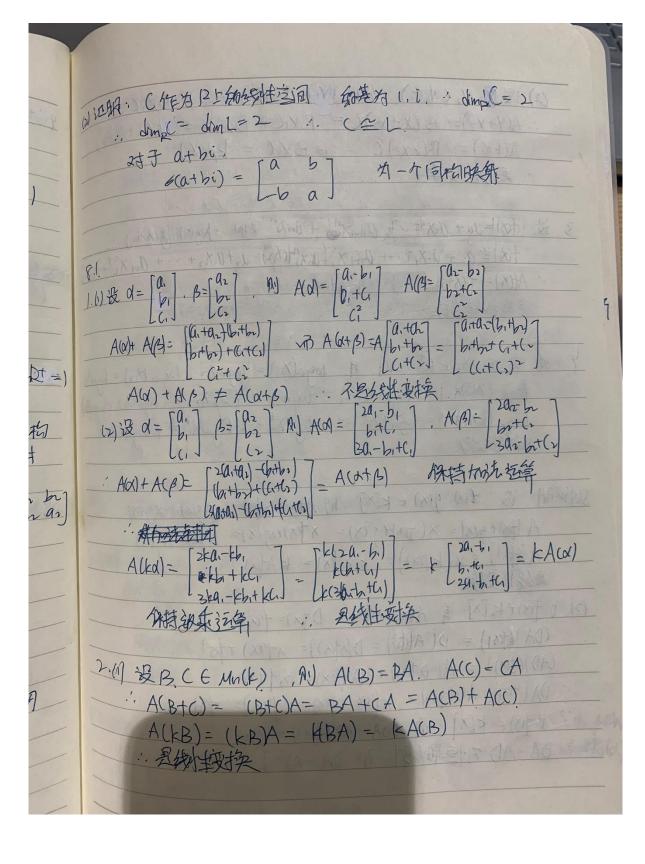




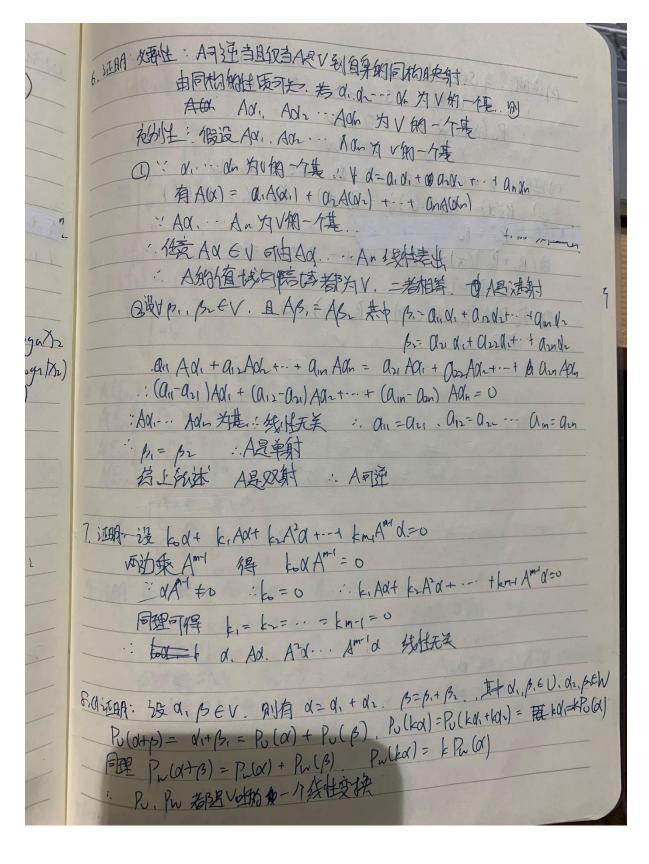


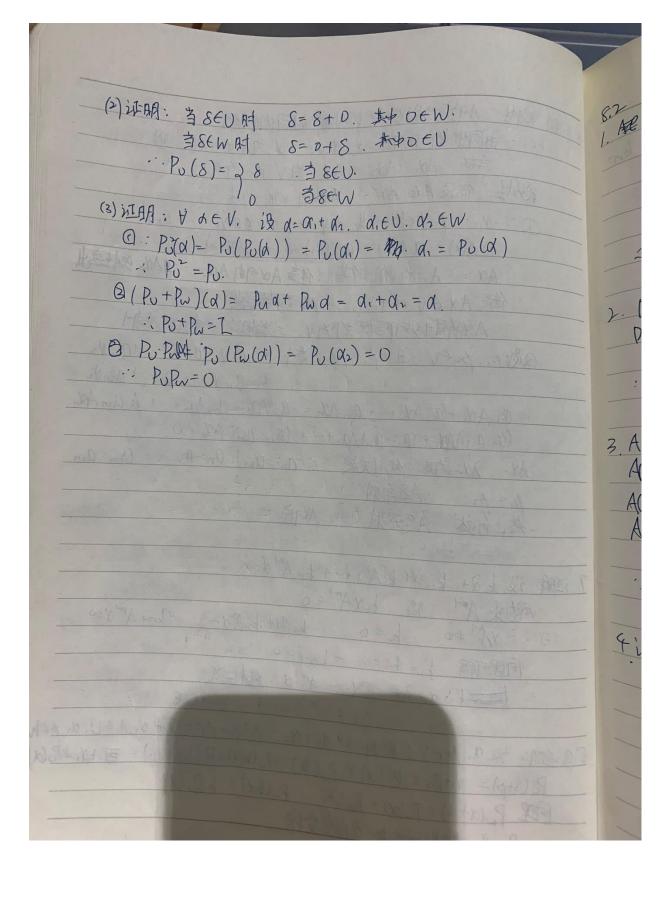


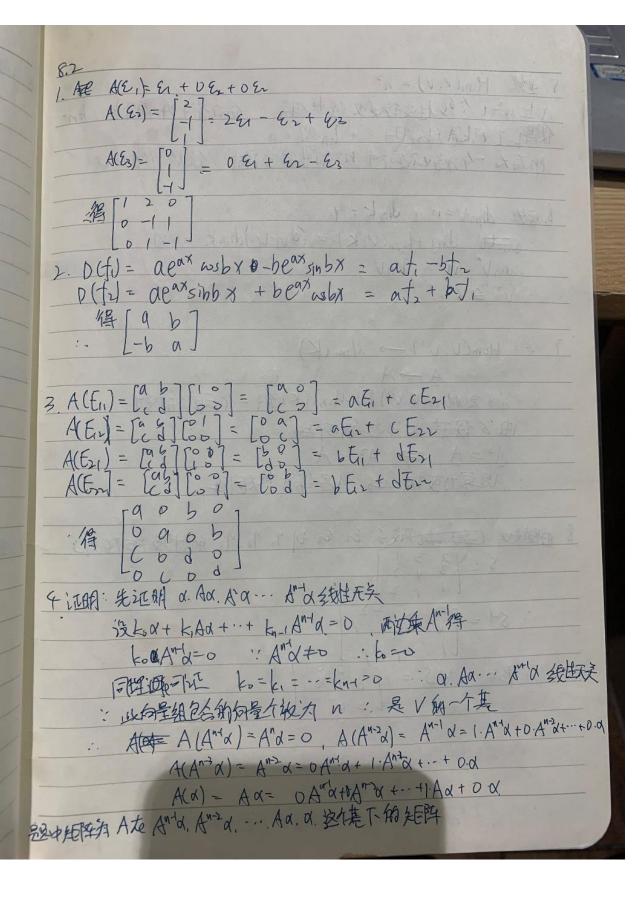


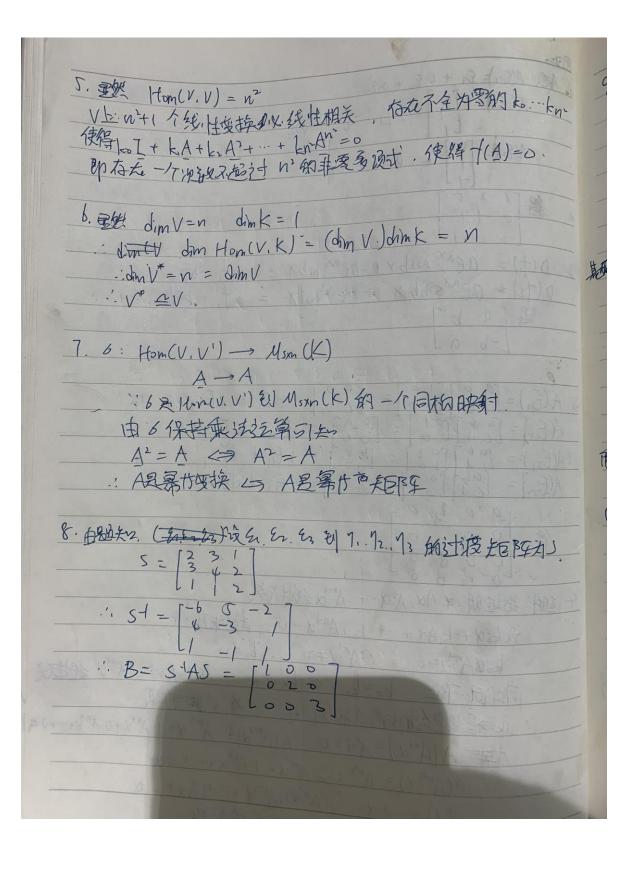


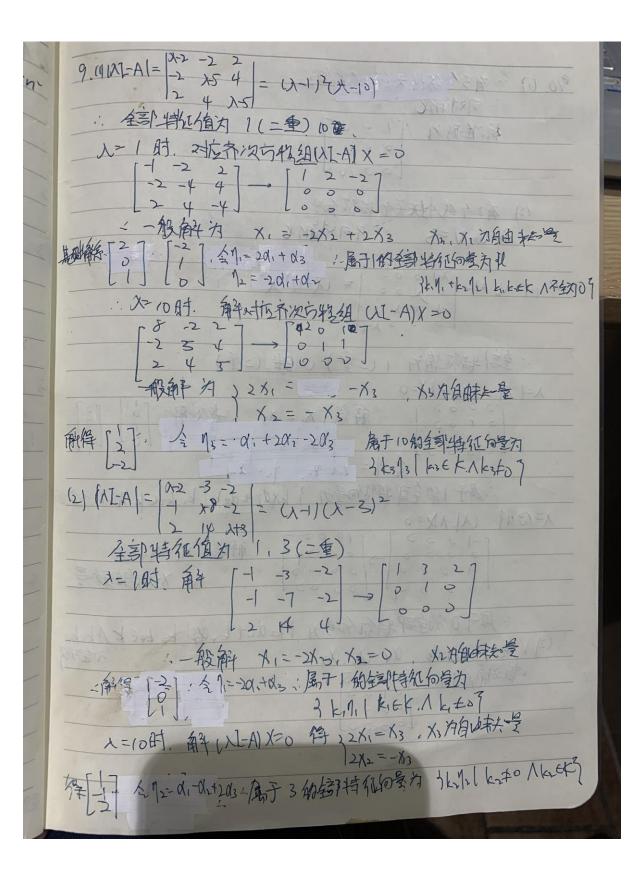
(2) 12 XI, XZE MACK). AND ACKI) = PXIC, ACKZ) = BXZC. - A(X+X2)= B(X+X2)(= BX(C+BX2C=A(Xi)+A(X)) A(EXI) = B(EXI) C = EBXIC = EACXI) 二是线性变换 3. 设设加。g(s) a k[x] , n) Afm = fintal. AgK)=g(x+a) A [fung(x)] = funa) + g(x+a) - Afix) +Agia) Akfus) = kfuston) = kAfus) 二光线性安接 Y. 