

Lineaire Algebra Wk 5Opdracht 2

$$b) \quad \begin{array}{c} \text{Step 1} \end{array} \left[ \begin{array}{ccc|ccc} 0 & 1 & 1 & 1 & 0 & 1 \\ 1 & 1 & 1 & 0 & 1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 1 \end{array} \right] \quad \begin{array}{c} \text{Step 2} \end{array} \left[ \begin{array}{ccc|ccc} 1 & 1 & 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 1 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 1 \end{array} \right]$$

$$\begin{array}{c} \text{Step 3} \end{array} \left[ \begin{array}{ccc|ccc} 1 & 1 & 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 1 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 1 \end{array} \right] \quad \begin{array}{c} \text{Step 4} \end{array} \left[ \begin{array}{ccc|ccc} 1 & 0 & 0 & -1 & 1 & 0 \\ 0 & 1 & 1 & 1 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 1 \end{array} \right]$$

$$\begin{array}{c} \text{Step 5} \end{array} \left[ \begin{array}{ccc|ccc} 1 & 0 & 0 & -1 & 1 & 0 \\ 0 & 1 & 1 & 1 & 0 & 0 \\ 0 & 0 & -1 & -1 & 0 & 1 \end{array} \right] \quad \begin{array}{c} \text{Step 6} \end{array} \left[ \begin{array}{ccc|ccc} 1 & 0 & 0 & -1 & 1 & 0 \\ 0 & 1 & 1 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & -1 \end{array} \right]$$

$$\begin{array}{c} \text{Step 7} \end{array} \left[ \begin{array}{ccc|ccc} 1 & 0 & 0 & -1 & 1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 1 \\ 0 & 0 & 1 & 1 & 0 & -1 \end{array} \right] \quad \begin{array}{c} \text{Step 8} \end{array} \left[ \begin{array}{ccc|ccc} 1 & 0 & 0 & -1 & 1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 1 \\ 0 & 0 & 1 & 1 & 0 & -1 \end{array} \right]$$

$$\left( \begin{array}{ccc|ccc} 0 & 1 & 1 & -1 & 1 & 0 \\ 1 & 1 & 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 1 & 0 & -1 \end{array} \right) \quad \begin{array}{c} \uparrow \\ \text{Resultaat} \\ \text{inverse matrix} \end{array}$$