

國立虎尾科技大學 106 學年度第一學期博士班資格考試題

系別：動力機械工程系機械與機電工程博士班

第 1 頁 共 2 頁

科目：電路學

注意事項：

- (1) 本試題共有 7 題，任選 5 題作答，每題 20 分，合計一百分。
- (2) 請依序作答於答案卷上並註明題號，若未註明選答題號及超過規定題數時，謹採計作答順序較前之題目計分。
- (3) 可使用計算機 close book

1. Find the V_1 、 V_3 and V_{ab} for the network of Fig.1

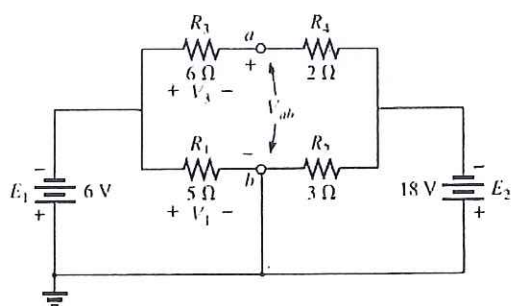


Fig.1

② Calculate the indicated currents and voltage for the network of Fig.2

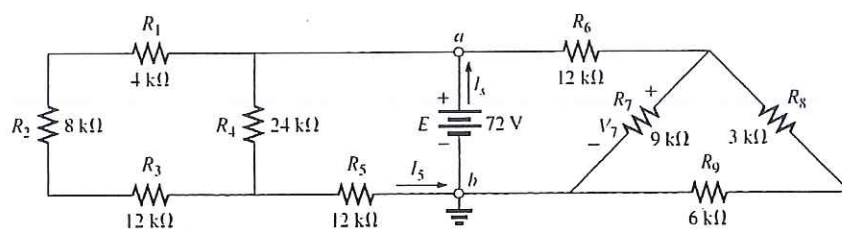


Fig.2

③ Find the i for the network of Fig.3

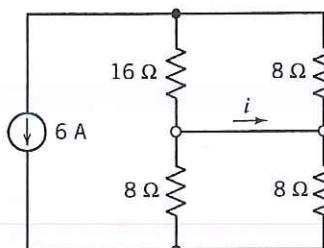


Fig.3

4. Find the v for the network of Fig.4

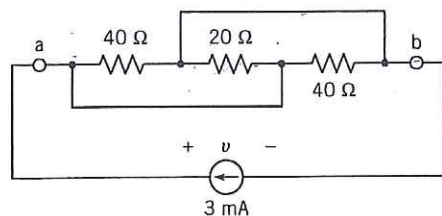


Fig.4

5. Find the R , given that $R_{eq} = 9 \Omega$ for the network of Fig.5

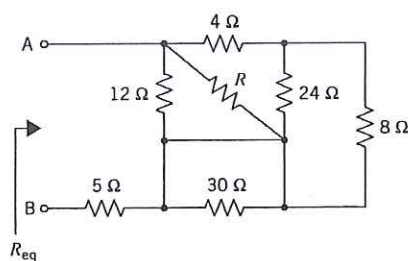


Fig.5

6. Find the R for the network of Fig.6

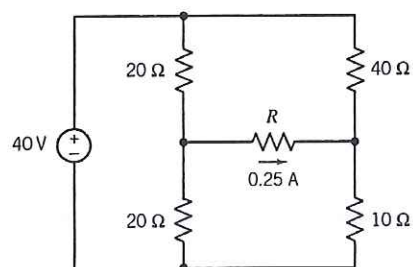


Fig.6

7. Find the v_1 , v_2 and i_a , i_b for the network of Fig.7

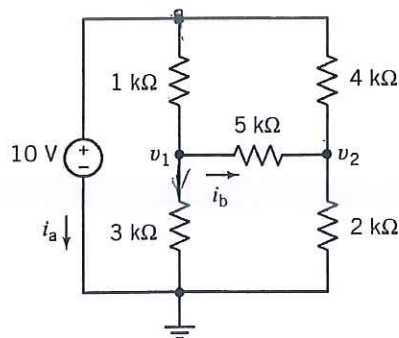


Fig.7