

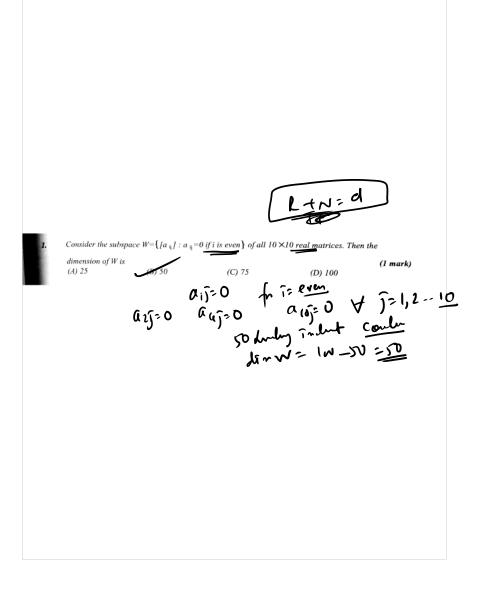
Amxn, BnxK

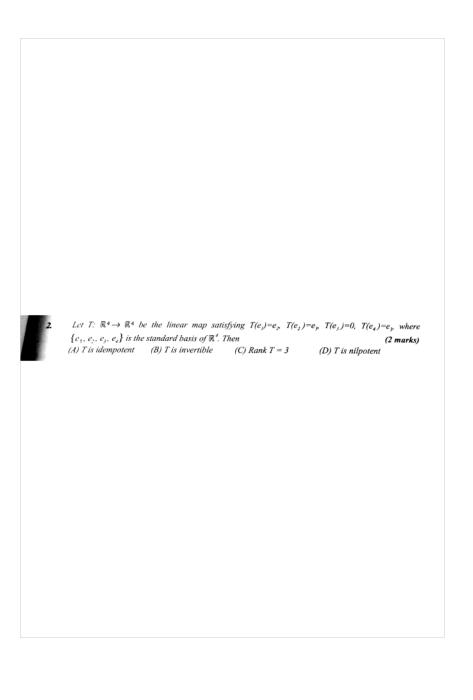
(XAX) \_n randles Hospine Deforte Neph depte mi m EJCO non-roch
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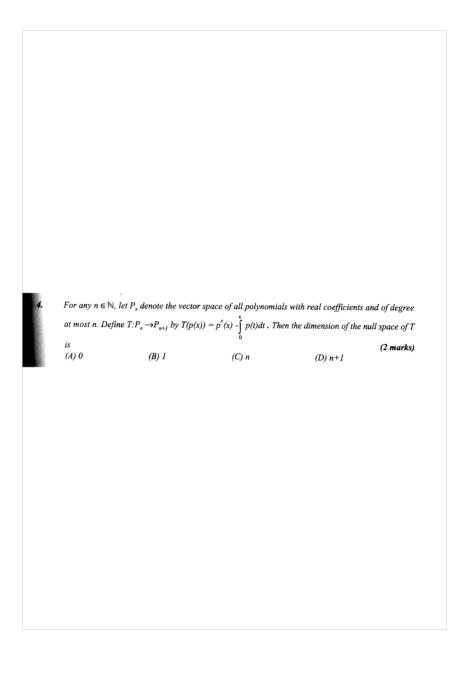
Turk sui-det - EJZO

