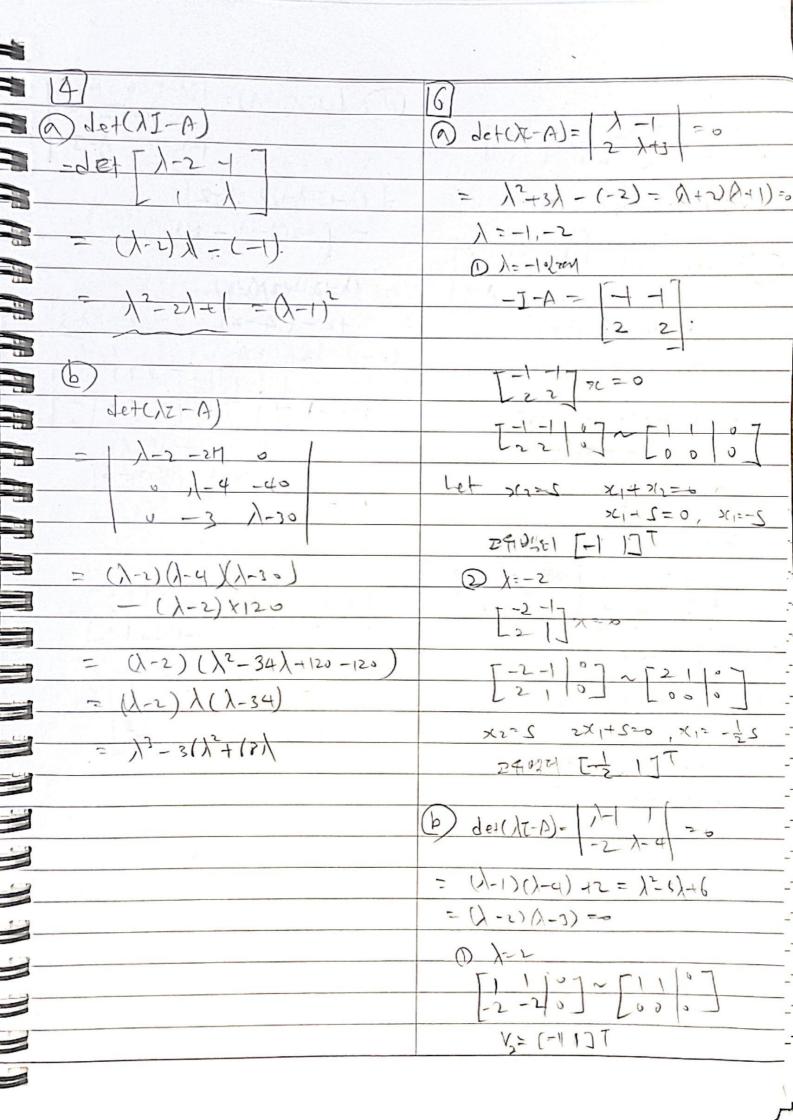
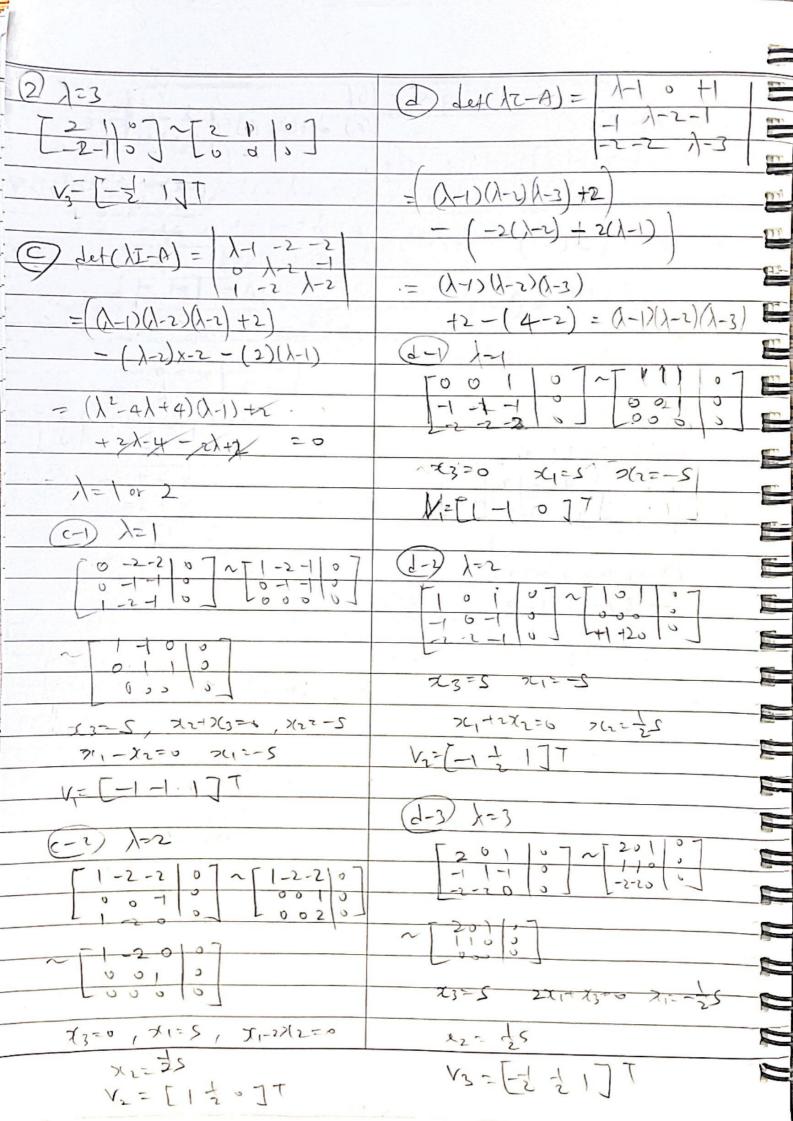
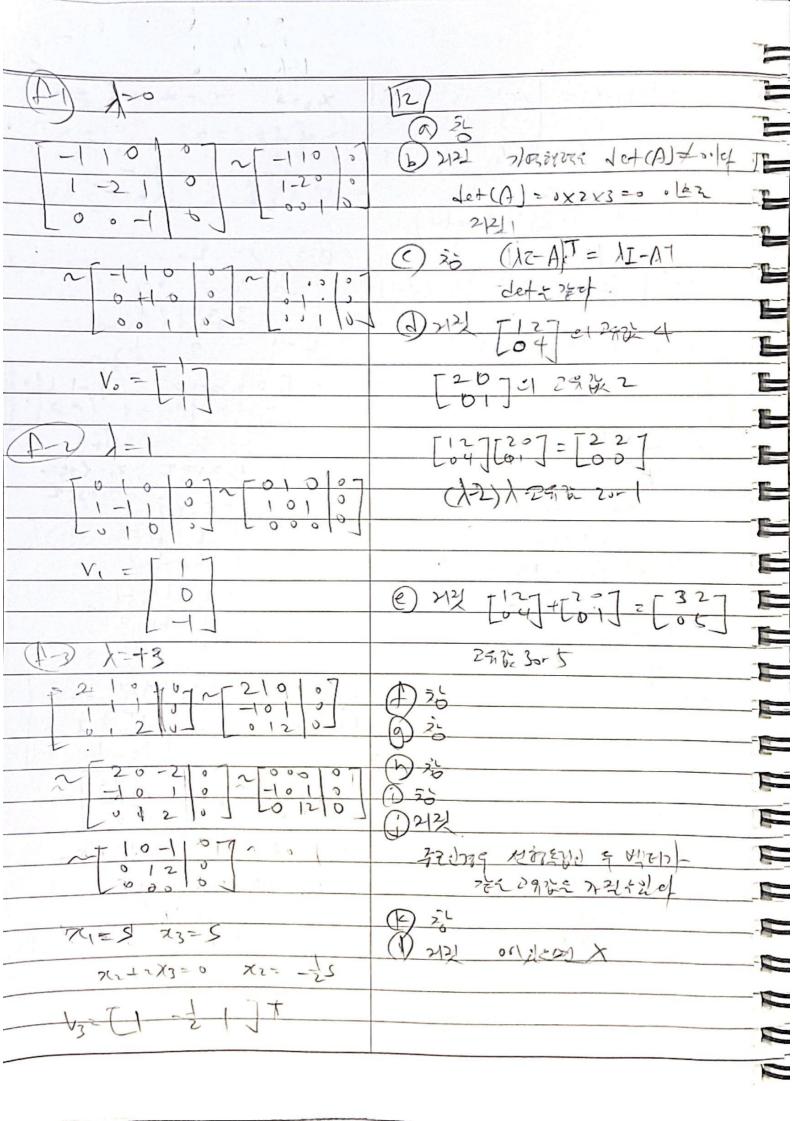
2) states & 2 m 8	
8-5 prost	8-8 prost
Let SV, V2 V, Booker	
V: et V: 2 2110[82 5V, 12Vr-1]01	pot) = 10+(/z-A) = (/-/1)(/-/2) (/-/n)
火元cey {v, vz·Vr,3元 せきれるはかかり	rd) = det(-A) = (-1) 1/1/2/3 /h
くV.、V2-V1分人人はおるちかり、かなり2	det(-A)=(-1)ndet(A) = ==
りいこといけてないこと CryVry もときない	1,7'
Av= aAv+aAv cmAvr-1	-, de (A) = 1,12/3 - 1n
@ Lu= CI XIM+CZ/2K - CHXHVM	
	p(X) Hu 1 3/2121142 2(-1)/:=-2/1
Onky X: = 3224	
(B) => 1141 = C1/141+C2/142 - G-1/14-1	det(AI-A) MIN MINHE JI-AU
	ZMB 18 BAKY YETUCK
Q=00102	λz-A=[]-α11 -α12α17]
0= c, (h,-hi) / +(2c/2-/2)/2	12-A= 1-011 -012 ain
- · cm (/m-/:) Vr-1	
day V, Vz Vr-12 1188 = 40/21	Ean - N-ann
3/27 MCRZ CI=ONOf(HL)	
