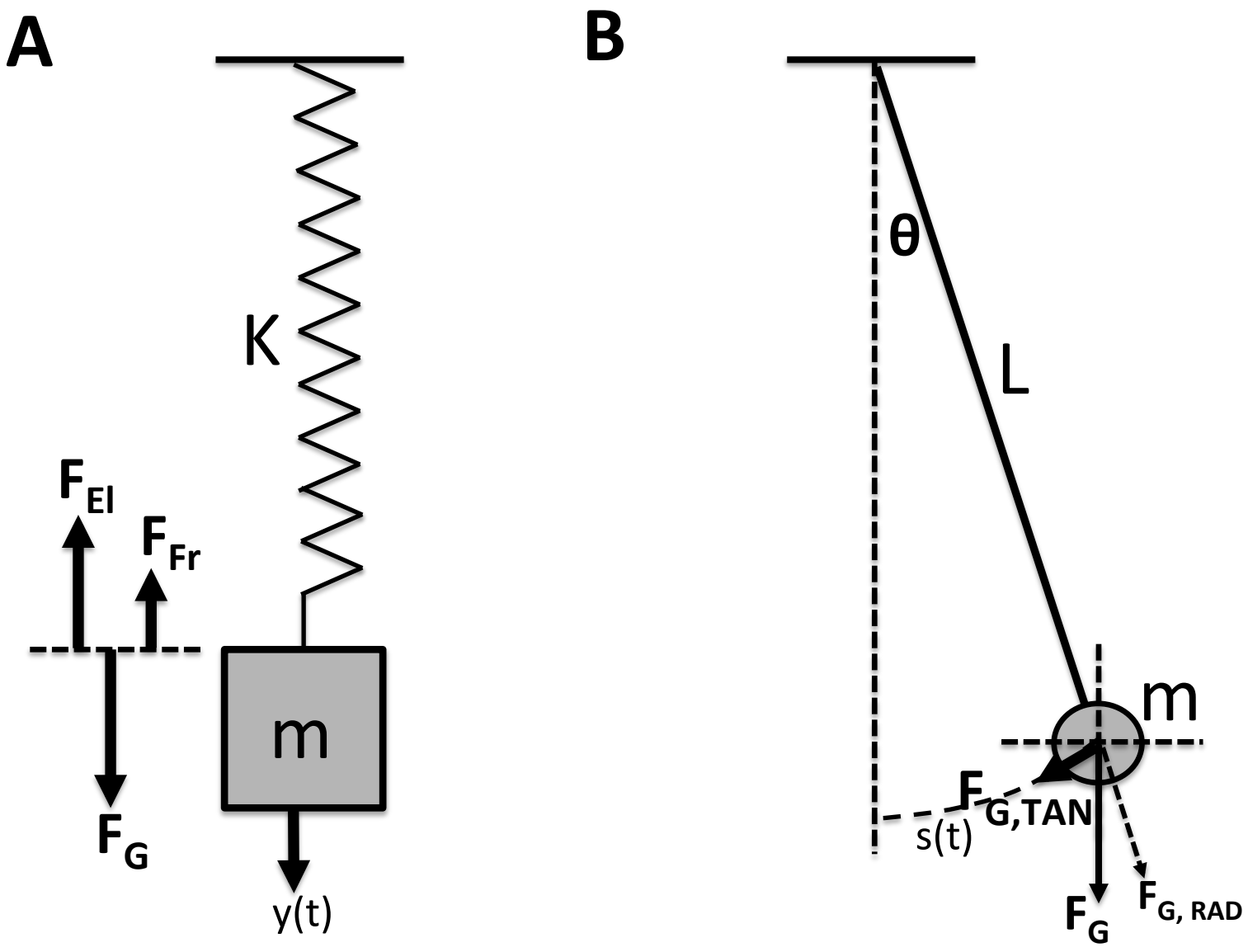


Figure 3.1

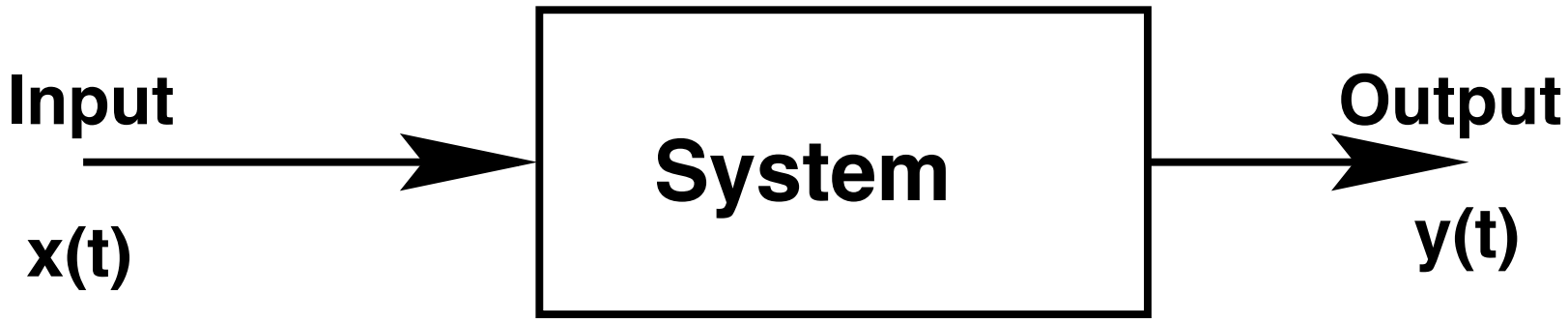
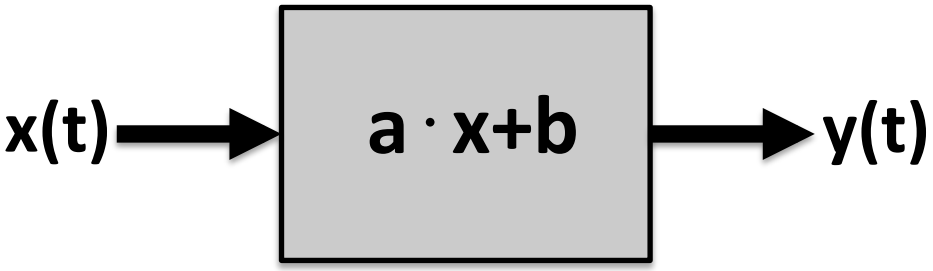


