(A1) Find the general soln to

$$\vec{x}' = \begin{bmatrix} 1 & 3 \\ 12 & 1 \end{bmatrix} \vec{x} + \begin{bmatrix} 2 \\ -11 \end{bmatrix}$$

(A2) Find a fundamental matrix for

$$\vec{x}' = \begin{bmatrix} 1 & -1 \\ 1 & 3 \end{bmatrix} \vec{x}$$

(A3) Find the ~~general soln to~~ fundamental matrix for

$$\vec{x}' = \begin{pmatrix} 1 & 1 & 1 \\ 2 & 1 & -1 \\ 0 & -1 & 1 \end{pmatrix} \vec{x}$$