新设力, xxeRt all # loga(X)=loga Xx loga (Xz)=loga (Xz loga (XIXx) = logal XiXx) = loga XI + loga Xx = logal (XI) + loga (Xx) Loga (ko XI) = loga (XI) = loga XI = kloga XI = kloga (XI) 一名线性变换 SUILLAH: iz for g(x) & k[x], Ry Afor = xfor Agor) = xgor) A HANtg(x) = x(t(x)+g(x) = x f(x)+xg(x) = Af(x)+ Ag(x). A[tfal] = x(ktral) = kxfal = kAfal (2) V fix) EK[x] 有 Afix)= xf(x). Df(x)=f(x) (DA)(f(x)) = D(Af(x)) = D(x(x)) = xf'(x) rf(x)(AD)(tx)) = A(D(tx)) = A(tx) = x(tx): ()A(ta))-AD(tx)= xf(1x)+tf(x)-xf(x)= f(x) · + fix) = fix] 有 (DA - AD)(fix)) = fix) · DA - AD 为与新华科· 部 DA - AD = L

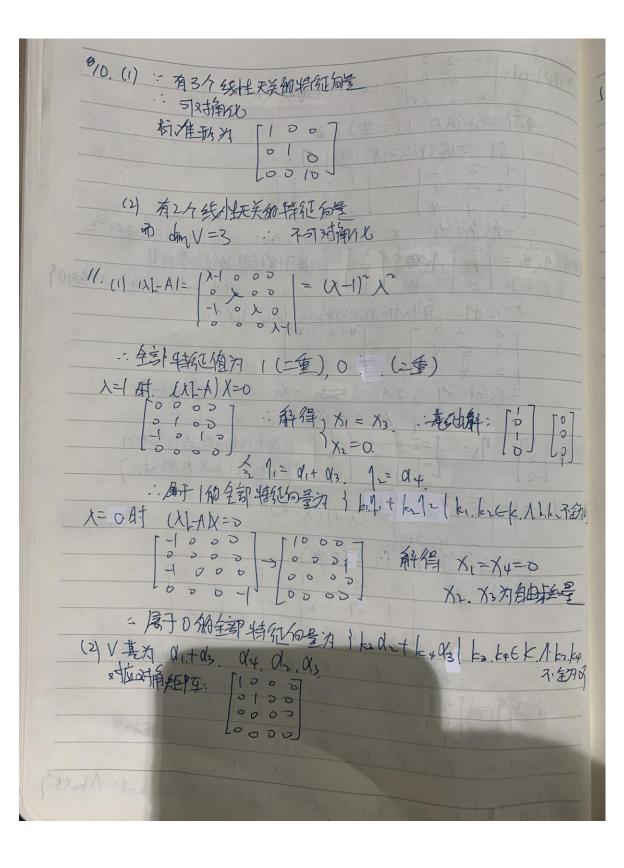












(2.证明: 6 设义, 入。是A的不同些征值, 1.12 分别为 A的属于人,人之的一个特别的量 A在V的一样的一个的打定为 进出的十年十二0()得 = 1= 1=0 (1) 式两边发来人 : k.A11+ k2A12=0 : kitilit kr /2 /2 = 0 (2) を川が断地 得 kiかり、+ kzかり2=0 (3) (2)-(3) 得 (1-12) 1=0 ·· /1 + /2 ·· k1=0 ·· k2/12=0 ·· k2=0 ·· k1=k2=0 ·· 1, 12 维姓夫美