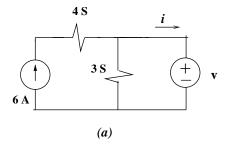
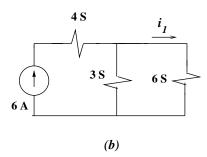
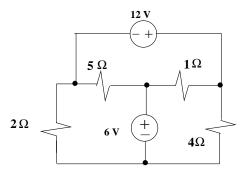
Closed book. Show all work. Partial credit will be given. No credit will be given if an answer appears with no supporting work.

- 1. (a) For circuit (a) shown in the figure below, find i when the voltage source v=2V
  - (b) For circuit (b) shown in the figure below, find  $i_1$

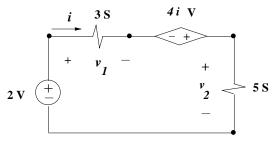




- 2. For the circuit shown in the figure below, use mesh analysis to find
  - (a) The current directed to the right, through the 12-V source
  - (b) The current, directed down, through the 6-V source



3. For the circuit shown in the figure below, determine the values of  $\emph{v}_1$  and  $\emph{v}_2$ 



- 4. For the circuit shown in the figure below,
  - (a) Find  $i_s$ ,
  - (b) Find the resistance  $R_{eq}$  seen by the current source.

