$$4x_1 + 3x_2 + 3x_3 - 2x_4 = \lambda$$
$$-x_1 - x_2 - x_3 + x_4 = 2$$
$$-19x_1 - 19x_2 - 20x_3 + (11 + \mu)x_4 = 6 - 2\lambda$$
$$4x_1 + 7x_2 + 8x_3 + x_4 = -2$$

$$\sim \begin{pmatrix} -4 & 3 & 3 & -2 & \lambda \\ -1 & -1 & -1 & 1 & 2 \\ -19 & -19 & -20 & (11+\mu) & 6-2\lambda| : 19 \\ 4 & 7 & 8 & 1 & -2 \end{pmatrix}$$

$$\sim \begin{pmatrix} -4 & 3 & 3 & -2 & \lambda \\ -1 & -1 & -1 & 1 & 2 \\ -1 & -1 & \frac{-20}{19} & \frac{11+\mu}{19} & \frac{6-2\lambda}{19} \\ 4 & 7 & 8 & 1 & -2 \end{pmatrix}$$