Assignment 7
Due date: 21 May 2021
TA: 林宏懌 E817 (13:10~14:00)

1. Use the adjoint method to find the inverse of *A*, where

$$A = \begin{bmatrix} 2 & 5 & 5 \\ -1 & -1 & 0 \\ 2 & 4 & 3 \end{bmatrix}.$$

2. Use the adjoint method to find the inverse of *A*, where

$$A = \begin{bmatrix} 2 & 0 & 3 \\ 0 & 3 & 2 \\ -2 & 0 & -4 \end{bmatrix}.$$

3. Solve the following system using Cramer's rule.

$$\begin{aligned} 4x & +5y & & = 2 \\ 11x & +y & +2z & = 3 \\ x & +5y & +2z & = 1 \end{aligned}$$

4. Solve the following system using Cramer's rule.

$$\begin{aligned} x - 4y + z & = 6 \\ 4x - y + 2z & = -1 \\ 2x + 2y - 3z & = -20 \end{aligned}$$