



MTH501 QUIZ(2)

Lecture: 17 to 21

RIZ MUGHAL **SQA ENGINEER:**

I'm providing 100% correct quiz solution.

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MTH501:Quiz No 2

Question # 1 of 10 (Start time: 03:55:05 PM, 14 June 2021)

If a matrix A is invertible than $\text{adj}(A)$ is also invertible.

Select the correct option

<input checked="" type="radio"/>	TRUE
<input type="radio"/>	FALSE

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Question # 2 of 10 (Start time: 03:55:25 PM, 14 June 2021)

Associative property states that if f , g and h are in V then for all

Select the correct option



$$((f + g) + h)(x) = (f + g)(x) + h(x)$$



$$((f + g) + h)(x) = (f + (g + h))(x)$$

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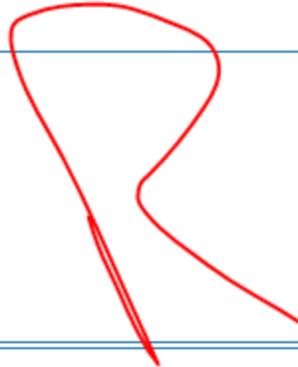
Question # 3 of 10 (Start time: 03:55:46 PM, 14 June 2021)

A matrix A and its transpose have the same determinant.

Select the correct option

<input type="radio"/>	FALSE
<input checked="" type="radio"/>	TRUE

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Question # 4 of 10 (Start time: 03:56:07 PM, 14 June 2021)

Total Ma

The value of the determinant of a square matrix remains unchanged if we multiply each element of a row or a column by some scalar.

Select the correct option

<input type="radio"/>	TRUE
<input checked="" type="radio"/>	FALSE

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R

Question # 5 of 10 (Start time: 03:56:50 PM, 14 June 2021)

The subspace $\{0\}$ in a vector space V is known as the:

Select the correct option

<input checked="" type="radio"/>	Zero vector space
<input type="radio"/>	Basis
<input type="radio"/>	Spanning set
<input type="radio"/>	Subspace

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R

Question # 6 of 10 (Start time: 03:58:06 PM, 14 June 2021)

Tot

If all the elements of one row is '0' in a matrix A then which of the following about the determinant of the matrix is true?

Select the correct option

- | | |
|----------------------------------|----------------------------|
| <input type="radio"/> | det (A)is not equal to '1' |
| <input type="radio"/> | det (A)=1 |
| <input checked="" type="radio"/> | det (A)=0 |
| <input type="radio"/> | det (A)is not equal to '0' |

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Question # 7 of 10 (Start time: 03:58:27 PM, 14 June 2021)

Let V be a five dimensional vector space, and let S be a subset of V which spans V , then S

Select the correct option

 Reload

- Must have exactly five elements
- Must be linearly dependent.
- Must be basis for V
- Must consist of at least five elements

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Question # 8 of 10 (Start time: 03:58:58 PM, 14 June 2021)

Total M

While using the Cramer's rule, if determinant $D = 0$, and other determinant is not zero then how many solutions are there?

Select the correct option

- | | |
|----------------------------------|----------------|
| <input type="radio"/> | one solution |
| <input checked="" type="radio"/> | no solution |
| <input type="radio"/> | two solutions |
| <input type="radio"/> | many solutions |

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Question # 9 of 10 (Start time: 03:59:22 PM, 14 June 2021)

Any system of n linear equations in $(n+1)$ variable can be solved by Cramer's rule.

Select the correct option

<input type="radio"/>	TRUE
<input checked="" type="radio"/>	FALSE

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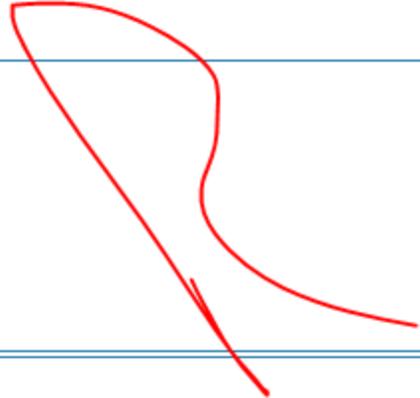
Question # 10 of 10 (Start time: 03:59:42 PM, 14 June 2021)

All the planes those passes through origin are the subspace of a three dimensional space.

Select the correct option

<input type="radio"/>	FALSE
<input checked="" type="radio"/>	TRUE

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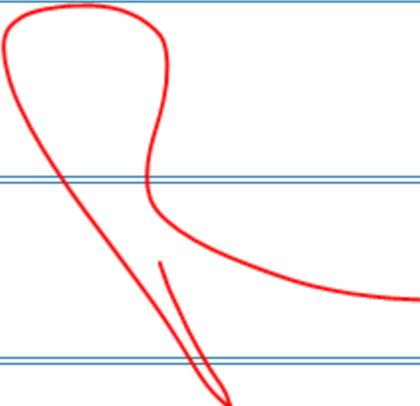


2nd account

Question # 1 of 10 (Start time: 04:08:41 PM, 14 June 2021)

