

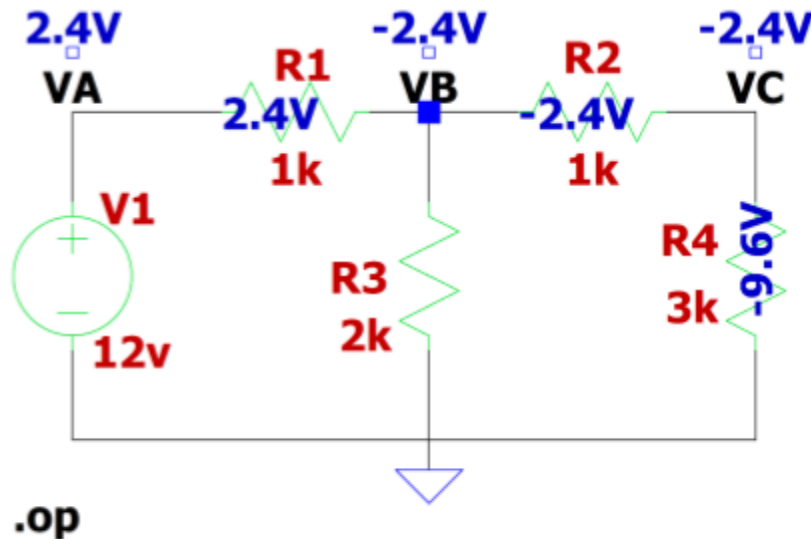
Frank Martino - Proof of Skills Day 2

Q1 Circuit Simulation

Prove your skill set using LTSpice (preferred Circuits simulation program) or equivalent simulation program (i.e. PSpice or MultiSim..)

Q1.1 Operation Point dc analysis

I can use operation point dc analysis to find voltages across a resistive circuit.



```
C:\Users\martif5\Documents\LTSpiceXVII\Draft1.asc
--- Operating Point ---
V(vb):      -3.33067e-016  voltage
V(va):      2.4           voltage
V(vc):      -2.4          voltage
V(n001):    -9.6          voltage
I(R4):      -0.0024       device_current
I(R3):      1.66533e-019  device_current
I(R2):      -0.0024       device_current
I(R1):      -0.0024       device_current
I(V1):      -0.0024       device_current
```

This circuit has a 12 volt DC power source with a resistor, R1(1kΩ), connected in parallel with another resistor, R2(1kΩ). R2(1kΩ) is in series with R4(3kΩ), another resistor. The pair of resistors R2(1kΩ) and R4(3kΩ) are in parallel with R3(2kΩ). I then

ran the simulation after labeling the nodes VA, VB, and VC which recorded their outputs in the section shown above in the red box. I was also able to record the voltage across R1, R2, and R3 which are labeled above each of them.