

Eigen values and Eigen vectors

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Contents

1	Eigen values and Eigen vectors	1
1.1	Definition	1

List of Figures

Chapter 1

Eigen values and Eigen vectors

1.1 Definition

λ

```
a=matrix([[1,1,3],[1,5,1],[3,1,1]])
z=a.eigenvalues()
z2=a.eigenvectors_right()

z3=maxima(a)
z4=z3.eigenvectors()
```

lamda

$$\begin{pmatrix} 1 & 1 & 3 \\ 1 & 5 & 1 \\ 3 & 1 & 1 \end{pmatrix}$$

$$[6, 3, -2]$$

$$[(6, [(1, 2, 1)], 1), (3, [(1, -1, 1)], 1), (-2, [(1, 0, -1)], 1)]$$