

MATH 464, HW 10

1) Implement in your preferred Computer Algebra System (MATLAB, MATHEMATICA, MAPLE, DERIVE, OCTAVE, etc etc) the FFT algorithm for DFT for $N = 2^5$. Apply it to a vector:

$$f(k) = \sin(2\pi k/32), \quad k = 0, \dots, 31.$$

2) Compare the results of part 1 with the result of the DFT applied to the same vector.