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The flash animations were developed by Jean-Michel Claus (with voiceover by Gilbert Strang). We are grateful! Funding was provided by a grant from the [The d'Arbeloff Fund for Excellence in MIT Education](#) as part of The d'Arbeloff Interactive Mathematics Project (d'A I M P).

SYLLABUS

Matrix Multiplication

An [interactive demo](#) (with voiceover explanation) on Matrix Multiplication, $A = LU$, and $PA = LU$

CALENDAR

Eigenvalue Demonstrations

The demonstrations below employ Java® applets with voice-over narration to show some Eigenvalue concepts.

[Demo 1](#) - This 3-minute demo shows eigenvectors of 2 by 2 matrices

The demo is also broken into 7 independent pieces:

- [Part 1](#)
- [Part 2](#)
- [Part 3](#)
- [Part 4](#)
- [Part 5](#)
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[Demo 2](#) - Powers $A^n V$ lead toward the top eigenvalue/eigenvector

RELATED RESOURCES

Mini-lectures on Eigenvalues

The mini-lectures with voice-over narration below help to explain some key Eigenvalue concepts.

[Full Lecture](#) (all eight together)

Or view individually (about 2 minutes each)

- [det\(A - \lambda I\) = 0](#)
- [Eigenvectors and Trace](#)
- [Powers](#)
- [Diagonalization](#)
- [Differential Equations](#)
- [Symmetry](#)
- [Positive Definite](#)
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