$$R1 \coloneqq 57$$
 $R2 \coloneqq 14$ $R3 \coloneqq 48$ $R4 \coloneqq 0$ $R5 \coloneqq 65$ $R6 \coloneqq 0$ $R7 \coloneqq 0$ $R8 \coloneqq 0$

$$Xl1 := 0$$
 $Xl2 := 0$ $Xl3 := 0$ $Xl4 := 31$ $Xl5 := 0$ $Xl6 := 29$ $Xl7 := 28$ $Xl8 := 36$

$$Xc1 := 83$$
 $Xc2 := 0$ $Xc3 := 23$ $Xc4 := 0$ $Xc5 := 0$ $Xc6 := 91$ $Xc7 := 0$ $Xc8 := 19$

$$E6M := 67 \quad E6a := 214$$

$$Z1 := R1 + 1j(-Xc1) = 57 - 83j$$

$$Z2 := R2 = 14$$

$$Z34 := R3 + 1j (Xl4 - Xc3) = 48 + 8i$$

$$Z56 := R5 + 1j (Xl6 - Xc6) = 65 - 62i$$

$$Z7 := 1j (Xl7) = 28i$$

$$Z8 \coloneqq 1j \left(Xl8 - Xc8 \right) = 17i$$

$$E := E6M \cdot e^{1j \cdot E6a^{\circ}} = -55.546 - 37.466j$$
 $E = 67 \angle -146^{\circ}$

$$Z \coloneqq \begin{bmatrix} Z1 \\ Z2 \\ Z34 \\ Z56 \\ Z7 \\ Z8 \end{bmatrix} \qquad RD \coloneqq \operatorname{diag}(Z) \qquad \qquad E \coloneqq \begin{bmatrix} 0 \\ 0 \\ 0 \\ E \\ 0 \\ 0 \end{bmatrix}$$

$$A \coloneqq \begin{bmatrix} 1 & -1 & 0 & 0 & -1 & 0 \\ 0 & 0 & 1 & -1 & 1 & 0 \\ -1 & 0 & 0 & 1 & 0 & 1 \\ 0 & 1 & -1 & 0 & 0 & -1 \end{bmatrix} \qquad B \coloneqq \begin{bmatrix} -1 & 0 & 0 & -1 & -1 & 0 \\ 0 & -1 & -1 & 0 & 1 & 0 \\ 1 & 1 & 0 & 0 & 0 & 1 \end{bmatrix}$$

$$Ik \coloneqq \left(B \cdot RD \cdot B^{\mathrm{T}}\right)^{-1} \left(B \cdot E\right) = \begin{bmatrix} 0.433 + 0.615\mathrm{i} \\ 0.025 + 0.308\mathrm{i} \\ 0.551 + 0.56\mathrm{i} \end{bmatrix}$$

$$I \coloneqq B^{\mathrm{T}} \bullet Ik = \begin{bmatrix} 0.118 - 0.055\mathrm{i} \\ 0.526 + 0.253\mathrm{i} \\ -0.025 - 0.308\mathrm{i} \\ -0.433 - 0.615\mathrm{i} \\ -0.408 - 0.308\mathrm{i} \\ 0.551 + 0.56\mathrm{i} \end{bmatrix}$$