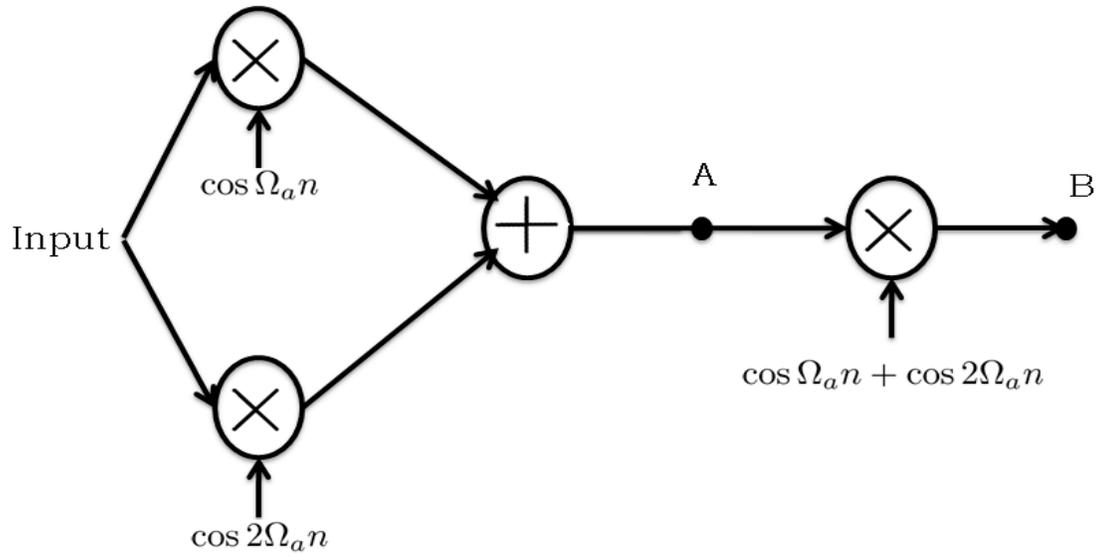
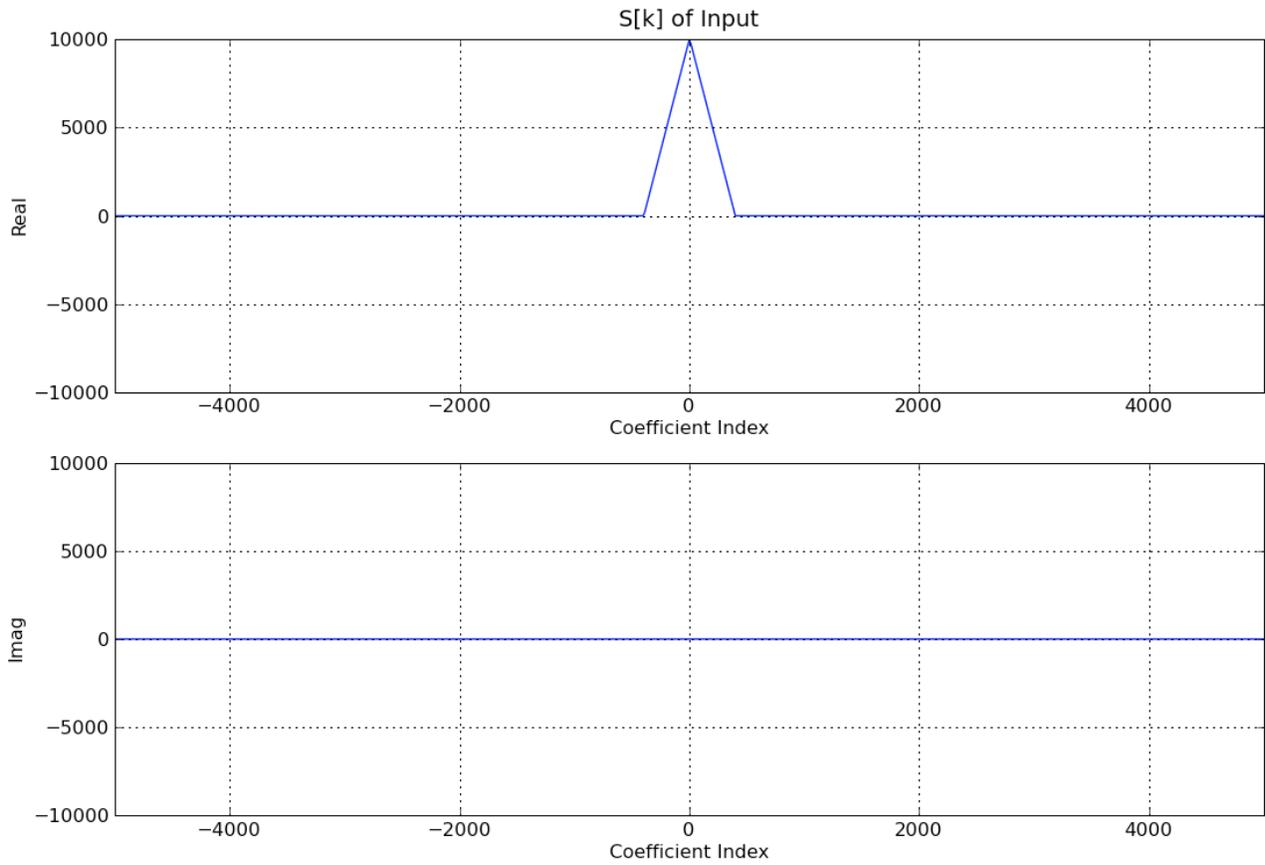


Review Problem 10.