If A is $n \times n$ matrix and $\det(A) = 2$ then $\det(A^3) =$ _____
Where ($A^3 = A$ power 3)

Select the correct option

- | | |
|----------------------------------|---|
| <input type="radio"/> | 9 |
| <input type="radio"/> | 8 |
| <input type="radio"/> | 4 |
| <input checked="" type="radio"/> | 6 |
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Question # 2 of 10 (Start time: 04:09:16 PM, 14 June 2021)

The three most important special cases of R^n are $x \in R$

Select the correct option

<input checked="" type="radio"/>	R, R^2, R^3
<input type="radio"/>	R, N

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Question # 3 of 10 (Start time: 04:09:59 PM, 14 June 2021)

Total Ma

The value of the determinant of a square matrix remains unchanged if we multiply each element of a row or a column by some scalar.

Select the correct option

<input type="radio"/>	TRUE
<input checked="" type="radio"/>	FALSE

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MTH501:Quiz No 2

Question # 4 of 10 (Start time: 04:10:36 PM, 14 June 2021)

The subspace $\{0\}$ in a vector space V is known as the:

Select the correct option

<input type="radio"/>	Spanning set
<input type="radio"/>	Basis
<input checked="" type="radio"/>	Zero vector space
<input type="radio"/>	Subspace

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R

Question # 5 of 10 (Start time: 04:11:11 PM, 14 June 2021)

Total Ma

Suppose k is any scalar and $u = (u_1, u_2, \dots, u_n), v = (v_1, v_2, \dots, v_n) \in R^n$. then the distributive law states that

Select the correct option

[Reload Math Equat](#)

- | | |
|----------------------------------|----------------|
| <input type="radio"/> | $k(u+v)=kuv$ |
| <input checked="" type="radio"/> | $K(u+v)=ku+kv$ |

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[Click to Save Answer & Move to Next Questi](#)

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Question # 6 of 10 (Start time: 04:11:49 PM, 14 June 2021)

If $M=[3]$ then which of the following is the determinant of the matrix M ?

Select the correct option

- | | |
|----------------------------------|-----|
| <input type="radio"/> | 1 |
| <input type="radio"/> | [3] |
| <input checked="" type="radio"/> | 3 |
| <input type="radio"/> | [1] |

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Question # 7 of 10 (Start time: 04:12:04 PM, 14 June 2021)

If u and v are vectors in W and $u = (1, -3, 2)$ and $v = (4, 2, 1)$ then which of the following is true for $u + v$ in W ?

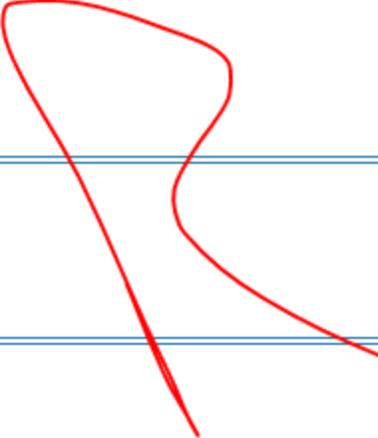
Select the correct option

- | | |
|----------------------------------|--------------|
| <input checked="" type="radio"/> | (5, -1, 3) |
| <input type="radio"/> | (-4, -2, -1) |
| <input type="radio"/> | (5, -1, 2) |
| <input type="radio"/> | (-3, -5, 1) |

Question # 8 of 10 (Start time: 04:12:23 PM, 14 June 2021)

If one row of A is multiplied by k to produce B, then which of the following condition is true?

Select the correct option

- | | |
|----------------------------------|-------------------------------|
| <input checked="" type="radio"/> | $\det B = k \det A$ |
| <input type="radio"/> | $\det B = \det A$ |
| <input type="radio"/> | $\det(AB) = (\det A)(\det B)$ |
| <input type="radio"/> | $\det B = - \det A$ |
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Question # 9 of 10 (Start time: 04:12:41 PM, 14 June 2021)

In general,

Select the correct option

- | | |
|----------------------------------|------------------------------------|
| <input checked="" type="radio"/> | $\det(A+B) \neq \det(A) + \det(B)$ |
| <input type="radio"/> | $\det(A+B) = \det(A) + \det(B)$ |

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Question # 10 of 10 (Start time: 04:12:56 PM, 14 June 2021)

To

By using determinants, we can easily check that the solution of the given system of linear equation exists and it is unique.

Select the correct option

<input checked="" type="radio"/>	TRUE
<input type="radio"/>	FALSE

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3rd account

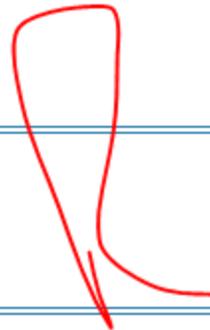
Question # 1 of 10 (Start time: 04:28:56 PM, 14 June 2021)

The determinant of the identity matrix is _____ .

