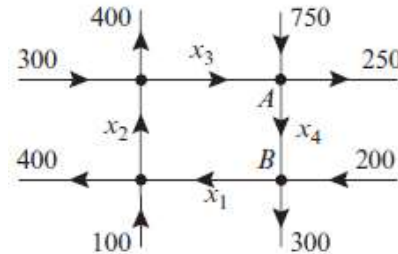


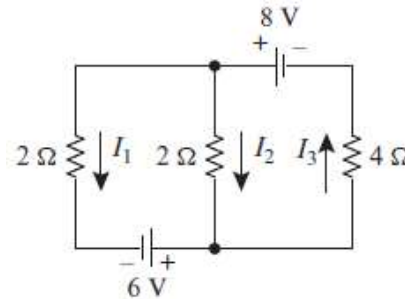
# HOMework

- 1) The accompanying figure shows a network of one-way streets with traffic flowing in the directions indicated. The flow rates along the streets are measured as the average number of vehicles per hour.



- Set up a linear system whose solution provides the unknown flow rates.
- Solve the system for the unknown flow rates.
- If the flow along the road from  $A$  to  $B$  must be reduced for construction, what is the minimum flow that is required to keep traffic flowing on all roads?

- 2) analyze the given electrical circuits by finding the unknown currents.



approximate the integral

$$\int_0^1 e^{x^2} dx$$

by subdividing the interval of integration into five equal parts and using an interpolating polynomial to approximate the integrand.

3)