

(1)[7 points] Solve the following system of equations using Gauss-Jordan elimination.

$$4x - y - 3z = 1$$

$$8x + y - z = 5$$

$$2x + y + 2z = 5$$

(2)[8 points] Solve the following system of equations using Gauss-Jordan elimination:

$$\begin{aligned}x + y + z &= 1 \\x + 2y + 3z &= 4 \\4x + 5y + 6z &= 7\end{aligned}$$