

17 Summery: MATLAB and Complex Numbers:

To start you may type : Format rat

i =sqrt(-1)

To enter a complex number type : **c1= 4+5i**

To find the conjugate of c1 type : **conj(c1)**

You may ask for the real part and Imaginary part of a complex number by typing

real(c1) imag(c1)

To enter a complex matrix, enter it in the same way that you enter a real matrix:

A= [2+i 3-5i -2; -7i 6+7i 55-12i]

This is what you will see

$$A = \begin{bmatrix} 2 + 1i & 3 - 5i & -2 \\ 0 - 7i & 6 + 7i & 55 - 12i \end{bmatrix}$$

You may find the real part, imaginary part or the conjugate of a matrix by typing **real(A) imag(A)**