



Define what u_i is:

$$u_1 = -y_4 - y_3$$

$$u_2 = y_1$$

$$u_3 = y_2 + y_6$$

$$u_4 = y_1 + y_5$$

$$u_5 = y_3 + y_4$$

$$u_6 = y_5$$

$$\begin{bmatrix} 1 & -4 & -3 \\ 2 & 1 & 0 \\ 3 & 2 & 6 \\ 4 & 1 & 5 \\ 5 & 3 & 4 \\ 6 & 5 & 0 \end{bmatrix}$$

Put into matrix form

$$\text{inputs} = [u_i]$$

$$\text{outputs} = \begin{bmatrix} [y_1], \\ [y_2], \\ [y_3], \\ [y_4], \\ [y_5], \\ [y_6] \end{bmatrix}$$