$$\dot{x} = \begin{pmatrix} 1 & -4 \\ 9 & -11 \end{pmatrix} x$$

$$\begin{cases} \dot{x} = x - 4y \\ \dot{y} = 9x - 11y \end{cases}$$

$$y = \frac{x - \dot{x}}{4}$$

$$\dot{y} = \frac{\dot{x} - \ddot{x}}{4}$$

$$\ddot{x} + 10\dot{x} + 20x = 0$$

$$(D + 5I)^2[x] = 0$$

$$D = -5I$$

$$\begin{cases} x = C_1 e^{-5t} + C_2 t e^{-5t} \\ y = 6C_1 e^{-5t} + C_2 e^{-5t}(6t - 1) \end{cases}$$