

Name: _____ Sort #: _____

Worksheet 20

Numerical Linear Algebra

MATH 2250, Fall 2018

1. Find the first two iterations of the Jacobi method for the following linear system using $\vec{x}^{(0)} = \vec{0}$.

$$3x_1 - x_2 + x_3 = 1$$

$$3x_1 + 6x_2 + 2x_3 = 0$$

$$3x_1 + 3x_2 + 7x_3 = 4$$

2. Repeat the first problem using Gauss-Seidel.