

Aufgabe 2)

$$\xrightarrow{\leftarrow} \left( \begin{array}{ccc|ccc} 0,8 & 2,2 & 3,6 & 1 & 0 & 0 \\ 2,0 & 3,0 & 4,0 & 0 & 1 & 0 \\ 1,2 & 2,0 & 5,8 & 0 & 0 & 1 \end{array} \right)$$

$$\left( \begin{array}{ccc|ccc} 2,0 & 3,0 & 4,0 & 0 & 10 & \\ 0,8 & 2,2 & 3,6 & 1 & 00 & \\ 1,2 & 2,0 & 5,8 & 0 & 0 & 1 \end{array} \right) \leftarrow P_{\Sigma}$$

$$0,8/2 \left( \begin{array}{ccc} 2,0 & 3,0 & 4,0 \\ 0,8 & 2,2 & 3,6 \\ 1,2 & 2,0 & 5,8 \end{array} \right)$$

$$0,2/1 \left( \begin{array}{ccc} 2 & 3,0 & 4,0 \\ 0 & 1 & 2,0 \\ 0 & 0,2 & 3,4 \end{array} \right)$$

$$P_1 \left( \begin{array}{ccc} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{array} \right)$$

$$L = \left( \begin{array}{ccc} 1 & 0 & 0 \\ 0,8/2 & 1 & 0 \\ 1,2/2 & ? & 1 \end{array} \right)$$

$$R \Rightarrow \left( \begin{array}{ccc} 2 & 3,0 & 4,0 \\ 0 & 1 & 2 \\ 0 & 0 & 3 \end{array} \right)$$

$$P = P_2 \circ P_1 = \left( \begin{array}{ccc} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{array} \right) \circ \left( \begin{array}{ccc} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{array} \right) = \left( \begin{array}{ccc} 0 & 1 & 0 \\ 0 & 0 & 1 \\ 0 & 0 & 1 \end{array} \right)$$

$$Ly = Pb \quad \left( \begin{array}{ccc} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{array} \right) \cdot \left( \begin{array}{c} y_1 \\ y_2 \\ y_3 \end{array} \right) = \left( \begin{array}{c} 1 \\ 2,4 \\ 3 \end{array} \right)$$

$$\left( \begin{array}{ccc} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{array} \right) \cdot \left( \begin{array}{c} 2,4 \\ 1,0 \\ 4,0 \end{array} \right) = \left( \begin{array}{c} 1 \\ 2,4 \\ 4,0 \end{array} \right)$$

$$\left( \begin{array}{ccc} 1 & 0 & 0 \\ 0,4 & 1 & 0 \\ 0,6 & 0,2 & 1 \end{array} \right) \cdot \left( \begin{array}{c} y_1 \\ y_2 \\ y_3 \end{array} \right) = \frac{1}{4} = y_1 = 1$$

$$y_2 = 2,4 - 0,4 = 2$$

$$y_3 = 4 - 0,6 - 0,4 = 3$$

$$\left( \begin{array}{ccc} 2 & 3 & 4 \\ 0 & 1 & 2 \\ 0 & 0 & 3 \end{array} \right) \cdot \left( \begin{array}{c} x_1 \\ x_2 \\ x_3 \end{array} \right) = \left( \begin{array}{c} 1 \\ 2 \\ 3 \end{array} \right) = \left( \begin{array}{c} x_1 = (1-4-0)/2 = -1,5 \\ x_2 = 0 \\ x_3 = 1 \end{array} \right)$$

(C)