

Mth501 grand quiz solved by riz mughal

Linear Algebra (Virtual University of Pakistan)



Scan to open on Studocu

BC170402555: AMNA MASOOD

MTH501:Grand Quiz

Question # 1 of 30 (Start time: 08:03:35 AM, 01 July 2020)

Which of the following will be the Matrix Product corresponding to Linear Combinition: $\binom{-2}{5}x+\binom{3}{1}y$?

0	$\left(egin{array}{cc} 1 & -3 \ -5 & -2 \end{array} ight)\left(egin{array}{cc} x \ y \end{array} ight)$
0	$\begin{pmatrix} -2 & 5 \ 3 & 1 \end{pmatrix} \begin{pmatrix} x \ y \end{pmatrix}$
	$\begin{pmatrix} -2 & 3 \\ 5 & 1 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix}$
0	$\begin{pmatrix} 3 & -2 \\ 1 & 5 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix}$

Question # 2 of 30 (Start time: 08:04:12 AM, 01 July 2020)

Which of the following property does not hold for matrix multiplication?

0	Associative
0	Distributive
	Commutative
0	Additive inverse

MTH501:Grand Quiz

Question # 3 of 30 (Start time: 08:04:37 AM, 01 July 2020)

For the matrix:
$$A = \begin{pmatrix} 4 & x+2 \\ 2x-3 & 1 \end{pmatrix}$$
 , if $A = A^t$, then $x = ---$.

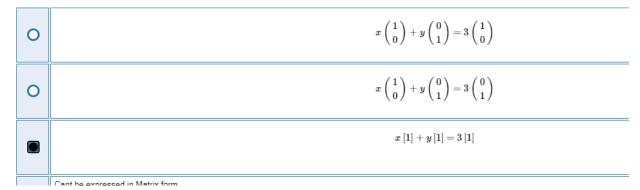
Select the correct option

	5
0	5/2
0	-5

MTH501:Grand Quiz

Question # 4 of 30 (Start time: 08:05:10 AM, 01 July 2020)

Which of the following is corresponding Matrix form of the Linear equation x + y = 3?



MTH501:Grand Quiz

Question # 5 of 30 (Start time: 08:06:05 AM, 01 July 2020)

Set
$$\left\{ \begin{pmatrix} 1 \\ 2 \end{pmatrix}, \begin{pmatrix} 0 \\ 0 \end{pmatrix} \right\}$$
 is Linearly - - - - in \mathbb{R}^2 .

Select t	he corre	ect option
----------	----------	------------

0	Independent
	Dependent

Question # 6 of 30 (Start time: 08:06:30 AM, 01 July 2020)		
If one ro	w of A is multiplied by k to produce B, then which of the following condition is true?	
Select th	e correct option	
0	det(AB) = (detA)(detB)	
	detB = k detA	
0	detB = - detA	
0	detB = detA	

DOTAMANIMA GCC70401

	Question # 7 of 30 (Start time: 08:07:02 AM, 01 July 2020)		
	If determ	ninant of a matrix is zero then which of the following is true for that system?	
Select the correct option			
	0	The inversion method applies.	
		The inversion method fails.	

For the following system of Equations: x+2y=0, 2x-y=0; which variable can be taken as free?

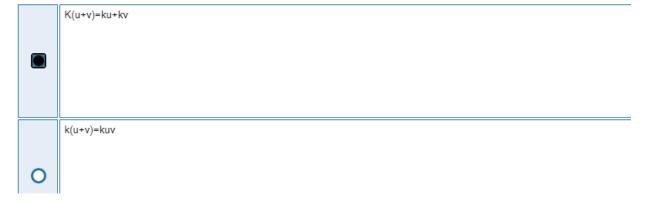
Select the correct option

0	only x
0	only y
0	both x and y
	either x or y

MTH501:Grand Quiz

Question # 9 of 30 (Start time: 08:08:04 AM, 01 July 2020)

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





Question	Question # 10 of 30 (Start time: 08:08:29 AM, 01 July 2020)		
	Under which of the following condition, a system of Linear Equations whose Row-Reduce form is $\begin{pmatrix} 1 & 2 & & -1 \\ 0 & 0 & & h-3k \end{pmatrix}$ has $Infinite$ many solutions?		
Select th	e correct option		
	h=3k		
0	h eq 3k		
	(h,k)=(0,0)		
MTH501	I:Grand Quiz		
Question	n # 11 of 30 (Start time: 08:09:06 AM, 01 July 2020)		
	Since vector $\begin{pmatrix} 2 \\ 3 \end{pmatrix}$ lies in the span $\left\{ \begin{pmatrix} 1 \\ 0 \end{pmatrix}, \begin{pmatrix} 0 \\ 1 \end{pmatrix} \right\}$ then the vectors $\begin{pmatrix} 2 \\ 3 \end{pmatrix}, \begin{pmatrix} 1 \\ 0 \end{pmatrix}$ and $\begin{pmatrix} 0 \\ 1 \end{pmatrix}$ are Linearly $$		
Select th	ne correct option		
	Dependent		
	Independent		

