

LÖSUNG 2c)

$$\begin{array}{l} \text{I} \quad 2x - 3y - z = 1 \\ \text{II} \quad 2y + 3z = 1 \\ \text{III} \quad 4x + 2y + 3z = 6 \end{array}$$

$$\left(\begin{array}{ccc|c} 2 & -3 & -1 & 1 \\ 0 & 2 & 3 & 1 \\ 4 & 2 & 3 & 6 \end{array} \right) - 2 \cdot \text{I}$$

$$\left(\begin{array}{ccc|c} 2 & -3 & -1 & 1 \\ 0 & 2 & 3 & 1 \\ 0 & 8 & 5 & 4 \end{array} \right) - 4 \cdot \text{II}$$

$$\left(\begin{array}{ccc|c} 2 & -3 & -1 & 1 \\ 0 & 2 & 3 & 1 \\ 0 & 0 & -7 & 0 \end{array} \right)$$

$$\text{III} \quad \begin{array}{l} -7z = 0 \quad | :(-7) \\ \Leftrightarrow z = 0 \end{array}$$

$$\text{II} \quad 2y + \underbrace{3 \cdot 0}_{=0} = 1 \quad | :2$$

$$\Leftrightarrow y = \underline{\underline{\frac{1}{2}}}$$

$$\text{I} \quad 2x - 3 \cdot \frac{1}{2} - \underbrace{0}_{=0} = 1$$

$$\Leftrightarrow 2x - 1,5 = 1 \quad | +1,5$$

$$\Leftrightarrow 2x = 2,5 \quad | :2$$

$$\Leftrightarrow x = \underline{\underline{1,25}}$$