Lay 4.2 Math 2210Q

 Multiple Choice: (a) True√ (b) False Question 2 True/False: Let A be any m × n matrix, then 0 is in Col A. Multiple Choice: (a) True√ (b) False Question 3 True/False: Let A be any m×n matrix, then Col A = Span{ā₁,,ān where A = [ā₁,,ān]. Multiple Choice: (a) True√ (b) False Question 4 True/False: Let A be any m×n matrix, then Col A is a subspace of Rⁿ Multiple Choice: (a) True Multiple Choice: (a) True (b) False√	Question 1 True/False: Let A be any $m \times n$ matrix, then $\vec{0}$ is in Nul A.
 Question 2 True/False: Let A be any m × n matrix, then 0 is in Col A. Multiple Choice: (a) True √ (b) False Question 3 True/False: Let A be any m×n matrix, then Col A = Span{\$\vec{a}\$_1,,\$\vec{a}\$_n where A = [\$\vec{a}\$_1,,\$\vec{a}\$_n]. Multiple Choice: (a) True √ (b) False Question 4 True/False: Let A be any m × n matrix, then Col A is a subspace of Rⁿ Multiple Choice: (a) True Question 4 True/False: Let A be any m × n matrix, then Col A is a subspace of Rⁿ Multiple Choice: (a) True 	Multiple Choice:
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 Multiple Choice: (a) True ✓ (b) False Question 3 True/False: Let A be any m×n matrix, then Col A = Span{\$\vec{a}_1,, \vec{a}_n\$} where A = [\$\vec{a}_1,, \vec{a}_n\$]. Multiple Choice: (a) True ✓ (b) False Question 4 True/False: Let A be any m × n matrix, then Col A is a subspace of Rⁿ Multiple Choice: (a) True 	(b) False
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of R ⁿ Multiple Choice: (a) True	(b) False
of R ⁿ Multiple Choice: (a) True	
(a) True	
• •	Multiple Choice:
(b) False ✓	(a) True
	(b) False ✓

Question 5 True/False: Let A be any $m \times n$ matrix, then $\operatorname{Col} A$ is a subspace of $\mathbf{R}^{\mathbf{m}}$

Multiple Choice:

- (a) True ✓
- (b) False

Question 6 True/False: Let A be any $m \times n$ matrix, then Nul A is a subspace of $\mathbf{R^m}$

Multiple Choice:

- (a) True
- (b) False ✓

Question 7 True/False: Let A be any $m \times n$ matrix, then Nul A is a subspace of ${\bf R^n}$

Multiple Choice:

- (a) True ✓
- (b) False

Question 8 True/False: Let A be any $m \times n$ matrix, then $\operatorname{Col} A$ is $\mathbf{R}^{\mathbf{m}}$

Multiple Choice:

- (a) True
- (b) False ✓

Question 9 Suppose $\begin{bmatrix} 1 \\ 2 \end{bmatrix}$ is a solution to $A\vec{x} = \vec{0}$ where A is a 5×2 matrix. Is $\begin{bmatrix} 1 \\ 2 \end{bmatrix}$ in Nul A?

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Multiple Choice:

- (a) Yes ✓
- (b) No
- (c) Not enough information given to determine

Question 10 Suppose $A \begin{bmatrix} 1 \\ 4 \end{bmatrix} = \begin{bmatrix} 5 \\ 6 \\ 7 \end{bmatrix}$. Which of the following statements is true?

Multiple Choice:

(a)
$$\begin{bmatrix} 1 \\ 4 \end{bmatrix} \in \operatorname{Col} A$$

(b)
$$\begin{bmatrix} 5 \\ 6 \\ 7 \end{bmatrix} \in \operatorname{Nul} A$$

(c)
$$\begin{bmatrix} 5 \\ 6 \\ 7 \end{bmatrix} \in \operatorname{Col} A \checkmark$$

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