

## ee101\_mesh\_anaylsis\_1.sqproj

### Description

In mesh analysis, the following steps are carried out:

1. Identify loops, define loop currents (“mesh currents”)  $I_1$ ,  $I_2$ , etc.
2. Write KVL for each loop in terms of  $I_1$ ,  $I_2$ , etc.
3. Solve the resulting system of equations to obtain  $I_1$ ,  $I_2$ , etc.
4. Compute any other quantities (currents, voltages, powers) of interest using the mesh currents.

### Exercise

For the circuit shown in the figure, carry out mesh analysis, and find the following: (a) currents through  $R_1$ ,  $R_2$ ,  $R_3$ , (b) power delivered by the two sources,  $V_{s1}$  and  $V_{s2}$ .