Figure 3.2



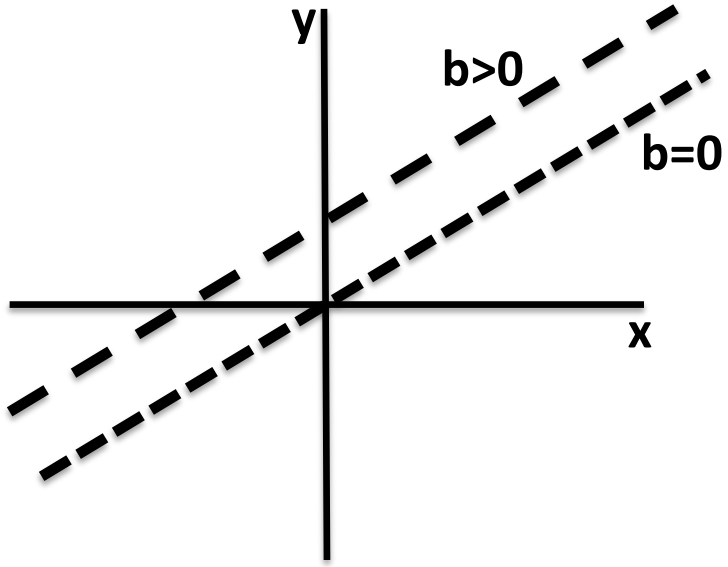


Figure 3.3

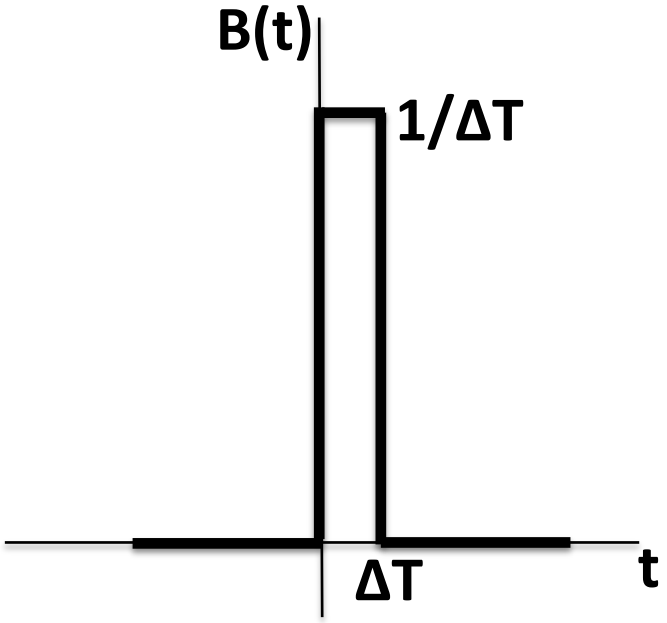


Figure 3.4

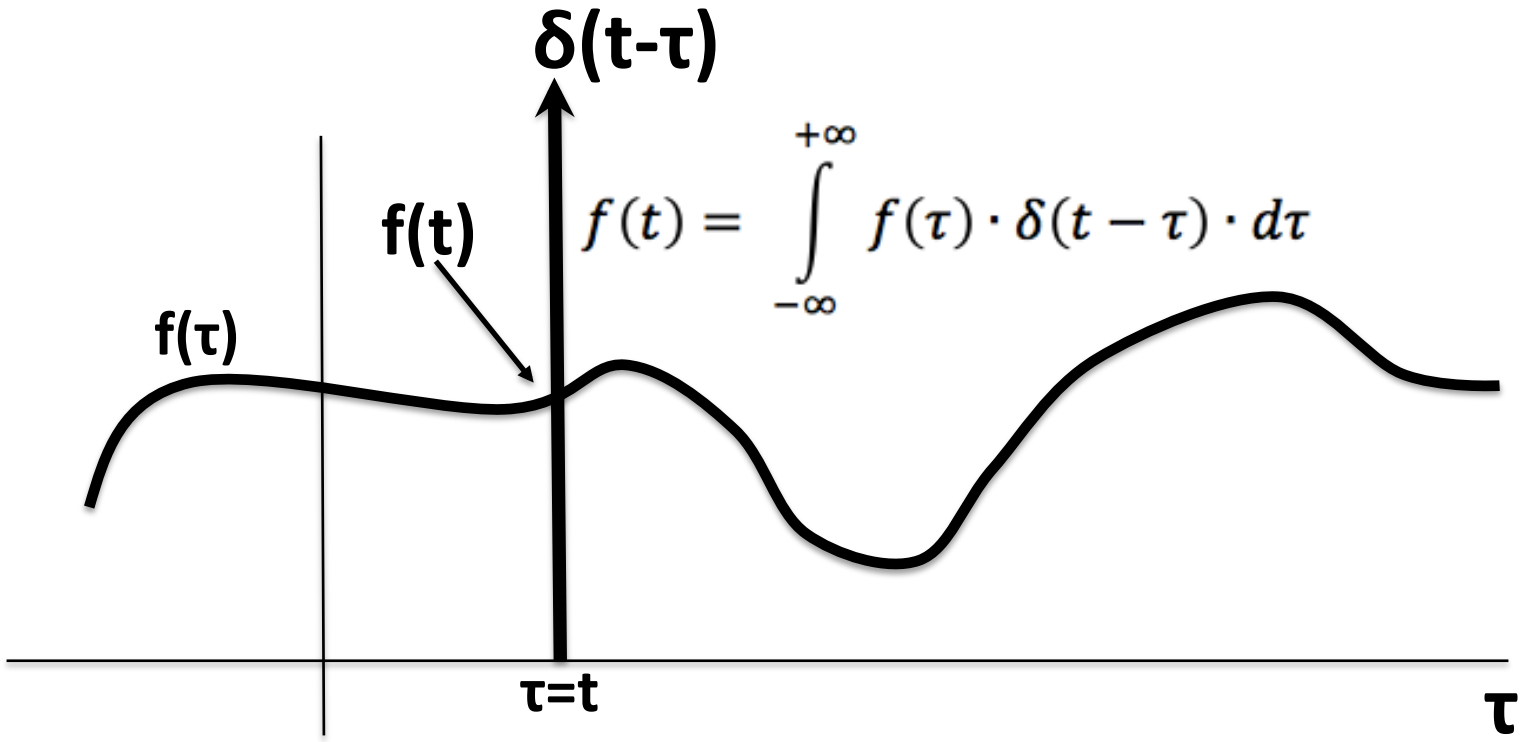

δ(t-τ)
f(t)
f(τ)
$f(t) = \int_{-\infty}^{+\infty} f(\tau) \cdot \delta(t-\tau) \cdot d\tau$
τ=t
τ

