Problem 1: 3 intersecting planes (unique solution)

Plane #1: $1x_1 + 1x_2 + 1x_3 = 2$
Plane #2: $1x_1 + -3x_2 + 0x_3 = 1$
Plane #3: $-1x_1 + 2x_2 + 6x_3 = 5$
$x_{solution} = [\ 1\ \ 0\ \ 1\ ]^T$

x3-axis

x2-axis

x1-axis