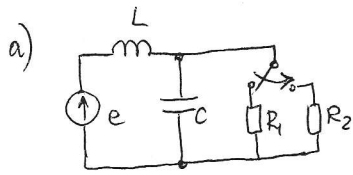
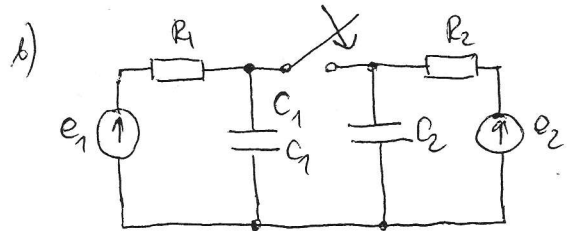


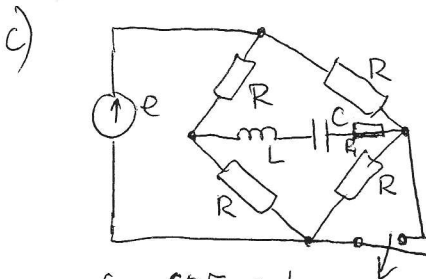
1. Determine $u_c(t)$, $i_L(t)$ in transient state after switching using Laplace model



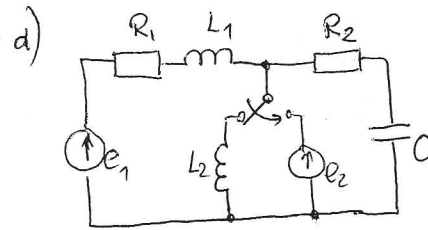
$e(t) = 10V$
 $L = 1H$
 $C = 1000\mu F$
 $R_1 = 5\Omega, R_2 = 50\Omega$



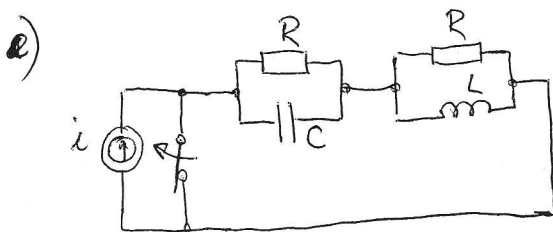
$e_1(t) = 100V, e_2(t) = 200V$
 $R_1 = 100\Omega, R_2 = 200\Omega$
 $C_1 = 10\mu F, C_2 = 20\mu F$



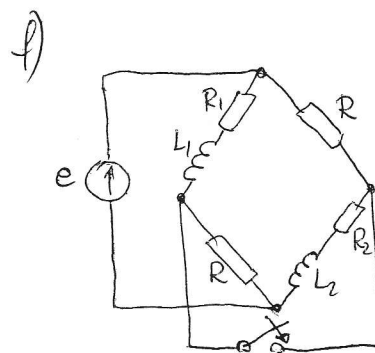
$e(t) = 60\sqrt{2} \sin t$
 $R = \frac{5}{3}\Omega, R_1 = \frac{5}{6}\Omega$
 $L = 1H, C = 1F$



$e_1(t) = 24\sqrt{2} \sin t$
 $e_2(t) = 10\sqrt{2} \sin(t + 90^\circ)$
 $R_1 = 3\Omega, R_2 = 1\Omega$
 $L_1 = 3H, L_2 = 1H, C = 1F$



$i(t) = 2A$
 $R = 10\Omega$
 $L = 1H$
 $C = 0,1F$



$e(t) = 10\sqrt{2} \sin(t - 45^\circ)$
 $R_1 = 1\Omega, L_1 = 1H$
 $R_2 = 2\Omega, L_2 = 1H$
 $R = 1\Omega$