MATLAB:

University of California, Davis

Computer LAB for Linear Algebra

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MATH 22AL

LAB # 10

18 Summery: MATLAB and Complex Numbers:

conj(A)

To find the conjugate transpose of a matrix type : conj(A),

The commands $\det(A)$, $\mathrm{rref}(A)$, $\mathrm{roots}(p)$, $\mathrm{poly}(A)$, $\mathrm{eig}(A)$ work in the same way that they work for real matrices. Note that A' will provide the conjugate transpose of A.

Examples:

type	$\det(\mathrm{B})$	To find determinant of B
type	В'	To find the conjugate
type		transpose of B
type	poly(B)	To find coefficients of
type		the characteristic polynomial of B
type	$\operatorname{rref}(\mathrm{B})$	To find reduced row echelon form of B.
type	eig(B)	To find eigenvalues of B
type	[V D] = eig(B)	To find eigenvalues and eigenvectors of B