

Das Gai de Hiloff

2)

$$V_1 =$$

$$20 + 25 - 10 - V_1 = 0$$

$$-V_1 = -35$$

$$V_1 = 35$$

WS

$$V_2 + 10 - 15 = 0$$

$$V_2 - 5 = 0$$

$$V_2 = 5$$

$$35 - 5 - V_3 = 0$$

$$30 - V_3 = 0$$

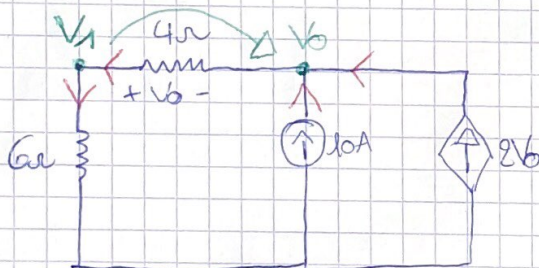
$$V_3 = 30$$

3)

$$V_0 = 50 \quad \uparrow = 0,5 \text{ A} \quad R_{eq} = 4 \quad V = R \cdot I \Rightarrow 0,5 \cdot 4 = 2 \text{ V}$$

$$P_{20} = \frac{V^2}{R} = \frac{4}{20000} = 0,2 \text{ kW} \Rightarrow 200 \text{ W}$$

4)



$$2 \cdot V_0 = -8,88 \text{ A}$$

$$P_{20} = V \cdot I = -11,11 \cdot 8,88 = 98,65 \text{ W}$$

$$N1: \frac{V_0 + V_1}{4} = \frac{V_1}{6}$$

$$V_1 = -3 \cdot \frac{40}{9} = -13,33$$

$$6V_0 + 6V_1 = 4V_1$$

$$2V_1 = -6V_0$$

$$V_1 = -3V_0$$

$$V_{TOT} = -13,33 - 4,44 =$$

$$N2: 10 + 8V_0 = \frac{V_0 + V_1}{4}$$

$$V_0 = \frac{-3V_0 - 40}{7}$$

$$V_{TOT} = -11,11$$

$$40 + 8V_0 = V_0 + V_1$$

$$7V_0 = V_1 - 40$$

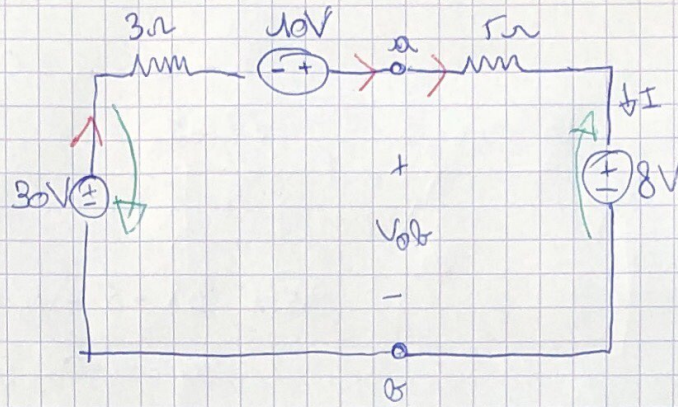
$$V_0 = \frac{V_1 - 40}{7}$$

$$9V_0 = -40$$

$$V_0 = \frac{-40}{9} = -4,44 \text{ V} \Rightarrow 10 + 2V_0 = \frac{V_0}{4}$$

$$V_1 = 6 \cdot \frac{V_0}{4} = -6,66$$

5)



$$\frac{40 - V_1}{3} = \frac{V_1 - 8}{5}$$

$$200 - 5V_1 = 3V_1 - 24$$

$$-8V_1 = -224$$

$$V_1 = \frac{224}{8} = 28V$$