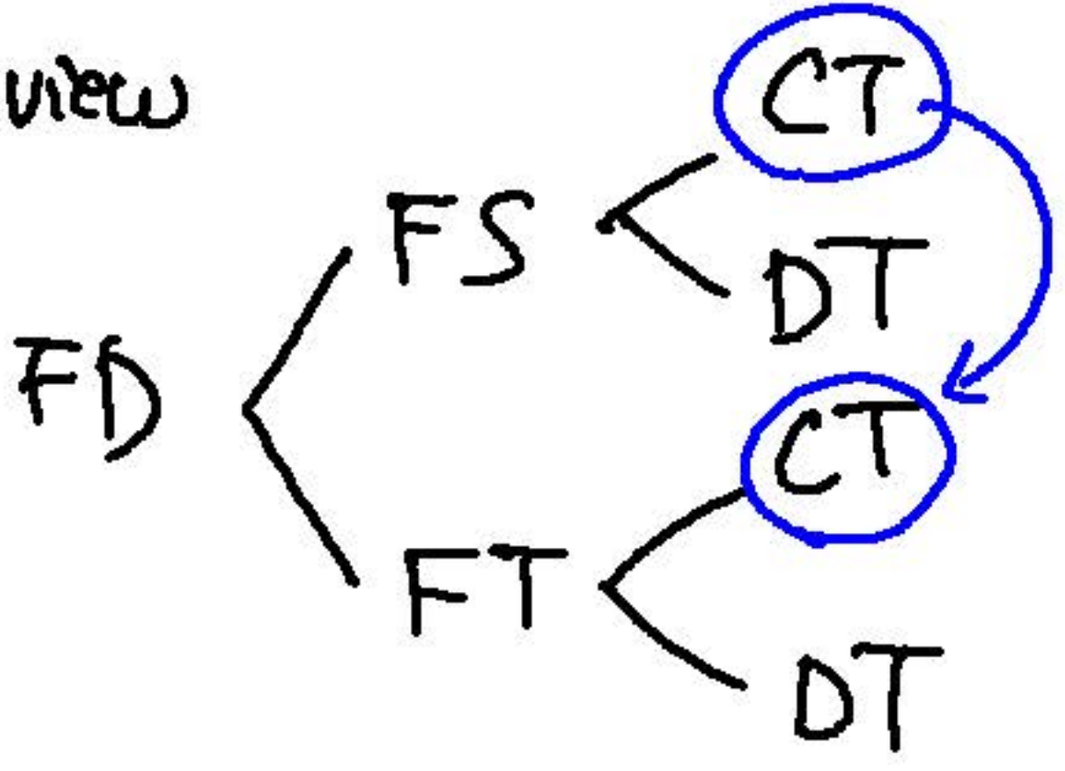
EECE 233 Fall 2014 Lec #20

Announcement

- Supplemental Lecture on this Friday @LG 105 09:30-10:45

Review



$$x(t)$$

$$x_T(t) = \sum_{n=-\infty}^{\infty} x(t-nT)$$

$$x[n]$$

$$x_N[n] = \sum_{m=-\infty}^{\infty} x[n-mN]$$

$$x_N[n] = \sum_{k=\langle N \rangle} a_k e^{j\frac{2\pi k}{N}n}$$

where $$a_k = \frac{1}{N} \sum_{n=\langle N \rangle} x_N[n]\, e^{-j\frac{2\pi k}{N}n}$$

Too good to be true

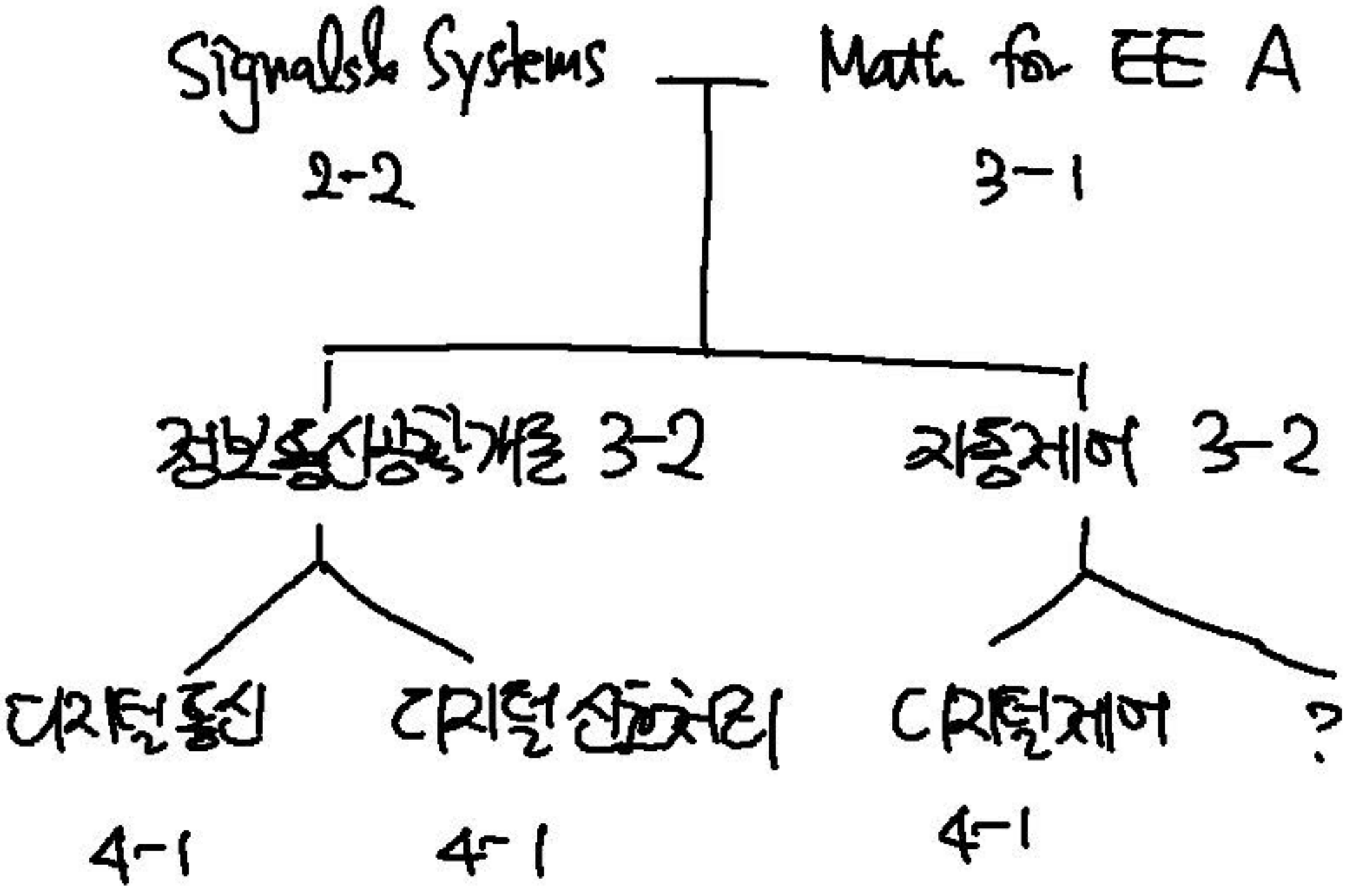
$$x(t) = \frac{1}{2\pi}\int_{-\infty}^{\infty} X(j\omega) e^{j\omega t}\, d\omega$$

