Practical
(Part II)
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A CT signal $x$ is defined for all $t$ by

$$x(t) = 3u(t) - 2u(t - 2) - u(t - 3)$$

where $u(t)$ is unit step function.

CT signals $x_1(t)$ and $x_2(t)$ are defined by

$$x_1(t) = x(-t/4)$$
$$x_2(t) = x(1-t)x(2-t)$$

Sketch $x$, $x_1$ and $x_2$ as functions of $t$. 
For each of the pairs of sequences in Figure P2.22-1, use discrete convolution to find the response to the input $x[n]$ of the linear time-invariant system with impulse response $h[n]$. 

![Graph showing sequences](image_url)
\[ 2y[n] - y[n - 1] = 4x[n] - 2x[n - 1] \]
• Express the signal from Figure in terms of unit functions
Consider a system with input $x[n]$ and output $y[n]$. The input–output relation for the system is defined by the following two properties:

1. $y[n] - ay[n - 1] = x[n]$,  
2. $y[0] = 1$.

(a) Determine whether the system is time invariant.  
(b) Determine whether the system is linear.
Project Q&A

• Cleaning the data:
  – removing the samples w.r.t the mouse click
  – Remove wrongly classified samples
  – Find the average of the values
  – Identify whether to continue with the data set or not

• How to determine the sampling rate?
Project Q&A

- Time, Type, Trial, L Raw X [px], L Raw Y [px]
- R Raw X [px], R Raw Y [px]
- L Dia X [px], L Dia Y [px], L Mapped Diameter [mm]
- R Dia X [px], R Dia Y [px], R Mapped Diameter [mm]
- L CR1 X [px], L CR1 Y [px], L CR2 X [px], L CR2 Y [px]
- R CR1 X [px], R CR1 Y [px], R CR2 X [px], R CR2 Y [px]
- L POR X [px], L POR Y [px]
- R POR X [px], R POR Y [px]
- Timing Latency
- L Validity, R Validity
- Pupil Confidence
- L Plane, R Plane
- L Object Hit
- R Object Hit
- H POS X [mm], H POS Y [mm], H POS Z [mm]
- H ROT X [°], H ROT Y [°], H ROT Z [°]
- L EPOS X, L EPOS Y, L EPOS Z
- R EPOS X, R EPOS Y, R EPOS Z
- L GVEC X, L GVEC Y, L GVEC Z
- R GVEC X, R GVEC Y, R GVEC Z
- Frame, Aux1
- L Event Info
- R Event Info