

1.2.9 a)

$$\begin{array}{l} (5) \downarrow (3) \\ (2) \downarrow \\ (2) \end{array} \left\{ \begin{array}{l} -2x + 3y + 3z = -9 \\ 3x - 4y + z = 5 \\ -5x + 7y + 2z = -14 \end{array} \right. \Leftrightarrow (1) \downarrow \left\{ \begin{array}{l} -2x + 3y + 3z = -9 \\ y + 11z = -17 \\ -y - 11z = 17 \end{array} \right.$$

$$\Leftrightarrow \left\{ \begin{array}{l} -2x + 3y + 3z = -9 \\ y + 11z = -17 \end{array} \right.$$

$$\Leftrightarrow \left\{ \begin{array}{l} x = -21 - 15t \\ y = -17 - 11t \\ z = t \end{array} \right. \quad t \in \mathbb{R}.$$

$$\begin{array}{l} / \quad -2x = -9 - 3y - 3z = \\ \quad \quad = -9 - 3(-17 - 11t) - 3t \quad / \end{array}$$