

Lineare Gleichungssysteme mit vier Unbekannten

1) $\begin{aligned} 4a + 3b + 2c - 1d &= 0 \\ 3a + 1b - 2c - 2d &= 4 \\ 1a - 2b + 3c - 4d &= -13 \\ 1a + 4b + 3c + 4d &= 5 \end{aligned}$	1) $L = \{(-1 / 3 / -2 / 1)\}$
2) $\begin{aligned} 2a - 3b + 2c - 4d &= -20 \\ 3a - 1b + 4c + 2d &= -23 \\ 1a - 3b + 4c - 3d &= -13 \\ 2a + 2b - 2c + 1d &= -2 \end{aligned}$	2) $L = \{(-3 / -2 / -4 / 3)\}$
3) $\begin{aligned} -1a + 3b - 4c + 2d &= 2 \\ 2a + 4b + 4c - 3d &= 10 \\ -3a - 2b - 3c - 2d &= -8 \\ 2a - 2b - 2c - 4d &= -2 \end{aligned}$	3) $L = \{(1 / 1 / 1 / 2)\}$
4) $\begin{aligned} 3a + 1b + 1c - 3d &= -1 \\ -4a - 1b + 1c + 1d &= -7 \\ 2a + 3b - 1c - 4d &= 13 \\ 3a + 1b + 1c + 2d &= 8 \end{aligned}$	4) $L = \{(1 / 4 / 1 / 3)\}$
5) $\begin{aligned} -2a + 1b + 2c + 3d &= -6 \\ 4a + 3b + 1c - 3d &= 18 \\ 2a + 3b + 3c + 1d &= 20 \\ -2a - 3b - 2c - 1d &= -18 \end{aligned}$	5) $L = \{(1 / 4 / 2 / -4)\}$
6) $\begin{aligned} 1a + 1b + 5c + 3d &= 18 \\ 1a + 3b + 6c - 1d &= 35 \\ -2a + 3b - 1c + 4d &= -8 \\ -4a + 4b + 3c - 1d &= 0 \end{aligned}$	6) $L = \{(5 / 2 / 4 / -3)\}$
7) $\begin{aligned} -2a + 1b + 4c + 2d &= -13 \\ 5a - 1b + 3c - 3d &= 34 \\ 5a + 3b + 4c - 1d &= 31 \\ 2a + 3b + 1c - 1d &= 10 \end{aligned}$	7) $L = \{(6 / -1 / 1 / -2)\}$
8) $\begin{aligned} -1a + 1b + 2c + 8d &= 14 \\ -1a - 1b + 7c + 4d &= -3 \\ -2a + 6b + 1c + 9d &= 5 \\ 4a + 7b + 5c + 3d &= 54 \end{aligned}$	8) $L = \{(7 / 3 / 1 / 2)\}$