Figure 3.5

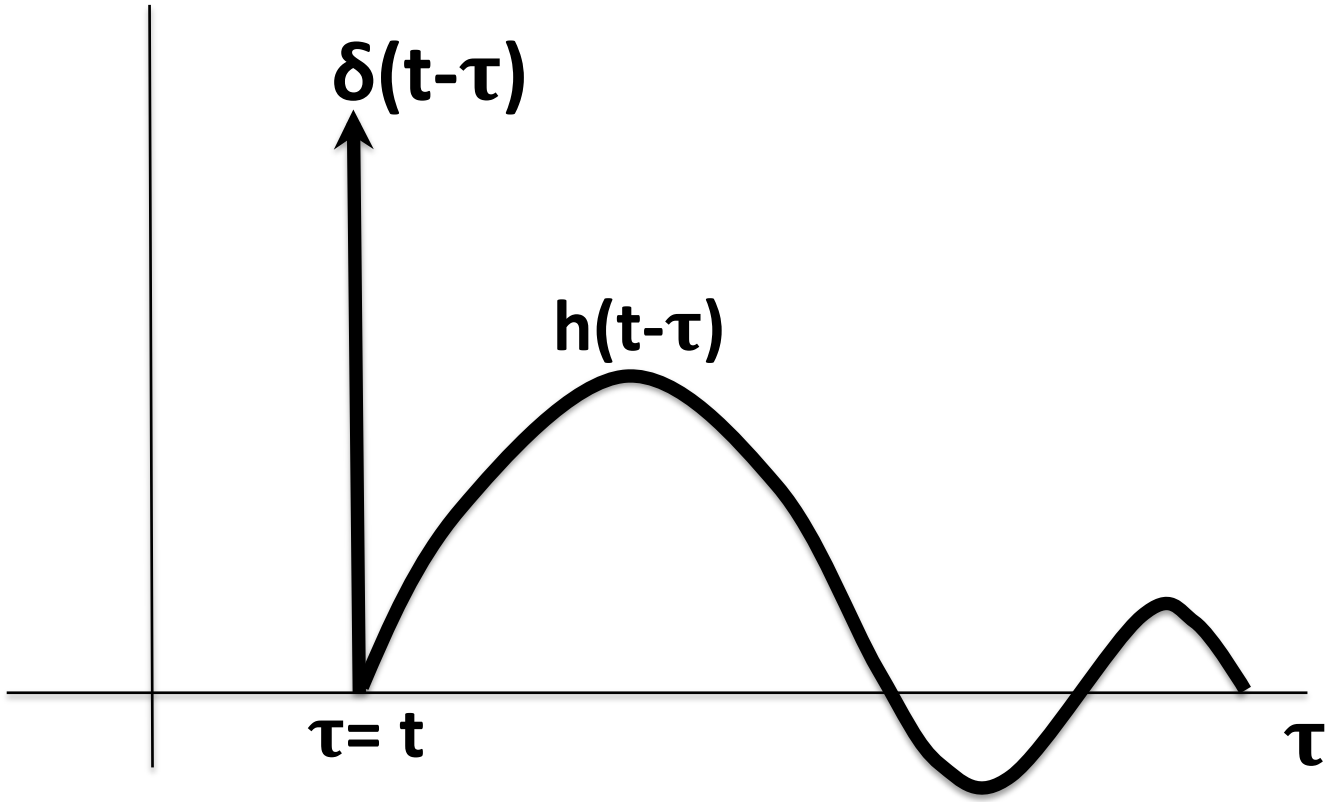


Figure 3.6

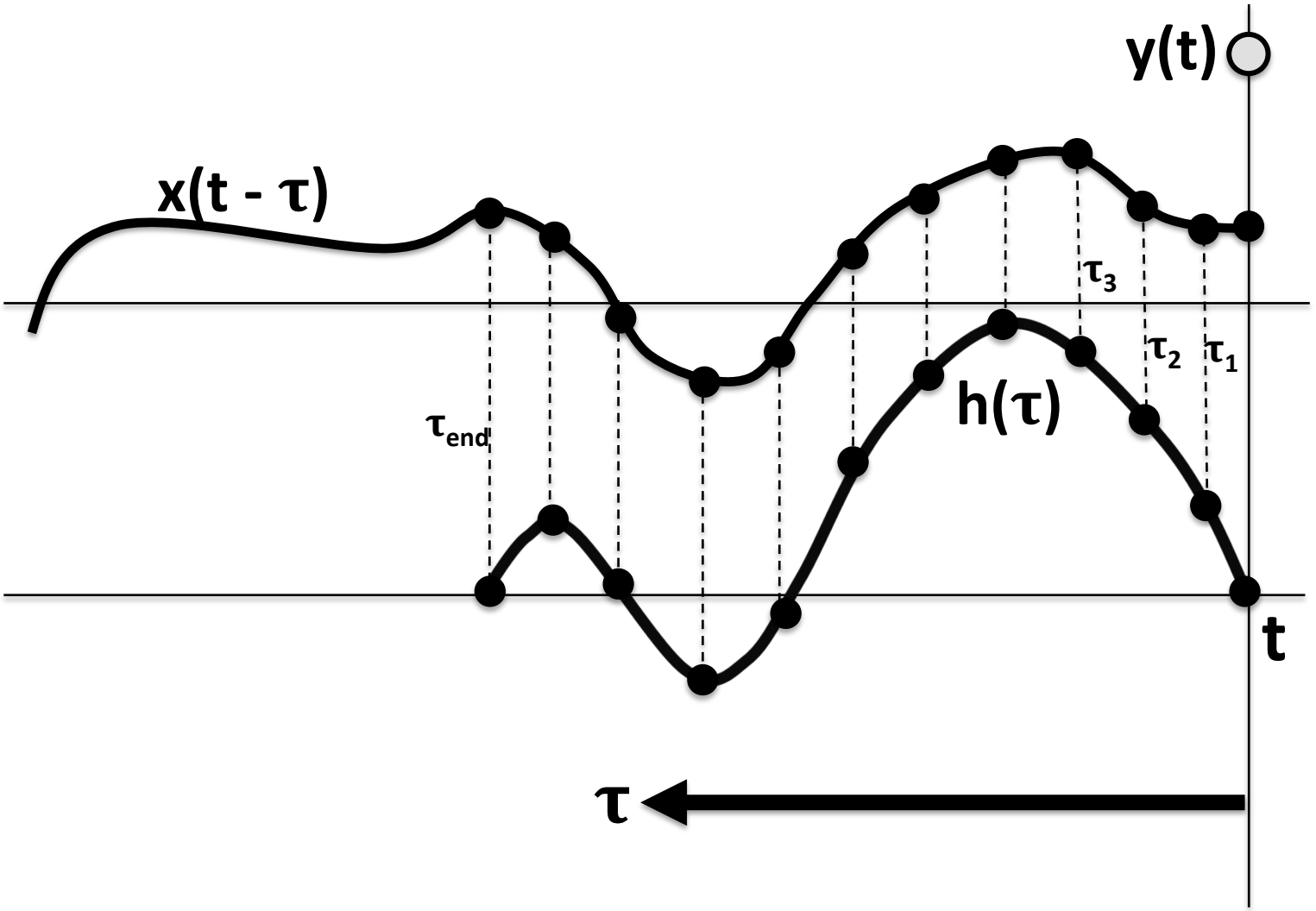


Figure 3.7

