

Console

- 1. 0. 0.
1. - 2. 3.
0. 2. - 3.
1. 0. 0.
0. 1. 0.
0. 0. 1.

- 1. 0. 0.
1. - 1. 3.
0. 1. - 3.
1. 0. 0.
0. 0.5 0.
0. 0. 1.

- 1. 0. 0.
1. - 1. 0.
0. 1. 0.
1. 0. 0.
0. 0.5 1.5
0. 0. 1.

- 1. 0. 0.
2. - 5. 0.
0. 1. 0.
1. 0. 0.
0. 0.5 1.5
0. 0. 1.

- 0.5 0. 0.
1. - 5. 0.
0. 1. 0.
0.5 0. 0.
0. 0.5 1.5
0. 0. 1.

- 0.5 - 2.5 0.
1. 0. 0.
0. 1. 0.
0.5 2.5 0.
0. 0.5 1.5
0. 0. 1.

- 6. - 5. 0.
1. 0. 0.
0. 1. 0.
0.5 2.5 0.

$$\begin{matrix} 0. & 0.5 & 1.5 \\ 0. & 0. & 1. \end{matrix}$$

T=

$$\begin{matrix} 0.5 & 2.5 & 0. \\ 0. & 0.5 & 1.5 \\ 0. & 0. & 1. \end{matrix}$$

Characteristic polynomial:

$$\begin{matrix} 2 & 3 \\ 5x + 6x + x \end{matrix}$$

Eigenvalues:

$$\begin{matrix} -5. & -1. & 0 \end{matrix}$$

y=

$$\begin{matrix} 25. & 1. & 0 \\ -5. & -1. & 0 \\ 1. & 1. & 1. \end{matrix}$$

Eigenvectors:

$ 0.0 $	$ -2.0 $	$ 0.0 $
$ 1.5 $	$ 1.0 $	$ -1.0 $
$ 1.0 $	$ 1.0 $	$ 1.0 $