Turk





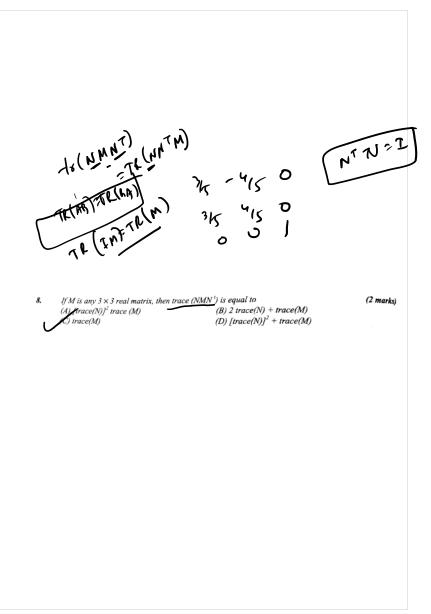


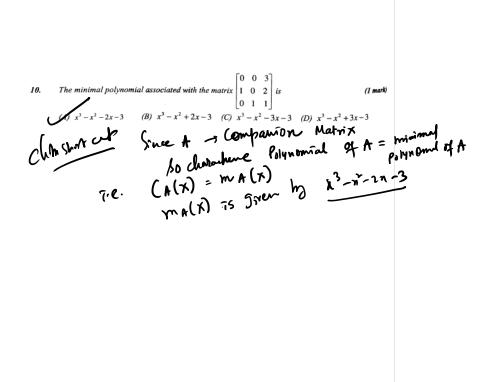


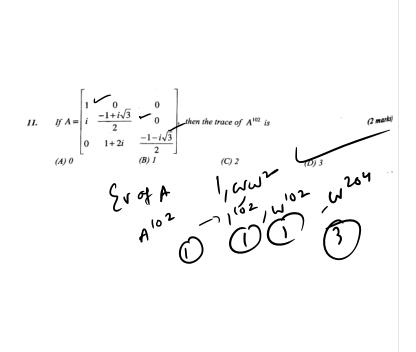


1(A1AT) +12(A -- T) -- (A)

7. Then N is (2 marks)
(A) non-invertible (B) skew-symmetric (C) symmetric (D) orthogonal



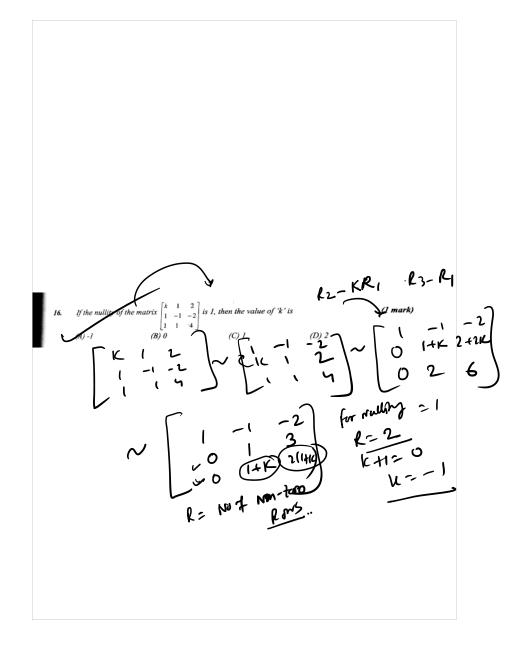




12. Which of the following matrices is not diagonalizable?  (A) \begin{pmatrix} 1 & 1 & 0 & 0 \\ 1 & 1 & 0 & 0 \\ 1 & 1 & 0 & 0 \end{pmatrix} \]  If a & which limit  i.v. are equily fluggling that the party of the party	

14.	The dimension of the (A) 0	range space of $T^2$ is (B) $I$	(C) 2	(D) 3	(2 marks)

2° +2x+(=0. The dimension of the null space of  $T^3$  is (A) 0 (B) 1 (C) 2 (D) 3 (2 marks)



17. If a  $3\times3$  real skew-symmetric matrix has an eigenvalue (2i) then one of the remaining eigenvalues is

(A)  $\frac{1}{2i}$ (B)  $-\frac{1}{2i}$ (C) 0
(D) 1

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(Six also (2i))

(N, od )

(Rear symmetric matrix has an eigenvalue (2i) then one of the remaining eigenvalues is

(I mark)

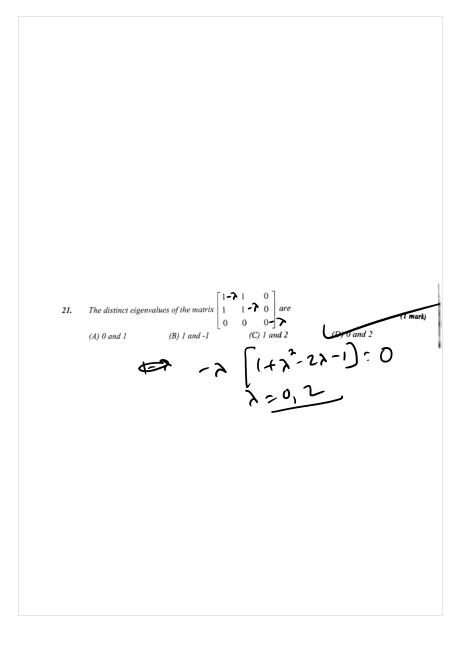
(A)  $\frac{1}{2i}$ (B)  $-\frac{1}{2i}$ (C) 0
(D) 1

