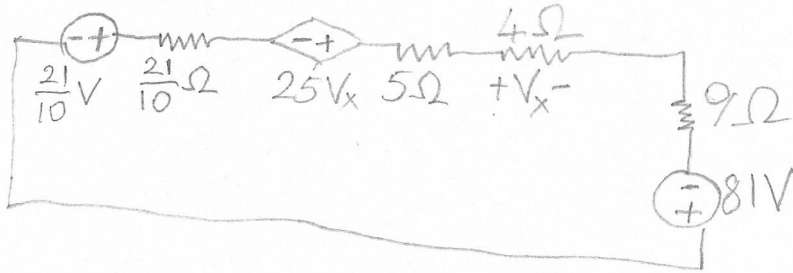
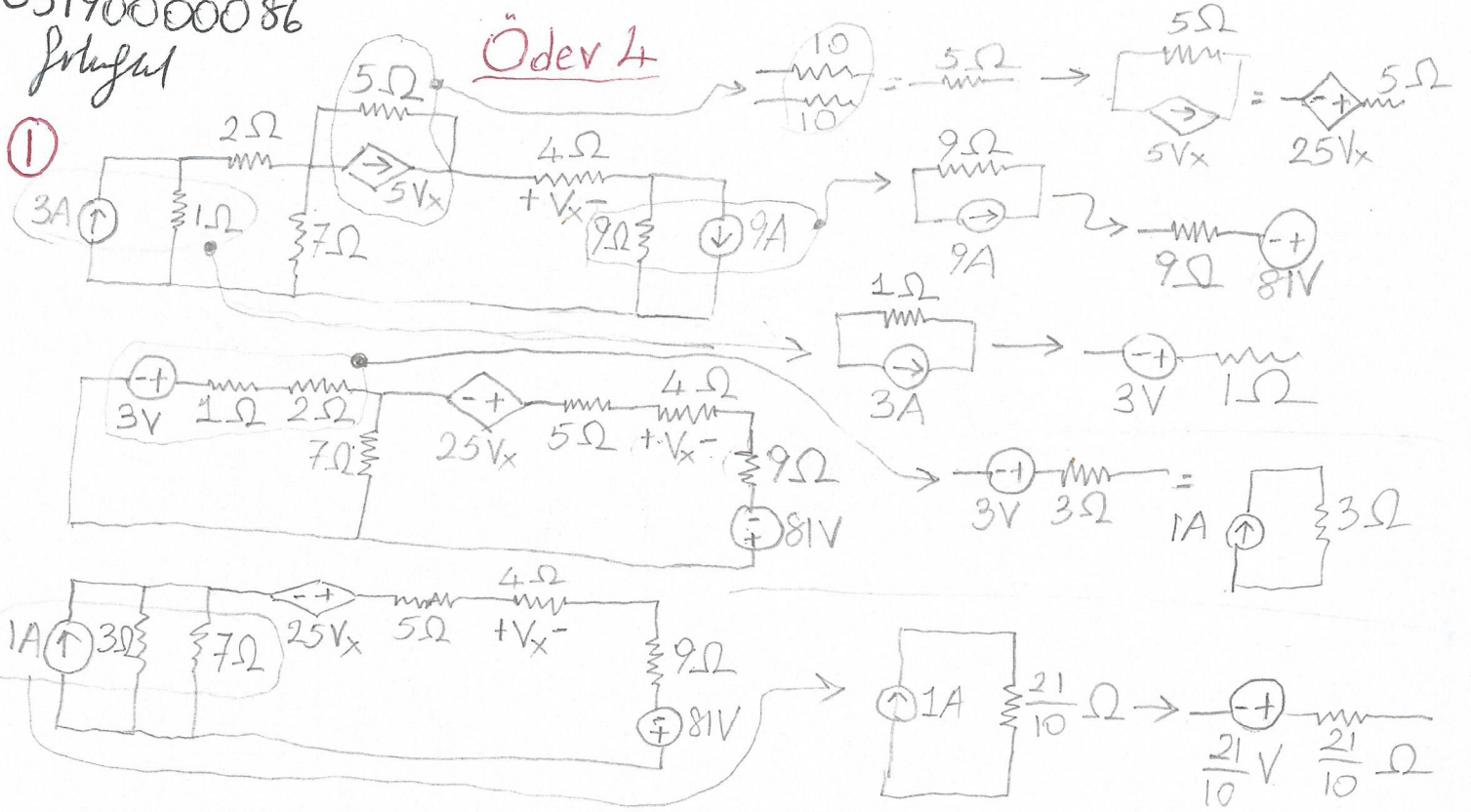
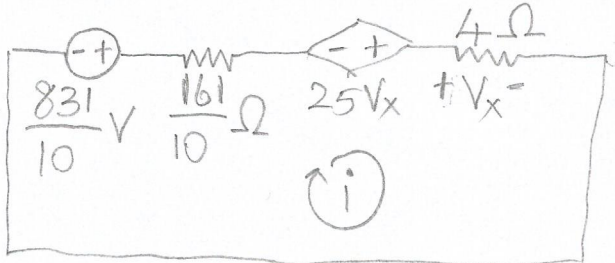


