Transfer Function Analysis in Multisim

Note the circuit to the left. (R3 is not calculated correctly on purpose). Note that the power supply sub-circuit has been connected in via the bus method as discussed in a separate tutorial.

If a Transfer Function Analysis is desired, choose Simulate/Analysis/Transfer Function from the pull-down menu.

Once there, it will need to know the name of the input source first. Be careful to use the correct one since the sub-circuit has two voltage sources in it as well. For this example I have entered vv3 (for V3). Then for the output node I have entered node number 8. If the node names are not present, go to Options/Sheet Properties/Circuit and choose Show All.

Directly below the Output node is “Output Reference”. You need to make sure the circuit’s ground node (should be 0 if connected correctly) here. If this is not done the answers will be incorrect.

Once this has been accomplished, select Simulate and the window shown below should open and provide the needed answers.

Note that this result will also be in the Grapher.