¡Felicitaciones! ¡Aprobaste!

Calificación recibida 100 % Para Aprobar 100 % o más

Ir al siguiente elemento

1. Let $\lambda_1$ and $\lambda_2$ be distinct eigenvalues of a two-by-two matrix $\mathrm{A}$. Which of the following cannot be the associated eigenvectors? 1 / 1 punto

- $\mathrm{x}_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}, \mathrm{x}_2 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$
- $\mathrm{x}_1 = \begin{pmatrix} 1 \\ -1 \end{pmatrix}, \mathrm{x}_2 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$
- (●) $\mathrm{x}_1 = \begin{pmatrix} 1 \\ -1 \end{pmatrix}, \mathrm{x}_2 = \begin{pmatrix} -1 \\ 1 \end{pmatrix}$
- $\mathrm{x}_1 = \begin{pmatrix} 1 \\ 2 \end{pmatrix}, \mathrm{x}_2 = \begin{pmatrix} 2 \\ 1 \end{pmatrix}$

Correcto

2. Which matrix is equal to $\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}^{100}$? 1 / 1 punto

- $\begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$
- $\begin{pmatrix} 1 & 1 \\ 1 & 1 \end{pmatrix}$
- $\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$
- (●) $\begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$

Correcto

3. Which matrix is equal to $e^{\mathrm{I}}$, where $\mathrm{I}$ is the two-by-two identity matrix? 1 / 1 punto

- (●) $\begin{pmatrix} e & 0 \\ 0 & e \end{pmatrix}$
- $\begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$
- $\begin{pmatrix} 0 & e \\ e & 0 \end{pmatrix}$
- $\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$

Correcto