

Bsp 2:

$$\begin{aligned} \text{I } x + y + z &= 18 \\ \text{II } 10x + y - 8z &= 0 \\ \text{III } x + 2y + z &= 0 \end{aligned}$$

$$\begin{array}{ccc|c} \text{A2} & 1 & 1 & 18 \\ & 10 & 1 & 0 \\ & 1 & 2 & 0 \end{array} \begin{array}{l} \downarrow \cdot 10 \\ \downarrow \end{array}$$


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$$\begin{array}{ccc|c} & 1 & 1 & 18 \\ & 0 & 9 & 180 \\ & 0 & -1 & 0 \end{array} \begin{array}{l} \downarrow \cdot 9! \text{REV} \\ \downarrow \end{array}$$

$$\begin{array}{ccc|c} & 1 & 1 & 18 \\ & 0 & 1 & 20 \\ & 0 & -1 & 0 \end{array} \begin{array}{l} \downarrow + \\ \downarrow \end{array}$$

$$\begin{array}{ccc|c} & 1 & 1 & 18 \\ & 0 & 1 & 20 \\ & 0 & 0 & 38 \end{array} \begin{array}{l} \downarrow \cdot 2 \\ \downarrow \end{array}$$

$$\begin{array}{ccc|c} & 1 & 1 & 18 \\ & 0 & 1 & 20 \\ & 0 & 0 & 19 \end{array} \begin{array}{l} \uparrow + \\ \uparrow + \\ \uparrow \cdot (-1) \cdot (-2) \end{array}$$

$$\begin{array}{ccc|c} & 1 & 1 & 0 \\ & 0 & 1 & 0 \\ & 0 & 0 & 1 \end{array} \begin{array}{l} \uparrow + \\ \uparrow \cdot (-1) \end{array}$$

$$\begin{array}{ccc|c} & 1 & 0 & 17 \\ & 0 & 1 & -18 \\ & 0 & 0 & 19 \end{array}$$

$$\begin{aligned} x &= 17 \\ y &= -18 \\ z &= 19 \end{aligned}$$

$$L = \{(17 | -18 | 19)\}$$

Bsp 3:

$$\begin{aligned} \text{I } 2x - 4y + 5z &= 3 \\ \text{II } 3x + 3y + 7z &= 13 \\ \text{III } 4x - 2y - 3z &= -1 \end{aligned}$$

$$\begin{array}{ccc|c} \text{A2} & 2 & -4 & 5 \\ & 3 & 3 & 7 \\ & 4 & -2 & -3 \end{array} \begin{array}{l} \downarrow \cdot 3 \\ \downarrow \cdot 2 \\ \downarrow \end{array}$$

$$\begin{array}{ccc|c} & 2 & -4 & 5 \\ & 0 & -18 & 1 \\ & 0 & -6 & 13 \end{array} \begin{array}{l} \downarrow \cdot 3 \\ \downarrow \end{array}$$

$$\begin{array}{ccc|c} \text{Tripos} & 2 & -4 & 5 \\ & 0 & -18 & 1 \\ & 0 & 0 & -38 \end{array} \begin{array}{l} \downarrow \cdot 3 \\ \downarrow \cdot (-38) \end{array}$$

$$\begin{array}{ccc|c} & 2 & -4 & 5 \\ & 0 & -18 & 1 \\ & 0 & 0 & 1 \end{array} \begin{array}{l} \uparrow \cdot 5 \\ \uparrow \end{array}$$

$$\begin{array}{ccc|c} & -2 & -4 & 0 \\ & 0 & 18 & 0 \\ & 0 & 0 & 1 \end{array} \begin{array}{l} \uparrow \cdot 18 \\ \uparrow \end{array}$$

$$\begin{array}{ccc|c} & -2 & -4 & 0 \\ & 0 & 1 & 0 \\ & 0 & 0 & 1 \end{array} \begin{array}{l} \uparrow \cdot 4 \\ \uparrow \end{array}$$

$$\begin{array}{ccc|c} & -2 & 0 & 0 \\ & 0 & 1 & 0 \\ & 0 & 0 & 1 \end{array} \begin{array}{l} \uparrow \cdot 2 \\ \uparrow \end{array}$$

$$\begin{array}{ccc|c} & 1 & 0 & 0 \\ & 0 & 1 & 0 \\ & 0 & 0 & 1 \end{array}$$

$$\begin{aligned} x &= -1 \\ y &= 1 \\ z &= 1 \end{aligned}$$

$$L = \{(-1 | 1 | 1)\}$$