Matrices in Geometry - 12.155

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Sept, 2025

Problem Statement

The eigenvalues of a matrix are i, $-2i$ and $3i$. The matrix is

1. unitary
2. anti-unitary
3. Hermitian
4. anti-Hermitian

Solution

We know that all the eigenvalues of an anti-Hermitian matrix are either 0 or purely imaginary.
Therefore, the matrix is anti-Hermitian.
Thus option 4) us correct