## **EXERCISE 8.5:** It is easy to create a MATLAB example that demonstrates the conjugate-symmetry property by executing Xk=fft(1:8), which computes the 8-point DFT of a real signal. List the values of the signal x[n] for $n = 0, 1, 2, \dots, 7$ . Then tabulate the values of the MATLAB vector Xk in polar form from which you

can verify that  $X[N-k] = X^*[k]$  for k = 0, 1, ..., 7 and N = 8. Finally, list the value of  $\hat{\omega}$  corresponding

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to each index k.

