Assiut University	Faculty of Engineering
Elect. Eng. Dept.	1st Year
3 hours	Jan. 2015
Bylaw 2004	100 points

Electric Circuits (1)

Answer the following Questions:

1- In Fig 1, using Ohm, kirchoff's laws and Δ - Y transformation, find the unknown currents.

2- When an ammeter is used to measure the current i_4 in the circuit

shown in Fig. 2 it reads 6 A. Using Norton's theorem,

a) What is the resistance of the ammeter ?

b) What is the percent error in the current measurement ?

3-Using Loop current method, find the branches currents and then check power balance in fig. 3 .
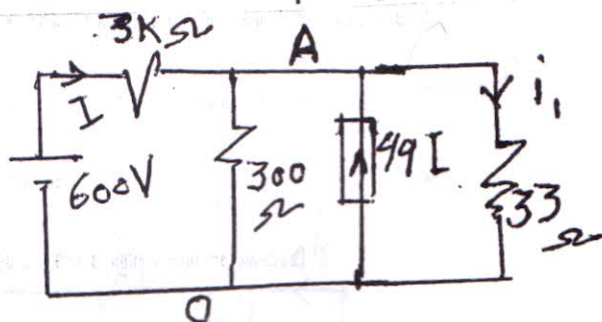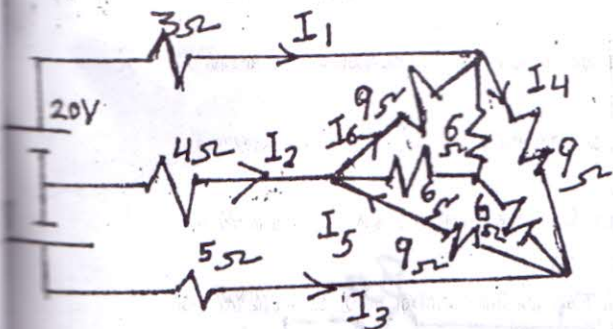
4- a: Find R to give max power transfer in Fig 4a

b- Find the average and effective value of the current in Fig 4b

5- Find the currents in Fig 5. Check active and reactive power balances
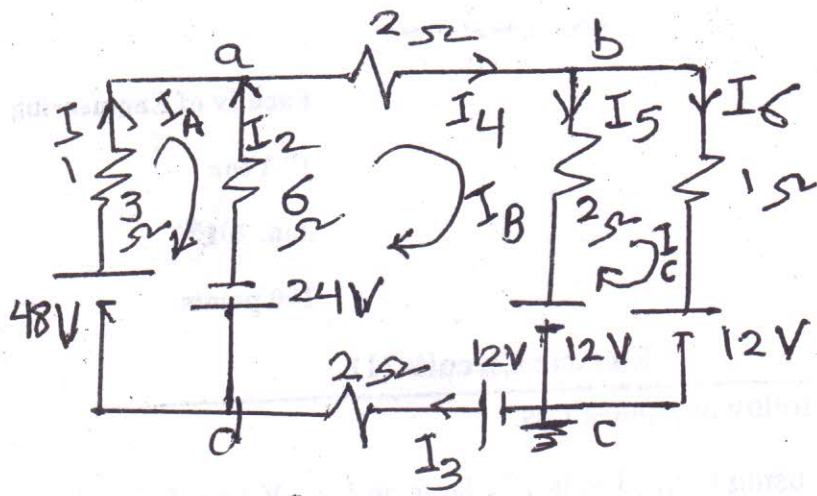
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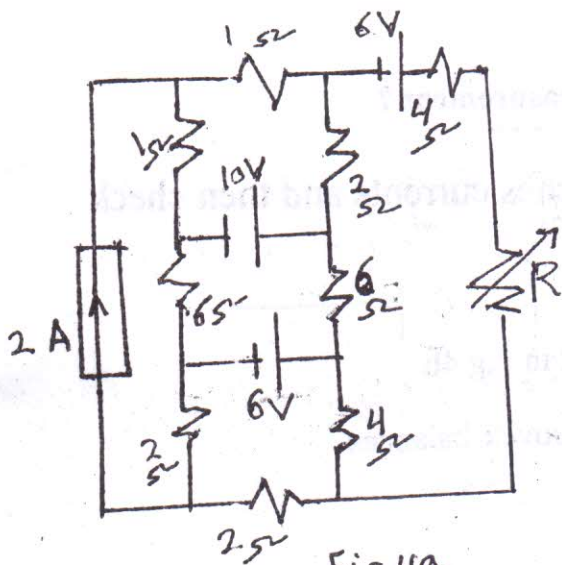
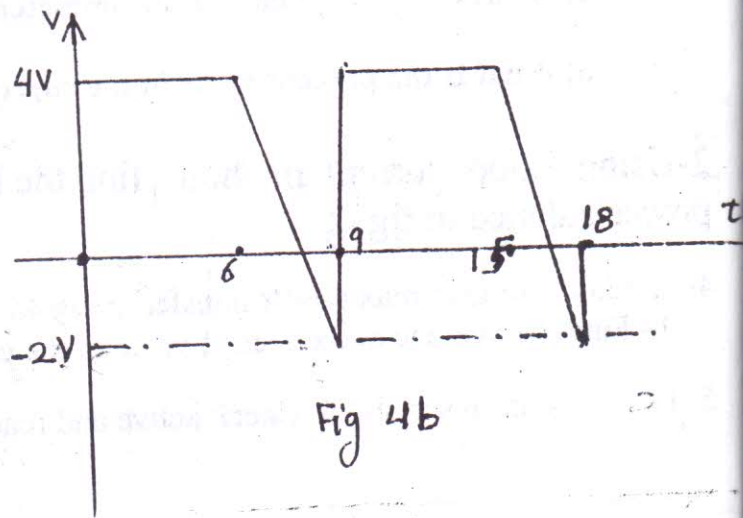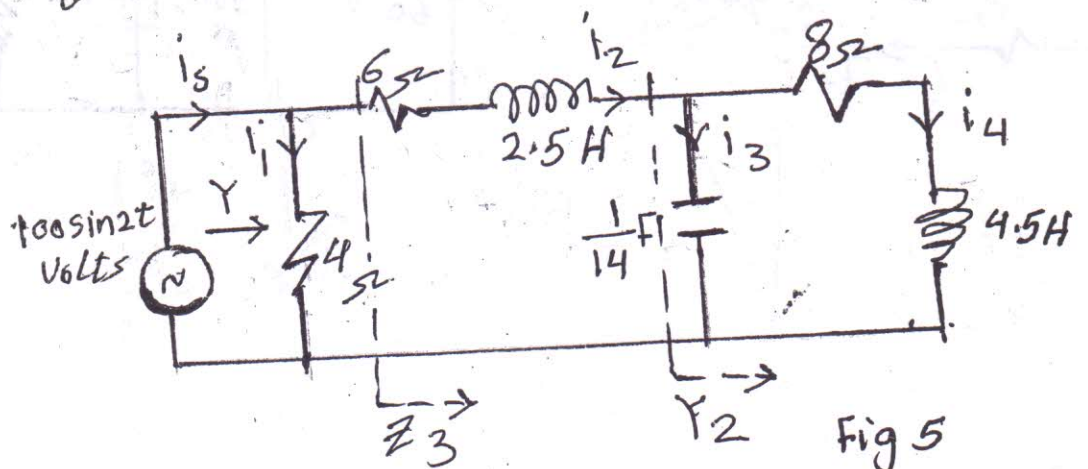<div dir="rtl">افرض اى معلومات ناقصة</div>

Fig 3

Fig 4a

Fig 4b

Fig 5