

PROBLEM:

(a) Make a carefully labeled sketch of the frequency response $H(e^{j\hat{\omega}}) = \frac{2 \sin(7\hat{\omega}/2)}{\sin(\hat{\omega}/2)}$.

(b) Make a pole-zero plot in the z -plane of the system function $H(z) = \frac{1 - 3z^{-1} + 2z^{-2}}{1 - 0.5z^{-1}}$.

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