

## MATH 54 – QUIZ 1

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Name: \_\_\_\_\_

**Instructions:** You have 10 minutes to take this quiz, for a total of 10 points. Good luck, and remember: I've got one less row-reduction, one less row-reduction...

1. (5 points) Using the **reduced row-echelon form**, find the general solution of the linear system corresponding to the following **augmented** matrix.

$$\begin{bmatrix} 2 & -3 & 5 & 5 \\ 1 & -2 & -1 & -5 \\ 3 & -4 & 11 & 15 \end{bmatrix}$$

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*Date:* Thursday, January 29, 2015.

2. (5 points) For what  $c$  is  $\begin{bmatrix} c \\ 0 \\ -c \end{bmatrix}$  in  $\text{Span} \left\{ \begin{bmatrix} 1 \\ 0 \\ 1 \end{bmatrix}, \begin{bmatrix} 1 \\ -1 \\ 2 \end{bmatrix}, \begin{bmatrix} c \\ 1 \\ 1 \end{bmatrix}, \begin{bmatrix} 1 \\ 2 \\ -1 \end{bmatrix} \right\}$ ?