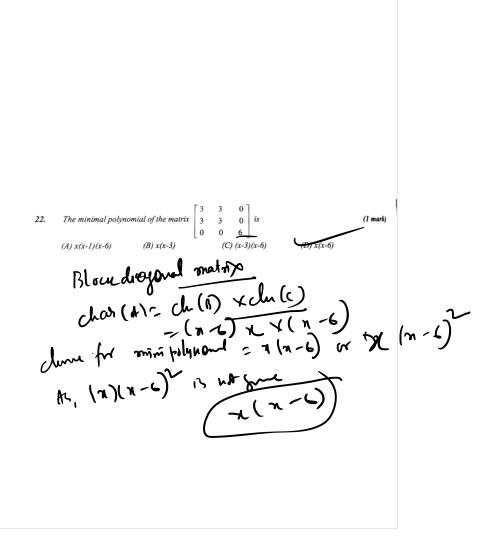
(N > Zero)

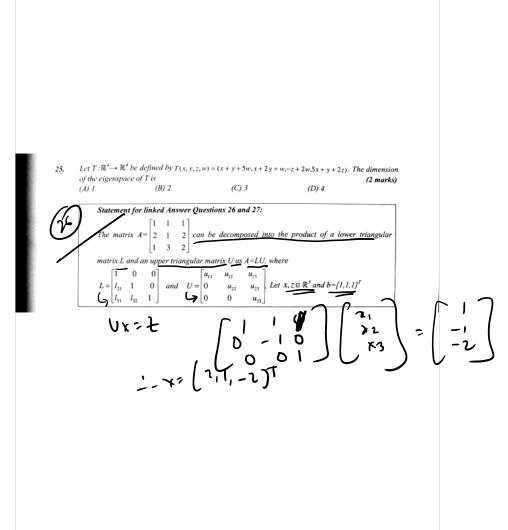
(Six also (2i))

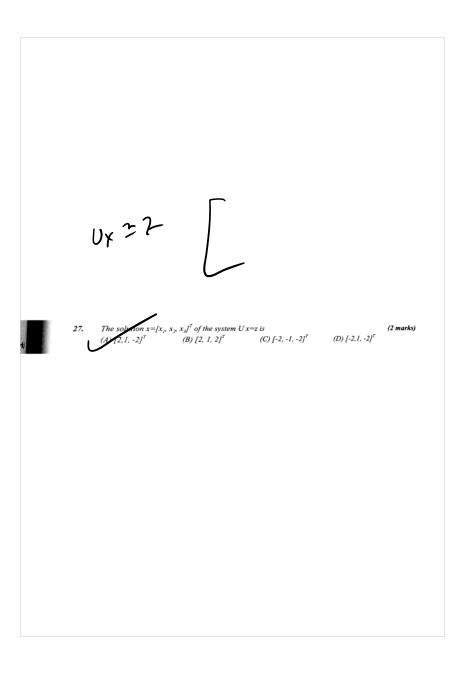
(Six also (2i)

