

## PROBLEM:

- (a) Make a carefully labeled sketch of the frequency response  $H(e^{j\hat{\omega}}) = \frac{3 \sin(3\hat{\omega})}{\sin(\hat{\omega}/2)}$ .
- (b) Make a pole-zero plot in the  $z$ -plane of the system function  $H(z) = \frac{1 - 5z^{-1} + 6z^{-2}}{1 + 0.5z^{-1}}$ .
- Note:** Make sure you include **ALL** poles and zeros.