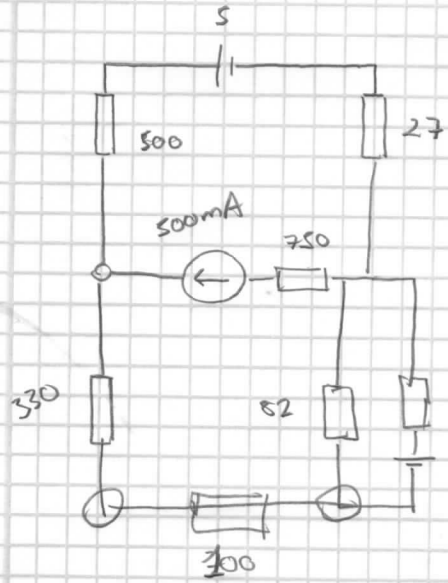
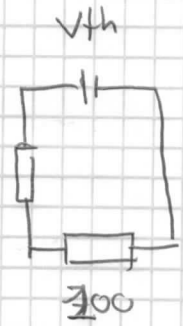
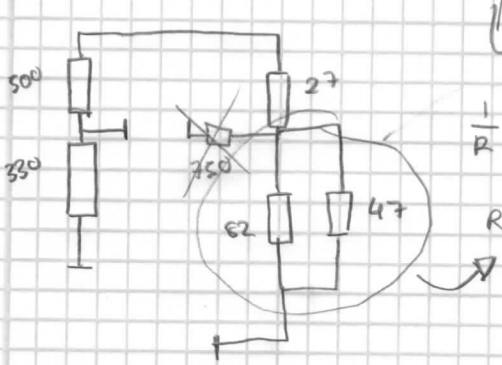




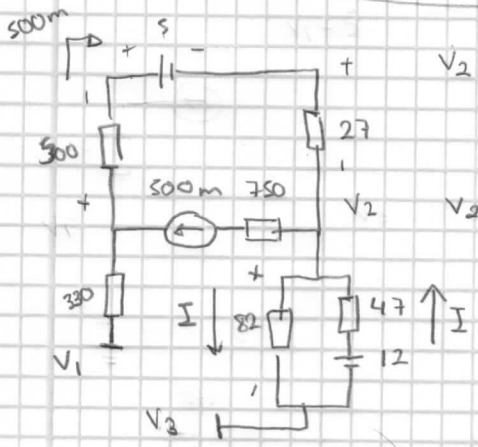
$$V_{R4} = \frac{V_{th}}{100 + R_{th}} \cdot 100 = 27'98\ V$$



$$\frac{1}{R} = \frac{1}{82} + \frac{1}{47}$$

$$R = \frac{82\,47}{82+47} = 29'876$$

$$R_{th} = 330 + 500 + 27 + 29'876 = 886'876$$



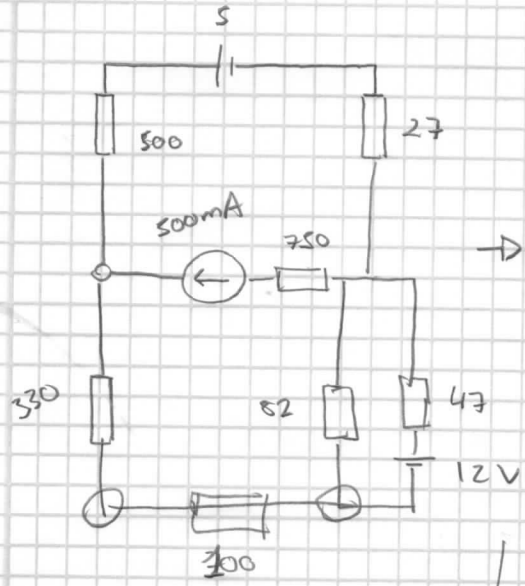
$$V_2 = V_1 - 0'5 \cdot 500 - 5 - 0'5 \cdot 27 = V_1 - 268'5$$

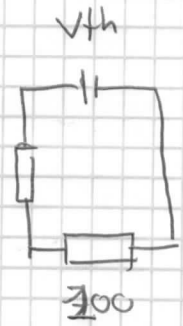
$$V_2 - V_3 = \frac{12}{82+47} \cdot 82 = 7'628$$

$$V_3 = V_2 - 7'628$$

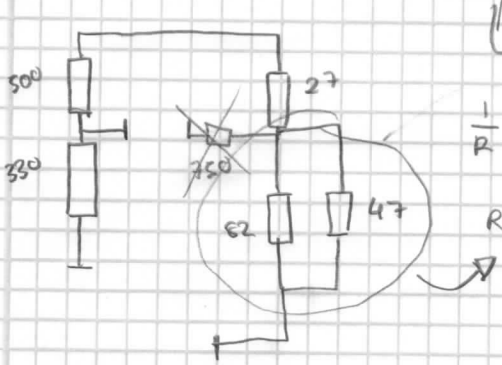
$$V_1 - V_3 = V_1 - V_2 + 7'628 = V_1 - V_1 + 268'5 + 7'628$$

$$V_{th} = 276'128$$





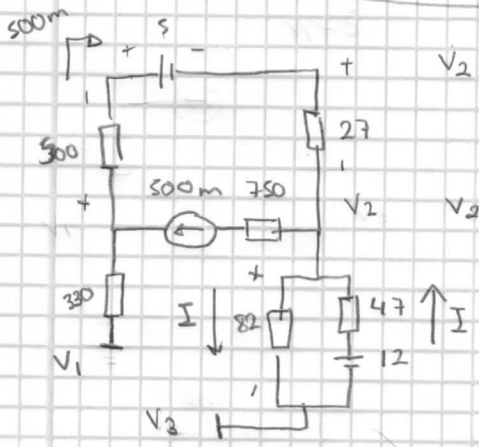
$$V_{R4} = \frac{V_{th}}{100 + R_{th}} \cdot 100 = 27'98\ V$$



$$\frac{1}{R} = \frac{1}{82} + \frac{1}{47}$$

$$R = \frac{82\,47}{82+47} = 29'876$$

$$R_{th} = 330 + 500 + 27 + 29'876 = 886'876$$



$$V_2 = V_1 - 0'5 \cdot 500 - 5 - 0'5 \cdot 27$$

$$= V_1 - 268'5$$

$$V_2 - V_3 = \frac{12}{82+47} \cdot 82 = 7'628$$

$$V_3 = V_2 - 7'628$$

$$V_1 - V_3 = V_1 - V_2 + 7'628$$

$$= V_1 - V_1 + 268'5 + 7'628$$

$$V_{th} = 276'128$$