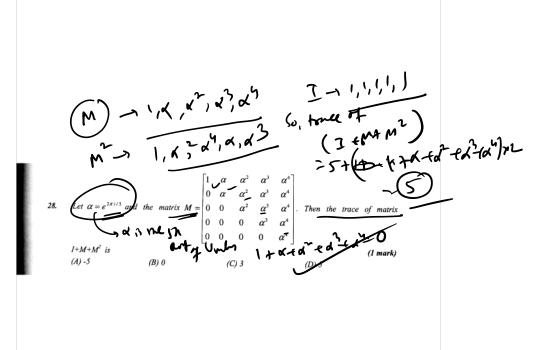


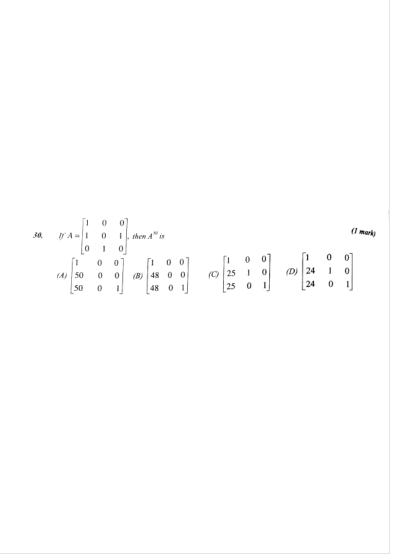




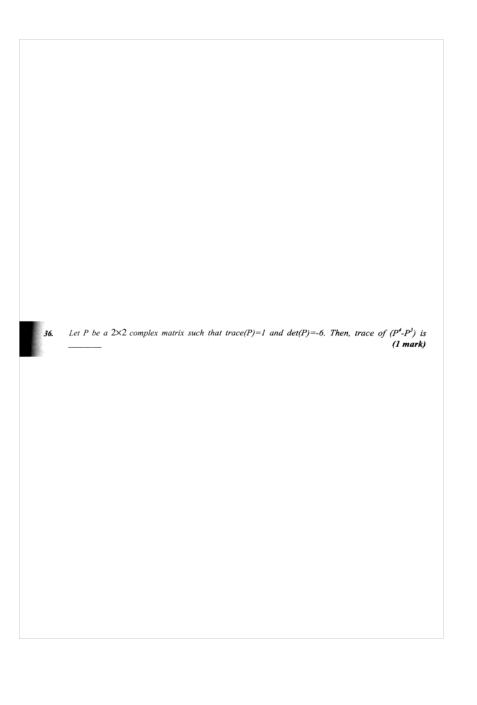


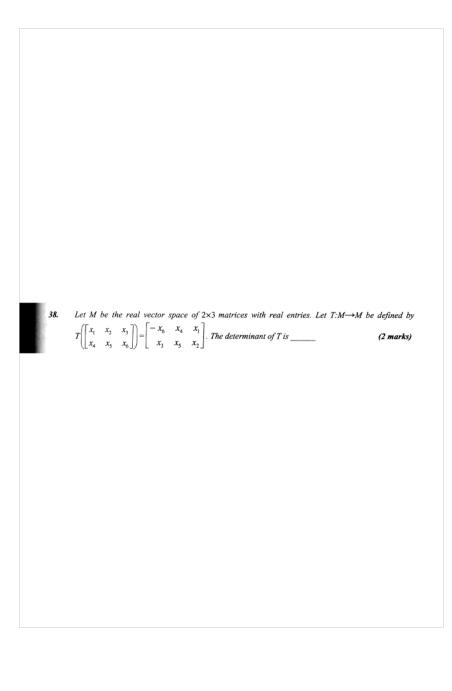


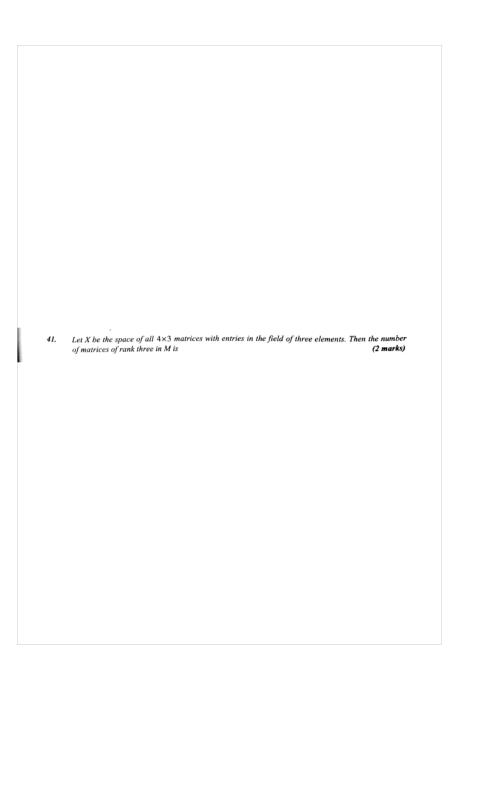


