WORKSHEET: GAUSSIAN ELIMINATION (A FIRST LOOK)

1. Use Gaussian elimination to solve the system
$$S_1= \begin{cases} x+&y&=1\\ &2y-z=-4\\ x+&y+z=4 \end{cases}$$

2. Use Gaussian elimination to solve the system
$$S_2=\left\{ egin{align*} x-5y+z=2\\ x-4y+z=2\\ 2x & +z=5 \end{array} \right.$$

3. Use Gaussian elimination to solve the system $S_3=\begin{cases} x_1+&x_2+3x_3=5\\ x_1+2x_2+4x_3=6 \end{cases}$