

1. New

Let:

$$\cdot |\lambda| < 1 < |\mu|$$

Then, holds:

$$\cdot A^n = \lambda^n, \mu^n$$

$$\cdot \forall (x, y) \in \mathbb{R}^2 \quad \text{,, } y \neq 0 :$$

$$o((x, y)) \xrightarrow{n} (0, \infty)$$

$$\cdot \forall (x, y) \in \mathbb{R}^2 \quad \text{,, } y = 0 :$$

$$o((x, y)) \xrightarrow{n} (0, 0)$$

Demonstration:

$$x_n = \lambda^n x \xrightarrow{n} 0$$

$$y_n = \mu^n y \xrightarrow{n} \begin{cases} 0 & y = 0 \\ \infty & y \neq 0 \end{cases}$$