Started on	Tuesday, 8 December 2020, 8:45 AM
State	Finished
Completed on	Tuesday, 8 December 2020, 8:46 AM
Time taken	12 secs
Grade	**3.00** out of 3.00 (**100**%)

Quiz navigation

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Finish review

Question **1**

Flag question Mark 1.00 out of 1.00 Correct

$$A = \begin{pmatrix} 2 & -1 \\ -1 & 2 \end{pmatrix}, \Lambda = \begin{pmatrix} 3 & 0 \\ 0 & 1 \end{pmatrix}, V = \begin{pmatrix} -\frac{1}{\sqrt{2}} & \frac{1}{\sqrt{2}} \\ \frac{1}{\sqrt{2}} & \frac{1}{\sqrt{2}} \end{pmatrix}.$$

Is $A = V\Lambda V^T$?

Select one or more:

- a. False
- b. True ✓ Yes!

Your answer is correct.

The correct answer is: True

Question **2**

Flag question Mark 1.00 out of 1.00 Correct

$$A = \begin{pmatrix} 2 & -1 & 0 \\ -1 & 2 & -1 \\ 0 & -1 & 2 \end{pmatrix}, \Lambda = \begin{pmatrix} 2+\sqrt{2} & 0 & 0 \\ 0 & 2 & 0 \\ 0 & 0 & 2-\sqrt{2} \end{pmatrix}, V = \begin{pmatrix} \frac{1}{2} & -\frac{1}{\sqrt{2}} & \frac{1}{2} \\ -\frac{1}{\sqrt{2}} & 0 & \frac{1}{\sqrt{2}} \\ \frac{1}{2} & \frac{1}{\sqrt{2}} & \frac{1}{2} \end{pmatrix}.$$

Is $A = V\Lambda V^T$?

Select one or more:

- a. True ✓ Yes!
- b. False

Your answer is correct.

The correct answer is: True

Question **3**

Flag question Mark 1.00 out of 1.00 Correct

Algebraic and geometric orders are always the same for a real valued eigenvalue.

Select one or more:

- a. False ✓ Yes!
- b. True

Your answer is correct.

The correct answer is: False

Finish review