

Solve using Cramer's Rule

$$\begin{aligned} \textcircled{1} \quad & x - y + 2z - w = -1 \\ & 2x + y - 2z - 2w = -2 \\ & -x + 2y - 4z + w = 1 \\ & 3x \qquad \qquad - 3w = -3 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & -x - 2y - 3z = 0 \\ & w + x + 4y + 4z = 7 \\ & w + 3x + 7y + 9z = 4 \\ & -w - 2x - 4y - 6z = 6 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & a + b - 2c + d + 3e - f = 4 \\ & 2a - b + c + 2d + e - 3f = 20 \\ & a + 3b - 3c - d + 2e + f = -15 \\ & 5a + 2b - c - d + 2e + f = -3 \\ & -3a - b + 2c + 3d + e + 3f = 16 \\ & 4a + 3b + c - 6d - 3e - 2f = -27 \end{aligned}$$