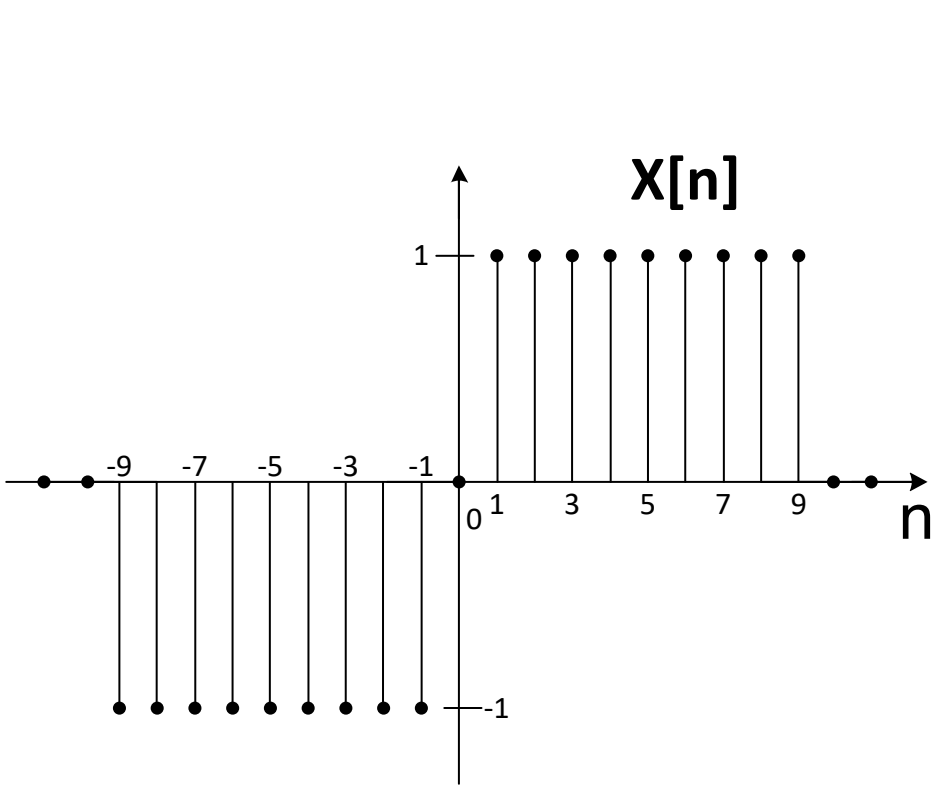
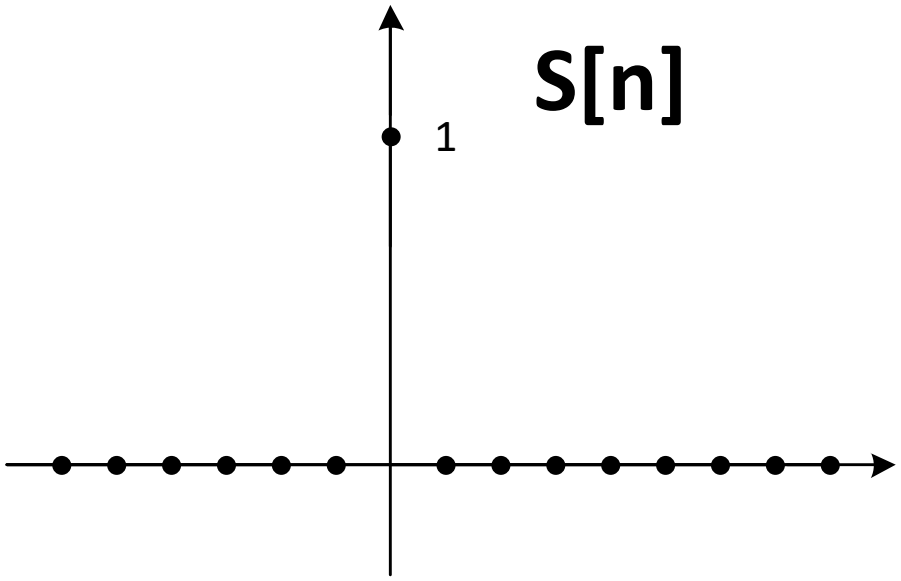
สื่อการสอน วิชา คอมพิวเตอร์วิทัศน์และการประมวลผลภาพ

CPE5004

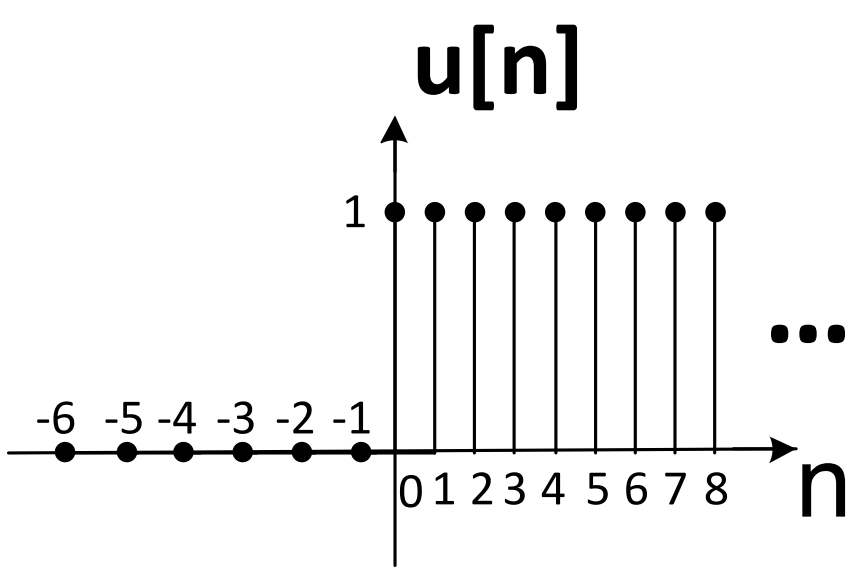
ผศ.ดร.พรภวิษย์ บุญศรีเมือง

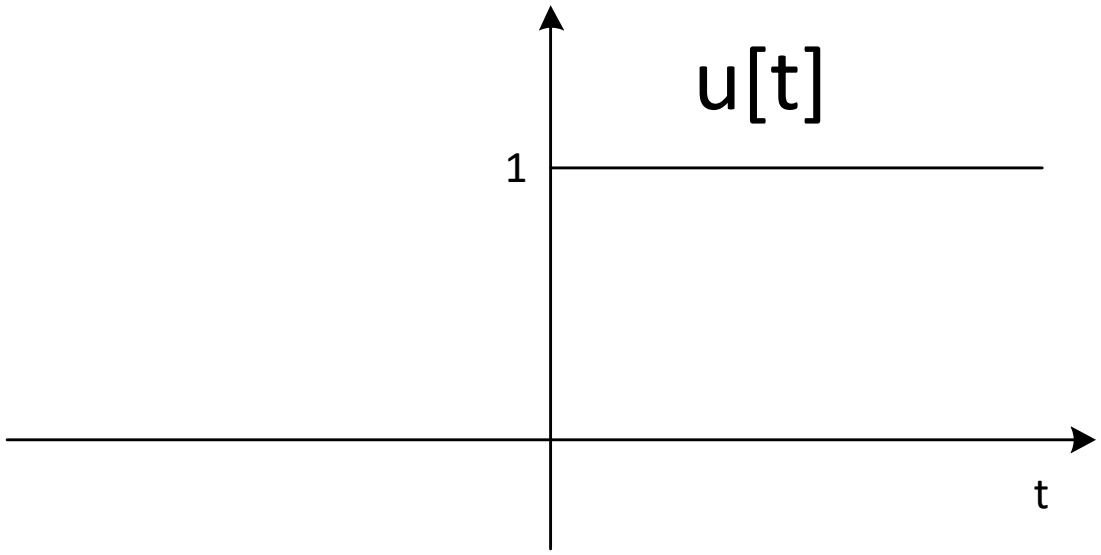
Odd discrete-time signal&Discrete-time unit impulse