Question # 12 of 30 (Start time: 08:09:38 AM, 01 July 2020)

The order of matrix $[2\ 1\ 3]$ is

0	2-by-1
0	2-by-3
	1-by-3
0	3-by-1

Question # 13 of 30 (Start time: 08:10:20 AM, 01 July 2020)

Select the correct option

0	$\left(egin{array}{cc} 2 & 1 \ -2 & 1 \end{array} ight)$
0	$\left(egin{array}{cccc} 2 & 0 & & 1 \ -1 & -2 & & 1 \end{array} ight)$
0	$\left(\begin{array}{ccc c}2&0& &1\\1&-2& &0\end{array}\right)$
	$\left(\begin{array}{ccc c}2&0& &1\\-1&-2& &0\end{array}\right)$

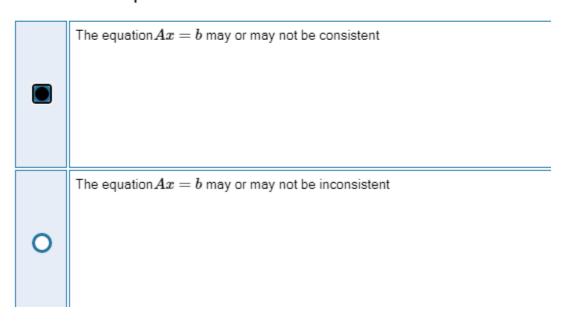
Question # 13 of 30 (Start time: 08:10:20 AM, 01 July 2020)

0	$\left(egin{array}{cc} 2 & 1 \ -2 & 1 \end{array} ight)$
0	$\left(\begin{array}{ccc c}2&0& &1\\-1&-2& &1\end{array}\right)$
0	$\left(\begin{array}{ccc c}2&0& &1\\1&-2& &0\end{array}\right)$
	$\left(egin{array}{cccc} 2 & 0 & \mid & 1 \ -1 & -2 & \mid & 0 \end{array} ight)$

Question # 14 of 30 (Start time: 08:10:47 AM, 01 July 2020)		
	Linear al	gebra is the study of linear sets of equations and their properties.
Select the correct option		
	0	non-linear
		transformation

Question # 15 of 30 (Start time: 08:11:13 AM, 01 July 2020)

If an augmented matrix $[A \;\; b]$ has a pivot position in every row then



Question # 16 of 30 (Start time: 08:11:43 AM, 01 July 2020)		
LU-factorization is a matrix decomposition which writes a matrix as the product of a matrix and an upper triangular matrix.		
Select the correct option		
O diagonal		
O null		
Olidentity		
lower triangular		

MTH501:Grand Quiz

Question # 17 of 30 (Start time: 08:12:08 AM, 01 July 2020)

If $A^t = A^{-1}$, then |A| = - - - -.

0	0
0	1
0	-1
	± 1

Question # 18 of 30 (Start time: 08:12:36 AM, 01 July 2020)

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

	R , R^2 , R^3
0	R,N

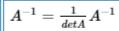
Solved by riz mughal		
мтн50	MTH501:Grand Quiz	
Questio	on # 19 of 30 (Start time: 08:12:59 AM, 01 July 2020)	
	e entries of a row or a column of a square matrix are zero, then det (A) will be	
Select t	the correct option	
	zero	
0	infinity	
0	one	
	non zero	

Question # 20 of 30 (Start time: 08:13:21 AM, 01 July 2020)	
Which of the following is the area of the parallelogram determined by the columns of A where A is a 2 x 2 matrix?	
Select the correct option	
0	[A]
	det A
0	det A

Question # 23 of 30 (Start time: 08:14:20 AM, 01 July 20

Inverse of a matrix is given by

Select the correct option



U

$$A^{-1} = rac{1}{det A} adj(A)$$



MTH501:0	MTH501:Grand Quiz	
Question #	# 27 of 30 (Start time: 08:15:45 AM, 01 July 2020)	
A . B = A	A.B	
Select the correct option		
	TRUE	
0	FALSE	

Question # 28 of 30 (Start time: 08:16:08 AM, 01 July 2020)	
Which of the following is NOT the axiom for vector space where u, v, w in V are set of vectors and I, m, n are scalars?	
Select the correct option	
0	u + (v + w) = (u + v) + w
	u.v =v.u
0	(u + v)= u + v
	(I +m) u= I u+ m u

BC170402555: AMNA MASOOD

Question # 30 of 30 (Start time: 08:16:53 AM, 01 July 2020)	
Non squ	are matrices do not have inverse
Select the correct option	
	True
0	False