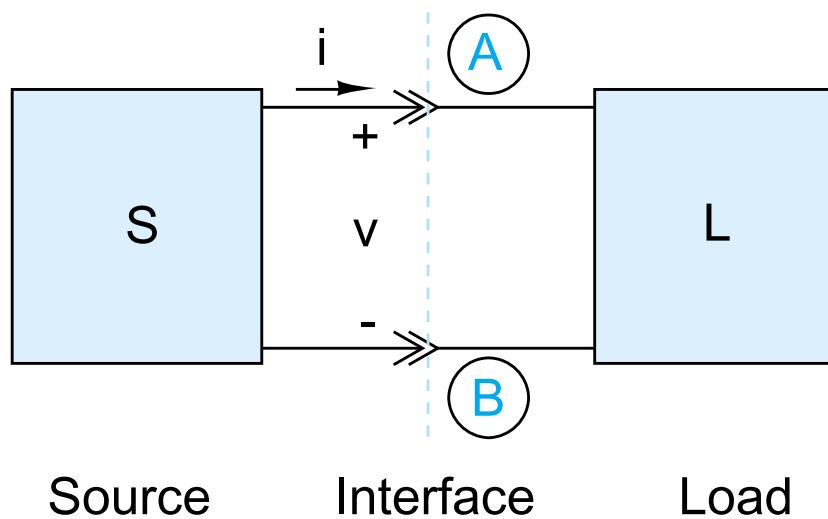


Not all circuits are linear and things can get messy when its non-linear (remember problem 1-17?).

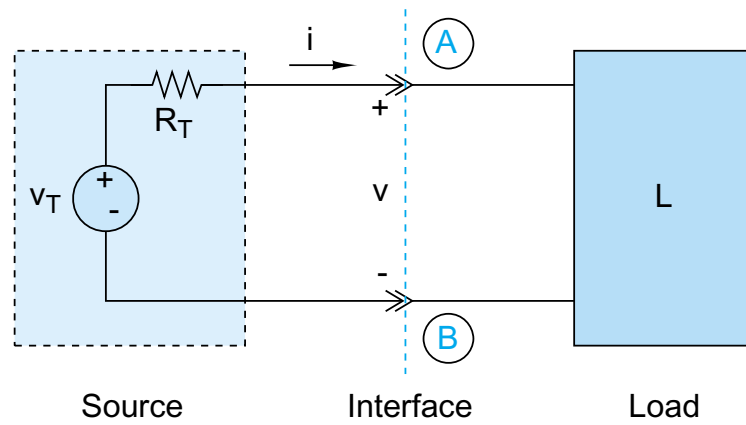
Segregating the linear bits from the non-linear bits can make things simpler



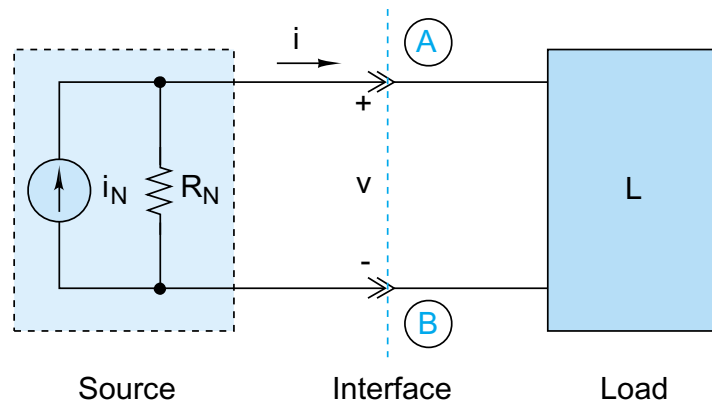
If the source circuit in a two-terminal interface is linear, then the interface signals v and i do not change when the source circuit is replaced by its Th venin or Norton equivalent circuit.

(Obviously, one could reverse the argument and apply it to a linear load and non-linear source)