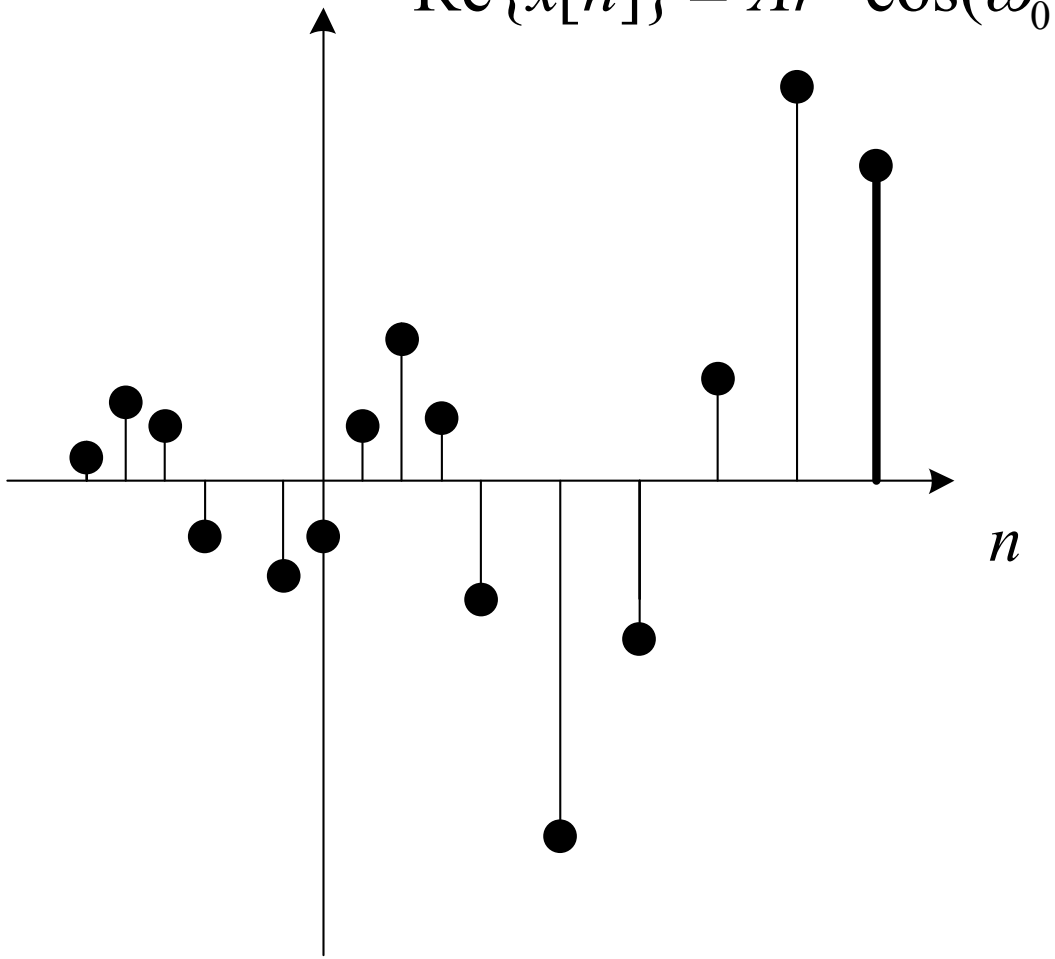
Discrete-time unit step signal&Continuous-time step signal



