Math 2418 Linear Algebra Quiz #7
Oct. 24-25, 2001

Circle T for True and F for false.

[2] 1.) $Span\{\begin{bmatrix}4\\1\end{bmatrix}, \begin{bmatrix}2\\3\end{bmatrix}, \begin{bmatrix}7\\5\end{bmatrix}\} = R^2$. T F

[2] 2.) $\{\begin{bmatrix}4\\1\end{bmatrix}, \begin{bmatrix}2\\3\end{bmatrix}, \begin{bmatrix}7\\5\end{bmatrix}\}$ is linearly independent. T F

[2] 3.) $\{\begin{bmatrix}4\\1\end{bmatrix}, \begin{bmatrix}2\\3\end{bmatrix}, \begin{bmatrix}7\\5\end{bmatrix}\}$ is a basis for R^2. T F

[2] 4.) $Span\{\begin{bmatrix}-2\\-3\end{bmatrix}, \begin{bmatrix}4\\6\end{bmatrix}, \begin{bmatrix}0\\0\end{bmatrix}\} = R^2$. T F

[2] 5.) $\{\begin{bmatrix}-2\\-3\end{bmatrix}, \begin{bmatrix}4\\6\end{bmatrix}, \begin{bmatrix}0\\0\end{bmatrix}\}$ is linearly independent. T F

[2] 6.) $\{\begin{bmatrix}-2\\-3\end{bmatrix}, \begin{bmatrix}4\\6\end{bmatrix}, \begin{bmatrix}0\\0\end{bmatrix}\}$ is a basis for R^2. T F

[2] 7.) $Span\{7+4t,\ 2-3t\} = \mathbf{P_1}$ = the set of all polynomials of degree at most 1. T F

[2] 8.) $Span\{3+t,\ 5-2t\} = Span\{1-t,\ 4+2t\}$. T F

[2] 9.) $\{3+2t^2,\ 4-t,\ 5-2t+t^2\}$ is a basis for $Span\{7-t+2t^2,\ 9-3t+t^2\}$. T F

[2] 10.) $Span\{7-t+2t^2,\ 9-3t+t^2\} = Span\{2-2t-t^2,\ 16-4t+3t^2\}$. T F

[2] 11.) $Span\{7-t+2t^2,\ 9-3t+t^2\} = Span\{2-2t-t^2,\ 16-4t+2t^2\}$. T F