

$$1- \begin{vmatrix} p & -1 & 2 \\ p & -2 & 4 \\ p & -2 & 1 \end{vmatrix}$$

$$(-2p - 4p - 4p) - (-4p - p - 8p)$$

$$-10p - (-13p)$$

$$-10p + 13p$$

$$p = 3$$

$$\begin{vmatrix} 3 & -1 & 2 \\ 3 & -2 & 4 \\ 3 & -2 & 1 \end{vmatrix} \Rightarrow 9 \text{ // LETRA (E)}$$

$$(-6 - 12 - 12) - (-12 - 3 - 24)$$

$$-30 - (-39)$$

$$9 \text{ //}$$

2- 5ª propiedad

$$\det(2A) = x^m \cdot \det A$$

$$2^4 \cdot -6$$

$$16 \cdot -6$$

$$-96 \text{ //}$$

$$\det(2A) = x \cdot 97$$

$$-96 = x \cdot 97$$

$$x = 1 \text{ //}$$

$$\text{LETRA (C) //}$$

3-

$$\begin{vmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{vmatrix}$$

$$\Rightarrow X/Y // \text{LETRA (C)} //$$

↑

$$a_{11} = y$$

$$a_{21} = y$$

$$a_{31} = y$$

$$\begin{cases} a_{31}/X \\ a_{32}/X \\ a_{33}/X \end{cases}$$

A determinante agora
se torna $(y, a_{11})/X$
ou seja, está
multiplicando y/X
ou dividindo X/y

4-

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

$$(-4K - K) - (-2K + 4K) = 10$$

$$-5K - (2K) = 10$$

$$-5K = 10$$

$$K = -2 //$$

$$\begin{vmatrix} 2 & 1 & 0 \\ 2 & 1 & -3 \\ 1 & 2 & -2 \end{vmatrix}$$

$$(-4 - 3) - (-4 - 12)$$

$$-7 - (-16)$$

$$9 //$$

$$\text{LETRA (C)} //$$

$$5 - \begin{pmatrix} 1 & -11 & 6 \\ -2 & 4 & -3 \\ -3 & -7 & 2 \end{pmatrix}$$

4

$$-11 + 4 = -7 // \text{ LETRA (D)}$$

$$6 - \begin{vmatrix} 1 & x & x^2 \\ 1 & 2 & 4 \\ 1 & -3 & 9 \end{vmatrix}$$

$$(18 - 3x^2 + 4x) - (2x^2 + 9x - 12)$$

$$18 - 3x^2 + 4x - 2x^2 - 9x + 12$$

$$-5x^2 - 5x + 30 = 0$$

$$\Delta = 25 + 600$$

$$x_1 = \frac{5 + 25}{-10} = -3 //$$

$$\Delta = 625$$

$$x_{11} = \frac{5 - 25}{-10} = 2 //$$

$$V = \{-3, 2\} //$$

7 -

1	0	0	0	0
2	2	0	0	0
3	2	1	0	0
4	2	2	-2	0
5	1	3	3	3

$$\Rightarrow 1 \cdot 2 \cdot 1 \cdot -2 \cdot 3 = -12 //$$

LETRA (D) //