(: १६५ ३५ वायकर भेष्र)	1 m = Z(-1)a;; = - Za;
	phinin you saled Aleger
1/cm V;= C1V1+ (2V2 Cr-1 Vr-1 =0	Zli=Zaii = EMA)
0122 1:2 2分間にかれるよう!	- tr(A) = 292 = 5610
2-7/2601 73471 25-12-2	
(V1. V2 Vr) 2 Minzyold	





763=5, 122-263=0, 2/2-25 e det(12-A)= ->(-1)(2=0 1-6 6 1-4 (N-1) (1+6) (N-4) + 154+154) 18(7+2) - 9(7-4) -18(7-1) -3 3 -3 0 = (x-1)(x+6)(x-4) + 108 (13/29-9/436-13/418) = (x-1)(x2+x-20)+128 712=1, 21=t, 21-5+t= + 91-144 13+12-20/-12-1+20 +9×-144 -118 λ3-12λ-1b V-z= S 1 + t 0 (A) JOY(YZ-A) = /-/ 10 -2 $= (\lambda - 1)^2 (\lambda - 2)$ => 13-12)-11= (H2)2(1-A) (e-) /24 = (/-1) (/2-3/+2) - 2(/-1) -3 9 -3 0 7 1 33 -3 0 -3 9 -3 0 7 1 66 0 0 = (1-1)(12-31) = (1-1)/(1-3) =



