

(1) Solve the system

$$\begin{aligned}x_1 + 2x_2 &= 3 \\4x_1 + 5x_2 &= 6 \\7x_1 + 8x_2 &= 9\end{aligned}$$

(2) Solve the system

$$\begin{aligned}x_1 + x_2 + 2x_3 &= 3 \\4x_1 + 4x_2 + 5x_3 &= 6 \\7x_1 + 7x_2 + 8x_3 &= 10\end{aligned}$$

(3) Solve the system

$$\begin{aligned}x_1 + 2x_2 + 3x_3 &= 4 \\5x_1 + 6x_2 + 7x_3 &= 8 \\9x_1 + 10x_2 + 11x_3 &= 12 \\13x_1 + 14x_2 + 15x_3 &= 16\end{aligned}$$