

Ex 2.11

$$7) \begin{cases} 2x + 3y + 2z = 41 \\ 8x + 5y = 31 \\ 7y = 21 \end{cases} \Leftrightarrow y = 3$$

dans 1.

$$\Rightarrow 8x + 15 = 31 \Leftrightarrow 8x = 16 \Leftrightarrow x = 2$$

dans 2.

$$\Rightarrow 4 + 9 + 2z = 41 \Leftrightarrow 2z = 28 \Leftrightarrow z = 14$$

$$\Rightarrow S = \{(2; 3; 14)\}$$

$$9) \begin{cases} 7x - 4y - 5z = 56 \\ 3y - 2z = 13 \\ 5x - 3y = 22 \end{cases} \begin{array}{l} \cdot 2 \\ \cdot (-5) \end{array} \Rightarrow \begin{array}{r} 14x - 8y - 10z = 112 \\ -15y + 10z = -65 \\ \hline 14x - 23y = 47 \end{array}$$

$$\Rightarrow \begin{cases} 5x - 3y = 22 \\ 14x - 23y = 47 \end{cases} \begin{array}{l} \cdot 23 \\ \cdot (-3) \end{array}$$

$$\begin{array}{r} 115x - 69y = 506 \\ + \quad -42x + 69y = -141 \\ \hline 73x = 365 \end{array}$$

$$x = 5 \Rightarrow 25 - 3y = 22$$

dans 2.

$$\Rightarrow 3 - 2z = 13$$

$$-3y = -3$$

$$-2z = 10$$

$$y = 1$$

$$z = -5$$

$$\Rightarrow S = \{(5; 1; -5)\}$$