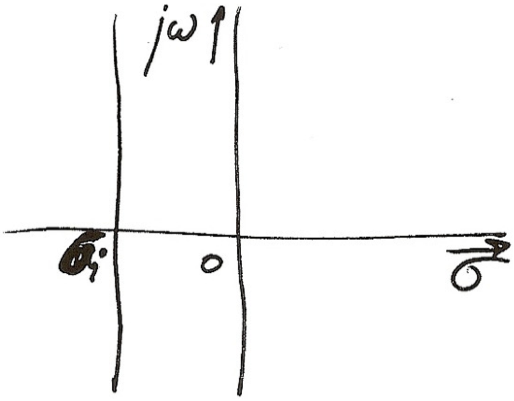
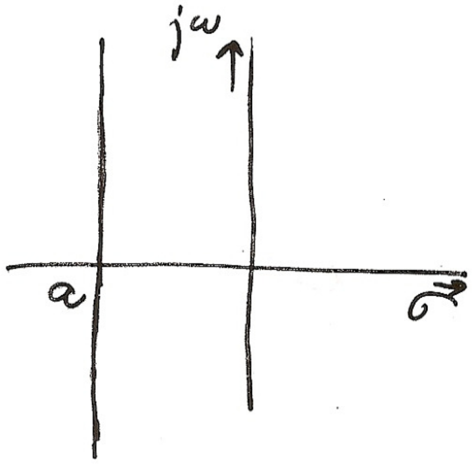


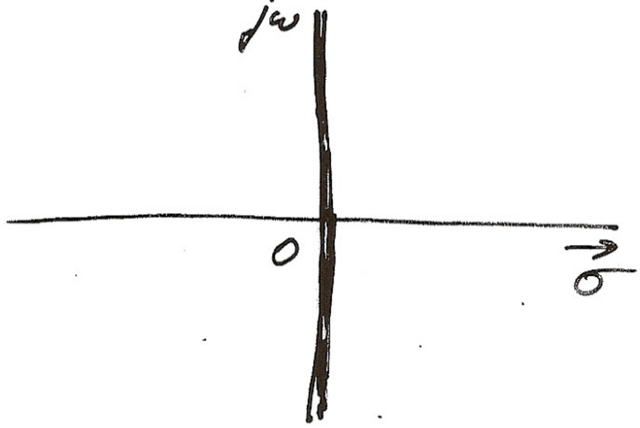
$$\langle -T/2;\ T/2 \rangle \rightarrow \langle 0;\ T \rangle$$

$$a > \sigma_0$$

$$X(p) = X(a+j\omega)$$

$$F(a+j\omega) = \int_0^{\infty} x(t)\, e^{-(a+j\omega)t}\, dt = \int_{-\infty}^{\infty} e^{-at} x(t)\, e^{-j\omega t}\, dt$$





$$\mathcal{L}\{x(t)\} = X(p) = X(a+j\omega) \qquad \mathcal{F}\{e^{-at} x(t)\} = X(\omega)$$

$$R_{21}(\tau) = R_{12}(-\tau)$$

$$S_{21}(\omega) = X_1(\omega) \cdot \overline{X_2}(\omega)$$

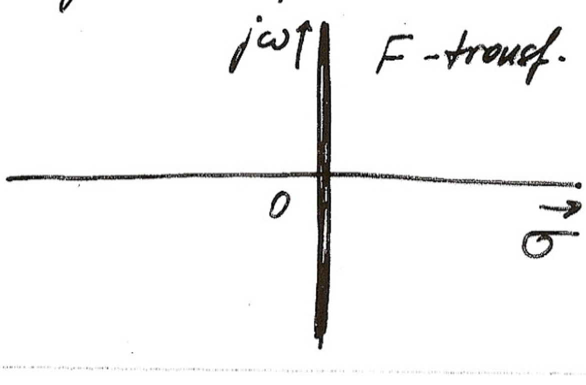
$$S_{21}(\omega) = \overline{S_{12}}(\omega)$$

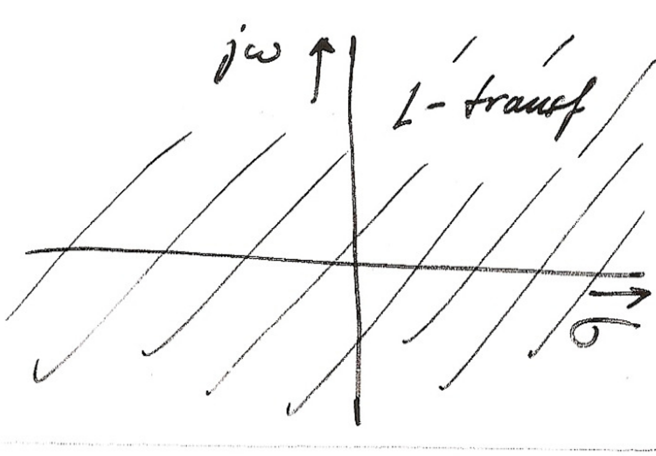
Vzťah medzi Fourierovou a Laplaceovou transformáciou

