

可否使用計算機			
可	✓	否	

本試題共 2 頁

本試題雙面印製

1. (20%) Consider the circuit shown in Fig. 1, determine the gain v_o/v_s .

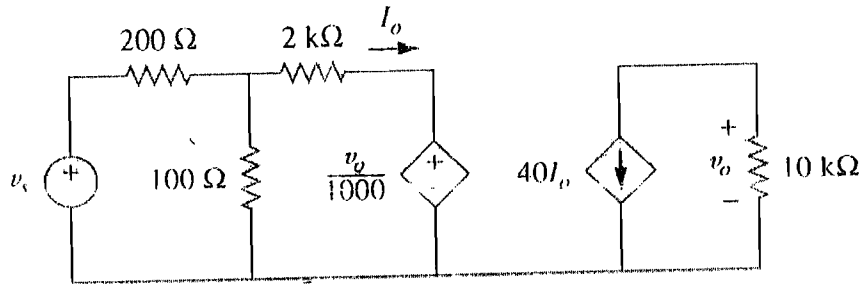


Fig. 1

2. (10%) (a) Compute the value of R that has maximum power transfer to the 10Ω resistor in Fig. 2.
 (10%) (b) Find the maximum power transfer to the 10Ω resistor in Fig. 2.

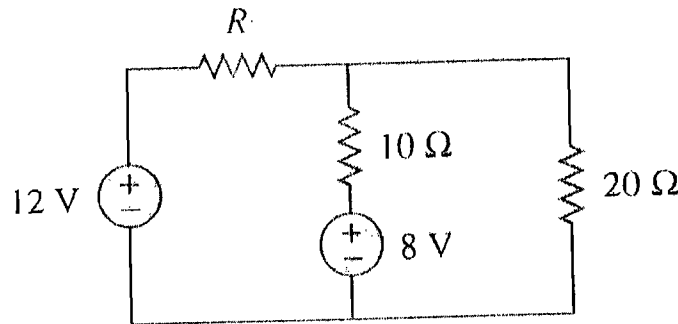


Fig. 2

3. (10%) (a) Determine the ratio v_o/i_s in the op amp circuit shown in Fig. 3(a).
 (10%) (b) Determine the ratio i_o/i_s in the op amp circuit shown in Fig. 3(b)

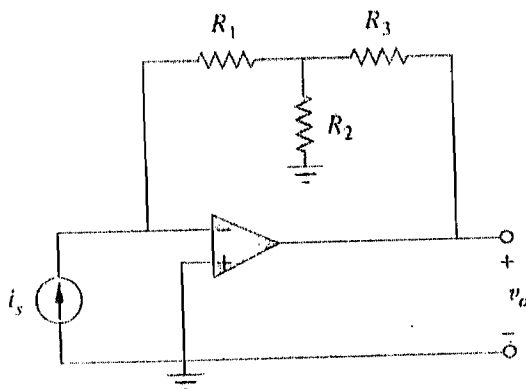


Fig. 3(a)

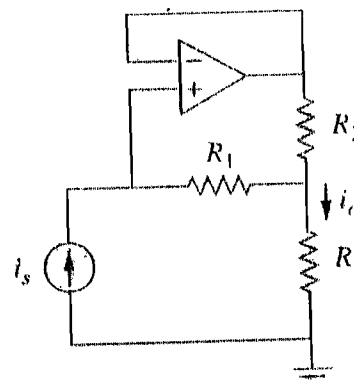


Fig. 3(b)

淡江大學 96 學年度轉學生招生考試試題

45-2

系別：電機工程學系三年級

科目：電 路 學

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4. (20%) Compute the response $v(t)$ and $i(t)$ for $t > 0$ of the circuit shown in Fig. 4.

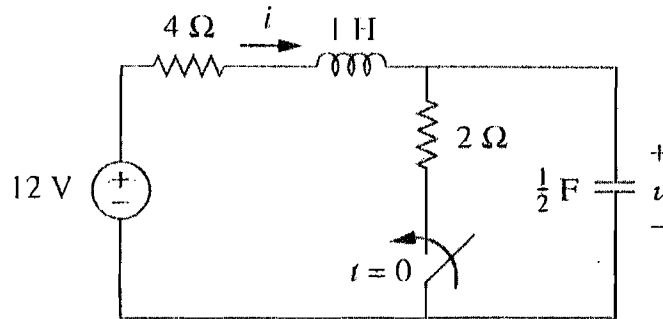


Fig. 4

5. (20%) Find the Thevenin equivalent circuit at terminals $a-b$ in the circuit of Fig. 5.

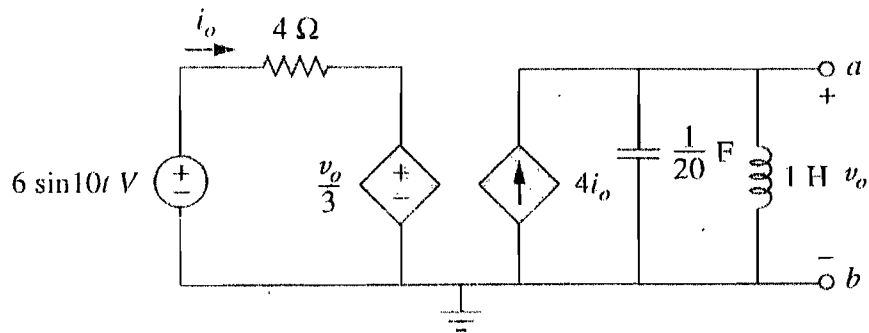


Fig. 5