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Lista de exercícios

1. $A = \begin{vmatrix} 1 & 2 & 0 \\ 0 & 1 & 1 \\ 0 & -1 & 1 \end{vmatrix}$ $1 \cdot \text{cof}(a_{11})$
 2

\uparrow

$\begin{vmatrix} 1 & 1 \\ -1 & 1 \end{vmatrix} = 1 - (-1) = 2$

$\det A = 2 //$

$B = \begin{vmatrix} 1 & 0 & 0 & 3 \\ 2 & 1 & -1 & 4 \\ 0 & 0 & 0 & 3 \\ 0 & 1 & 1 & 4 \end{vmatrix}$ $3 \cdot \text{cof}(a_{34}) \rightarrow 3+4=7$
 $3 \cdot 2$ \downarrow
impar

\rightarrow 6

$\det B = -6 //$

$\begin{vmatrix} 1 & 0 & 0 \\ 2 & 1 & -1 \\ 0 & 0 & 1 & 1 \end{vmatrix}$ $= 1 - (-1) = 1 + 1 = 2$

$0 \begin{vmatrix} 0 & 1 & 1 \end{vmatrix} 1$

$-1 \begin{vmatrix} 1 & 0 & 0 \end{vmatrix} 0$

$0 \begin{vmatrix} 2 & 1 & -1 \end{vmatrix} 0$

$1 + 0 + 0 = 1$

$0 + (-1) + 0 = -1$

2

x^2	0	x	$-\frac{1}{10}$	
7,5	0	5	2	=0
10	0	4	2	
1	1	1	1	

↑

x^2	x	$-\frac{1}{10}$	x^2	x
7,5	5	2	7,5	5
10	4	2	10	4

$-5 \quad 8x^2 \quad 15x$ $(10x^2+20x-3)-(-5+2x^2+15x)$

$2x^2+5x+2$

$10x^2+20x-3$ $\Delta = 5^2 - 4 \cdot 2 \cdot 2$

$\Delta = 25 - 16$

$\Delta = 9$

$x = \frac{-5 \pm \sqrt{9}}{2 \cdot 2}$

$x = \frac{-5 \pm 3}{4}$

$x' = \frac{-5+3}{4} = \frac{-2}{4} = -\frac{1}{2} //$
 $x'' = \frac{-5-3}{4} = \frac{-8}{4} = -2 //$

alternativa (b) $x_1 = -2$ ou $x_1 = -1/2 //$

3

x	0	0	3	
-1	x	0	0	
0	-1	x	1	
0	0	-1	2	←

-1 conf (242) - impot -2 (244)

$-1 \cdot x^2 + 3$ $-2 \cdot x^3$

$-x^2 + 3 + x^2 + 3$

alternativa (A) $-2x^3 + x^2 + 3 //$

x	0	3		x	0	0
-1	x	0		-1	x	0
0	0	-1	1	x^2	0	0
0	x	0	3	3	0	x
0	-1	x	0	0	0	0

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