Exercises Week 3

DSP

1. Characterize the following systems with respect to:

    - Memory
    - Linearity
    - Time invariance
    - Causality
    - Stability

    a. $y[n] = n \cdot x[n^2]$
    b. $y[n] = x[n] \cdot cos(\omega_0 n)$
    c. $y[n] = sin(x[n])$
    d. $y[n] = x[n] + n \cdot x[n+1]$