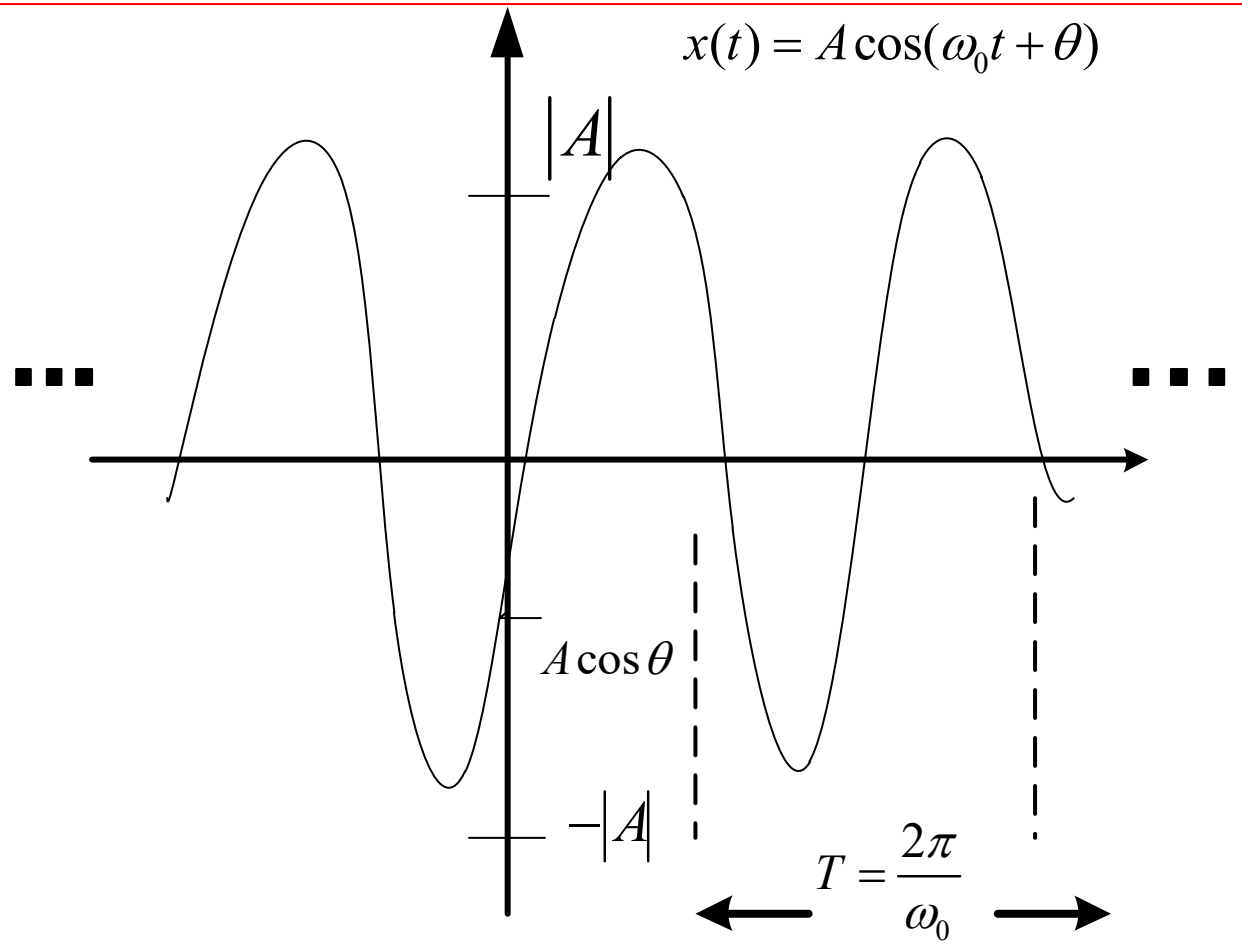


Real part of growing complex exponential signal

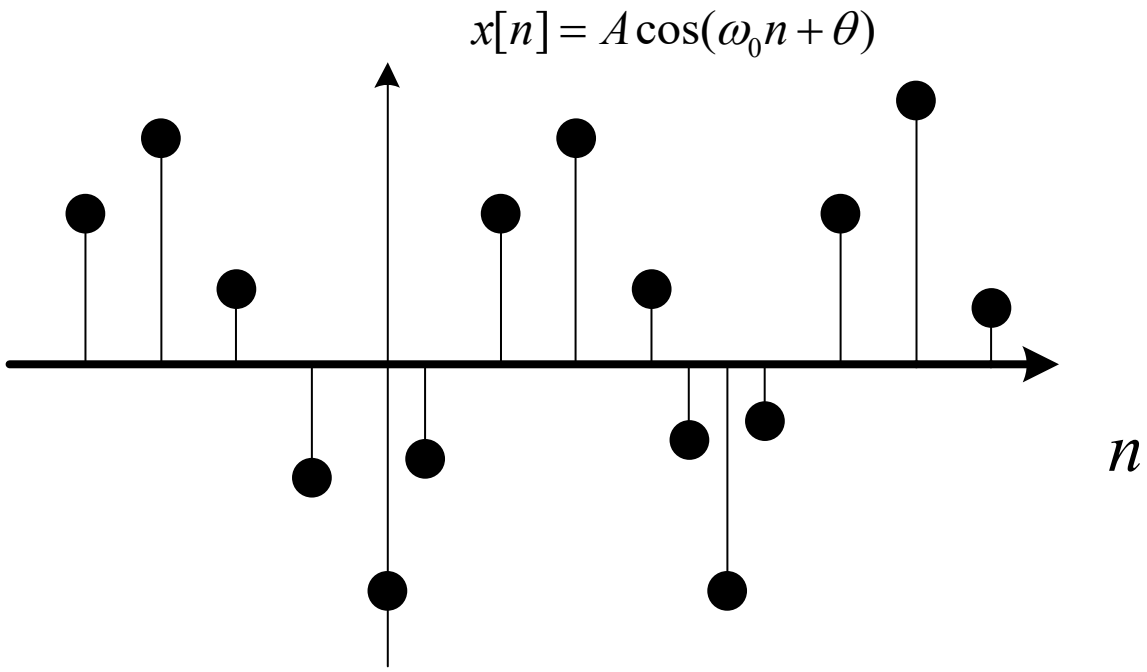
$$\mathrm{Re}\{x[n]\} = Ar^n \cos(\omega_0 n + o)$$



