

Apply KVL to the loop

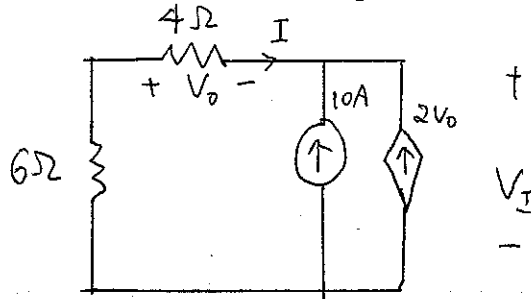
$$1. \quad -10 + 15i_0 - 5 = 0$$

$$\underline{i_0 = 1A}$$

$$V_0 = -10i_0 + 10 = \underline{0V}$$

(5)

2. Find  $V_0$  and voltage across the current sources



$$\frac{V_0}{4} + 10 + 2V_0 = 0$$

$$V_0 = -\frac{40}{9} V \quad (-4.44V)$$

$$I + 10 + 2V_0 = 0$$

(5)

$$I = -10 - 2V_0 = -10 + \frac{80}{9} = \frac{-10}{9} A$$

$$V_I = -10I = \frac{100}{9} V \quad (11.11V)$$