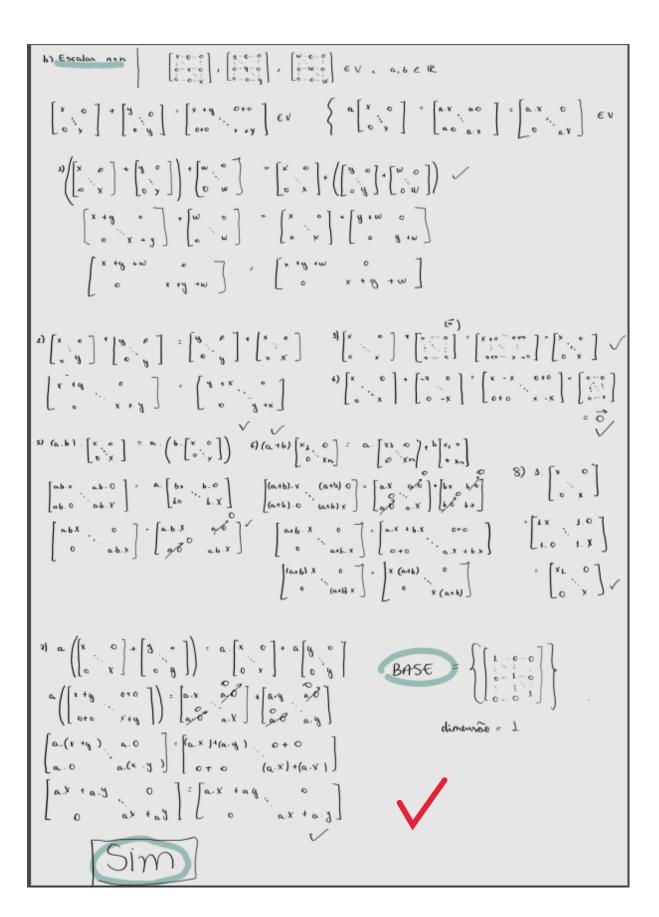
Introdução à Álgebra Linear

8,5 muito bem

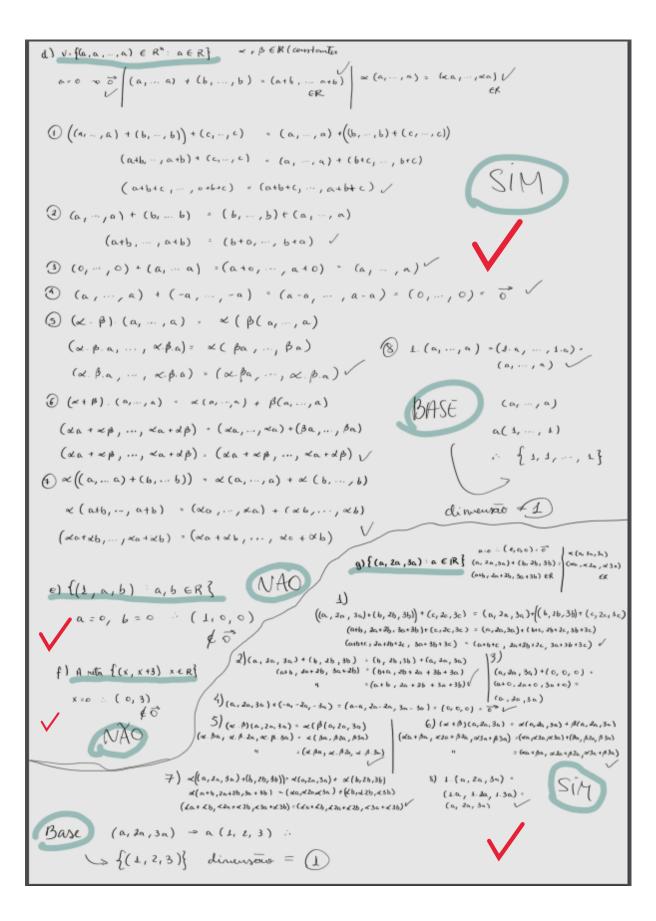
Lista 5 Turma 02 A Grupo 22

Integrantes: Raquel Temóteo Eucaria Pereira da Costa, Raul Breno Fiuza Bento, Renato Santos Fernandes de Medeiros, Riller Silva de Lacerda

QUESTÃO 5)



dimensão = 2



QUESTÃO 9)

9-> V,=[20] V2=[02] V3=[00]
Ve1 = [00]
Da[20]+b[02]+c[00]+d[00]-
[00] en 00 [00] + [06] + [00] + [00]
unão [ab]=[00] mace [00] [cd]=[00] mace [00] [V1) V21 V3, V4] 4 d T C=0 d=0
{V1) V21 V3, V4} 4 d T C=0 d=0
appl
[1] or [10] + b[01] + c[00] + d[00] = [34]
[00]+[0b]+[00]+[00]=[xy] [00]+[00]+[00]=[xy]
[ab]=[xy] &[x,x2,x3,x4] gloo R'/ [ca]=[xy] (8[x,x2,x3,x4] gloo R'/ [V],V2,V3,V4] sooBan part R'/

