Exercise 1. Solve by Cramer's Rule the following system:

$$\begin{cases} 6x + y - 2z = -2 \\ x + y + 3z = 1 \\ -5x + 2y - 3z = 0 \end{cases}.$$

Exercise 2. Solve using the unit column method:

$$\begin{cases} x - 3y + z = 3 \\ 3x - 6y + 5z = 2 \\ -x + 2y - 2z = 1 \end{cases}$$

Exercise 3. Find the rank of

$$A = \begin{bmatrix} 1 & 5 & 2 & -2 \\ 2 & 3 & -2 & 1 \\ -3 & -1 & 6 & 0 \end{bmatrix}.$$

Exercise 4. Find the values of the parameter *p,* for which the given system is non-singular:

$$\begin{cases} -3x - 5y + pz = -3 \\ -x - 4y + 2z = p \\ px + 3y + z = p \end{cases}.$$