

Day 04: Quiz

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Let

$$A = \begin{bmatrix} \frac{1}{2} & 0 & 0 \\ -5 & 3 & -5 \\ 0 & 0 & -2 \end{bmatrix}$$

Diagonalize A by finding nonsingular V such that $V^{-1}AV$ is a diagonal matrix. In particular, find V 's that do the following:

1. Find a V that arranges the eigenvalues in ascending order of their absolute value.
2. Find a V that arranges in descending order.

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