QUIZ 2   **Time: 10min**

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1. Let $\mathbf{u} = \begin{bmatrix} 2 \\ -1 \end{bmatrix}$ and $\mathbf{v} = \begin{bmatrix} 2 \\ 1 \end{bmatrix}$. Show that $\begin{bmatrix} h \\ k \end{bmatrix}$ is in $Span\{\mathbf{u}, \mathbf{v}\}$ for all h and k.

2. True or False:

(a) $Span\{\mathbf{u}, \mathbf{v}\}$ contains the line through u and the origin.

(b) If $A\mathbf{x} = \mathbf{b}$ is consistent, then $\mathbf{b}$ is not in the set spanned by the columns of A.

Each problem is worth 5 points.