Math 2418 Linear Algebra Quiz #6 Oct. 17-18, 2001

[10] 1.) Show that the line $\mathbf{x} = t \begin{bmatrix} 4 \\ 8 \end{bmatrix}$ is a subspace of \mathbb{R}^2 .

[10] 2.) Write
$$\begin{bmatrix} 5 \\ -4 \\ -5 \end{bmatrix}$$
 as a linear combination of $\begin{bmatrix} 4 \\ 1 \\ 2 \end{bmatrix}$, $\begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$, and $\begin{bmatrix} 6 \\ 5 \\ 8 \end{bmatrix}$