

1 | upper triangular matrix def

A matrix in which all entries below the diagonal are zero

$$\begin{pmatrix} \lambda_1 & & * \\ & \ddots & \\ 0 & & \lambda_n \end{pmatrix}$$

1.1 | results

1.1.1 | **Axler 5.26** Conditions for upper-triangular matrix

Suppose $T \in \mathcal{L}(V)$ and v_1, \dots, v_n is a basis of V . The following are equivalent:

- the matrix of T with respect to v_1, \dots, v_n is upper triangular