where

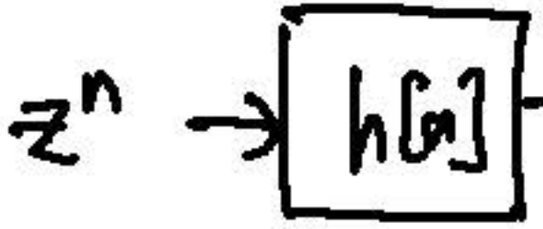
$$X(j\omega) = \int_{-\infty}^{\infty} x(t)\, e^{-j\omega t}\, dt$$

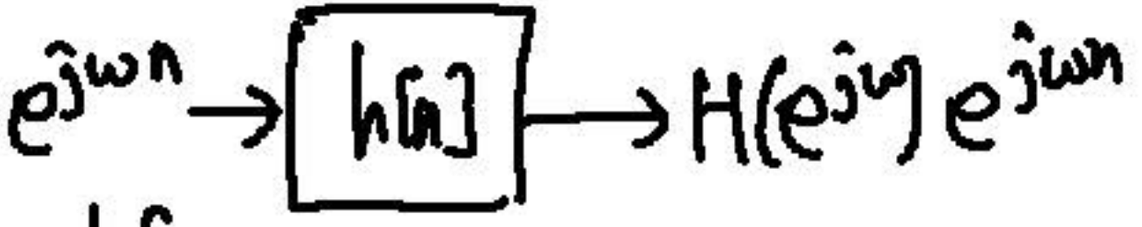
$$x[n] = \frac{1}{2\pi}\int_{\langle 2\pi \rangle} X(e^{j\omega}) e^{j\omega n}\, d\omega$$

$$X(e^{j\omega}) = \sum_{n=-\infty}^{\infty} x[n]\, e^{-j\omega n}$$


Signals & Systems
2-2
Math for EE A
3-1
정보통신망개론 3-2
확률제어 3-2
디지털통신
디지털신호처리
디지털제어
?
4-1
4-1
4-1

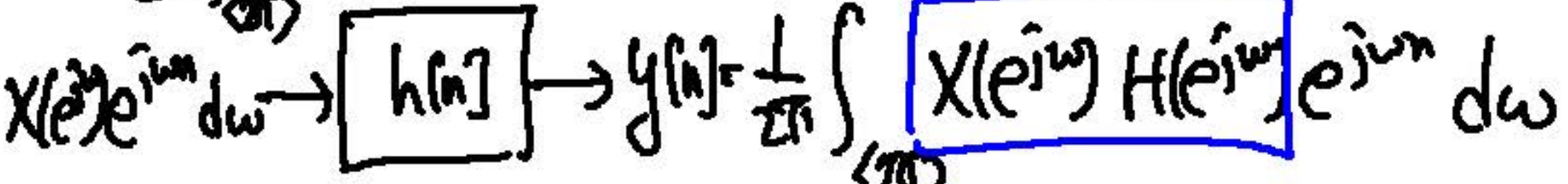
$$y[n] = x[n] * h[n]$$
$$= h[n] * x[n]$$





$$x[n] = \frac{1}{2\pi}\int_{\langle 2\pi \rangle} X(e^{j\omega})e^{j\omega n}\,d\omega$$

$Y(e^{j\omega})$



$$y[n] = \frac{1}{2\pi}\int_{\langle 2\pi \rangle} X(e^{j\omega})H(e^{j\omega})e^{j\omega n}\,d\omega$$

FF
PLAY