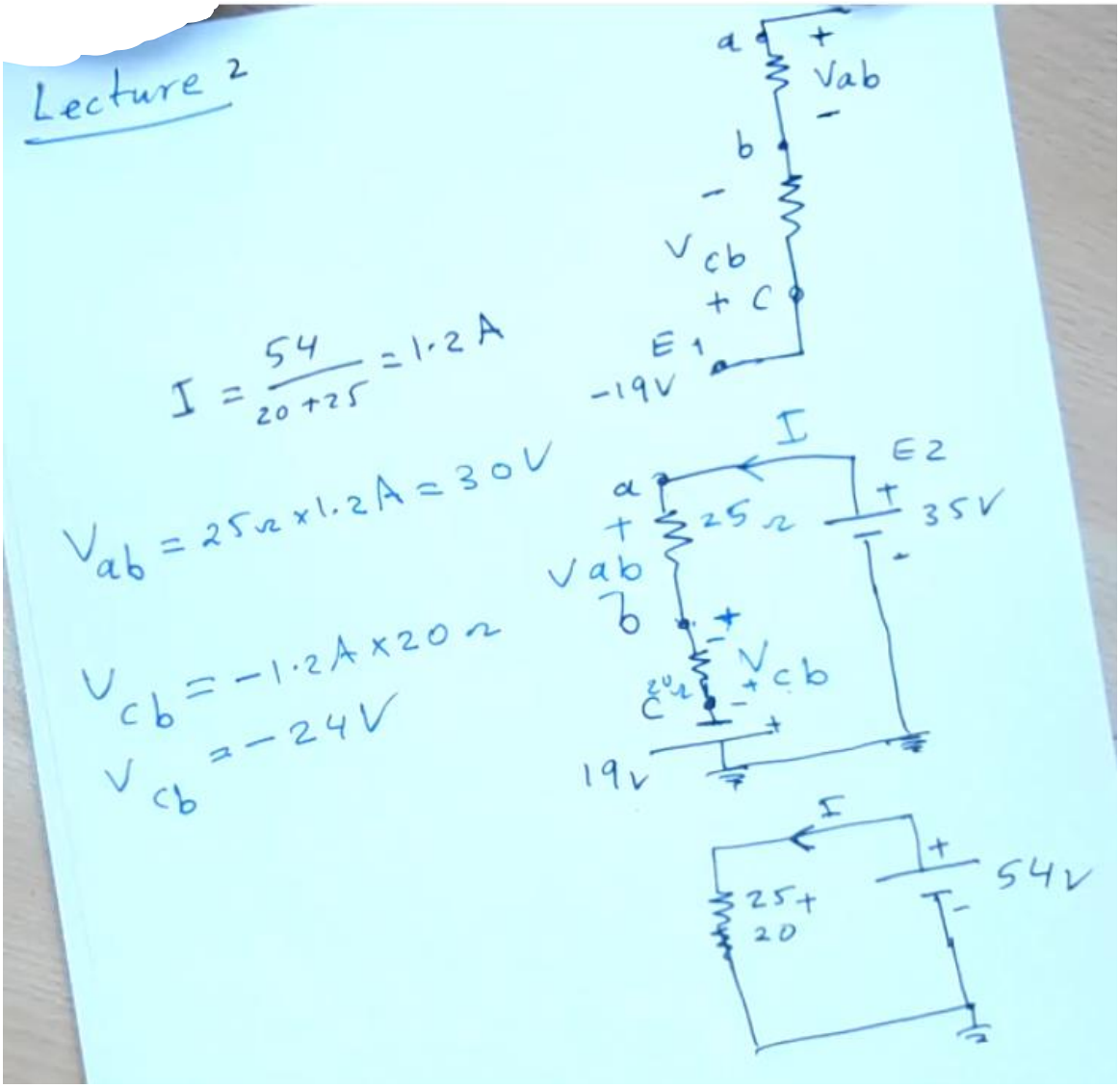
Attribution Nidhal Abdulaziz

Lecture 2 additional solutions



KVL

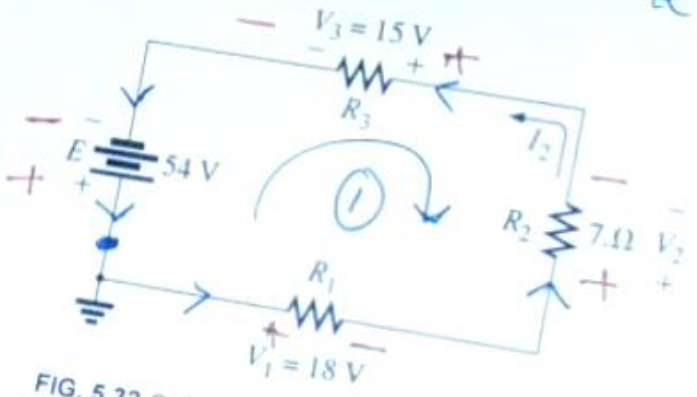


FIG. 5.32 Series configuration to be examined in Example 5.13.

KVL (1)

$$+E - V_3 - V_2 - V_1 = 0$$

$$54 - 15 - V_2 - 18 = 0$$

$$V_2 = 21\ V$$

$$I_3 = \frac{V_3}{R_3} \Longrightarrow I_3 = I_2 = I_1 = I_s$$

$$I_2 = \frac{V_2}{R_2} = \frac{21\ V}{7\Omega} = 3\ A$$

$$I_1 = \frac{V_1}{R_1}$$