

Survey of Mathematics



The use of eigenvalues has practical applications for life. When finding eigenvalues of a complex square matrix, for example, you can graphically represent those eigenvalues in a complex plane. You can also use this information to determine graphically how a certain eigenvalue acts on its corresponding eigenvector.

The use of the Gerschgorin Circle Theorem can be used to locate the area on a graphical representation of the matrix where the eigenvalues are located. This process is much more simple than trying to maneuver your way through the algebra and solving the matrix problem that way.

These concepts are also used in the field of flight when determining the flutter speed of an aircraft.