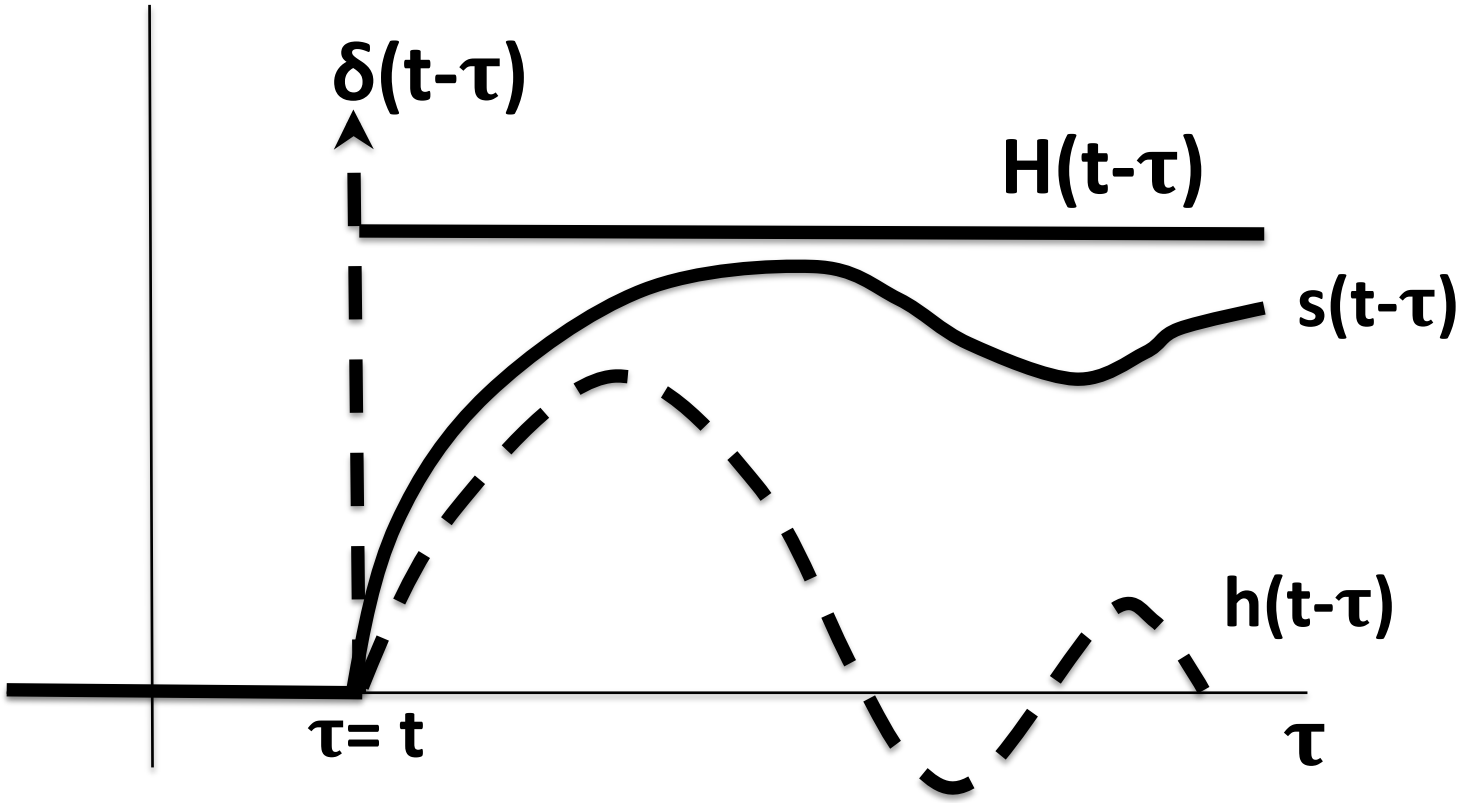


Figure 3.8

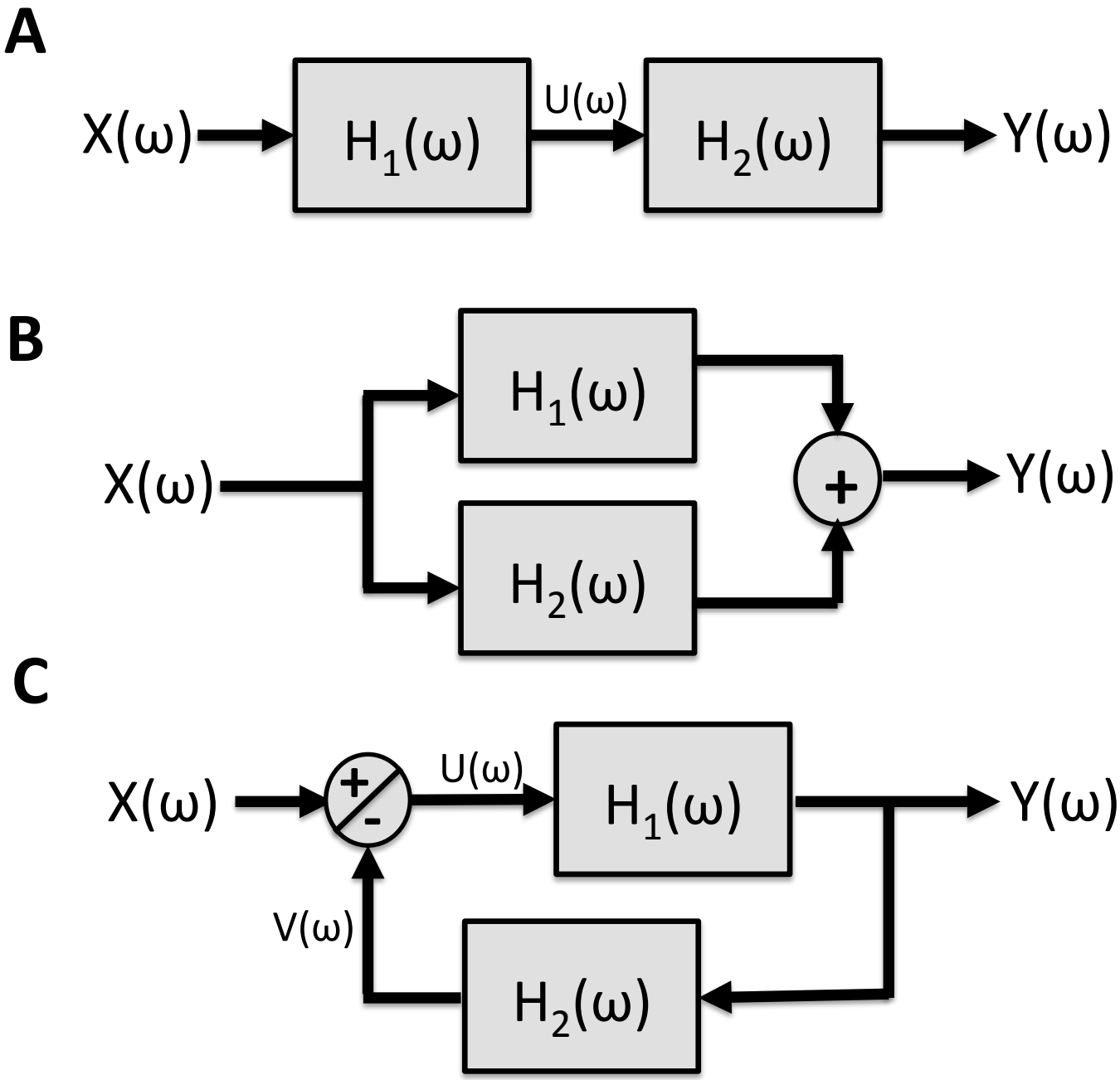


Figure 3.9

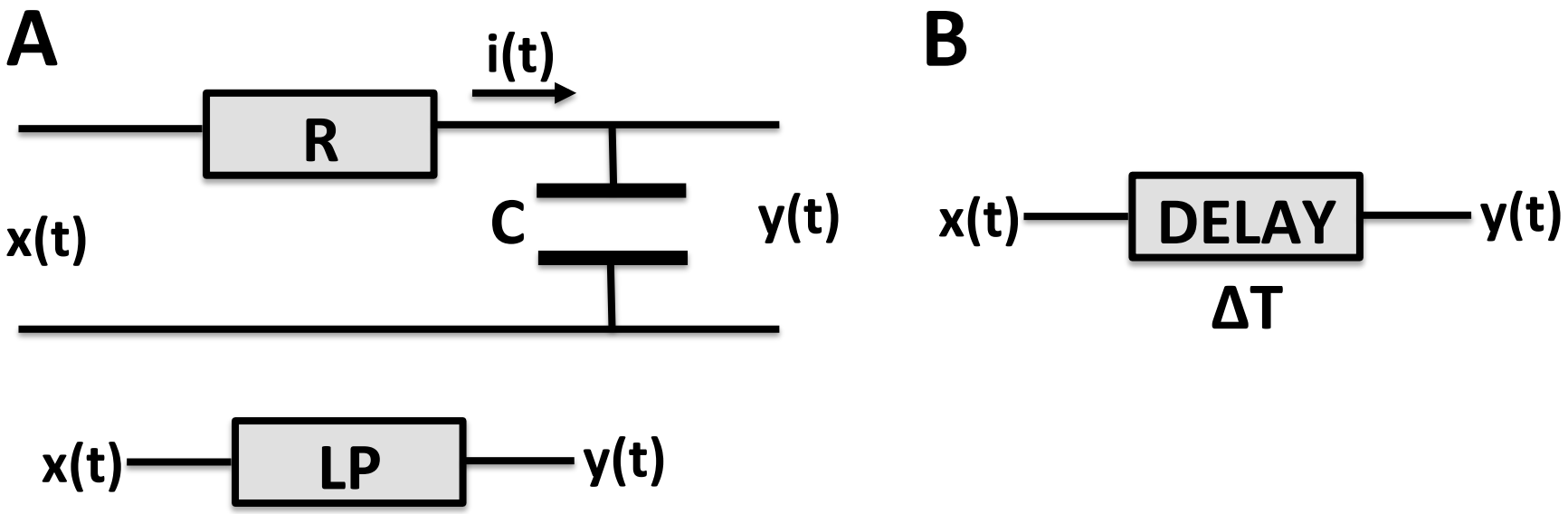


Figure 3.10