118 A-1= - (A2-5A+1) 11+1225 -6-12 -6-12 1/1/2=-14 1(5-11)=-14 13 49-12-12 14-2-4 -14-4+2 -112 XIX5+14=0 -12+1+4 12-2-2 -42-6-12 12-5/1-14=0 1 42-12-6 12-2-2 -12+4+1 = (1-1) (1tr) 13 8 1 01-2 -1 20 1+6+b= 8 - KA= 24 (1-1) (1+1)2-24-24 -12()+1)-12()+1)+4()+1) (1-1)(12-48 (-24)-24-41-28) (zr = 13+2/21/-11/2-14/-11-48 70 +24/+24-4)+28 = (x-1)(x-3) = 13-5/2+11-3=0 - (8(h-2)) 3] = A(A2-5A-7]) > (/-2) (/2-4/+3-8) I = A(A2-FA-1)I) = (1-2) (1-4x-45) = (1-2) (1-3) (1-4) Ael 298 2 5, -1 3 1. 3A3-2A2+ A+4Ze1 29 Th 3 × 8 - 2 × 4 + 2 + 4 = 22 : 22, 334, 3×125 - 2×25-5-4-334

-3-2-144 = -2

```
import numpy as np

A = np.array([[1, -1], [2, 4]])
w1, V1 = np.linalg.eig(A) # A의 고등값과 고유벡터 계산

print("A의 고윳값 = ", w1)
print("A의 고유벡터 = ", V1)

A의 고윳값 = [2. 3.]
A의 고유벡터 = [[-0.70710678 0.4472136]
[0.70710678 -0.89442719]]
```