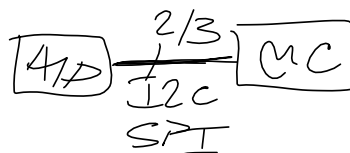
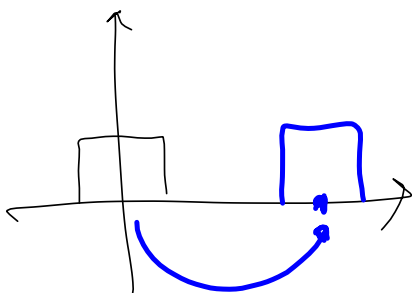
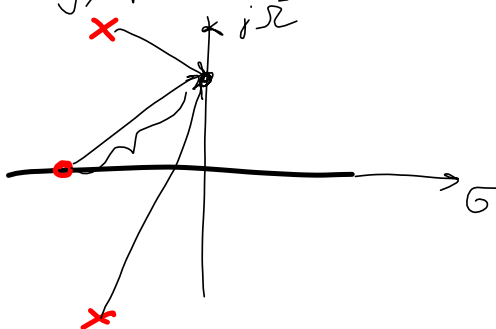


CPE381 #24

Wed: Phase II (Final Project due)
 HW #5 (Monday, April 20)
 - Matlab examples



$$y[n] = 0.2y[n-2] + x[n] \quad \therefore \text{freq resp} = s(b, a, \dots)$$

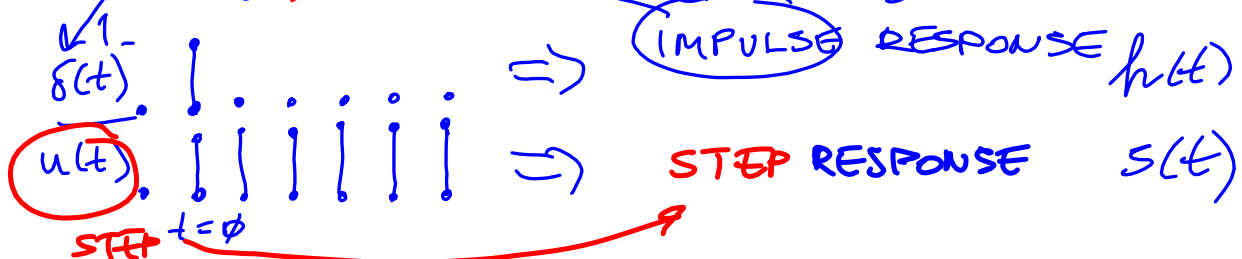
$$y[n] = -\sum_i a_i y_i + \sum_j b_j x_j$$

$$1 \cdot y[n] = \phi \cdot y[n-1] + 0.2 \cdot y[n-2] + 1 \cdot x[n]$$

$$a = [1 \quad \phi \quad -\phi^2] \quad b = [1]$$

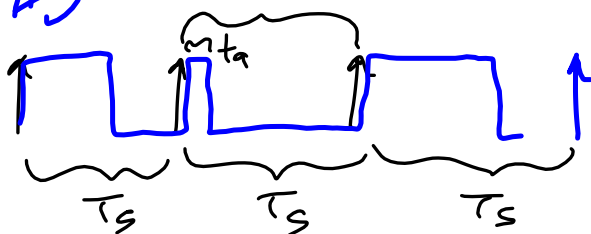
FIR $1 \cdot y[n] = 0.5 \cdot x[n] + 0.5 \cdot x[n-1]$

$$a = [1] \quad b = [0.5 \quad 0.5]$$

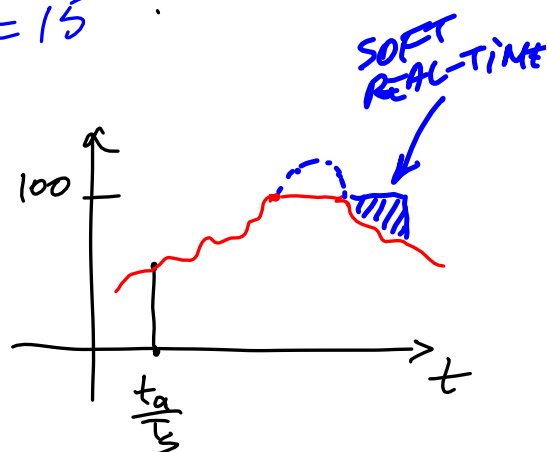


$$\sum_{k=0}^N k = \frac{N(N+1)}{2} \Rightarrow \sum_{k=0}^5 k = \frac{5 \cdot 6}{2} = 15$$

HW #5



$$\sin(\omega t + \varphi) \Big|_{t=nT_s = n \frac{1}{F_s}}$$

REAL-TIME
OPERATION

