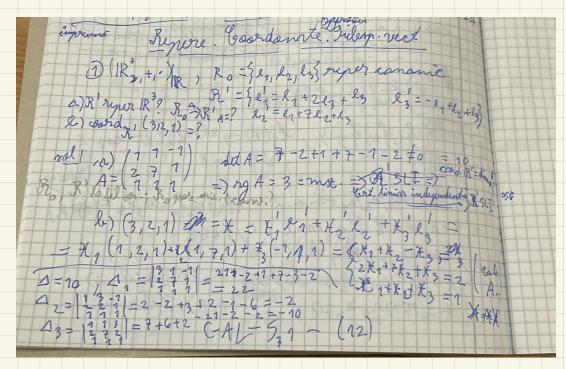
Seminary 4



$$A = \frac{A_1}{A} - \frac{22}{10}, \quad \xi_2 = \frac{A_2}{A} - \frac{2}{10}, \quad \xi_3 = -7$$

$$X = AX' = \begin{pmatrix} x_1 \\ x_2 \\ x_3 \end{pmatrix} = \begin{pmatrix} 1 & 1 & 1 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} y_1 & 1 \\ y_2 & 1 \\ y_3 & 1 \end{pmatrix} = \begin{pmatrix} x_1 + x_2 & 1 & y_3 & 1 \\ y_2 & 1 & x_3 & 1 \\ y_3 & 1 & y_3 & 1 \end{pmatrix}$$

$$x_{3}^{1} = x_{3}$$
 $x_{2}^{1} = x_{2} - x_{3}$
 $x_{1}^{1} = x_{1} - x_{2}$
 $= (x_{1} - x_{2})$
 $x_{3}^{1} = x_{3} - x_{2}$

```
4. (1R, Ex3,+,·)/1R
      V= 9 PERZEX3 / P(0)=03
       V2= 9 PE(P 3 Ex 3 / P(1)=0}
         V9= 5PE 1835x3/P(0)= Pcn =03
a. Vi = subsp? ( 1=1,3)
         P=00 + 0, X1 02 X2 + 93 X3
          P= P
          (0) =0=, ap=0
         =, P= q, x +az X +a, x 3, Cx = b, X+ b, X 2+ b, X3
     Fie P, Ge V1 = P+Q = (a, +b+) X+ (az+b2) X2+ (ag+b3) x3eV2
                                                           d P = do, X + Jo2 x ? + danx 3 e V1
                                                               V1 : Soux + 02 x2+ 03 X) | a1, a2, axelp 3 c(P3 tx 1
                                                                                                                                                                                 subsp. vect.
      P= 9, x+ 2 x2 40, x3 € C 9 X, X2, x3 > = V4 (56) 1
         Ro = 41, X, X2, X22 rep. Comount in 183 Ex1
         R1 = 7 x, x2, x3 1 C 1Po C(Li)=, R1 SLI @
              (1) + (0) = 1 R. rep. in V
           PE V2
   => P(1 = 0 = 1 90 + 94 + AZE43 = 0
                       00= - 91-92-93
         P= (-a1-a2-00) + a1 x +a2 x2 +a2 x3
         P= a1 (x-1) + a2 (x2-1) + a7 (x3-1) € < 9 x-1, x2-1, x3-1 3>= R3
                 R2 = sist. de generatori pt. V2
            Dem ca R2 = SLi
         Ro= 91, x, x2, x3 3 rep. canonic pt. 1830=1
         P2: 4 X-1, X2-1, X3-13
              R_2 = \frac{1}{1} + \frac{1}{1} 
          R= 9x, x2, x32}
            R2= 4x-1, x2-1, x3-13
             Va= 9 PE 1R3 TX 31 Pco1 = Pco1 = 03
                     P= 90 +01 X+02 X2+012x2 = (-02-01) X +02X2 +0123: 02 (X2-X) +02(X3-X) E < 7 x2-x, x3-x3 >
                           P(0) = 0 = 1 00 = 0
                          P(1=0=, a, taz+a, 0=, a,= -92-93 Rn= 56
                                                                                                                                                              rg ( 0 0 ) = 2 - max. = , R3 = reper
= , R3 = SLi
```

c)
$$P_1 = X + 2X^2 + 3X^3 \in V_1$$

 $(1, 2, 3) - coord.$ în report ex P_1
 $P_2 = 1 + 2X^2 - 3X^3 \in V_2$
 $= a(x-1) + b(x^2-1) + c(x^2-1)$
 $= a(x-1) + b(x^2-1) + c(x^2-1)$

(0,2,-3) - coord. in vaport ou Rz

(3,-4) -coord. în raport cu Rg

Ra= 9 x2-x, x3-x7 - reper in V3

e) 1R3Lx)= W1 @ W2 (W3

Partitionam reperul canonic in 3 submultimi

> R'SLF (vector nenul) + (1) =) R'ryon dim |RV' = 1 |RV' = 1| |RV' = 1||