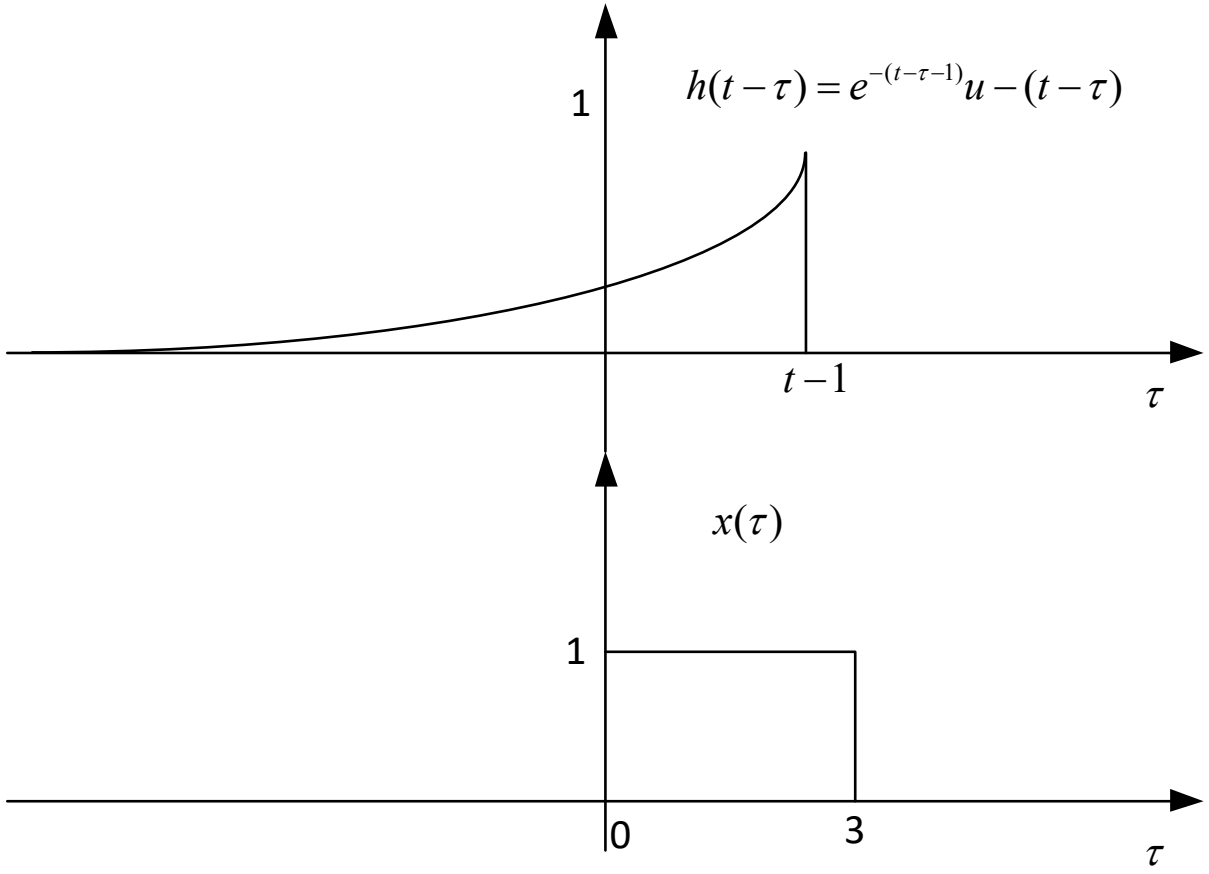
Continuous-time sinusoidal signal



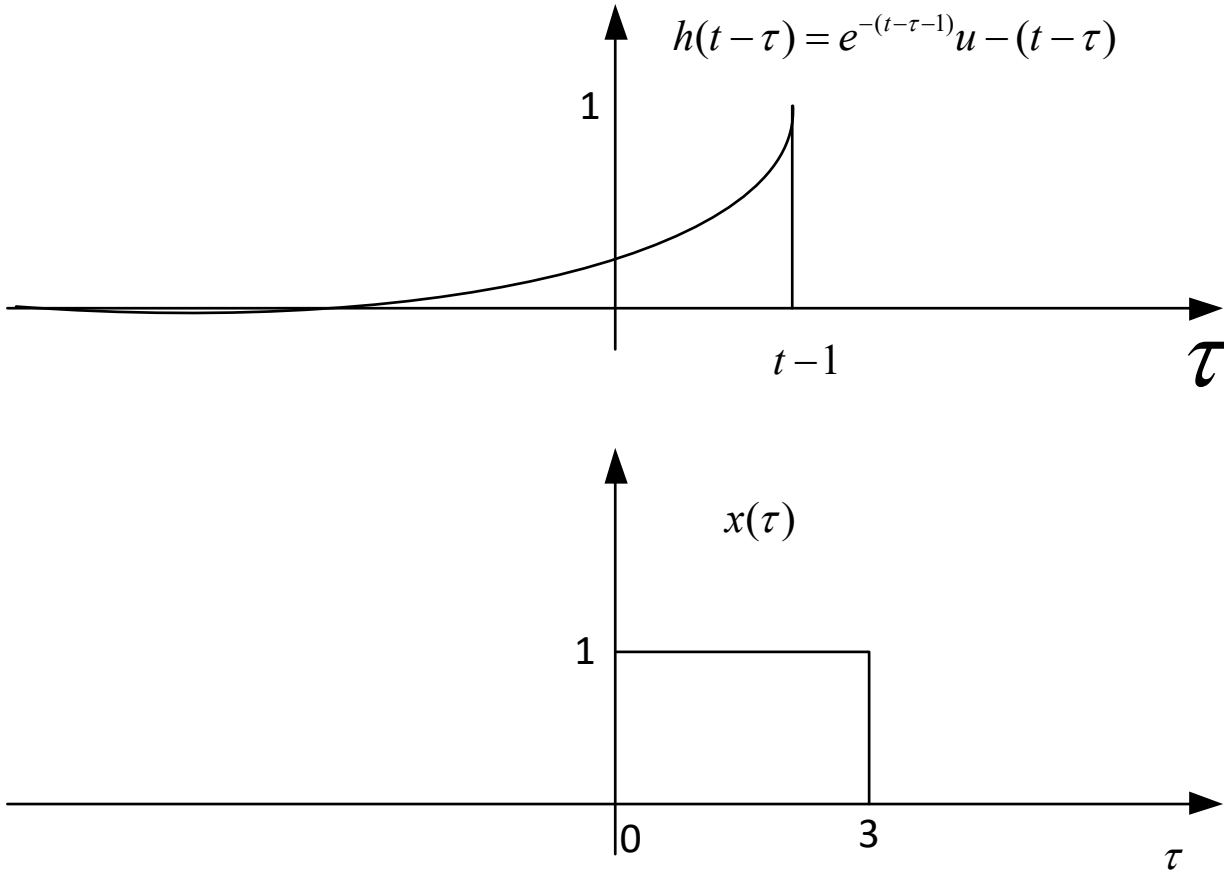
A periodic discrete-time sinusoidal signal