Th venin equivalent

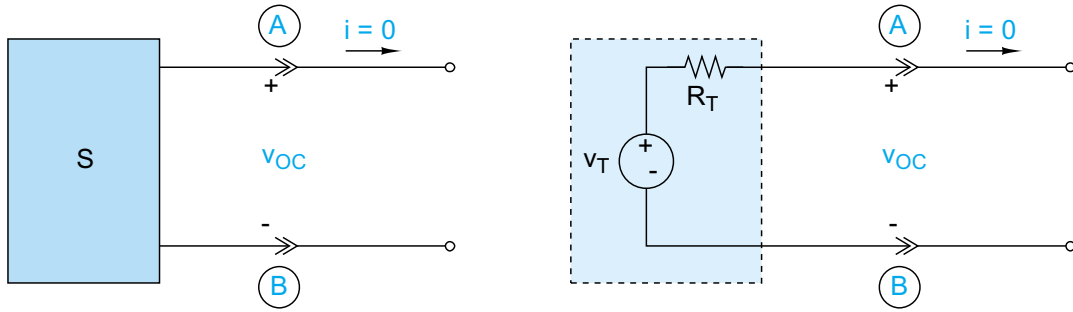


Norton equivalent

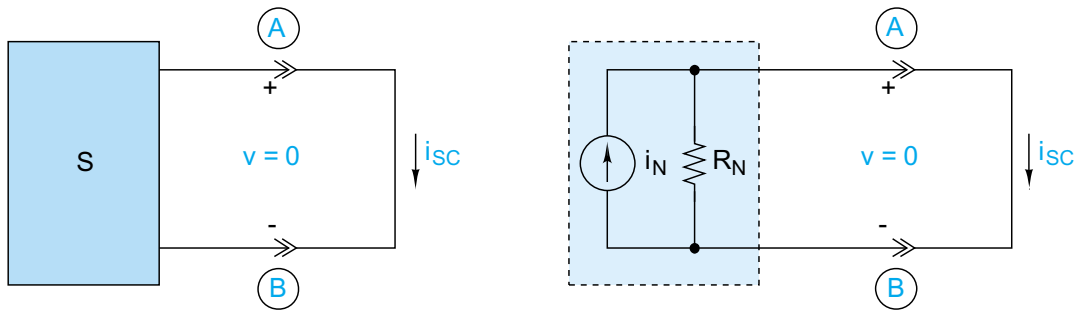


But how do you find i_N and v_T ?

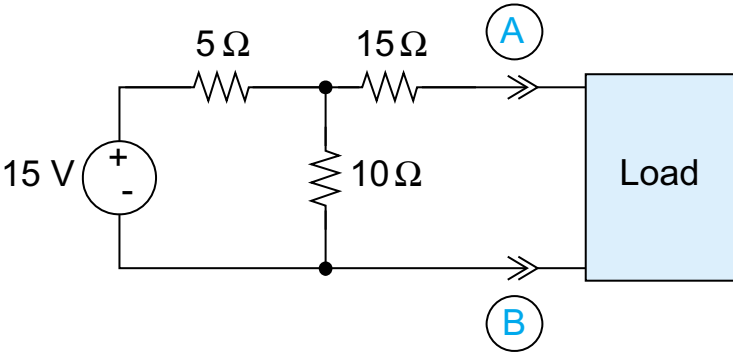
v_T



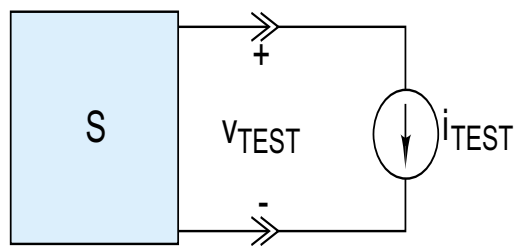
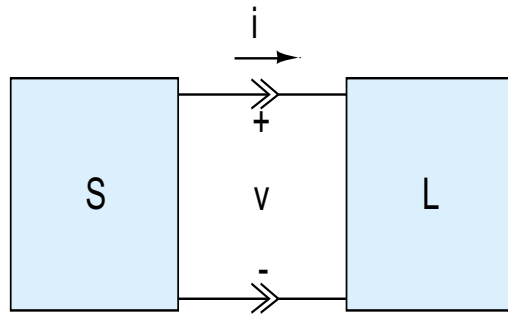
i_N



I just wish this guy would do an example to put it all into perspective...

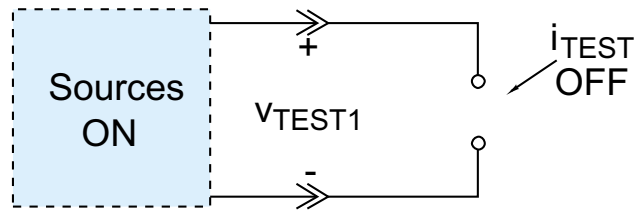


Prove it!

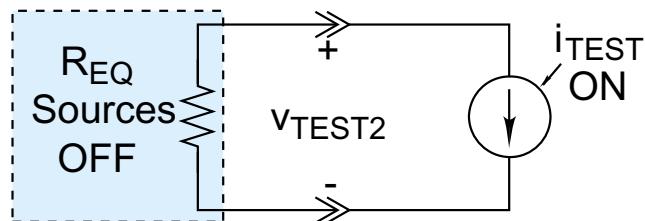


First, replace the load with a current source, i_{TEST}

Second, turn i_{TEST} off, while leaving all sources within S on...



Third, turn i_{TEST} on, but turn all sources within S off...



Would you buy a used example?

