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1. Pythagoras theorem test
2. Complex e-values and e-vectors
3. Singular value decomposition

Example :

1. A = [1 0 1; -1 -2 0; 0 1 -1];
2. A = [1 2; 3 4; 5 6; 7 8];
3. A = [ 2 2 0;-1 1 0];

Command : [U,S,V] = svd(A)

Verification

Different from the eigenvalues