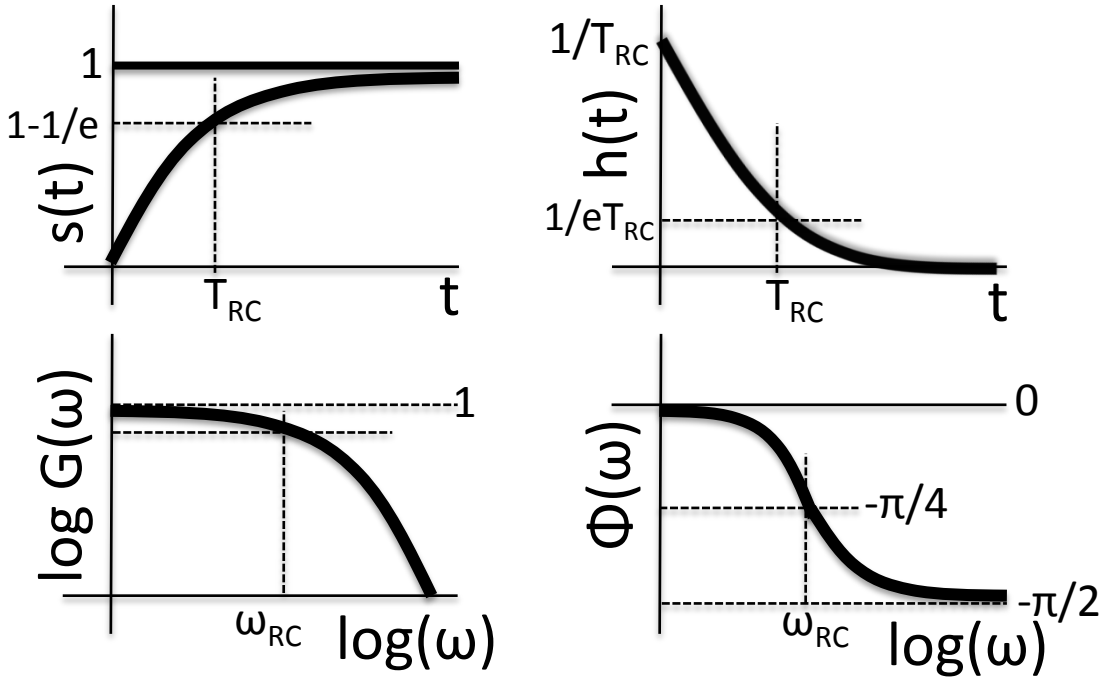

1
1-1/e
s(t)
T_RC
t
1/T_RC
h(t)
1/eT_RC
T_RC
t
log G(ω)
1
ω_RC
log(ω)
Φ(ω)
0
-π/4
-π/2
ω_RC
log(ω)

