

Class 8 Highlights from Jonathan Gates

An eigenvector is a characteristic vector of a linear transformation. It is a nonzero vector that changes by no more than a scalar factor when the linear transformation is applied. The factor by which the eigenvector is scaled is the associated eigenvalue, commonly represented by λ . An eigenvector, which corresponds to a real nonzero eigenvalue, points in the direction that the transformation stretches it, and the eigenvalue is the component that stretches it. The orientation is reversed if the eigenvalue is negative. The eigenvector in a multidimensional vector space is not rotated loosely.