CSE 3313 - Homework #3 – LSI Systems HW

# Causality & Stability

Test the following linear-shift-invariant systems for causality and stability

* 1. Causal. All values of n<0
  2. Stable. Total sums to 4/3
  3. Causal. All n<0 values meet h[n]
  4. Stable
  5. Non-Causal
  6. Stable
  7. Non-Causal
  8. Stable
  9. Non-Causal
  10. Stable
  11. Non-Causal
  12. Stable

# Convolution

Calculate y[n] analytically using convolution. Remember, 𝑥[𝑘] ∗ ℎ[𝑘] = ℎ[𝑘] ∗ 𝑥[𝑘]

1. ,
2. ,
3. ,
4. ,