Figure 3.11

The Complex s-plane

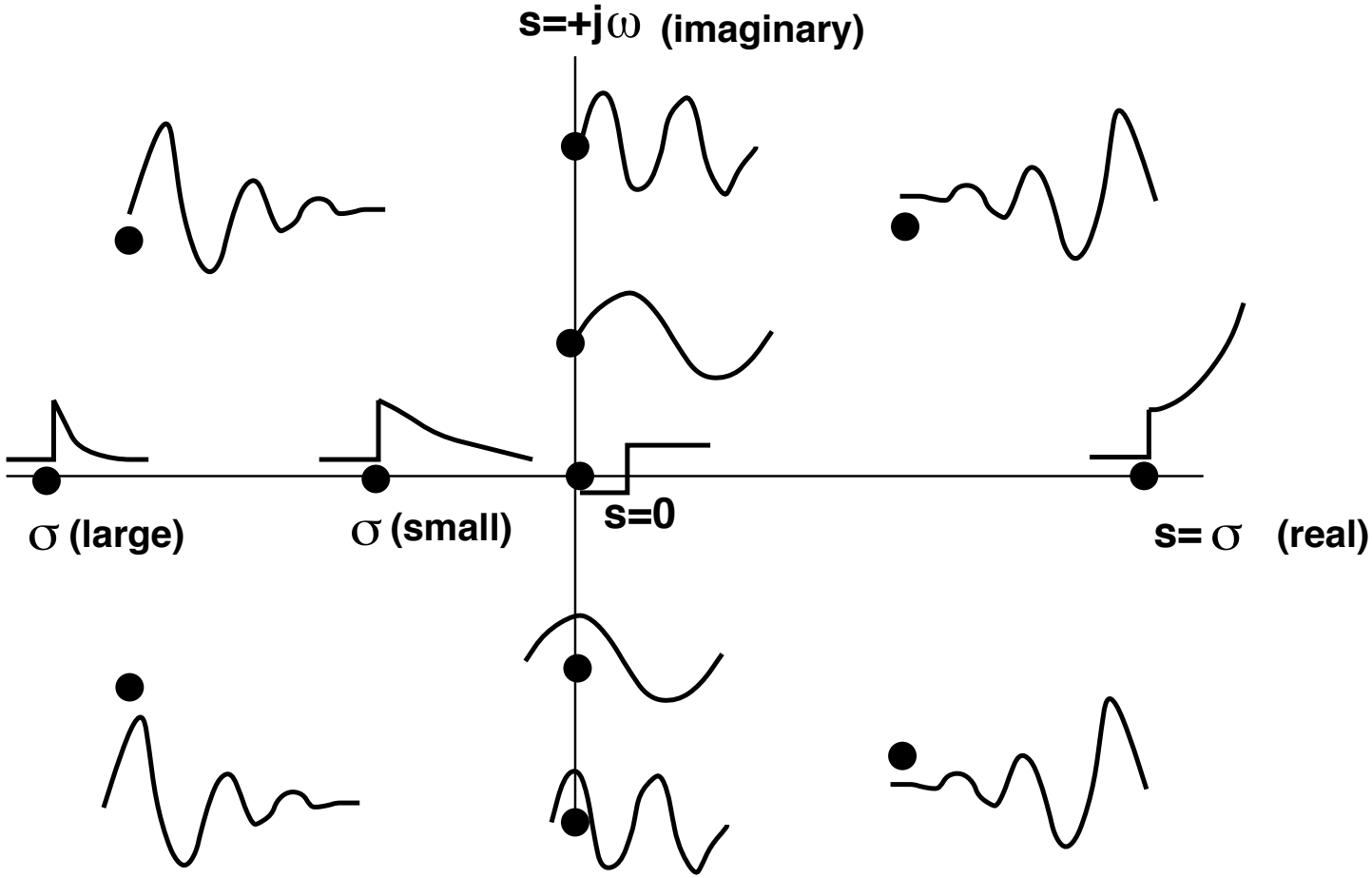


Figure 3.12

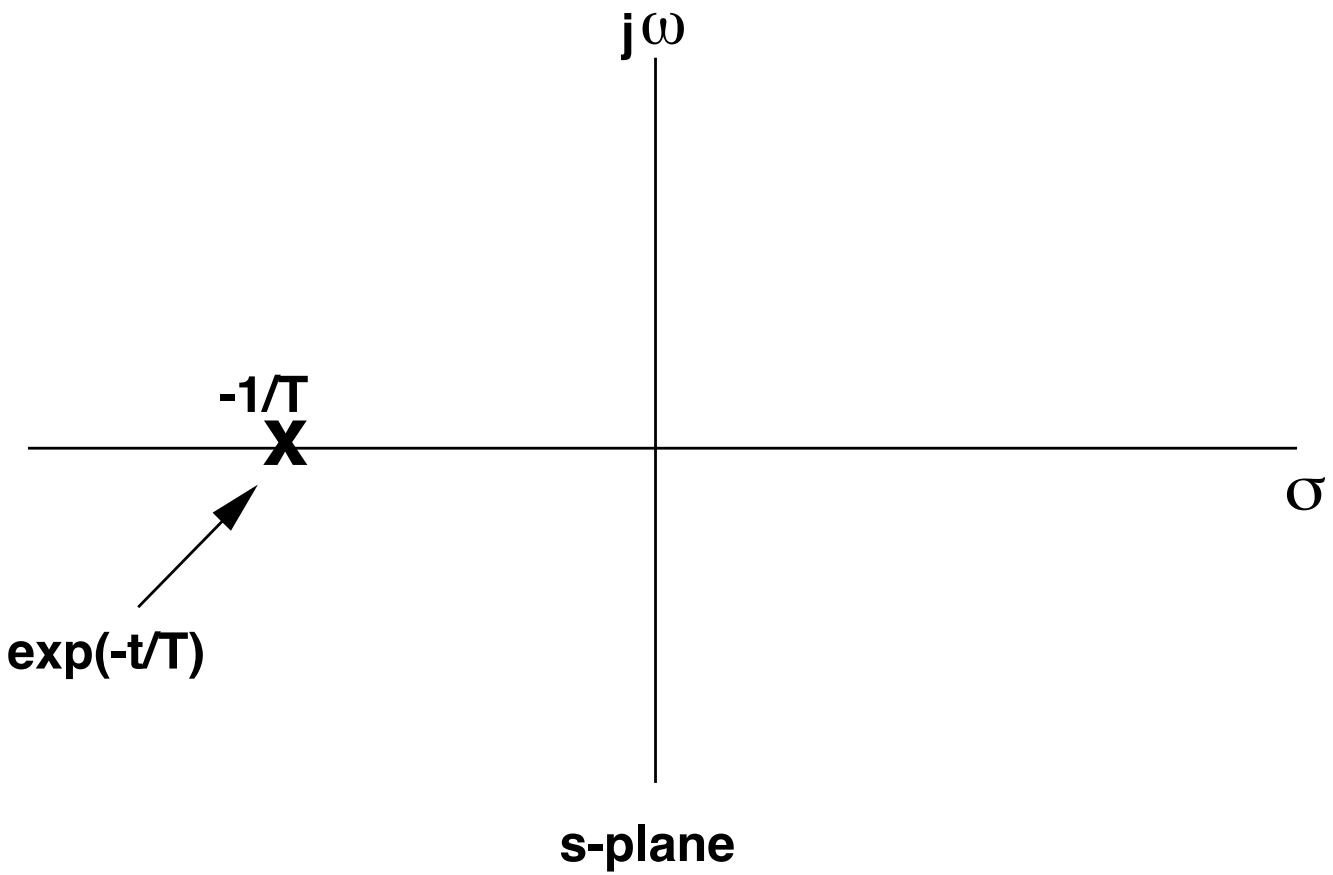


Figure 3.13

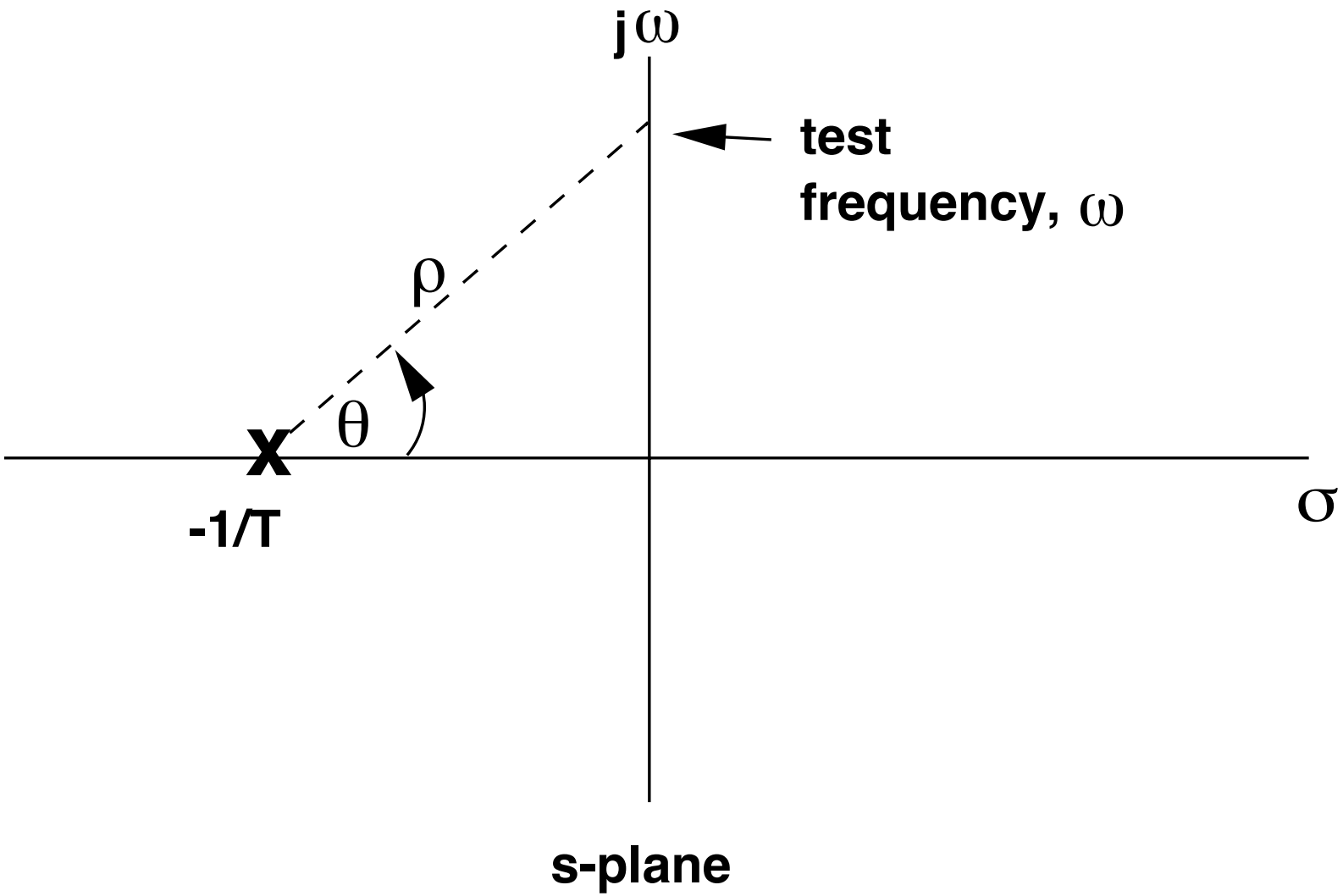


Figure 3.14

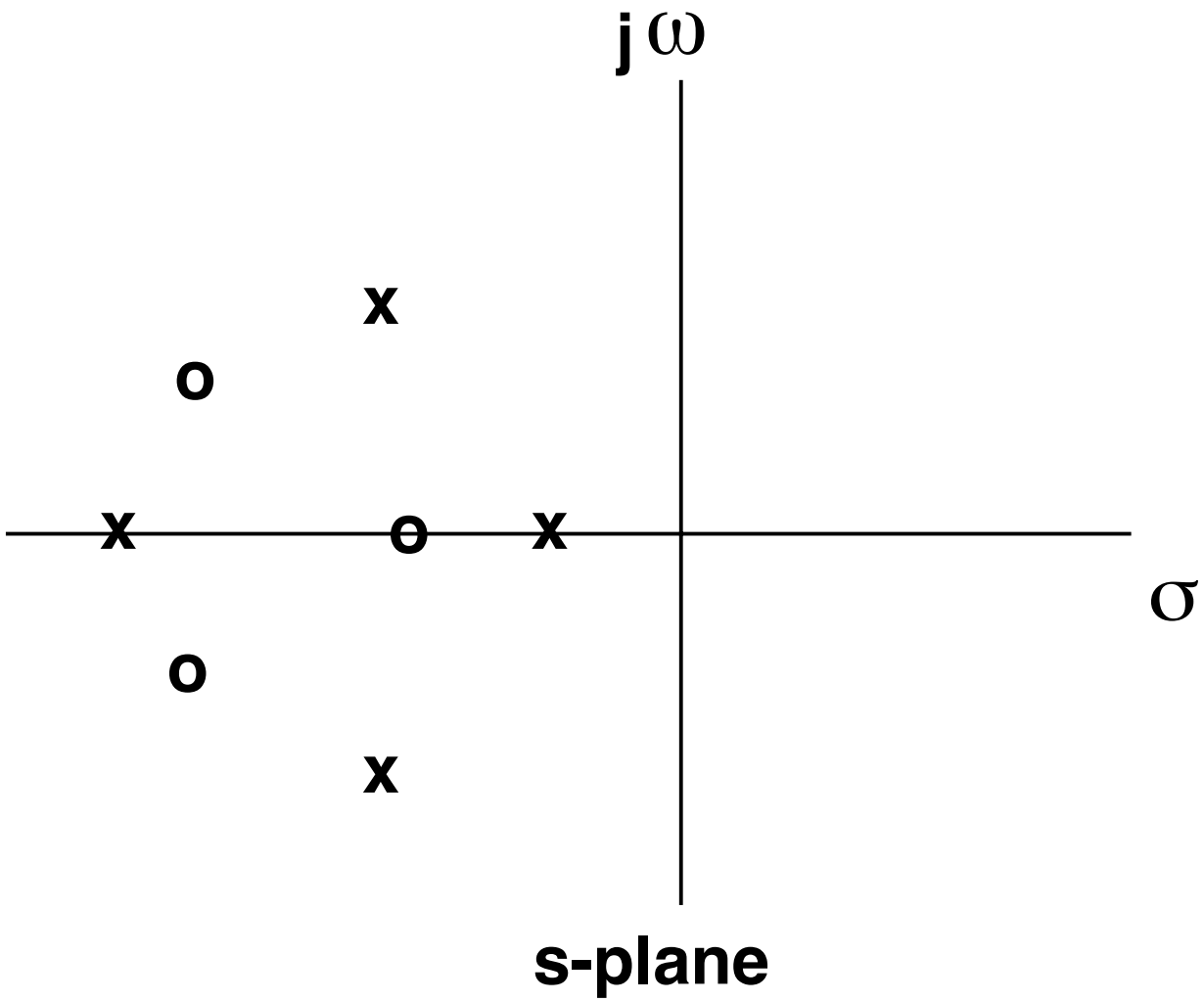


