



PROBLEM:

Given a feedback filter defined via the recursion:

$$y[n] = -0.98 y[n - 2] + 3x[n] - 3x[n - 1] \quad (\text{DIFFERENCE EQUATION})$$

- (a) Find the z -transform operator representation $H(z)$ for the system in the difference equation.
- (b) Find the poles and zeros of the system and plot their location in the z -plane.