Ödev 4

①



\* 81 V ile  $\frac{21}{10}$  V seri, toplanabilir. Res i bulmak için kaynakları kısa devre yapamaz.  
 $R_{eq} = \frac{21}{10} + 5 + 9 + (4\Omega) = \frac{161}{10}\Omega + 4\Omega$



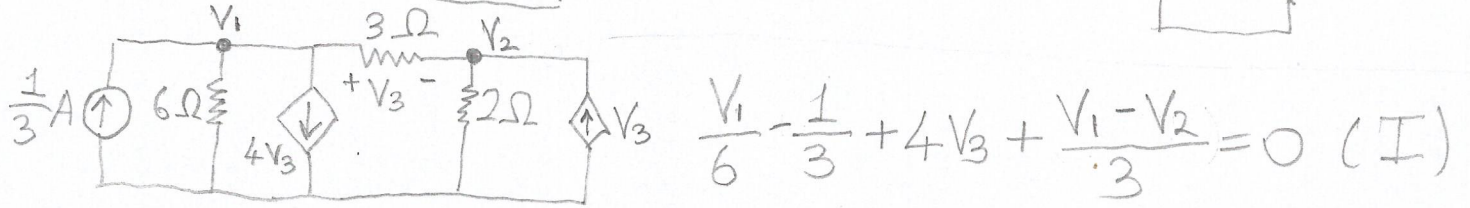
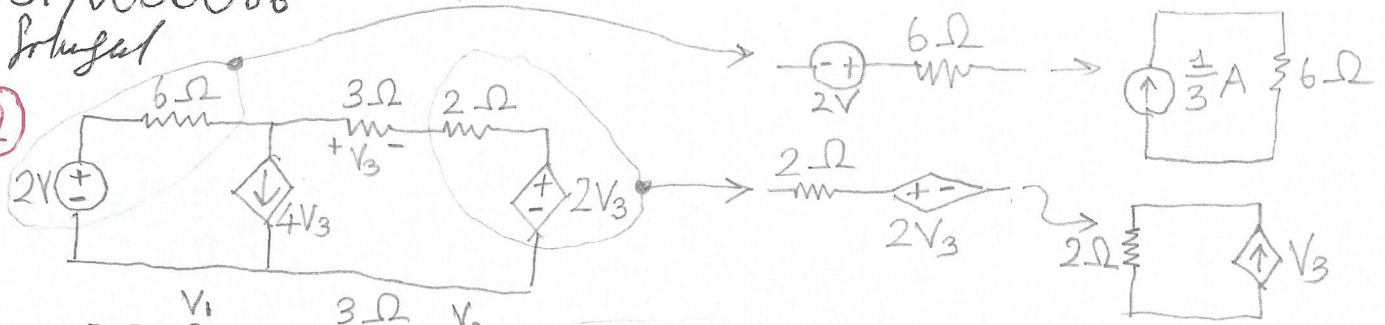
$$\frac{-831}{10} + \frac{161}{10}i - 25V_x + V_x = 0 \quad (I)$$

$$V_x = 4 \cdot i \quad (II)$$

(I) ve (II) çözülürse  $\rightarrow i = -\frac{831}{799}A = -1,04A$

$$V_x = -\frac{3324}{799}V = -4,16V$$

2



$$\frac{V_1}{6} - \frac{1}{3} + 4V_3 + \frac{V_1 - V_2}{3} = 0 \quad (I)$$

$$\frac{V_2 - V_1}{3} + \frac{V_2}{2} - V_3 = 0 \quad (II) \quad V_1 - V_3 = V_2 \quad (III)$$

(I), (II), (III) çözülürse  $\rightarrow V_1 = \frac{22}{89} V = 0,24 V$

$\rightarrow V_2 = \frac{16}{89} V = 0,18 V$

$\rightarrow V_3 = \frac{6}{89} V = 0,0674 V = 67,4 mV$