Figure 3.15

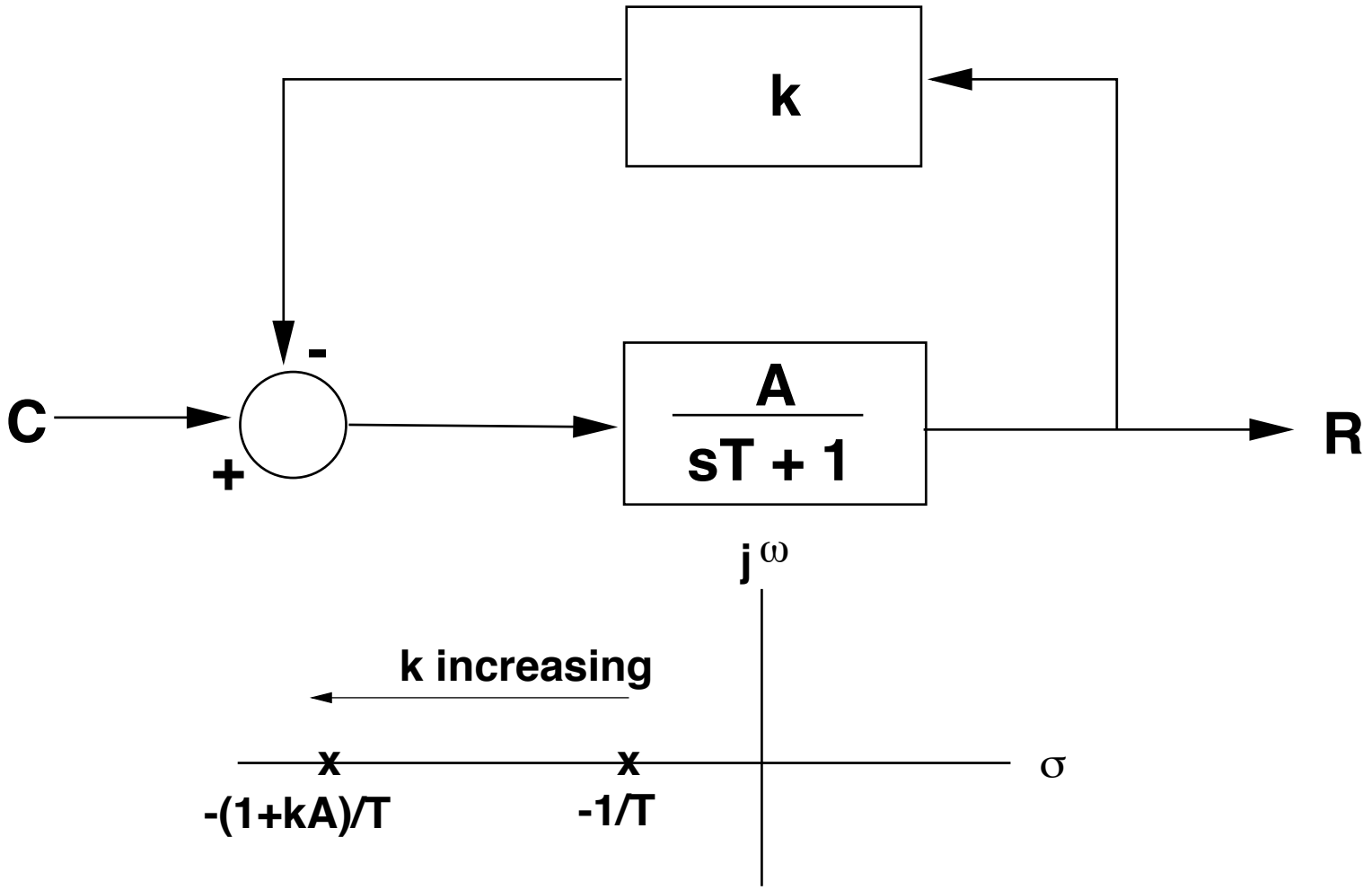


Figure 3.16

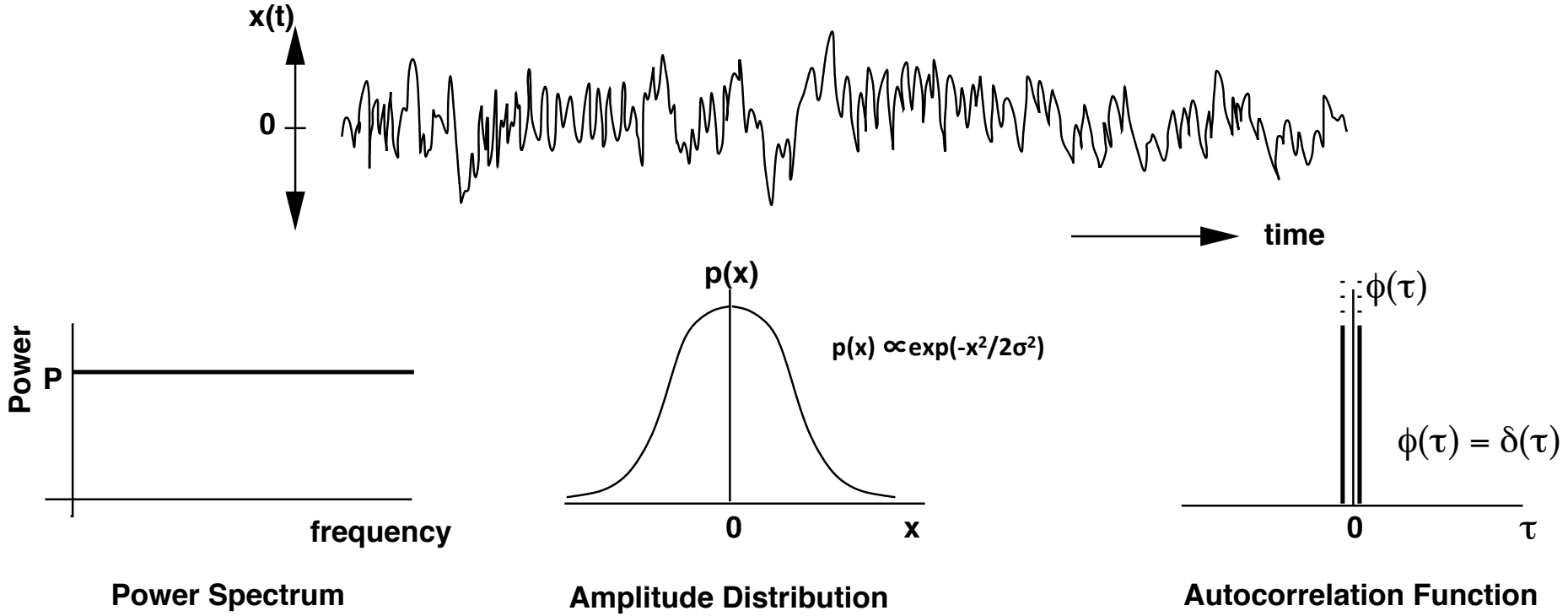

x(t)
0
time
p(x)
p(x) ∝ exp(-x²/2σ²)
0
x
Power
P
frequency
φ(τ)
φ(τ) = δ(τ)
0
τ
Power Spectrum