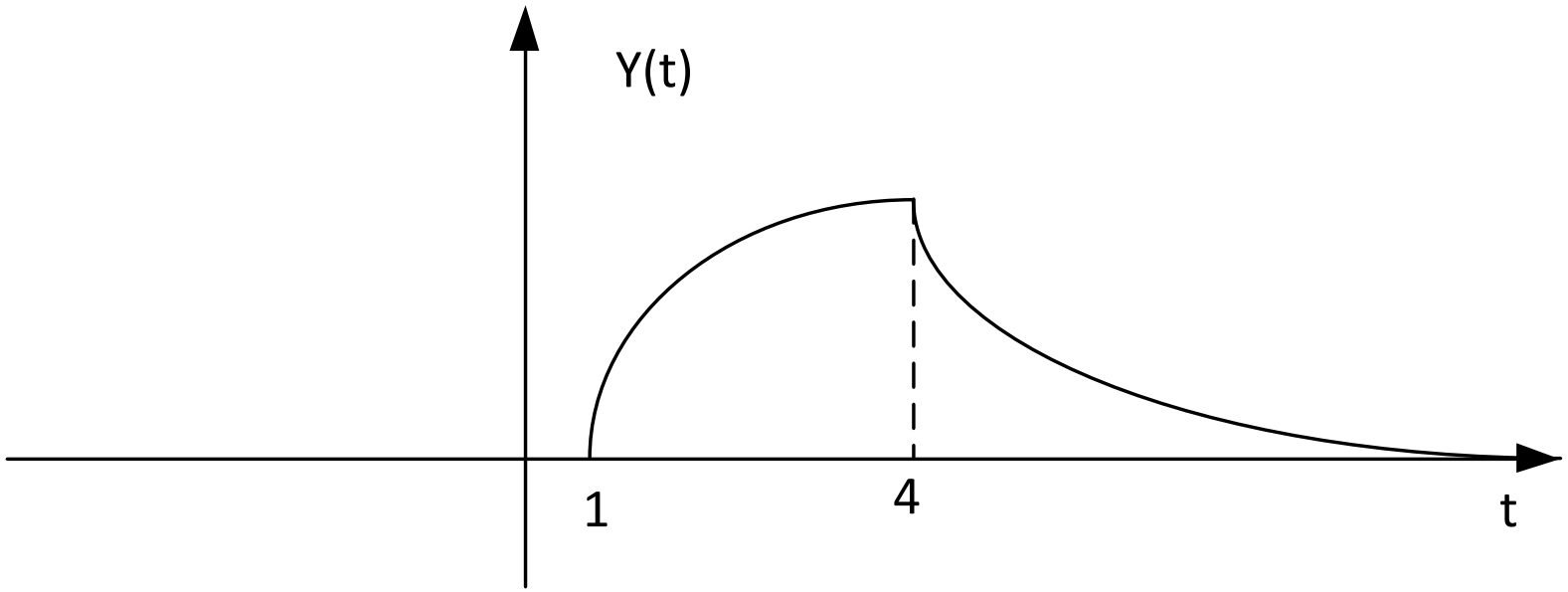
Overlap between the impulse response



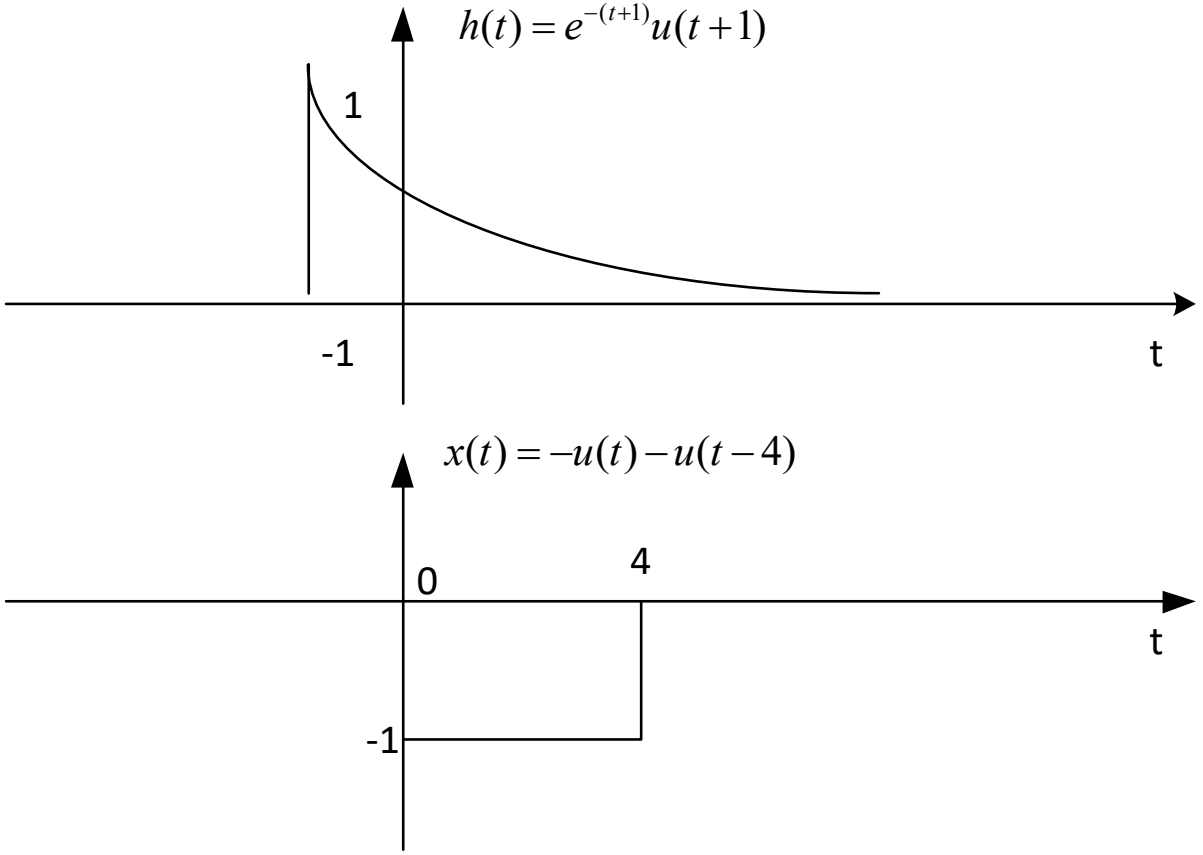
Overlap between the impulse response



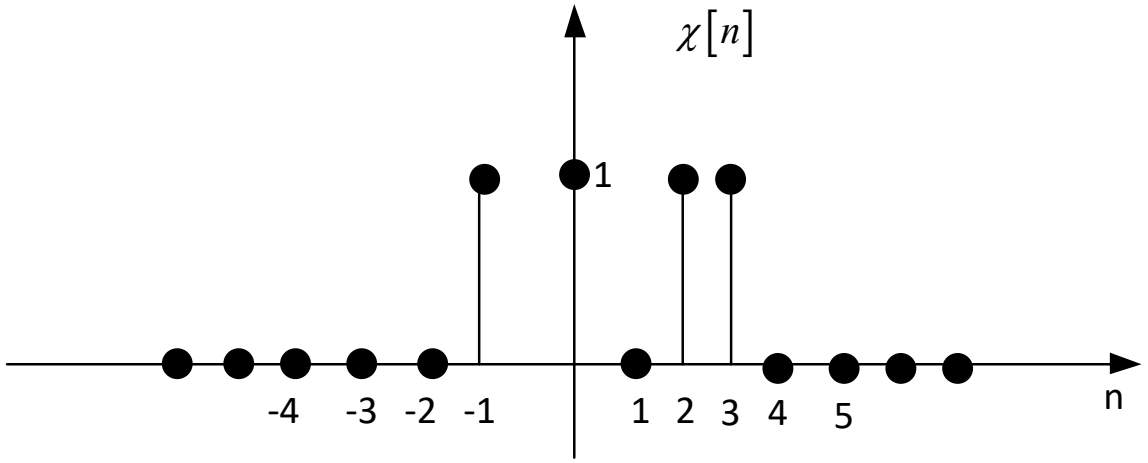
Output signal

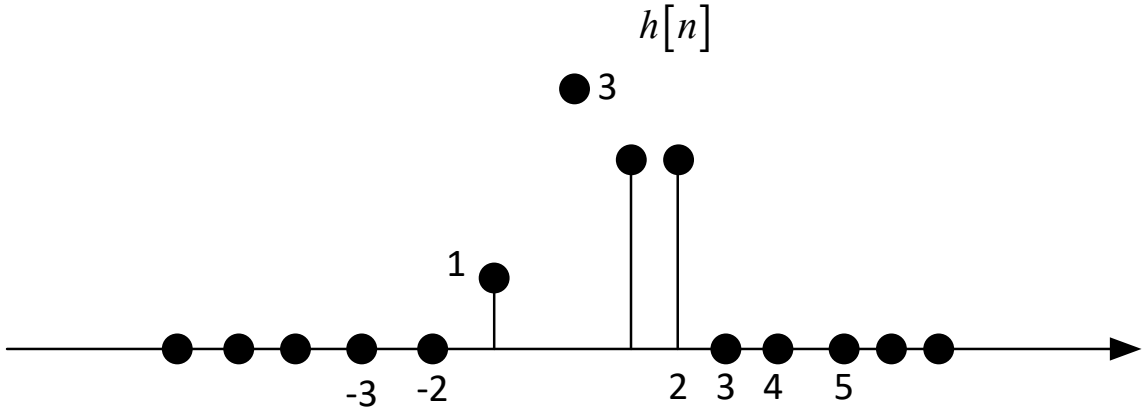


Impulse response and input signal

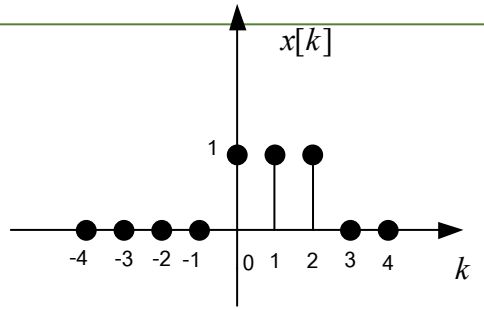


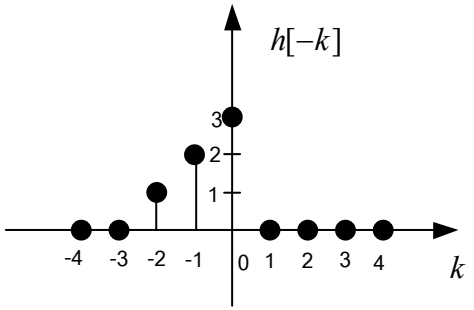
Input signal and impulse response



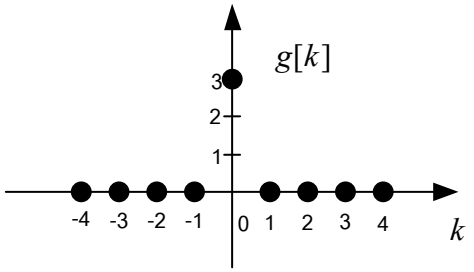


Impulse response flipped around the vertical axis

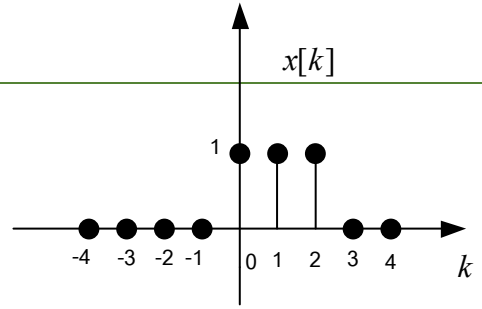


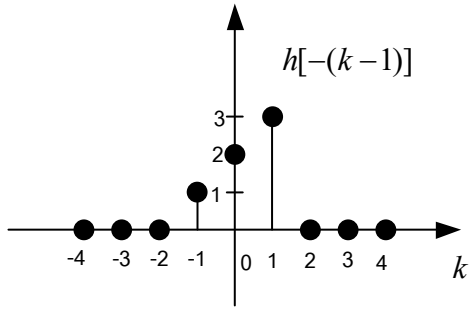


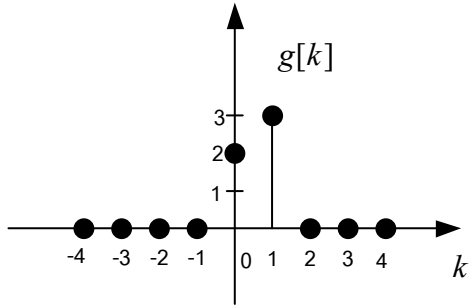
Product of flipped & shifted impulse response with Input signal for n=0