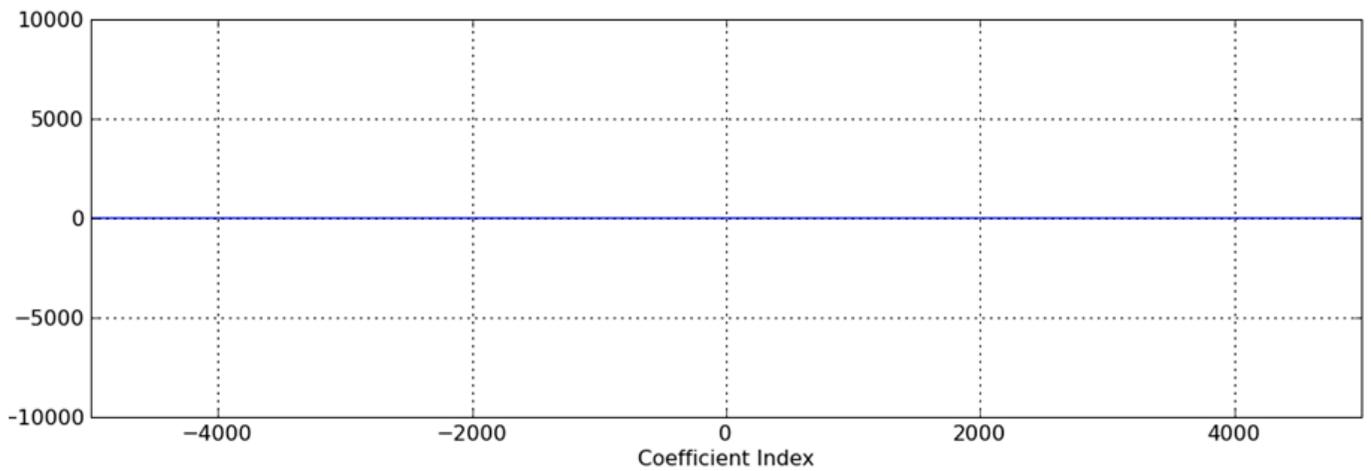
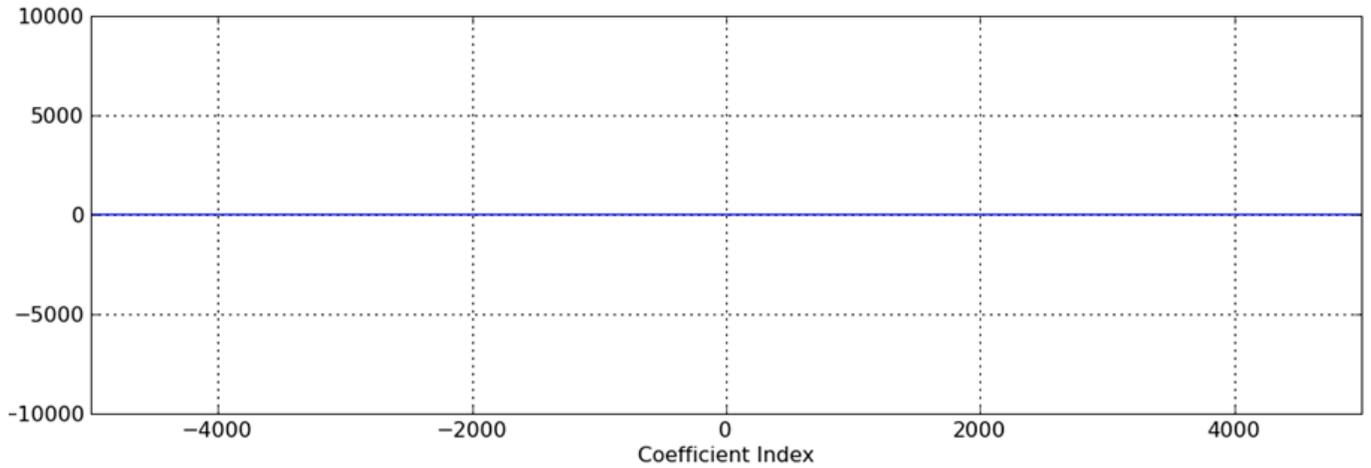
Consider the simple modulation-demodulation system below, where $\Omega_a = (1000 \cdot 2 \cdot \pi) / 10000$.



The Fourier Series coefficients for the input to the modulation-demodulation system is plotted below for the case $N = 10000$. Note that the Fourier coefficients are nonzero only for $-400 \leq k \leq 400$.



A. On the set of axes below, please plot the Fourier series coefficients for the signal at location **A** in the above diagram. Be sure to label key features such as values and coefficient indices for peaks.



B. On the set of axes below, please plot the Fourier series coefficients for the signal at location **B** in the above diagram. Be sure to label key features such as values and coefficient indices for peaks.

