Attendance Quiz for Lecture 2

NAME: (print!) _____ **Section:** _____

E-MAIL ADDRESS: (print!) _____

1. Compute the matrix-vector product

$$\begin{bmatrix} 2 & -3 & 1 \\ -4 & 5 & 0 \\ 3 & -1 & 2 \end{bmatrix} \begin{bmatrix} 1 \\ 2 \\ -3 \end{bmatrix} \quad .$$

2. If possible, write the vector

$$\mathbf{u} = \begin{bmatrix} 1 \\ 3 \\ 4 \end{bmatrix} \quad ,$$

as a linear combination of the vectors in $\mathcal{S}$, where

$$\mathcal{S} = \left\{ \begin{bmatrix} 1 \\ 1 \\ 2 \end{bmatrix} , \begin{bmatrix} 0 \\ 1 \\ 1 \end{bmatrix} \right\} \quad .$$