

Notes, Jan 27th, 2021

Linear Equations

$A \rightarrow$ matrix

$$Ax = b$$

$x \rightarrow$ vector of unknowns

if A is square

$b \rightarrow$ vector

$$x = A^{-1} \cdot b$$

$$\beta < 1 \quad \sum_{t=0}^{\infty} \beta^t = \frac{1}{1-\beta}$$

\uparrow
scalar

$$\sum_{t=0}^{\infty} A^t \quad (\text{if } \text{modulus}(A) < 1)$$
$$= \underline{(I - A)^{-1}}$$