ATIVIDADE

1-

a) **det = <u>-7</u>**

b) **(2x7) - (9x3) = <u>-13</u>**

c) **(1x2) - (-1x2) = <u>4</u>**

d) **((-2)(-3)) - (0x4) = <u>6</u>**

e) **(1/2 x4) - (1/3 x 3) = <u>1</u>**

2-

X^2 - 2x - (-3x+(-6)) = 12

X^2 - 2x - (-3x-6) = 12

X^2 - 2x - (-3x) = 12 + 6

X^2 - (-3x+2x) = 18

X^2 = (-1x) = 18

X^2 = 18/1x = x^2 = 18, <u>logo x = 9</u>

3-

3x – 5x + 10 = x

3x – 5x – 10 = x

-2x – 10 = x

-2x –x = 10 = -3x = 10 <u>x = 10/3</u>

4-

$$\frac{1}{2}\begin{bmatrix}3 & +\\ -4 & \end{bmatrix} x = \begin{bmatrix}-1 & 3\\ 4 & 2\end{bmatrix} >>> x = \begin{bmatrix}-1 & 3\\ 4 & 2\end{bmatrix} \begin{bmatrix}3 & -\\ 2 & \end{bmatrix} \begin{bmatrix}1 & 3\\ 2 & -4\end{bmatrix}$$

X = [-2 0]

[2 6]

5- $\begin{matrix}a11 & a12 & a13\\ a21 & a22 & a23\\ a31 & a32 & a33\end{matrix} = \begin{matrix}\mathbf{0} & \mathbf{-1} & \mathbf{-2}\\ \mathbf{1} & \mathbf{0} & \mathbf{-1}\\ \mathbf{2} & \mathbf{1} & \mathbf{0}\end{matrix}$

[0 -1 -2] [0 1 2] [0 -1 -4 0 -1]

[1 0 -1] [-1 0 1] = [-1 0 -1 -1 0]

[2 1 0] [-2 -1 0] [-4 -1 0 -4 -1]

0 1 4 -4 -4

Det A = (-4 –4) - (1 + 1) = -8 –2 = 10

Det A = 10

6-

a) 3 2 1 3 2

1 2 5 1 2 **det. = (10 +(-1)) - (-15+2)**

1 -1 0 1 -1 **9 + 13 = 22**

2 -15 0 0 10 -1

b) 1 -1 2 1 -1 **det. = (7+4) - (14-5)**

5 7 -4 5 7 **11 – 9 = 2**

1 0 1 1 0

14 0 -5 7 4 0

8)

a11 a12 a13 b11 b12 b13

a21 a22 a23 + b21 b22 b23

a31 a32 a33 b31 b32 b33

1 2 2 -1 1 1 0 3 3 0 3

1 1 2 + -1 -1 1 = 0 0 3 0 0

1 1 1 -1 -1 -1 0 0 0 0 0

0 0 0 0 0

9- **3-2 = 1** **Sim**

2x3 + 3 – 2 = 0

10- **1 + 5x1 – 1 = 5** **Sim**

7 – 2 + 3 = 8

2 – 5 + 11 = 8

11- **2 + 1 – 3 = 0**

2 – 1 + 3 = 4 **Não**

-2 + 1 + 3 = -5

16-

a) **3x + 2y = 0**

2x + 5y = 0

b) **5x + 7y – 2z = 11**

x – y + 3z = 13

18 -

9x + y = 18

3x + y = 12

6x = 6 x = 6/6 = 1

9 + y = 18

y = 18 - 9

y = 9

(1,9)

1 + 9 = 10