$$\mathcal{L}\{x(t)\} = X(p) = \int_0^\infty x(t)\, e^{-pt}\, dt$$

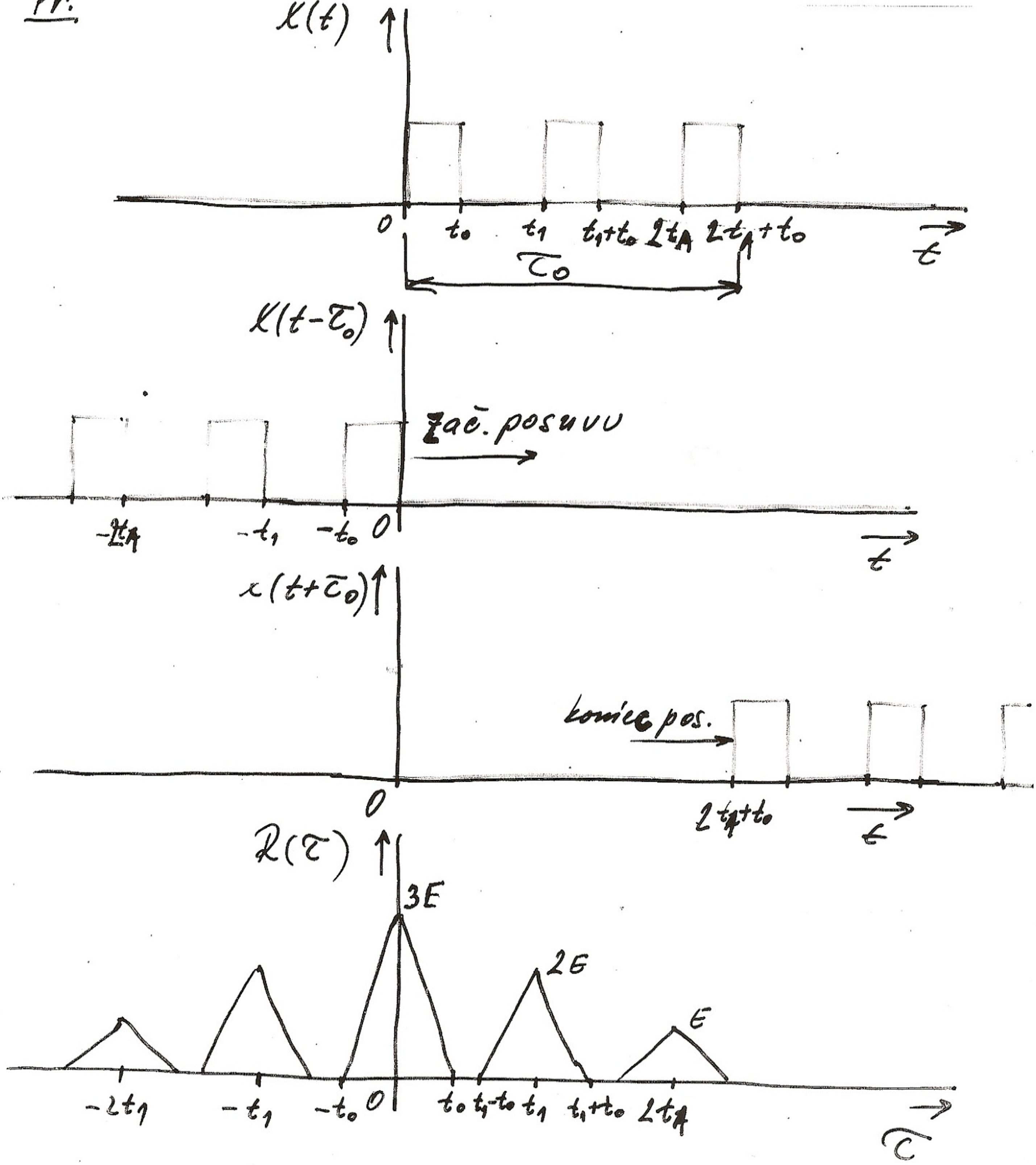
$$\mathcal{L}^{-1}\{X(p)\} = x(t) = \int_{\sigma - j\infty}^{\sigma + j\infty} X(p)\, e^{pt}\, dp$$

