Calificación recibida 100 % Para Aprobar 100 % o más

1. Which of the following sets of vectors form a basis for the null space of

1/1 punto

$$\begin{pmatrix} 1 & 2 & 0 & 1 \\ 2 & 4 & 1 & 1 \\ 3 & 6 & 1 & 1 \end{pmatrix}?$$

$$\bigcirc \left\{ \begin{pmatrix} -2\\1\\0\\0 \end{pmatrix}, \begin{pmatrix} 4\\-2\\0\\0 \end{pmatrix} \right\}$$

$$\bigcirc \left\{ \begin{pmatrix} 0 \\ 0 \\ 0 \\ 0 \end{pmatrix} \right\}$$

$$\bigcirc
\left\{ \begin{pmatrix} 0 \\ 0 \\ -3 \\ 2 \end{pmatrix} \right\}$$

$$\left\{ \begin{pmatrix} -2\\1\\0\\0 \end{pmatrix} \right\}$$

**⊘** Correcto

2. The general solution to the system of equations given by

1/1 punto

$$x_1 + 2x_2 + x_4 = 1,$$

$$2x_1 + 4x_2 + x_3 + x_4 = 1,$$

$$3x_1+6x_2+x_3+x_4=1,\\$$

is

$$\bigcirc a \begin{pmatrix} 0 \\ 0 \\ 0 \\ 1 \end{pmatrix} + \begin{pmatrix} -2 \\ 1 \\ 0 \\ 0 \end{pmatrix}$$

$$\bigcirc a \begin{pmatrix} 0 \\ 0 \\ 0 \\ 0 \\ 1 \end{pmatrix} + \begin{pmatrix} 0 \\ 0 \\ -3 \\ 2 \end{pmatrix}$$

$$\bigcirc a \begin{pmatrix} 0 \\ 0 \\ -3 \\ 2 \end{pmatrix} + \begin{pmatrix} 0 \\ 0 \\ 0 \\ 1 \end{pmatrix}$$

**⊘** Correcto

3. What is the rank of the matrix

$$\begin{pmatrix} 1 & 2 & 0 & 1 \\ 2 & 4 & 1 & 1 \\ 3 & 6 & 1 & 1 \end{pmatrix}$$
?

- O 1
- O 2
- 3
- O 4