

\* Mengubah dari Model Ruang Keadaan ke Model Nisbah. Alih, MATLAB: `>>> ss2tf`

command

$\text{SISO}$   
 $\text{LTI}$

$m=k=1$   
Linear Time Invariant  
 $A, B, C, D$   
 konstan (bukan  $f(t)$ )

Transf. Laplace

$$\int_0^{\infty} \dot{x} = \int_0^{\infty} \frac{dx(t)}{dt} = \int_0^{\infty} [A x(t) + B u(t)]$$

$$s \bar{X}(s) = A \bar{X}(s) + B U(s)$$

$$s \bar{X}(s) - \cancel{X}(s) = B U(s)$$

$$[sI - A] X(s) = B U(s)$$

$$\bar{X}(s) = \int_0^{\infty} x(t) e^{-st} dt$$

$$U(s) = \int_0^{\infty} u(t) e^{-st} dt$$

$$I = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$

$(n \times n)$