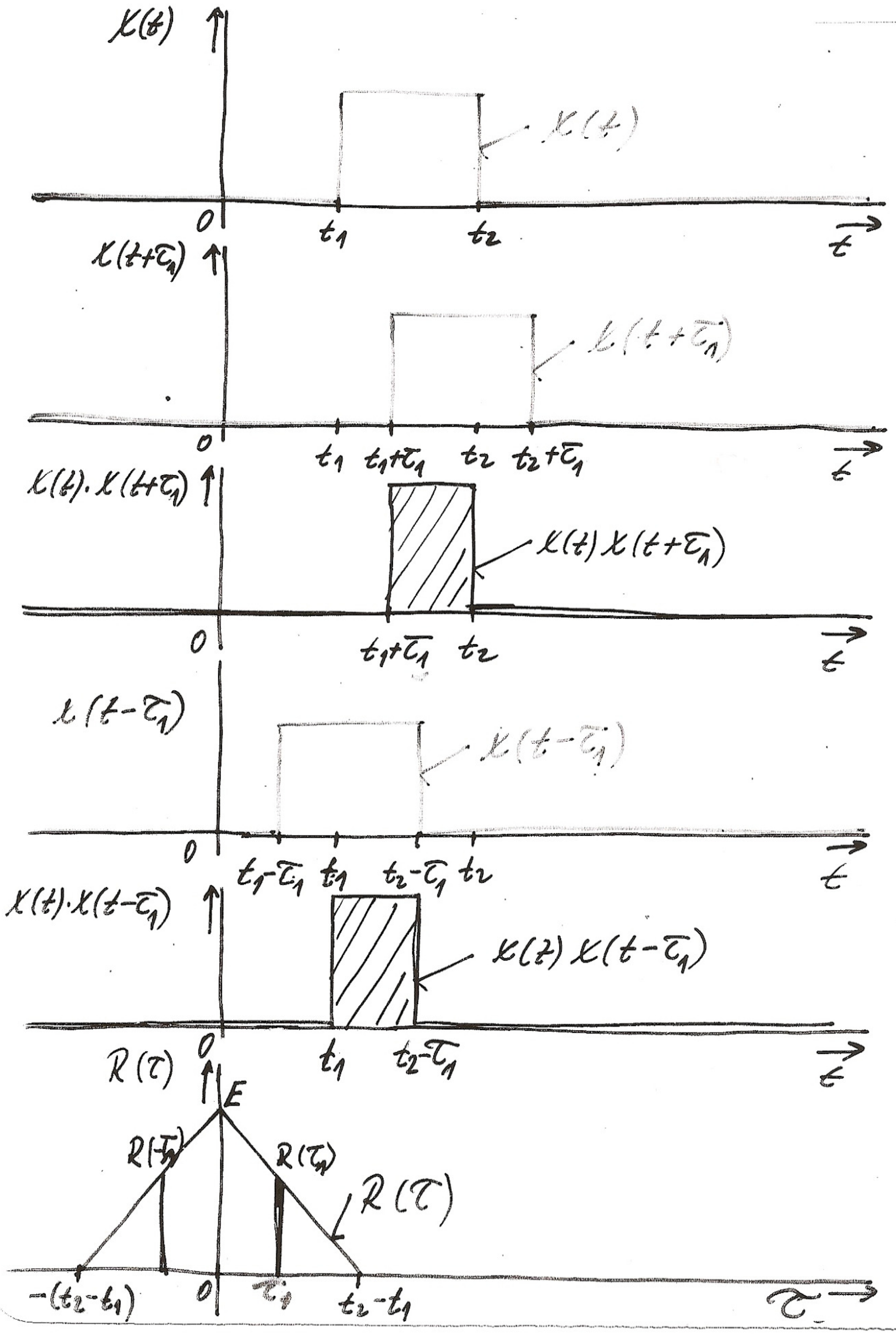
$$p = \sigma + j\omega$$





Pr.


x(t)
0
t₀
t₁
t₁+t₀
2t₁
2t₁+t₀
τ₀
t
x(t-τ₀)
Zač. posuvu
-2t₁
-t₁
-t₀
0
t
x(t+τ₀)
konec pos.
0
2t₁+t₀
t
R(τ)
3E
2E
E
-2t₁
-t₁
-t₀
0
t₀
t₁-t₀
t₁
t₁+t₀
2t₁
τ


x(t)
x(t)
0
t1
t2
t
x(t+τ1)
x(t+τ1)
0
t1
t1+τ1
t2
t2+τ1
t
x(t)·x(t+τ1)
x(t) x(t+τ1)
0
t1+τ1
t2
t
x(t−τ1)
x(t−τ1)
0
t1−τ1
t1
t2−τ1
t2
t
x(t)·x(t−τ1)
x(t) x(t−τ1)
0
t1
t2−τ1
t
R(τ)
E
R(−τ1)
R(τ1)
R(τ)
−(t2−t1)
0
τ1
t2−t1
τ

Korelácia

$$R_{12}(\tau) = \int_{-\infty}^{\infty} x_1(t) \cdot x_2(t+\tau)\, dt$$