Homework 06

You are suggested to finish all questions prior to Quiz 06.

1. Section 2.5 Exercises: Q3;

2. Section 2.5 Exercises: Q4;

3. Consider a linear system:

$$Ax = b : \begin{bmatrix} 3 & 1 & 0 \\ 1 & 2 & 1 \\ 0 & 1 & 4 \end{bmatrix} x = \begin{bmatrix} 5 \\ 5 \\ 5 \end{bmatrix} ,$$

   find the optimal ω such that the corresponding relaxation method converges to the true solution of $Ax = b$ fastest.