Amplitude Distribution
Autocorrelation Function

Figure 3.17

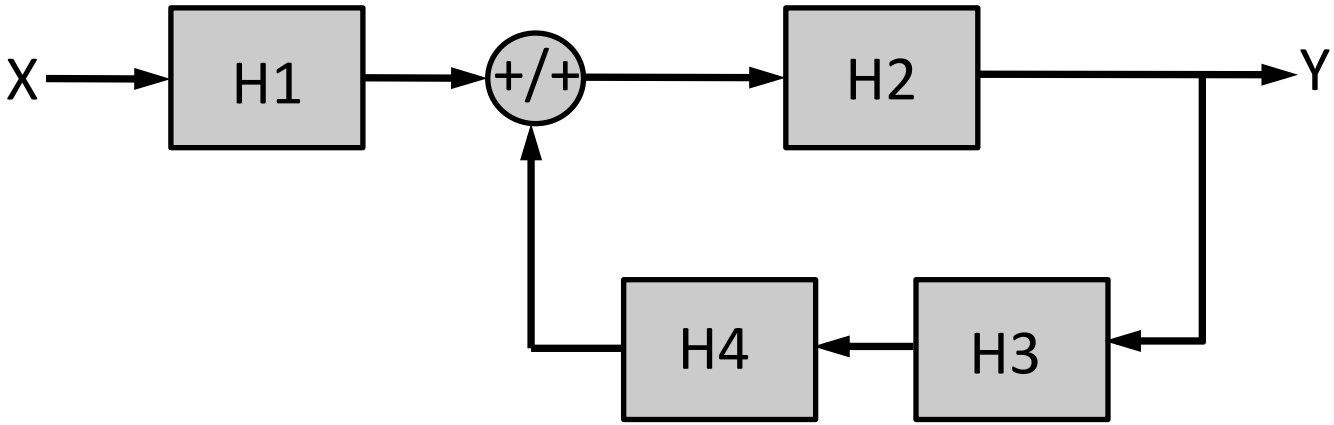


Figure 3-18

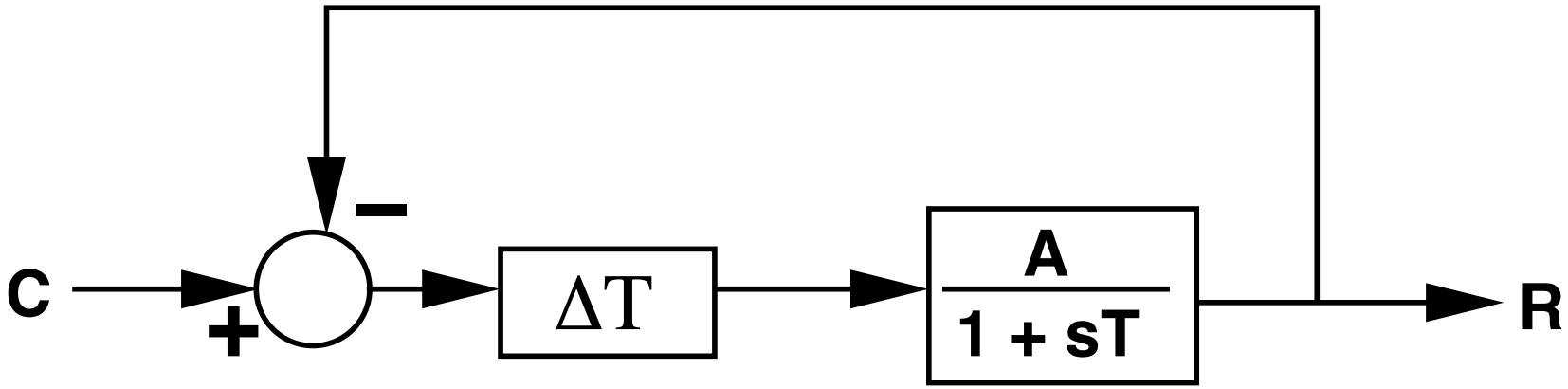


Figure 3-19

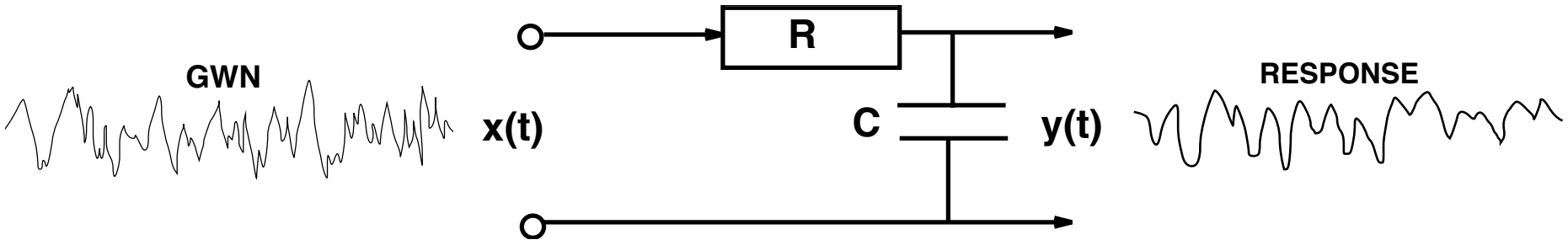


Figure 3-20