

**Question #1:** Determine the impulse responses  $h[n]$  for the following difference equations.

(a)  $y[n] + (0.8)y[n-1] = x[n]$  (Assume system is causal)

(b)  $y[n] - 4y[n-1] + 4y[n-2] = x[n]$  (Assume system is anti-causal)

(c)  $y[n] - 2.5y[n-1] + y[n-2] = x[n]$  (Assume system is causal)