Goals of this recitation

- Eigenvalues
- Eigenvectors

Contents

1. Eigenvectors and eigenvalues

1.1. Motivation. In one dimension, we had a motivation for defining stability

1.2. Building geometric tools.

1.3. Applying this to problems. Find the general solution to the following problems.

$$x' = \begin{pmatrix} 2 & -1 \\ 3 & -2 \end{pmatrix} x$$

Now try this yourself.

$$x' = \begin{pmatrix} 3 & -2 \\ 2 & -2 \end{pmatrix} x$$

2. Repeated Eigenvectors

References

Dept. of Mathematics, Colorado State University, Fort Collins, CO, USA
Email address: brian.collery@colostate.edu