MATH 54 FALL 2017: DISCUSSION 205/208 QUIZ#1

GSI: CHRISTOPHER EUR, DATE: 9/1/2017

STUDENT NAME: _____

Problem 1. (4 points) Solve for the general solution of $A\vec{x} = \vec{b}$ where

$$A = \begin{bmatrix} 2 & 0 & 4 & 2 \\ 2 & 1 & 2 & 1 \end{bmatrix}, \quad \vec{b} = \begin{bmatrix} -2 \\ 1 \end{bmatrix}$$

Problem 2. (6 points) Say for which values of h, k the following system has (a) no solution, (b) unique solution, (c) infinitely many solutions.

$$\begin{bmatrix} 1 & 1 \\ 0 & h \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \end{bmatrix} = \begin{bmatrix} k \\ k \end{bmatrix}$$