

# Persamaan Keadaan

$$\dot{\mathbf{x}} = \mathbf{A}\mathbf{x} + \mathbf{B}u$$

$$u=0 \text{ (no input)} \rightarrow \dot{\mathbf{x}} = \underset{\substack{\uparrow \\ [n \times n]}}{\mathbf{A}} \mathbf{x}, \quad \mathbf{x}(0) = \mathbf{x}_0$$

$$\begin{bmatrix} \frac{dx_1(t)}{dt} \\ \frac{dx_2(t)}{dt} \\ \vdots \\ \frac{dx_n(t)}{dt} \end{bmatrix} = \underset{[n \times n]}{\mathbf{A}} \begin{bmatrix} x_1(t) \\ x_2(t) \\ \vdots \\ x_n(t) \end{bmatrix}$$

$\underbrace{\hspace{10em}}_{\mathbf{x}(t)}$