Not like this:

$$x := \begin{bmatrix} m_{1,1} \\ m_{2,1} \end{bmatrix} :$$

$$u := \begin{bmatrix} m_{1,1} \\ m_{2,1} \end{bmatrix} :$$

$$A := \begin{bmatrix} m_{1,1} & m_{1,2} \\ m_{2,1} & m_{2,2} \end{bmatrix} :$$

$$B := \begin{bmatrix} m_{1,1} & m_{1,2} \end{bmatrix} :$$

$$B := \begin{bmatrix} m_{1,1} & m_{1,2} \end{bmatrix}$$

$$sys := s \cdot x = A \cdot x + B \cdot u$$

$$sys := s \cdot \begin{bmatrix} m_{1,1} \\ m_{2,1} \end{bmatrix} = m_{1,1}^2 + m_{1,2} m_{2,1} + \begin{bmatrix} m_{1,1}^2 + m_{1,2} m_{2,1} \\ m_{2,1} m_{1,1} + m_{2,2} m_{2,1} \end{bmatrix}$$

But to manipulate matrices something like this:

$x \in R^{n\times 1}$ $\qquad \frac{d}{dt} x = Ax + Bu$

$u \in R^{m\times 1}$ $\qquad s \cdot x = Ax + Bu$

$A \in R^{n\times n}$

$B \in R^{n\times m}$ $\qquad$ Backwards : $s = \frac{z-1}{Tz}$

$$\left(\frac{z-1}{T \cdot z}\right) x = Ax + Bu$$

$$z \cdot x - x = A T x \cdot z + B \cdot T u z$$

$$z \cdot x - A \cdot T x \cdot z - B \cdot T u z = x$$

$$(I - A \cdot T)\, x \cdot z - BT u z = x$$

$$\Updownarrow$$

$$(I - AT)\, x_{k+1} - BT \cdot u_{k+1} = x_k$$

$$x_{k+1} = (I - A \cdot T)^{-1} x_k + (I - TA)^{-1} \cdot B \cdot T\, u_{k+1}$$