

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

ej entydig lösning.

Låt:

$$z = t$$

$$w = k$$

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

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

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

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

$$\left[\begin{array}{cccc|c} 1 & 0 & 0 & 0 & 2k-9t-9 \\ 0 & 1 & 0 & 0 & k+3t+5 \\ 0 & 0 & 1 & 0 & t \\ 0 & 0 & 0 & 1 & k \end{array} \right]$$

$$\Leftrightarrow \begin{cases} x = 2k-9t-9 \\ y = k+3t+5 \\ z = t \\ w = k \end{cases}, t, k \in \mathbb{R}$$