

02-680 Module 10
Essentials of Mathematics and Statistics

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Eigenvalues and Eigenvectors

For a matrix $A \in \mathbb{R}^{n \times n}$, we define

- an **eigenvalue** $\lambda \in \mathbb{R}$, and
- an **eigenvector** $x \in \mathbb{R}^n \setminus 0$ such that
- $Ax = \lambda x$