

1.			
	Let A be any 3×3 invertible matrix. Then which one of the following is no	t always true? go /// mathongo /// mathongo /// mathongo ///	
	(1) $adj (adj (A)) = A ^2 \cdot (adj (A))^{-1}$	(2) $adj (adj (A)) = A \cdot (adj (A))^{-1}$	
	(3) adj (adj (A)) = A . A	(4) $adi(A) = A , A^{-1}$	
2.	Let A be a square matrix of order 3 such that $ A = 5$. Then $ adj (adj A) =$		
	(1) 625	(2) 125	
	(3) 3025 mathongo /// mathongo /// mathongo	(4) 325thongo /// mathongo /// mathongo ///	
3.	If $A = \begin{bmatrix} 2 & -3 \\ -4 & 1 \end{bmatrix}$, then Adj $(3A^2 + 12A)$ is equal to:		
	[]	(2) [51 63]	
	$\begin{pmatrix} 11 \\ -63 \end{pmatrix} \begin{pmatrix} 04 \\ -63 \end{pmatrix}$ mathongo /// mathongo /// mathongo	(2) $\begin{bmatrix} 51 & 63 \\ 84 & 72 \end{bmatrix}$ \bigcirc \bigcirc mathongo \bigcirc mathongo \bigcirc mathongo \bigcirc	
	$(3) \begin{bmatrix} 51 & 84 \end{bmatrix}$	$ \begin{bmatrix} 72 & -63 \\ -84 & 51 \end{bmatrix} $	
111	[63 72]		
4.		the value of $\left A^{-1}adjB^{-1}adj(3A^{-1})\right $ is equal to $\frac{27}{3}$	
	(1) 27	(2) $\frac{27}{4}$	
<u>/</u> 4.		(4) $\frac{1}{4}$ /// mathongo /// mathongo /// mathongo ///	
5.	If $A = \begin{vmatrix} \cos x & \sin x & 0 \\ -\sin x & \cos x & 0 \end{vmatrix} = f(x)$, then $A^{-1} = \underline{\hspace{1cm}}$		
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
	(1) $f(-x)$ mathongo x mathongo x	(2) $f(x)$ ongo $///$ mathongo $///$ mathongo $///$	
	(3) -f(x)	(4) -f(-x)	
6.	Let $A = \begin{bmatrix} 1 & 2 \\ 1 & 1 \end{bmatrix}$ and $A^{-1} = xA + yI$, then the value of x and y are		
	$\begin{bmatrix} -5 & 1 \\ 1 \end{bmatrix}$ (1) $x = \frac{-1}{11}, y = \frac{2}{11}$	(2) $x = \frac{-1}{11}, y = \frac{-2}{11}$	
	(1) $x = \frac{1}{11}, y = \frac{2}{11}$ (3) $x = \frac{1}{11}, y = \frac{2}{11}$	(4) $r = \frac{1}{1}$ $u = \frac{-2}{1}$	
7//.		and $A^{-1} + B^{-1} = 3I$, then AB is equal to (where, I is the identity matrix of order	n
′•	3)	and 12 1 5 1, then 125 is equal to (where, 2 is the identity matrix of order	
	(1) A ongo /// mathongo /// mathongo /// mathongo	(2) B mathematically mathematical mathe	
	(3) $\frac{2I}{3}$	(2) Bathongo /// mathongo /// mathongo /// mathongo ///	
8.	If A and B are two non-singular matrices which commute, then $(A(A+B))$	$\binom{-1}{B}^{-1} \binom{AB}{AB}$ is equal to	
	mathongo $\frac{1}{1}$ mathongo $\frac{1}{1}$ mathongo $\frac{1}{1}$ mathongo	(2) $A^{-1}+B^{-1}$ mathongo /// mathongo ///	
	(1) $A + B$ (3) $A^{-1} + B$	(4) None of these	
9/		AC^{-1} , then CA^3C^{-1} is equal to -ngo /// mathongo /// mathongo ///	
	11 11, B and C are three square matrices of the same order such that B = C		
<i>7</i> •	(1) B	(2) B^2	
	(1) B (3) B ³	 (2) B² (4) B⁹ 	
	72	co. 70	
	72	co. 70	
	(3) B^3 matho $\begin{bmatrix} 1 & 1 & 3 \\ 5 & 1 & 2 \\ 3 & 1 & 0 \end{bmatrix}$ matho $\begin{bmatrix} 1 & 0 & 2 \\ 2 & 1 & 0 \\ 3 & 0 & 1 \end{bmatrix}$. If $Z = PQ^{-1}$, where Q is a square	(4) B ⁹ W mathongo W	
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