

$$g) \begin{cases} x + 3y + 10z = 31 \\ x + 4y + 12z = 39 \\ x + y + 6z = 14 \end{cases}$$

$$\begin{pmatrix} \textcircled{1} & 3 & 10 & 31 \\ 1 & 4 & 12 & 39 \\ 1 & 1 & 6 & 14 \end{pmatrix} \begin{matrix} R_2 - R_1 \\ \sim \\ R_3 - R_1 \end{matrix} \begin{pmatrix} 1 & 3 & 10 & 31 \\ 0 & \textcircled{1} & 2 & 8 \\ 0 & -2 & -4 & -17 \end{pmatrix}$$

$$\begin{matrix} R_1 - 3R_2 \\ \sim \\ R_3 + 2R_2 \end{matrix} \begin{pmatrix} 1 & 0 & 4 & 7 \\ 0 & 1 & 2 & 8 \\ 0 & 0 & 0 & -1 \end{pmatrix}$$

$$\rightarrow 0x + 0y + 0z = -1 \\ 0 \neq -1$$

$$V = \emptyset$$

vals stelsel

$$\kappa(A_b) = 3$$

$$\kappa(A) = 2$$