Time-reversed & shifted impulse response

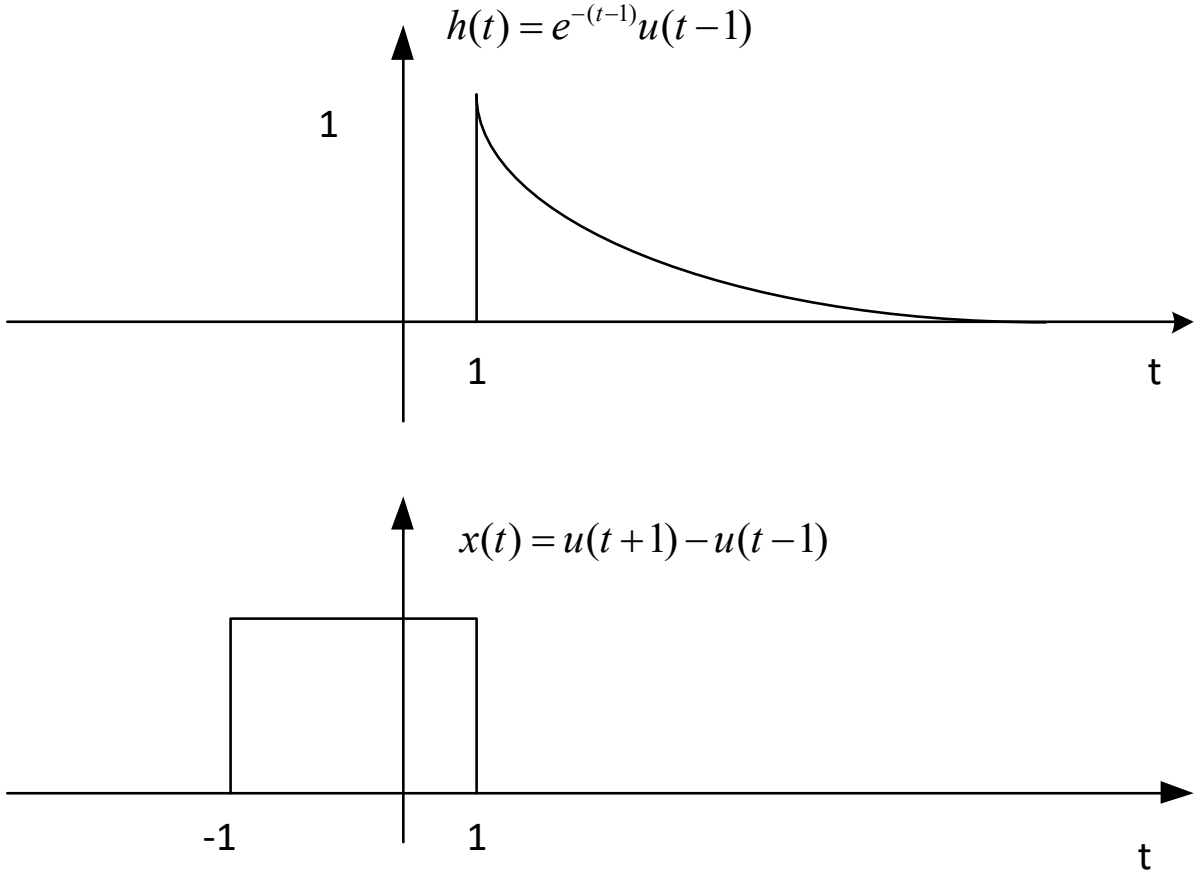




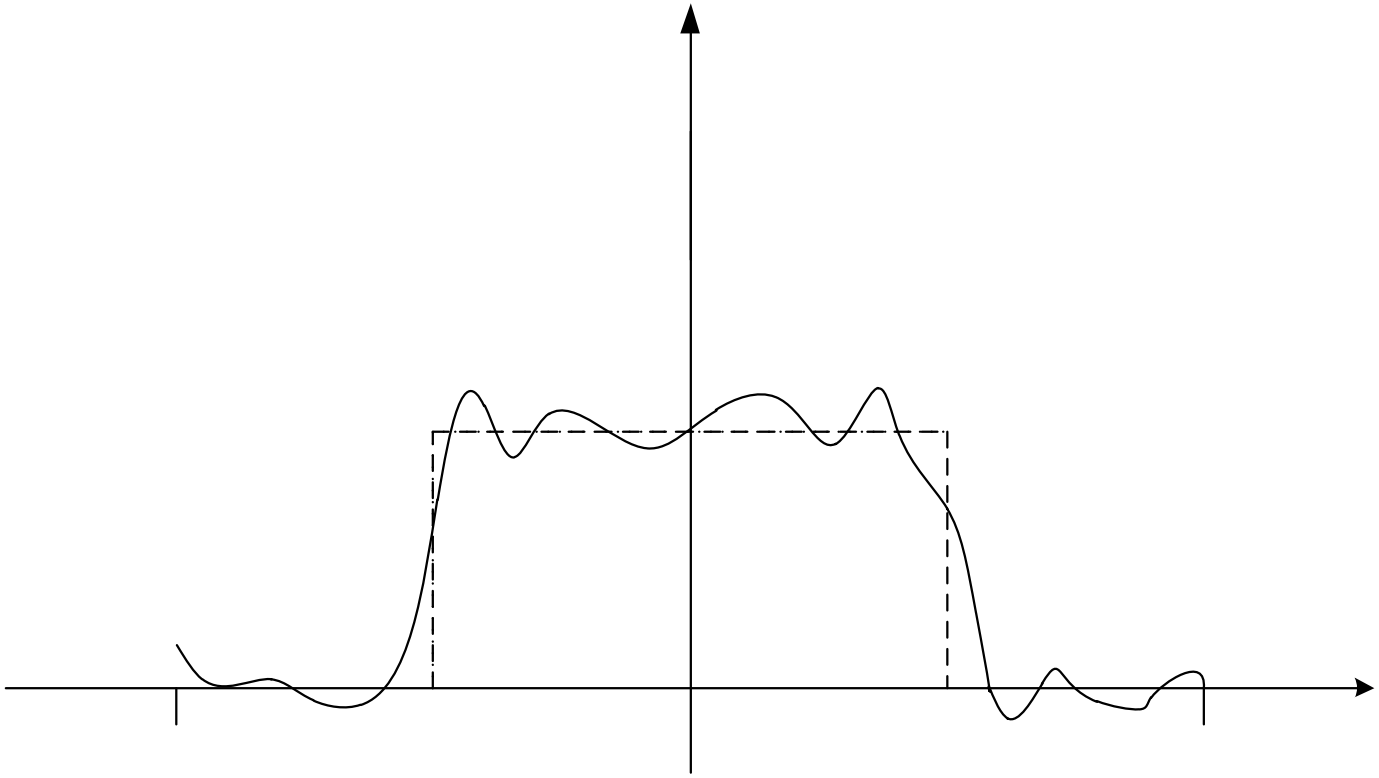


Product of flipped & shifted impulse response with Input signal for n=1

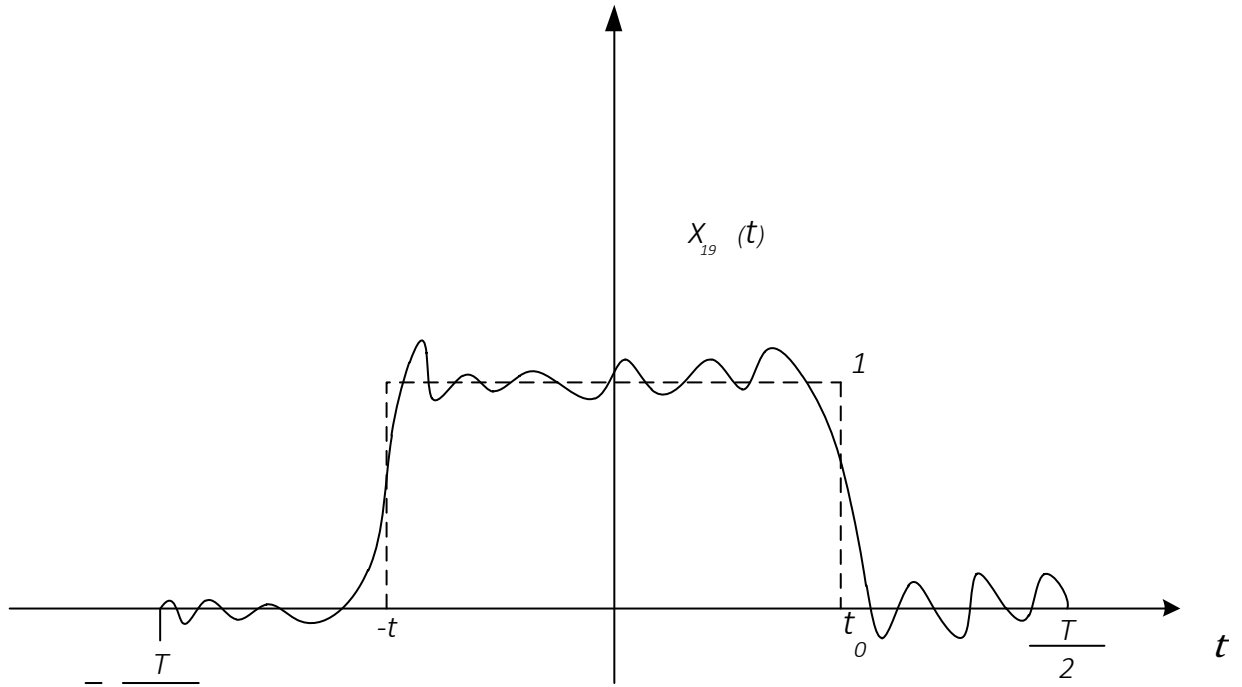
Impulse response and input signal



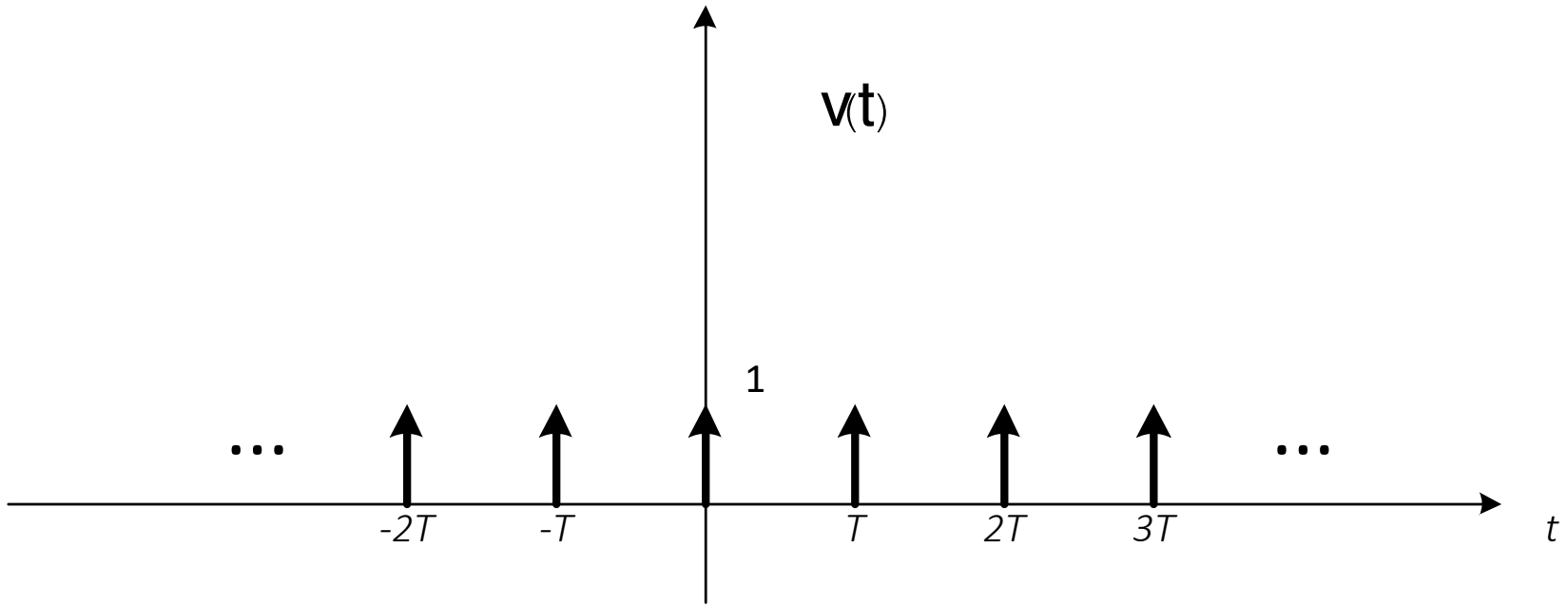
Gibbs phenomenon for truncated Fourier series of a square wave with seven Harmonic components