Select the correct option

- | | |
|----------------------------------|---------------------------------------|
| <input checked="" type="radio"/> | 1 |
| <input type="radio"/> | 0 |
| <input type="radio"/> | $n \times$ (number of rows or coulms) |
| <input type="radio"/> | -1 |

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Question # 2 of 10 (Start time: 04:29:17 PM, 14 June 2021)

The determinant of a square matrix $A = \begin{bmatrix} 3 & 2 \\ 4 & 5 \end{bmatrix}$ is

Select the correct option

- | | |
|----------------------------------|----|
| <input type="radio"/> | 8 |
| <input checked="" type="radio"/> | 7 |
| <input type="radio"/> | 0 |
| <input type="radio"/> | 15 |
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-

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Question # 3 of 10 (Start time: 04:29:36 PM, 14 June 2021)

A matrix A and its transpose have the same determinant.

Select the correct option

<input type="radio"/>	FALSE
<input checked="" type="radio"/>	TRUE

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Question # 4 of 10 (Start time: 04:29:52 PM, 14 June 2021)

If a matrix A is invertible than $\text{adj}(A)$ is also invertible.

Select the correct option

<input checked="" type="radio"/>	TRUE
<input type="radio"/>	FALSE

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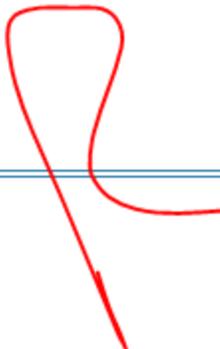
Question # 5 of 10 (Start time: 04:30:07 PM, 14 June 2021)

At what condition $\det(AB)=(\det A)(\det B)$ is possible?

Select the correct option

- | | |
|----------------------------------|--|
| <input type="radio"/> | When B is a column matrix |
| <input checked="" type="radio"/> | When A and B are $n \times n$ matrices |
| <input type="radio"/> | When A is a row matrix |
| <input type="radio"/> | When A and B are $m \times n$ matrices |

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Question # 6 of 10 (Start time: 04:30:25 PM, 14 June 2021)

Tot

Which of the following is NOT the axiom for vector space where u, v, w in V are set of vectors and l, m, n are scalars?

Select the correct option

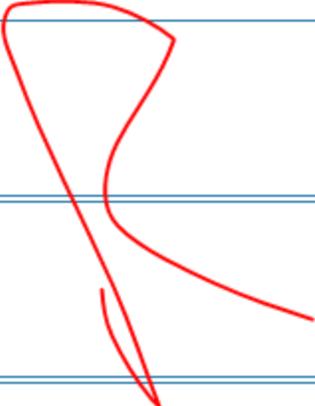
- | | |
|----------------------------------|-----------------------------|
| <input type="radio"/> | $u + (v + w) = (u + v) + w$ |
| <input type="radio"/> | $l(u + v) = lu + lv$ |
| <input checked="" type="radio"/> | $u \cdot v = v \cdot u$ |
| <input type="radio"/> | $(l + m)u = lu + mu$ |

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Question # 7 of 10 (Start time: 04:30:45 PM, 14 June 2021)

If A is a triangular matrix, then $\det(A)$ is the product of the entries on the _____.

Select the correct option

- | | |
|----------------------------------|--------------------------|
| <input type="radio"/> | first two rows of A |
| <input checked="" type="radio"/> | main diagonal of A |
| <input type="radio"/> | diagonal of A |
| <input type="radio"/> | first two columns of A |
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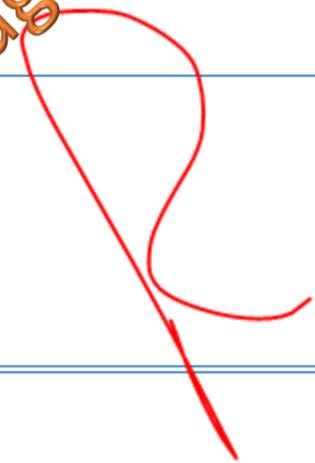
Question # 8 of 10 (Start time: 04:31:12 PM, 14 June 2021)

If A is an $n \times n$ matrix, then

Select the correct option

- | | |
|----------------------------------|----------------------|
| <input checked="" type="radio"/> | $\det A^T = \det A$ |
| <input type="radio"/> | $\det A^T = -\det A$ |

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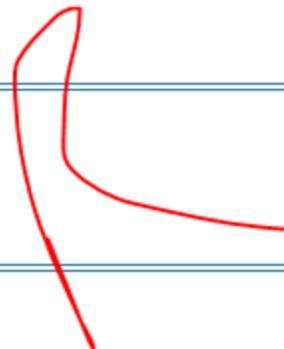
Question # 9 of 10 (Start time: 04:31:28 PM, 14 June 2021)

At what condition the Cramer's formula is valid for linear systems?

Select the correct option

- When matrix is $m \times n$
- When $\det(A)$ is equal to zero
- When matrix is $n \times n$
- When $\det(A)$ is not equal to zero

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Question # 10 of 10 (Start time: 04:31:48 PM, 14 June 2021)

Any system of n linear equations in $(n+1)$ variable can be solved by Cramer's rule.

Select the correct option

<input type="radio"/>	TRUE
<input checked="" type="radio"/>	FALSE

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Thank you for watching 😊

Share with your fellows

Rizwanqadeer848@gmail.com