

■ Resevanje linearnega sistema enacb

Matrika koeficientov neznank:

$$\mathbf{mR} = \left(\begin{array}{c|c|c|c|c} -1 & 1 & 0 & 0 & 0 \\ \hline 0 & -1 & 1 & 1 & 0 \\ \hline 0 & 0 & -1 & 0 & 1 \\ \hline 10 & 20 & 0 & 40 & 0 \\ \hline 0 & 0 & 30 & -40 & 50 \end{array} \right) ;$$

Vektor znanih vrednosti (desnih strani enacb):

$$\mathbf{vU} = \{0, 0, 0, 10, -20\};$$

Resitev sistema (vektor neznank):

$$\mathbf{vI} = \text{LinearSolve}[\mathbf{mR}, \mathbf{vU}]$$
$$\left\{ \frac{1}{17}, \frac{1}{17}, -\frac{5}{34}, \frac{7}{34}, -\frac{5}{34} \right\}$$

Resitev sistema (v amperih):

$$\mathbf{N}[\mathbf{vI}]$$
$$\{0.0588235, 0.0588235, -0.147059, 0.205882, -0.147059\}$$

Resitev sistema (v miliamperih):

$$\mathbf{N}[\mathbf{vI}] * 10^3$$
$$\{58.8235, 58.8235, -147.059, 205.882, -147.059\}$$