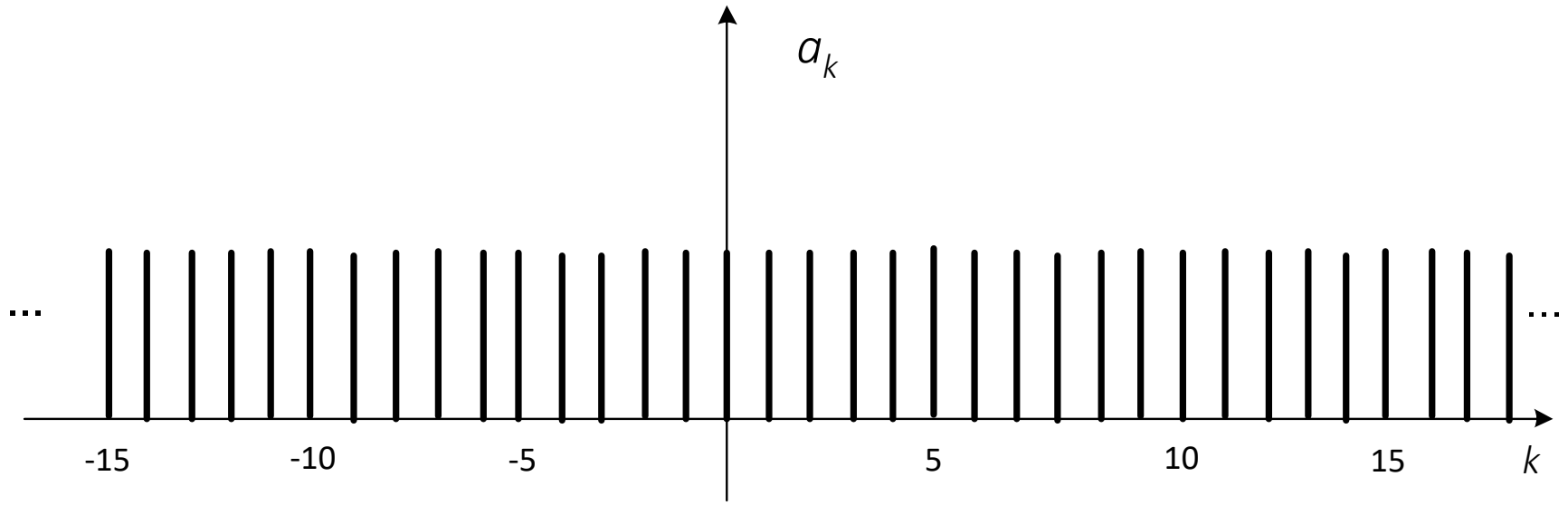
Gibbs phenomenon for truncated Fourier series of a square wave with seven Harmonic components



