

ee101_superposition_1.sqproj

Description

To obtain the response (voltages/currents) of a circuit with more than one *independent* sources, the superposition theorem can be used. The procedure is as follows.

1. Identify the *independent* sources, S_1 , S_2 , etc.
2. Deactivate all independent sources except S_1 . Compute the quantity (quantities) of interest. Call it $x^{(1)}$.
3. Repeat with S_2 , S_3 , etc., and obtain $x^{(2)}$, $x^{(3)}$, etc.
4. Finally, the net result is given by, $x = \sum x^{(i)}$, with i going over all independent sources.

Exercise

For the circuit shown in the figure, obtain the currents through R_1 and R_2 by superposition.

