Note: Make sure you include **ALL** poles and zeros.

PROBLEM:

(a) Make a carefully labeled sketch of the frequency response $H(e^{j\hat{\omega}}) = \frac{6\sin(5\hat{\omega}/2)}{\sin(\hat{\omega}/2)}$.

(b) Make a pole-zero plot in the z-plane of the system function $H(z) = \frac{1+z^{-2}}{1+z^{-1}}$.