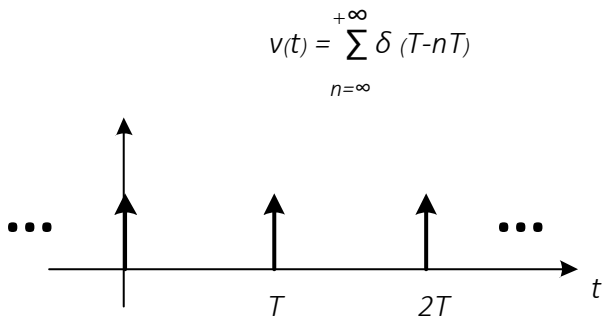
Impulse train

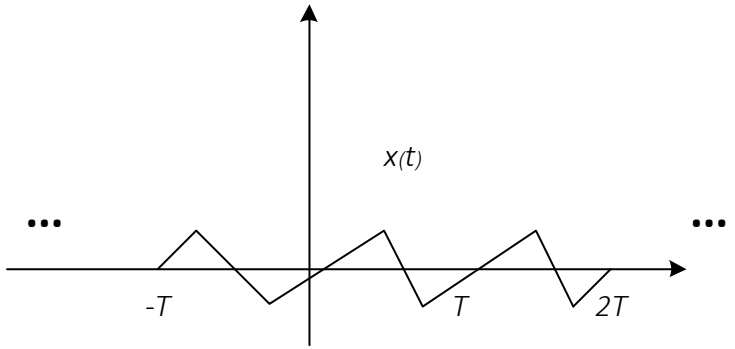


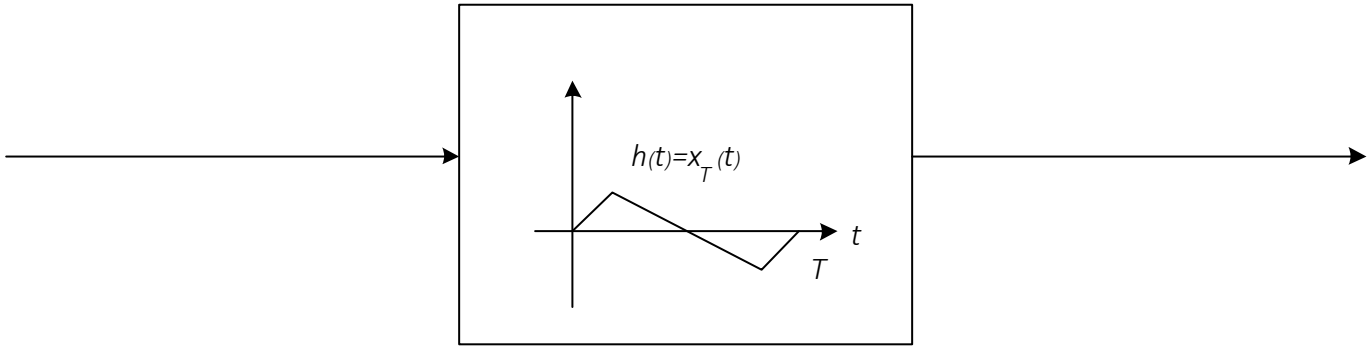
Spectral coefficients of the impulse



Conceptual setup for generating a periodic signal



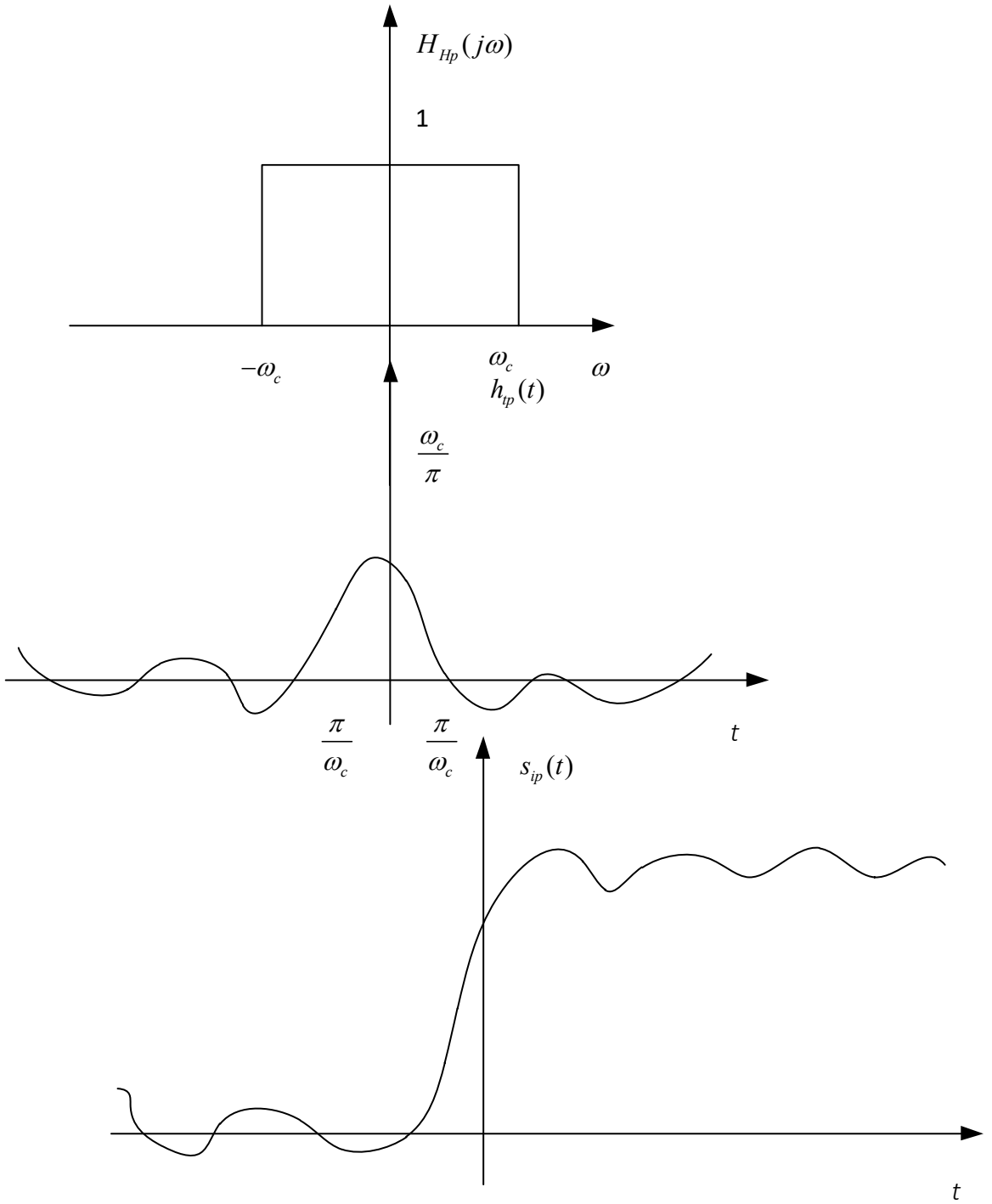




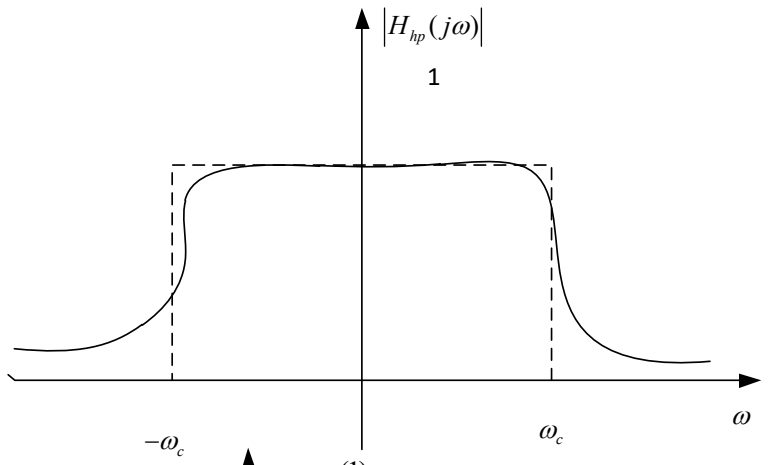
Impulse response of an ideal lowpass filter.

Impulse response of an ideal lowpass filter.

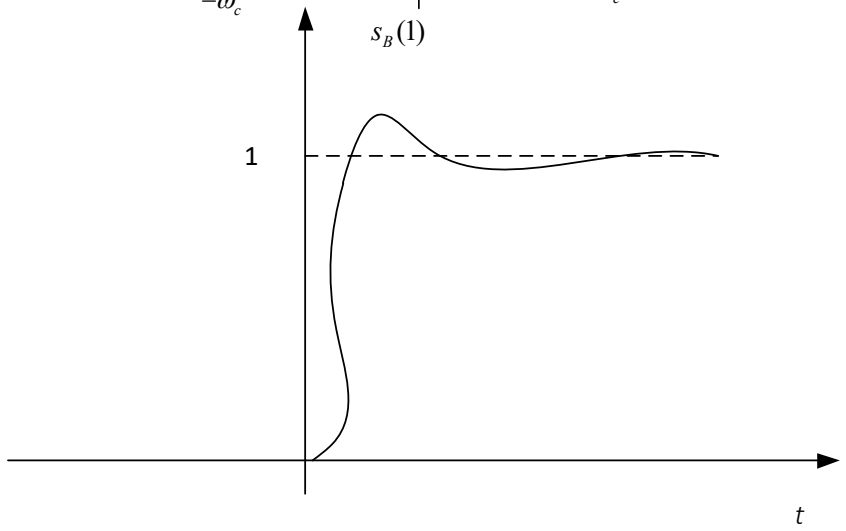
Step response of an ideal lowpass filter.



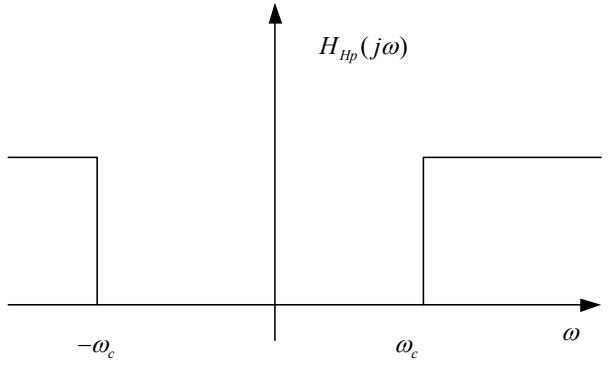
Magnitude of frequency response of a second-order Butterworth filter.



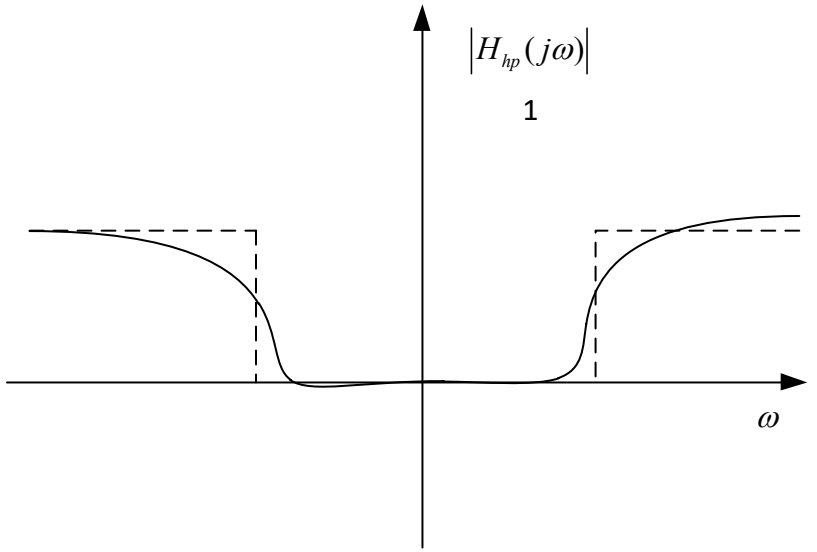
Step response of a second-order Butterworth filter.



Frequency response of an ideal highpass filter.



Magnitude of frequency response of a second-order highpass filter.



Frequency response of an ideal bandpass filter.