MATH 335 Quiz 2 Name: .
Spring 16

Show all work. 5 points each.

1. Let $\mathbf{u} = \begin{bmatrix} 0 \\ 4 \\ 4 \end{bmatrix}$ and $A = \begin{bmatrix} 3 & -5 \\ -2 & 6 \\ 1 & 1 \end{bmatrix}$. Is $\mathbf{u}$ in the plane spanned by the columns of A? Why or why not?

2. Solve the system of equations and describe the solutions in parametric form.

$$\begin{array}{rrrl} x_1 & +3x_2 & +x_3 & = 1 \\ -4x_1 & -9x_2 & +2x_3 & = -1 \\ & -3x_2 & -6x_3 & = -3 \end{array}$$