Math 54 Fall 2017

You have 20 minutes to complete this quiz. To receive full credit, you must justify your answers.

Name : _____

1. (5 points) Find the general solution of the linear system corresponding to the following augmented matrix:

$$\left[\begin{array}{ccc|c} 1 & 3 & 2 & 0 \\ 2 & 4 & 0 & 2 \\ 1 & 1 & -2 & 2 \end{array}\right]$$

2. (5 points) Find all values of c for which the vector $\begin{bmatrix} 3 \\ 3 \\ c \end{bmatrix}$ lies in the span of $\begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$ and $\begin{bmatrix} -1 \\ 1 \\ 3 \end{bmatrix}$.