QUESTÃO 11)

```
11-7
  B={(1,1,1), C-1,1,0), (1,0,-1)}
 Xa = (1,0,0) XB?
  XB=mxA m=B-1 XAA
 B = \begin{bmatrix} 1 & -1 & 1 \\ 1 & 1 & 0 \\ 1 & 0 & -1 \end{bmatrix} \quad B = \begin{bmatrix} 1/3 & 1/3 & -2/3 \\ -1/3 & 2/3 & -6/3 \\ 1/3 & 1/3 & 2/3 \end{bmatrix}

\begin{bmatrix}
102 & 1 & 1 & -1 \\
0 & 1 & 1 & 0 & 1 & -1 \\
0 & 0 & 1 & 1 & 0 & 1 & -1
\end{bmatrix}

\begin{bmatrix}
102 & 1 & 1 & -1 & -1 & -1 \\
0 & 10 & 1 & 3 & 2/3 & -5/3 \\
0 & 0 & 1 & 1 & 1 & 3 & 2/3
\end{bmatrix}

\begin{bmatrix}
102 & 1 & 1 & -1 & -1 & -1 \\
0 & 10 & 1 & 3 & 2/3 & -5/3 \\
0 & 0 & 1 & 1 & 1 & 3 & 2/3
\end{bmatrix}

\begin{bmatrix}
102 & 1 & 1 & -1 & -1 & -1 & -1 \\
0 & 10 & 1 & 3 & 2/3 & -5/3 \\
0 & 0 & 1 & 1 & 1 & 3 & 2/3
\end{bmatrix}

\begin{bmatrix}
103 & 1 & 1 & 3 & 2/3 & -5/3 \\
0 & 0 & 1 & 1 & 1 & 3 & 2/3
\end{bmatrix}

 000 113 113 -913
```

$$X_{B} = B^{-1}X_{A}$$
 $X_{B} = \begin{cases} 2/3 & 1/3 & -4/3 \\ -1/3 & 2/3 & -5/3 \\ 1/3 & 1/3 & 2/3 \end{cases} \cdot \begin{bmatrix} 1 \\ 0 \\ 0 \end{bmatrix}$
 $X_{B} = \begin{bmatrix} 1/3 \\ -1/3 \\ 1/3 \end{bmatrix}$
 $X_{B} = \begin{bmatrix} 1/3 \\ -1/3 \\ 1/3 \end{bmatrix}$

QUESTÃO 15)

QUESTÃO 19)

19-
$$x(2,7,0) + y(0,-1,1) + z(1,1) = 0$$

 $x+z=0$ $x=-z$
 $x-y+z=0$ $y=0$
 $y+z=0$ $z=0$
 $x=y=z=0=1$
 $\{V_4,V_2,V_3\}=3$, and $\{V_4,V_2,V_3\}=1R^3$

32) \$1= {(1,0),(1,2)}
32) \$1= {(1,0),(0,2)}, B2= {(-1,0),(1,1)}, B3= {(-1,-1),(0,-1)}
2035 N/2(-110) = C(1/(10)+001/0)
-1 = Q11 = b/Q11 = -1
0= 2021 621 = 0
V2=(1.1) = 9(12(1.0) + 927/012)
1= 412 =0 412=1
1= 2022 a22=1/2
$\frac{1}{ A ^{2}} = \frac{ A ^{2} - A ^{2}}{ A ^{2}}$
b) [I] B3 =?
71= (-11-1)= and-1101+a21(11)
$(-1)^{-1} = (-a+10) + (a+1)$
-1 = -911 + 971 $911 = 0$
= -1 = 0 + a21 = raan = -1
-1 = -ant(-1)
7-1+1 = ana and - hos + are(1)
0=-a11
2a=(01-1) = arc(-10) + a22(11)
$0 = a_1a(-1) + a_2a(1)$
-1 = a12+0 + azz (1)
[-1=azz]
$0 = -a_{12} + (-1)$
[a12 = 1]
$\left[: \left[I \right]_{\beta_{2}}^{B_{3}} = \left[0 \cdot 1 \right] \right]$
1-1-11
0) (I] B3 = 2 W1= (-1-1) = an(110)+a21(012)
1-1=a11 = 0(119) (12)
1-1=2021 =1-1/0=021
Wa=(01-1) = a1a(110) + aaa(012) = 0 b= a1a) 1-1=0 aaa
USA == 1/a

[:[I]B3 = [-1 0]	
[] β2 [] β3 = [+1 1]. [$\begin{bmatrix} 0 & 1 \\ -1 & -1 \end{bmatrix} = \begin{bmatrix} 0 & -1 & -1 & -1 \\ 0 & -1/a & 0 & -1/a \end{bmatrix} \Rightarrow$
b) Aly Linha de todes as mad	xilies é mai nula

QUESTÃO 33)

333 B1={[00],[00]]
B={[18],[8],[8]],[8]
[6 8] = 1[6 8] +0[8 8] + 0[89]
[
[8 +]=1[8]-1[8]-1[8]
20101010128 Linhar 20101+092 (10)+952
[I]30=[1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
12=13= 1101010111 +0331001+14311101+013:(0
1= a13+a13