



Conditions:

$$f_n + f_1 = \frac{1}{4}$$

$$f_e + f_2 + f_1 = -\frac{1}{4}$$

$$f_3 + f_2 + f_1 = 0$$

$$\begin{bmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 1 & 1 & 1 \end{bmatrix} \begin{bmatrix} f_1 \\ f_2 \\ f_3 \end{bmatrix} = \begin{bmatrix} \frac{1}{4} - f_n \\ -\frac{1}{4} - f_e \\ 0 \end{bmatrix}$$

$$\begin{bmatrix} f_1 \\ f_2 \\ f_3 \end{bmatrix} = \begin{bmatrix} 1 & 0 & 0 \\ -1 & 1 & 0 \\ 0 & -1 & 1 \end{bmatrix} \begin{bmatrix} \frac{1}{4} - f_n \\ -\frac{1}{4} - f_e \\ 0 \end{bmatrix} = \begin{bmatrix} \frac{1}{4} - f_n \\ f_n - f_e - \frac{1}{2} \\ f_e + \frac{1}{4} \end{bmatrix}$$