

## Lineare Gleichungssysteme mit drei Unbekannten

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|-----|--|----------------------------|
| 1)  | $\begin{aligned}1x + 2y - 4z &= -20 \\ -4x + 4y + 3z &= 16 \\ -1x + 2y + 4z &= 16\end{aligned}$  | 1) $L = \{(-2 / -1 / 4)\}$ |
| 2)  | $\begin{aligned}-2x + 2y + 3z &= 13 \\ 1x + 1y + 2z &= 3 \\ -4x - 2y - 1z &= 1\end{aligned}$     | 2) $L = \{(-2 / 3 / 1)\}$  |
| 3)  | $\begin{aligned}2x - 4y - 2z &= -28 \\ -4x + 4y - 1z &= 24 \\ 2x + 1y + 3z &= 7\end{aligned}$    | 3) $L = \{(-4 / 3 / 4)\}$  |
| 4)  | $\begin{aligned}2x - 4y + 4z &= -2 \\ 4x - 4y + 1z &= -14 \\ 3x - 1y + 1z &= -8\end{aligned}$    | 4) $L = \{(-3 / 1 / 2)\}$  |
| 5)  | $\begin{aligned}-4x + 3y + 3z &= -7 \\ -2x - 1y + 2z &= -7 \\ -1x + 2y + 3z &= -5\end{aligned}$  | 5) $L = \{(1 / 1 / -2)\}$  |
| 6)  | $\begin{aligned}3x + 3y - 4z &= -8 \\ 4x + 4y + 3z &= 31 \\ -4x + 2y - 1z &= -3\end{aligned}$    | 6) $L = \{(1 / 3 / 5)\}$   |
| 7)  | $\begin{aligned}-2x - 4y - 3z &= -14 \\ -2x + 1y - 4z &= 3 \\ 4x + 3y - 4z &= 33\end{aligned}$   | 7) $L = \{(4 / 3 / -2)\}$  |
| 8)  | $\begin{aligned}-2x - 3y - 3z &= -7 \\ -1x + 3y - 1z &= -11 \\ 4x + 3y - 4z &= -10\end{aligned}$ | 8) $L = \{(2 / -2 / 3)\}$  |
| 9)  | $\begin{aligned}-3x - 1y - 2z &= -23 \\ 4x + 2y + 3z &= 29 \\ 3x - 4y + 4z &= 58\end{aligned}$   | 9) $L = \{(6 / -5 / 5)\}$  |
| 10) | $\begin{aligned}2x - 4y + 4z &= 42 \\ -4x + 2y + 4z &= 0 \\ -2x + 2y + 3z &= -2\end{aligned}$    | 10) $L = \{(1 / -6 / 4)\}$ |