

本科目可使用計算機*

1. For the circuit shown in Fig. 1,

- (a). Find the initial values $v_o(0^+)$, $i_o(0^+)$ and $i(0^+)$. (15%)
- (b). Find the final values $v_o(\infty)$, $i_o(\infty)$ and $i(\infty)$. (15%)
- (c). Calculate v_o and i for $t \geq 0$. (20%)

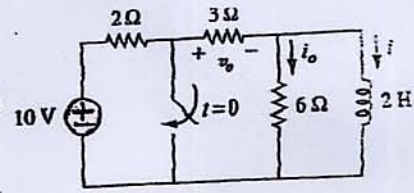


Fig. 1

以下第 2, 3 題為填充題：請按題號順序只將答案寫在答案卷第一頁，每個答案十分，計算過程不計分

2. Find the Thevenin voltage and resistance at the port ab for the circuit shown in Fig. 2.

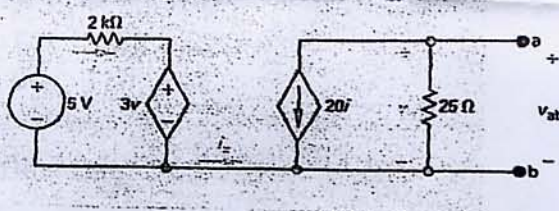


Fig. 2

3. Find the branch current I_b , I_c , and I_d in the circuit shown in Fig. 3.

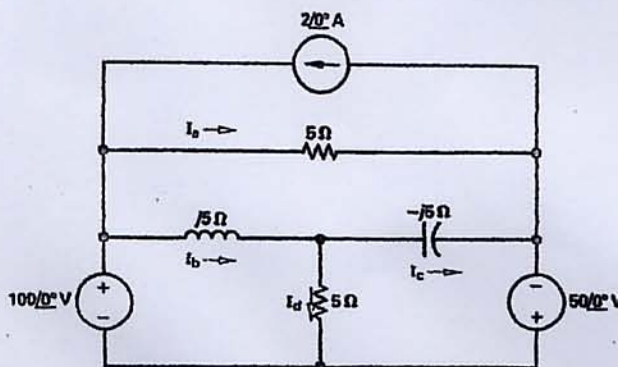


Fig. 3