

Each Person:

Each Person: Calculate the eigenvalues and eigenvectors for the matrix A given by

$$A = \begin{bmatrix} 4 & 2 \\ 1 & 3 \end{bmatrix}$$

i.e. solve $Av = \lambda v$.

$$\lambda_1 = 5$$

$$\lambda_2 = 2$$

$$v_1 = \begin{bmatrix} 2 \\ 1 \end{bmatrix}$$

$$v_2 = \begin{bmatrix} -1 \\ 1 \end{bmatrix}$$