

# Engineering Analysis

## Homework 4

April 25, 2017

1. Solve the system of linear equations below using the Jacobi method, Gauss-Seidel Iterative method, Relaxation method, and Conjugate gradient method. Discuss the results with the exact solution. You need to choose an initial solution vector for each method.

$$\begin{aligned}x + 3y - 2z &= 5, \\3x + 5y + 6z &= 7, \\2x + 4y + 3z &= 8.\end{aligned}$$