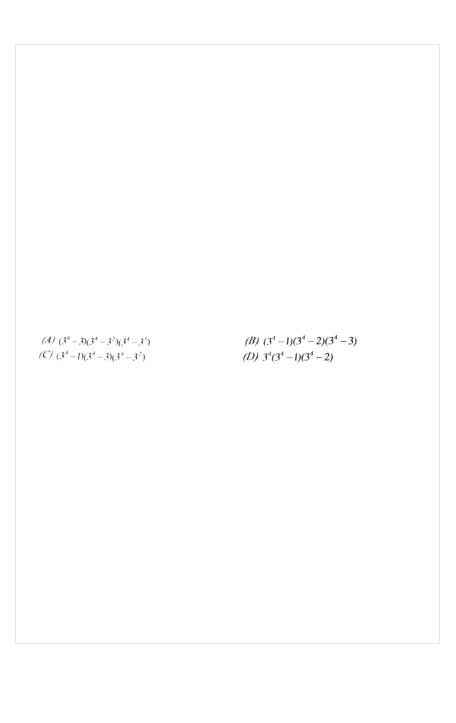


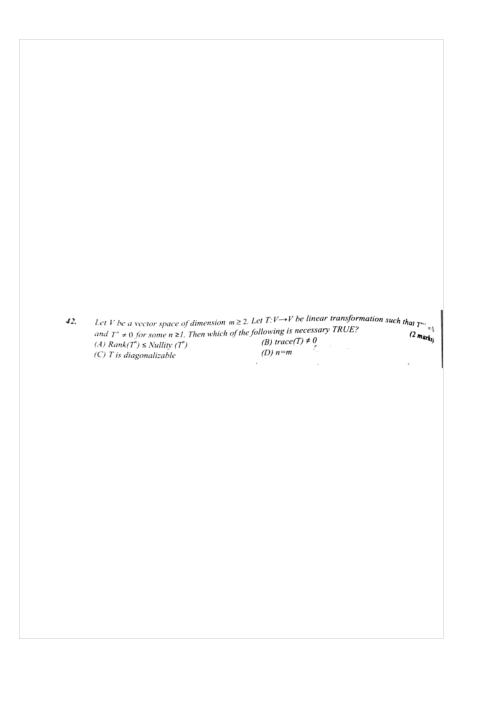
35.	The possible set	t of eigen values of a 4×4 (B) {±i,±1}	skew – symmetric orthog (C) {±1}	gonal real matrix is (D) $\{0,\pm i\}$	(I mark)
200					

