

## 中國文化大學 103 學年度暑假轉學招生考試

系組：電機工程學系三年級

日期節次：7月31日第2節 10:50-12:10

科目：電路學

1. 20%

Find the equivalent resistance at terminals a-b of circuit in Figure 1

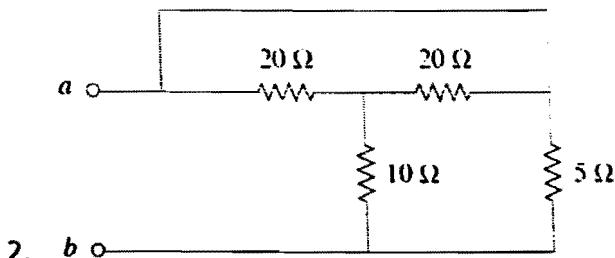


Figure 1

2. 20%

Find V in the circuit of Figure 2

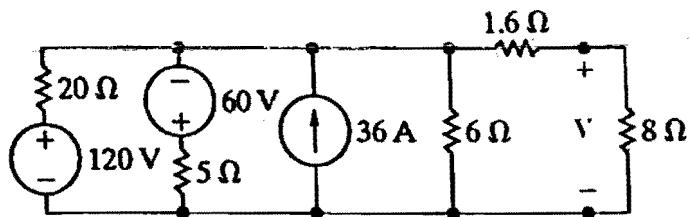


Figure 2

3. 20%

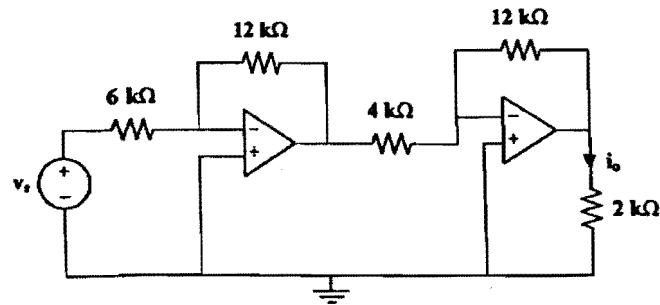
Find  $i_o$  in the circuit of Figure 3.

Figure 3

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4. 20%

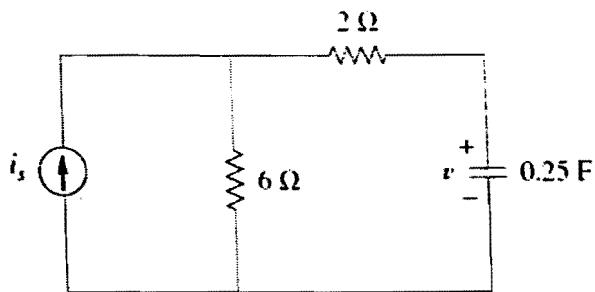
For the circuit in Figure 4,  $i_s(t) = 5u(t)$ . Find  $v(t)$ .

Figure 4

5. 20%

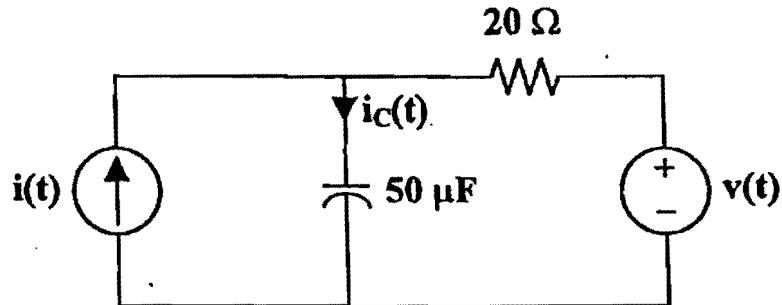
Find the current  $i_C(t)$  in Figure 5 circuit if  $i(t)=2\cos 1000t$  A and  $v(t)=10\sin(4000/3 t)$  V.

Figure 5