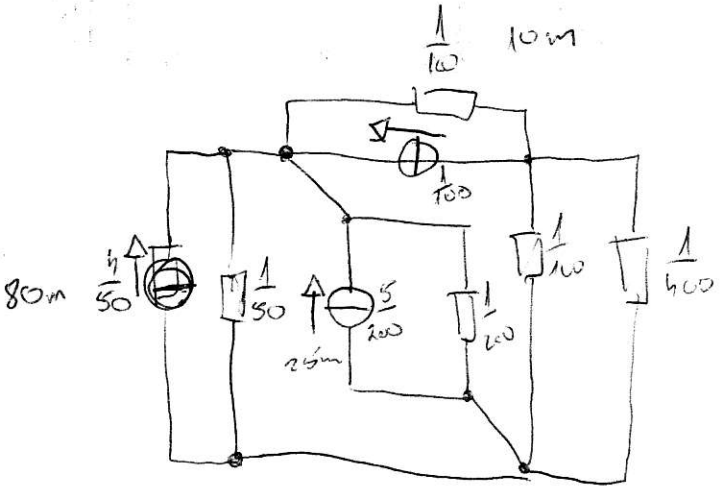
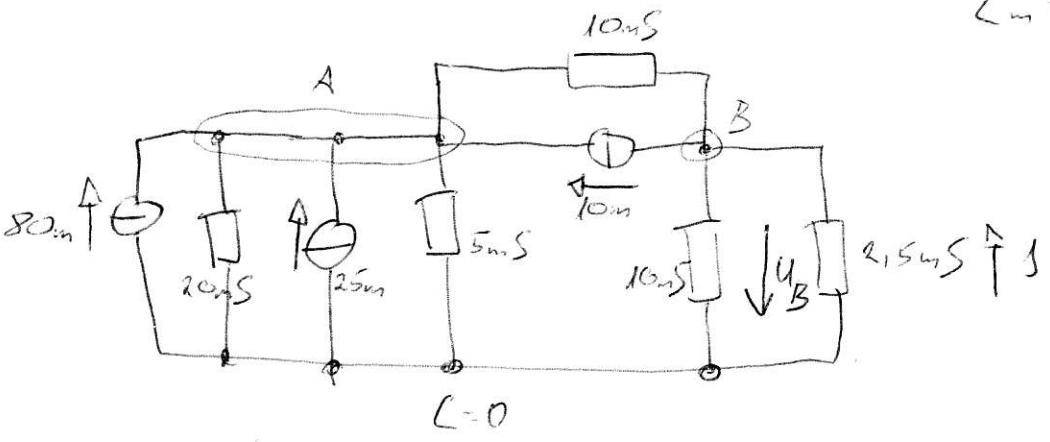
121. a.2.2.11



[mA; mS; V]



1) 1-3

$35U_A - 10U_B = 115$

$-10U_A + 22,5U_B = -10$

~~$-10U_A = 115 - 35U_A$~~

$$\left|\begin{array}{cc|c} 35 & -10 & 115 \\ -10 & 22,5 & -10 \end{array}\right|$$

$$D = \begin{vmatrix} 35 & -10 \\ -10 & 22,5 \end{vmatrix} = 35 \cdot 22,5 - (-10 \cdot -10) = 687,5$$

$$D_B = \begin{vmatrix} 35 & 115 \\ -10 & -10 \end{vmatrix} = (35 \cdot -10) - (-10 \cdot 115) =$$

$$-350 + 1150 = 800$$

$$U_B = \frac{D_B}{D} = \frac{800}{687,5} = 1,16V$$

$$1 = \frac{U_B}{R} = \frac{1,16}{400} = \underline{2,91mA}$$