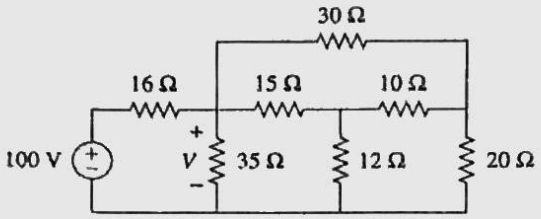

Fig. 3

5. (10%) In a certain application, the circuit in Fig. 4 must be designed to meet these two criteria: (1) $V_o / V_s = 0.05$ (2) $R_{eq} = 40$ kΩ
If the load resistor 5 kΩ is fixed, find R_1 and R_2 to meet the criteria.

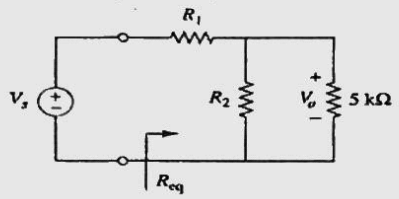

Fig. 4

6. (16%) For the circuit in Fig. 5, find currents i_1 and i_2 by using the mesh analysis.

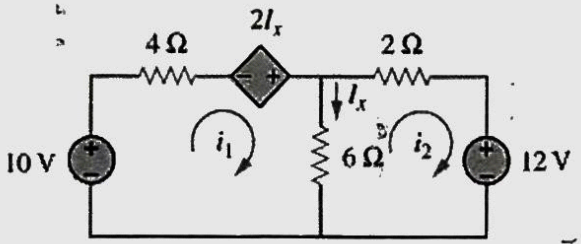

Fig. 5

7. (16%) For the circuit in Fig. 6, find v_1, v_2, and v_3 by using nodal analysis.

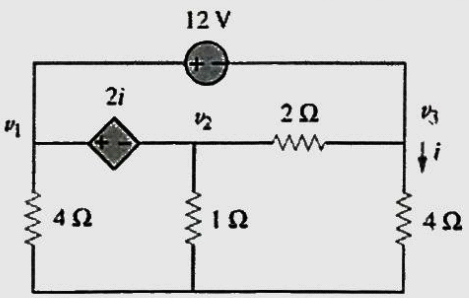

Fig. 6

8. (10%) Obtain the equivalent resistance at the terminals *a-b* for each of the circuits in Fig. 7.

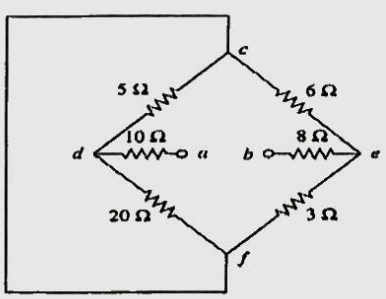

Fig. 7