

Math 2080: Differential Equations

Worksheet 4.2: Eigenvalues and eigenvectors

NAME:

Let $\mathbf{A} = \begin{bmatrix} -2 & 1 \\ 4 & 1 \end{bmatrix}$ and $\mathbf{B} = \begin{bmatrix} 1 & 2 \\ 2 & 4 \end{bmatrix}$.

1. Compute the eigenvalues of \mathbf{A} .

2. Compute the eigenvectors of \mathbf{A} .

3. Compute the eigenvalues of \mathbf{B} .

4. Compute the eigenvectors of \mathbf{B} .