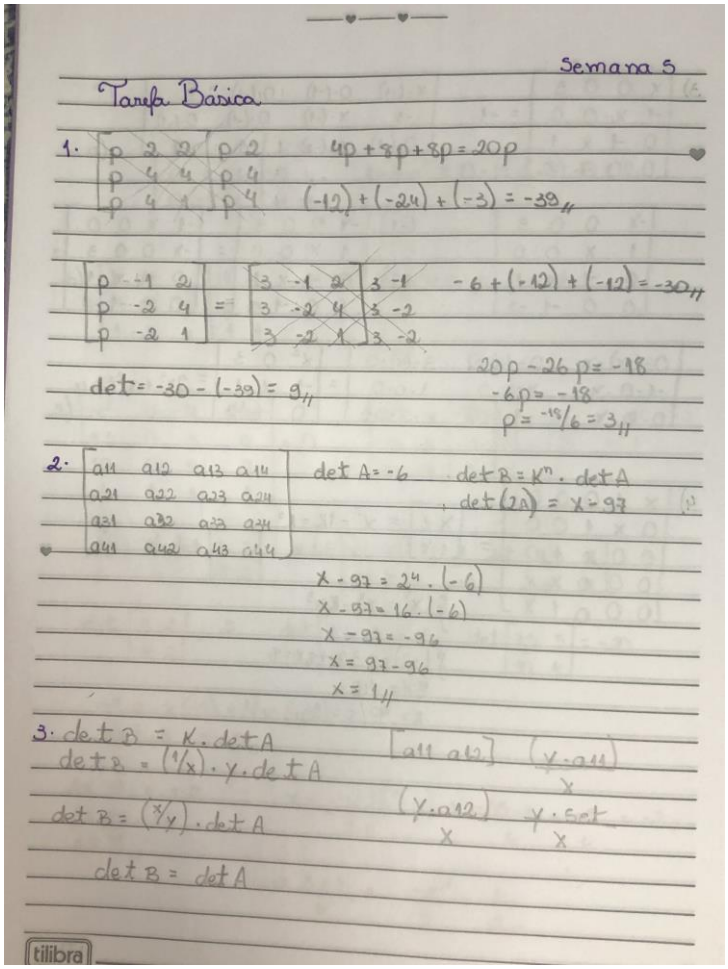


Semana 5

Tarefa Básica

1. $\begin{vmatrix} p & 2 & 2 & p & 2 \\ p & 4 & 4 & p & 4 \\ p & 4 & 1 & p & 4 \end{vmatrix}$ $4p + 8p + 8p = 20p$

$(-12) + (-24) + (-3) = -39$ //

$\begin{vmatrix} p & -1 & 2 \\ p & -2 & 4 \\ p & -2 & 1 \end{vmatrix} = \begin{vmatrix} 3 & -1 & 2 & 3 & -1 \\ 3 & -2 & 4 & 3 & -2 \\ 3 & -2 & 1 & 3 & -2 \end{vmatrix}$ $-6 + (-12) + (-12) = -30$ //

$det = -30 - (-39) = 9$ //

$20p - 26p = -18$

$-6p = -18$

$p = -18/6 = 3$ //

2. $\begin{vmatrix} a11 & a12 & a13 & a14 \\ a21 & a22 & a23 & a24 \\ a31 & a32 & a33 & a34 \\ a41 & a42 & a43 & a44 \end{vmatrix}$ $\det A = -6$ $\det B = K^n \cdot \det A$

$\det(2A) = X - 97$

$X - 97 = 2^4 \cdot (-6)$

$X - 97 = 16 \cdot (-6)$

$X - 97 = -96$

$X = 97 - 96$

$X = 1$ //

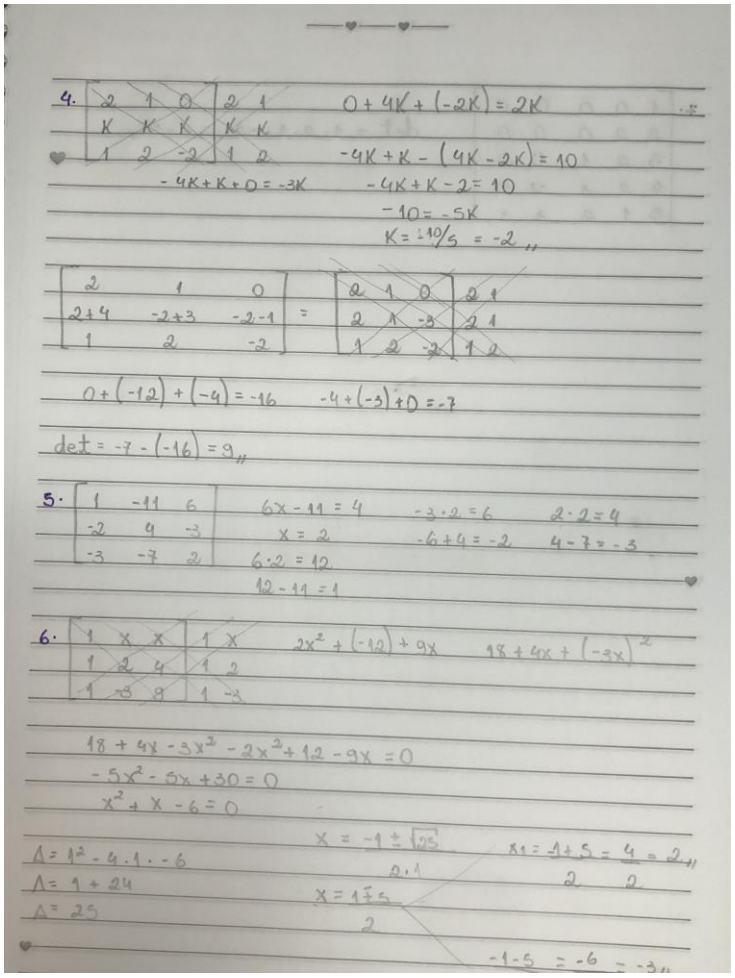
3. $\det B = K \cdot \det A$

$\det B = (1/x) \cdot y \cdot \det A$

$\det B = (x/y) \cdot \det A$

$\det B = \det A$

$\begin{vmatrix} a11 & a12 \\ (y \cdot a12)/x & (y \cdot a22)/x \end{vmatrix}$ $\begin{vmatrix} y \cdot a11 & \\ x & \end{vmatrix}$



Obs: no final é: -1-5/2 = -6/2 = -3

7.
$$\begin{vmatrix} 1 & 0 & 0 & 0 & 0 \\ 2 & 2 & 0 & 0 & 0 \\ 3 & 2 & 1 & 0 & 0 \\ 4 & 2 & 3 & -2 & 0 \\ 5 & 1 & 2 & 3 & 3 \end{vmatrix}$$

$\det = 1 \cdot 2 \cdot 1 \cdot -2 \cdot 3 = -12$