

$$\left[\begin{array}{cccc|c} 1 & 2 & 3 & 4 & 1 \\ 0 & 1 & -3 & -1 & 5 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \end{array} \right]$$

g' entydig lösning.

Låt:

$$z = t$$

$$w = h$$

$$\left[\begin{array}{cccc|c} 1 & 2 & 3 & 4 & 1 \\ 0 & 1 & -3 & -1 & 5 \\ 0 & 0 & 1 & 0 & t \\ 0 & 0 & 0 & 1 & k \end{array} \right] \xrightarrow{-4} \left[\begin{array}{cccc|c} 1 & 2 & 3 & 0 & 1-4k \\ 0 & 1 & -3 & 0 & k+5 \\ 0 & 0 & 1 & 0 & t \\ 0 & 0 & 0 & 1 & k \end{array} \right]$$

$$\left[\begin{array}{cccc|c} 1 & 2 & 3 & 0 & 1-4k \\ 0 & 1 & -3 & 0 & k+5 \\ 0 & 0 & 1 & 0 & t \\ 0 & 0 & 0 & 1 & k \end{array} \right] \xrightarrow{-3} \left[\begin{array}{cccc|c} 1 & 2 & 0 & 0 & 1-4k-3t \\ 0 & 1 & 0 & 0 & k+3t+5 \\ 0 & 0 & 1 & 0 & t \\ 0 & 0 & 0 & 1 & k \end{array} \right]$$

$$\begin{aligned} 1-4k-3t-2(k+3t+5) &= \\ = 1-4k-3t-2k-6t-10 &= \\ = -9-6k-9t \end{aligned}$$

$$\left[\begin{array}{cccc|c} 1 & 0 & 0 & 0 & -6k-9t-9 \\ 0 & 1 & 0 & 0 & k+3t+5 \\ 0 & 0 & 1 & 0 & t \\ 0 & 0 & 0 & 1 & k \end{array} \right] \Leftrightarrow \left\{ \begin{array}{l} x = -6k-9t-9 \\ y = k+3t+5 \\ z = t \\ w = h \end{array} \right. ; t, h \in \mathbb{R}$$