

Q4: a For the resistor-battery circuit on the blackboard, please write the two loop-eqns as we did in class. Do not solve the SoE.

Loop I_1 going CCW from P : $0 \text{ (volts)} =$.

Loop I_2 going CCW from P : $0 \text{ (volts)} =$.

b Let $B := \begin{bmatrix} 0 & 7 & 3 \\ 1 & 0 & -1 \\ 0 & 2 & 1 \end{bmatrix}$. Please write its inverse matrix as a product of elementary matrices. Please write, below each matrix, the corresponding row-operation symbol: $\mathbb{S}_{i,j}$ (switch two rows), $\mathbb{M}_{i,\beta}$ (mult. Row $_i$ by β), $\mathbb{A}_{i,(\alpha,j)}$ (to Row $_i$ add $\alpha \cdot$ Row $_j$).

$B^{-1} =$.