

$$\begin{cases} 2x - 4y = 2 \\ x - 2y = 1 \end{cases} \quad | \cdot (-2)$$

$$\begin{cases} x = 2y + 1 \\ y = y \end{cases}$$

$$\begin{cases} 2x - 4y = 2 & \textcircled{L_1} \\ -2x + 4y = -2 & \textcircled{L_2} \end{cases}$$

$$\Rightarrow 2x - 4y = 2$$

$$2x = 4y + 2$$

$$\boxed{x = 2y + 1}$$

$$\boxed{0 + 0 = 0}$$

$$L_1 + L_2$$

$$x - y + z = 0$$

$$-x + y + z = 10$$

$$x + y - z = 2$$

 $\cdot 1$  $-1$  $\cdot 1$  $1$ 

$$x - y + z = 0$$

$$2z = 10$$

$$2y - 2z = 2$$