

ECE 310: Quiz #7 (10am Section G) Fall 2018

UIN: _____

Name: _____

1. (6 pts) Let $x[n] = \{-1, 1, 0, 0\}$.

(a) Compute the DFT $X[k]$ of $x[n]$.

(b) Sketch the magnitude of $X[k]$.

2. (4 pts) Let $X[k]$ be the DFT of $x[n] = \{1, 2, 3, 4\}$. Determine the sequence $y[n]$ whose DFT is given by $Y[k] = 3e^{-j\pi(k+1)/2}X[k]$.