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$$2x_1 + x_2 + x_3 = 0$$

$$3x_1 - \frac{3}{2}x_2 + 9x_3 = 6$$

$$2x_1 + 2x_2 - \frac{3}{2}x_3 = 1$$

$$\begin{array}{l} \text{I.} \\ \text{II.} \\ \text{III.} \end{array} \begin{array}{ccc|c} 2 & 1 & 1 & 0 \\ 3 & -\frac{3}{2} & 9 & 6 \\ 2 & 2 & -\frac{3}{2} & 1 \end{array} \begin{array}{l} \\ (-\frac{3}{2}\text{I}) \\ (-\text{I}) \end{array}$$

$$\begin{array}{ccc|c} 2 & 1 & 1 & 0 \\ 0 & -3 & \frac{15}{2} & 6 \\ 0 & 1 & -\frac{5}{2} & 1 \end{array}$$

$$\begin{array}{ccc|c} 2 & 1 & 1 & 0 \\ 0 & 1 & -\frac{5}{2} & 1 \\ 0 & -3 & \frac{15}{2} & 6 \end{array} (+3\text{II})$$

$$\begin{array}{ccc|c} 2 & 1 & 1 & 0 \\ 0 & 1 & -\frac{5}{2} & 1 \\ 0 & 0 & 0 & 9 \end{array} \left. \begin{array}{l} \\ \\ \end{array} \right\} \rightarrow \begin{array}{l} 2x_1 + x_2 + x_3 = 0 \\ x_2 - \frac{5}{2}x_3 = 1 \\ 0 = 9 \end{array}$$

~~keine Lösung~~