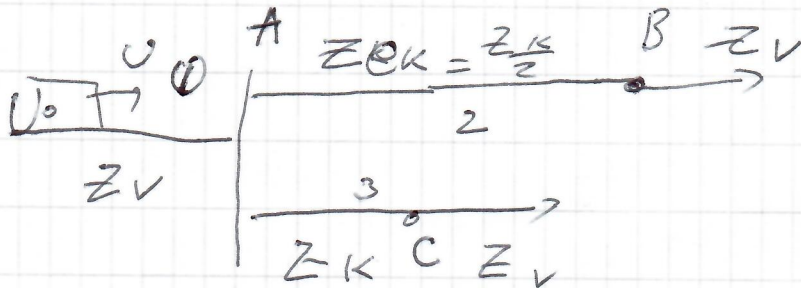


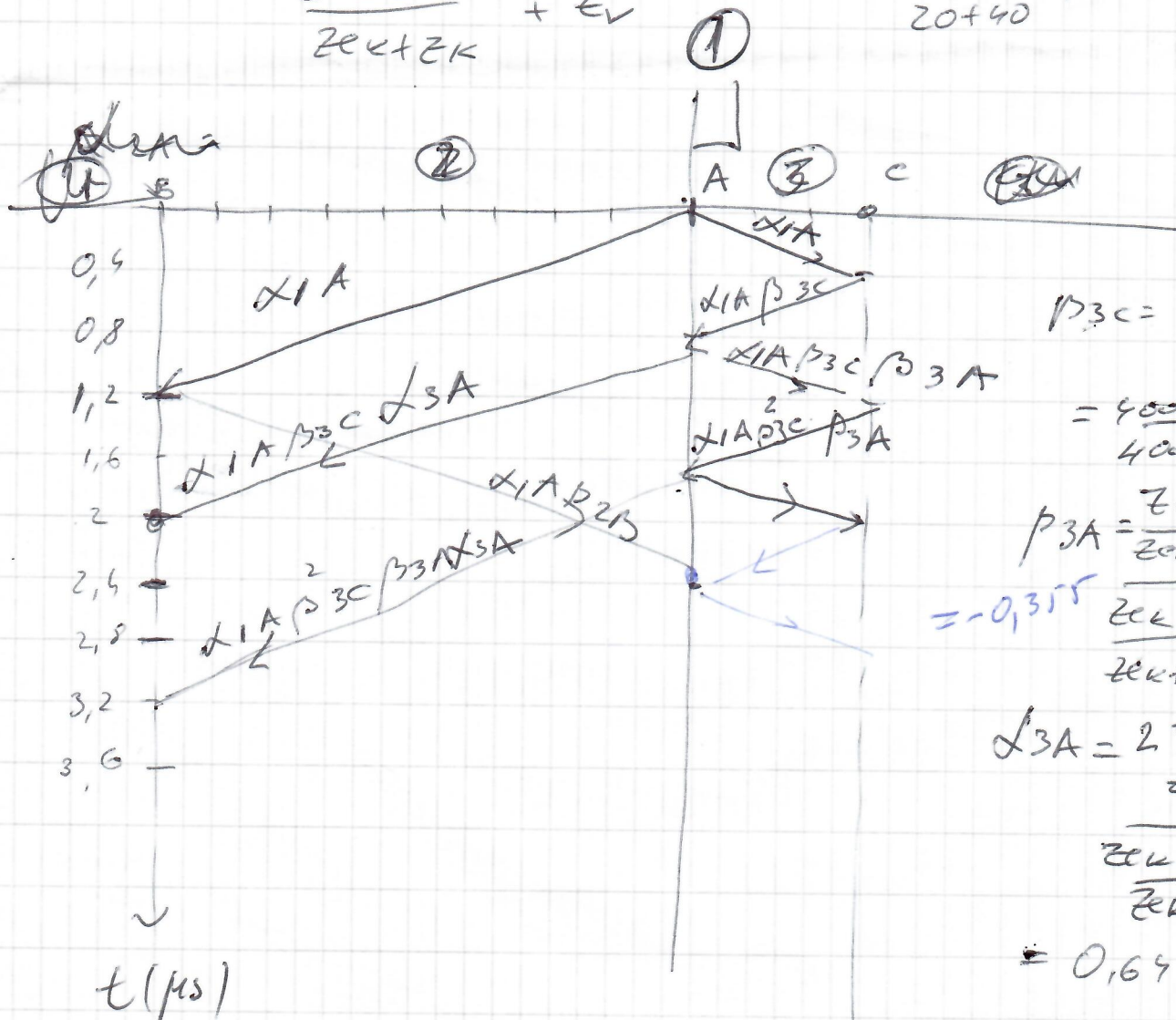
3.12 $U_0 = 75 \text{ kV}$ $l_1 = 60 \text{ m}$ $l_2 = l_3 = 180 \text{ m}$
 $Z_V = 400 \Omega$ $Z_K = 40 \Omega$ $U_K = 110 \text{ V/m}$
 $U_i = 75 \text{ kV}$



$$T_1 = \frac{l_1}{U_K} = \frac{60}{110} = 0,54 \mu\text{s}$$

$$T_2 = \frac{l_2}{U_K} = \frac{180}{110} = 1,64 \mu\text{s}$$

$$\alpha_{1A} = \frac{2 \frac{Z_{EK} Z_K}{Z_{EK} + Z_K}}{\frac{Z_{EK} Z_K}{Z_{EK} + Z_K} + Z_V} = \frac{2 \cdot \frac{20 \cdot 40}{20 + 40}}{\frac{20 \cdot 40}{20 + 40} + 400} = 0,0615$$



$$\beta_{3C} = \frac{Z_V - Z_K}{Z_V + Z_K} = \frac{400 - 40}{400 + 40} = 0,818$$

$$\beta_{3A} = \frac{Z_{EK} Z_V}{Z_{EK} + Z_V} - Z_K = -0,315$$

$$\alpha_{3A} = \frac{2 \frac{Z_{EK} Z_V}{Z_{EK} + Z_V}}{\frac{Z_{EK} Z_V}{Z_{EK} + Z_V} + Z_K} = 0,645$$

$$U_A(t) = \alpha_{1A} U_0 (h(t) + \alpha_{3A} \beta_{3C} h(t - 2T_1) + \beta_{3C} \beta_{3A} \alpha_{3A} h(t - 4T_1) + \dots)$$