

## Attendance Quiz 6

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

1.  $T$  is defined by  $T(\vec{x}) = A\vec{x}$ . Find a vector  $\vec{x}$  whose image under  $T$  is  $\vec{b}$ , and determine whether  $\vec{x}$  is unique.

$$A = \begin{bmatrix} 1 & -3 & 2 \\ 0 & 1 & -4 \\ 3 & -5 & -9 \end{bmatrix}, \quad \vec{b} = \begin{bmatrix} 6 \\ -7 \\ -9 \end{bmatrix}.$$