1. Which of the following are the eigenvalues of $\begin{pmatrix} 1 & -1 \\ -1 & 2 \end{pmatrix}$?

1/1 punto

- $O_{\frac{3}{2}\pm\frac{\sqrt{3}}{2}}$
- O $\frac{1}{2} \pm \frac{\sqrt{3}}{2}$
- $\bigcirc \ \tfrac{1}{2} \pm \frac{\sqrt{5}}{2}$

2. Which of the following are the eigenvalues of $\begin{pmatrix} 3 & -1 \\ 1 & 3 \end{pmatrix}$?

1/1 punto

- O 1 ± 3i
- O $1 \pm \sqrt{3}$
- O 3√3±1
- 3 ± i

(Correcto

3. Which of the following is an eigenvector of $\begin{pmatrix} 2 & 1 & 0 \\ 1 & 2 & 1 \\ 0 & 1 & 2 \end{pmatrix} \uparrow$

1/1 punto

- O $\begin{pmatrix} 1 \\ 0 \\ 1 \end{pmatrix}$
- \odot $\begin{pmatrix} 1 \\ \sqrt{2} \\ 1 \end{pmatrix}$
- O $\begin{pmatrix} 0 \\ 1 \\ 0 \end{pmatrix}$
- $O\begin{pmatrix} \sqrt{2} \\ 1 \\ \sqrt{2} \end{pmatrix}$

@ Corrects