



KVL 1

$$100 - 250i_1 - 625i_1 - 625 \cdot 10^{-3}V_2 = 0$$

$$100 - 875i_1 = 625 \cdot 10^{-3}V_2$$

KVL 2

$$5000i_1 = V_2 + L \cdot 10^3 \cdot \frac{V_2}{6} \cdot 10^{-3}$$

$$5000i_1 = V_2 \left(1 + \frac{4}{6}\right)^{\frac{10}{6}}$$

$$\frac{6}{10} \cdot 5000i_1 = \cancel{1.66}V_2$$

$$3000i_1 = V_2$$

$$100 - 875i_1 = 625 + 10^3 \cdot 3000i_1$$

$$100 = i_1 \left(\frac{625}{1000} \cdot \cancel{3000} + 875 \right)$$

$$i_1 = \frac{100}{2750} = 0,036A$$

$$V_{th} = V_2 = 109,09V$$