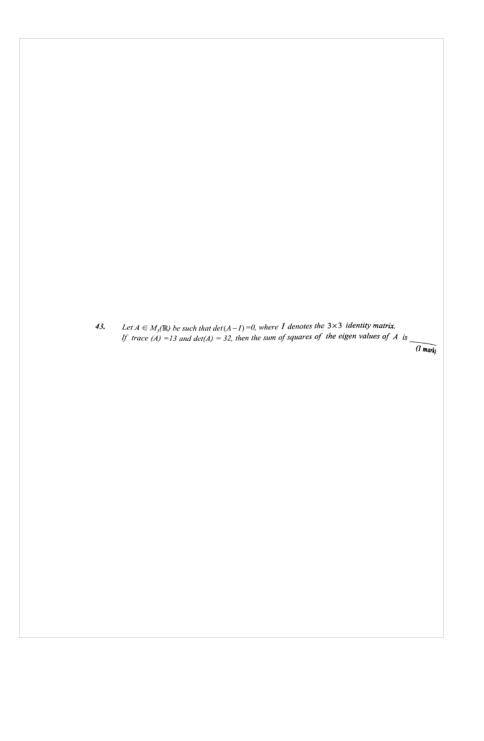




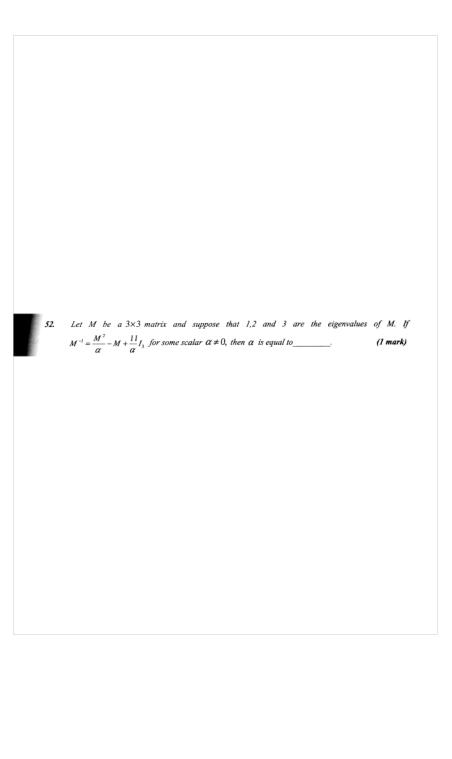


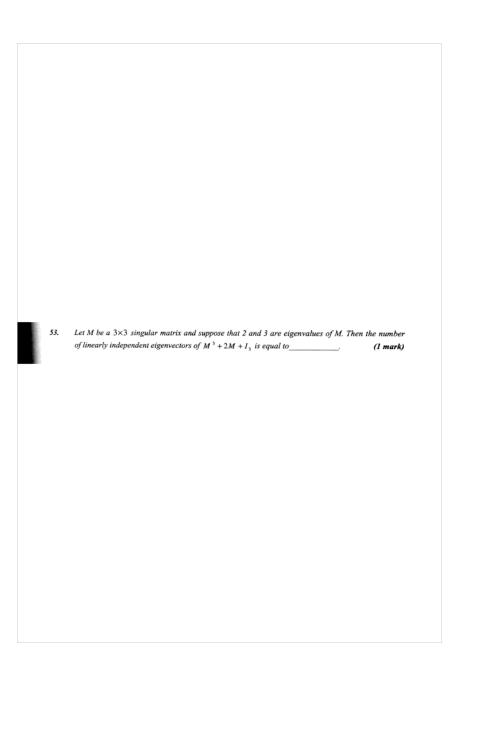


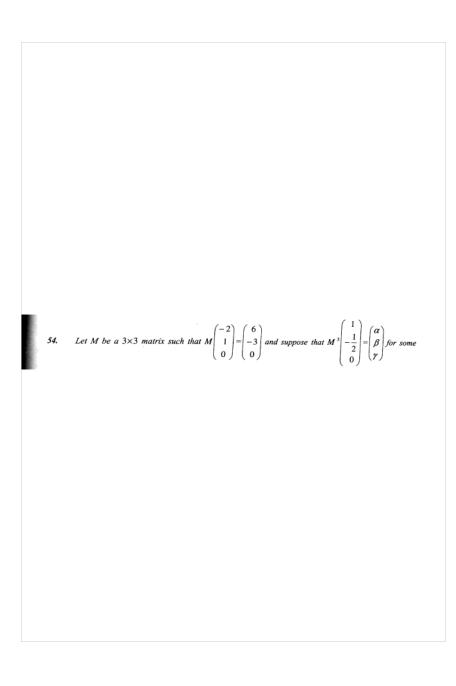


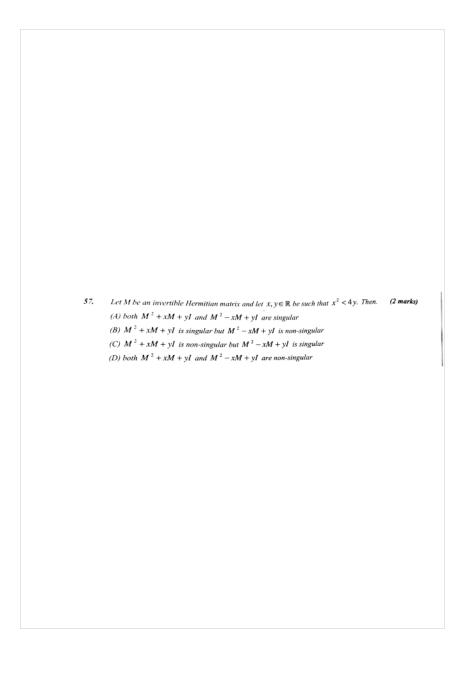


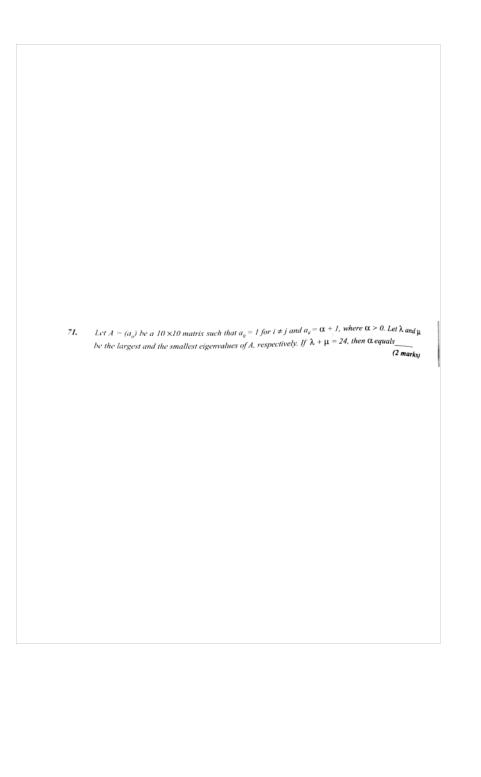


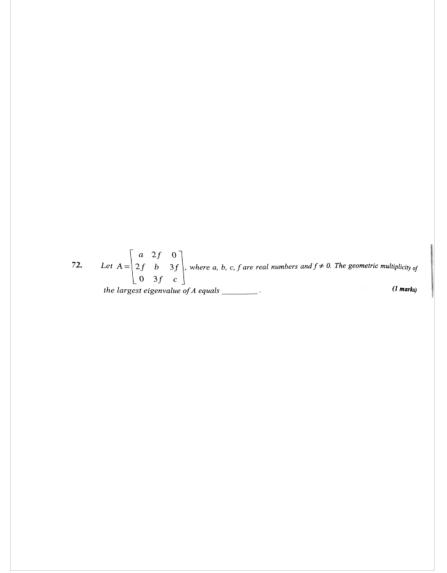




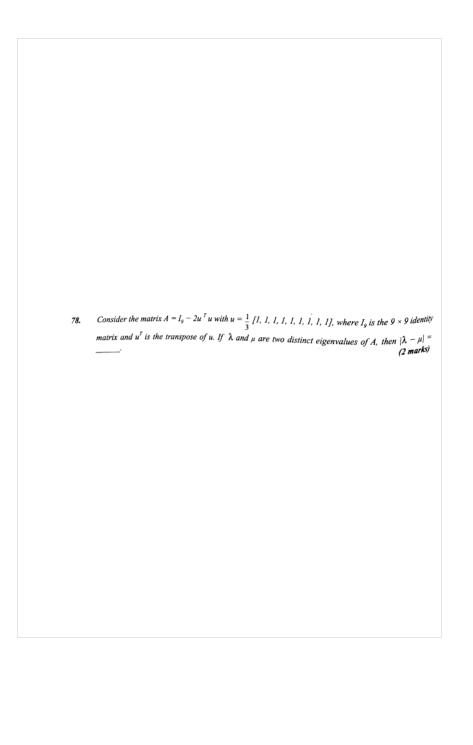




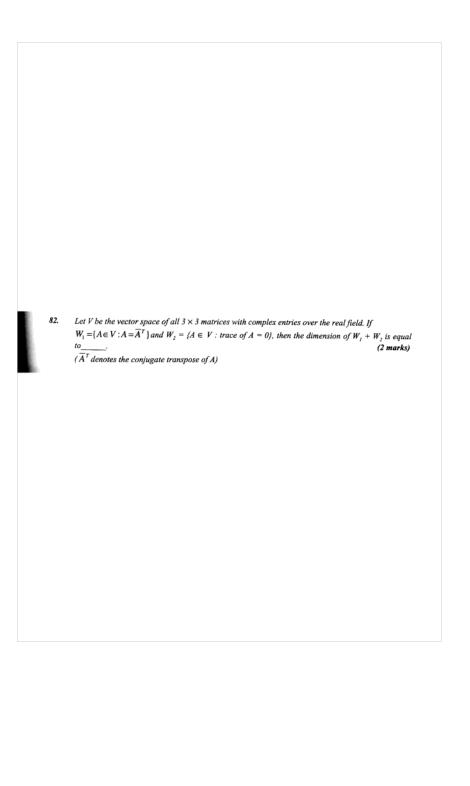








	If the characteristic polynomial and minimal polynomial of a square matrix A are $(\lambda-1)$ $(\lambda+1)^4$	
79.	If the characteristic polynomial and minimal polynomial of a square matrix $A$ are $(A-1)(A+1)$	
	if the characteristic positioning the matrix $A + I$ is, where $I$ is the identity matrix of appropriate order (I mark)	
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86. Suppose $V$ is a finite dimensional non-zero vector space over $\mathbb{C}$ and $T:V\to V$ is a linear transformation such that Range( $T$ ) = Null space ( $T$ ). Then which of the following statements is FALSE?  (A) The dimension of $V$ is even  (B) 0 is the only eigenvalue of $T$ (C) Both 0 and 1 are eigenvalues of $T$ (D) $T^2=0$		
transformation such that Range( $T$ ) = Null space ( $T$ ). Then which of the following statements is FALSE? (2 marks)  (A) The dimension of $V$ is even (B) 0 is the only eigenvalue of $T$		
	86.	transformation such that Range( $T$ ) = Null space ( $T$ ). Then which of the following statements is FALSE? (2 marks)  (A) The dimension of $V$ is even (B) 0 is the only eigenvalue of $T$