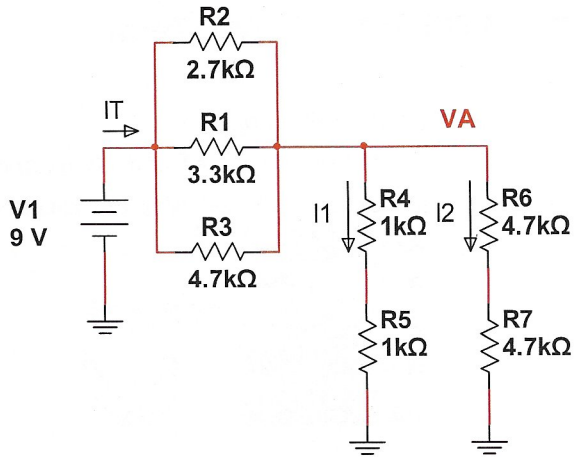
EECT 111 Mid-Term



4. Find the following:

Find IT, RT and VA via *analysis* (show all work.)

R123 = 1628.496
R45 = 2000
RR67 = 9400
R4567 = 1649.123
RT = 2777.579
IT = 0.00324
I1 = 2.61E-03
I2 = 5.68E-04
VA = 5.34

Find I1, I2, IT, RT and VA via *simulation* (capture and upload simulation schematic and outputs)

R123 = 1.134k
R45 = 2003
R67 = 9400
R4567 = 1649
RT = 2777
IT = 3.24mA
VA = 5.34

Find IT, RT and VA via *test* (capture your test setup and measure all resistors, VA, I1, I2, and IT).

R1 = 3.297 R2 = 2.688 R3 = 4.621 R4 = 1.0026 R5 = 1.999
R6 = 4.691 R7 = 4.644 RT = 2762.59
I1 = 2.68mA I2 = 5.75mA IT = 3.258mA VA = 5.35

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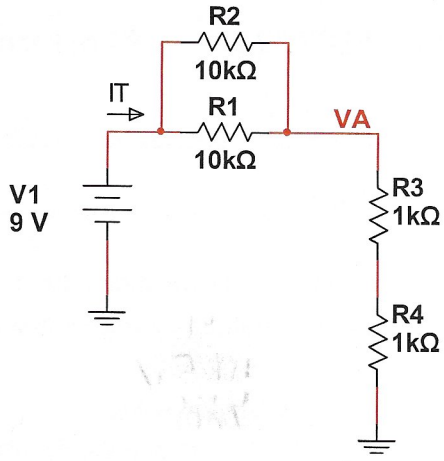

2. Find the following:

Find IT, RT and VA via *analysis*
(show all work, can also use Excel)

R12 = 5000
R34 = 2000
RT = 7000
IT = 1.29E-03
VA = 2.57 V

Find R12, R34, RT, IT and VA via *simulation* (capture and upload simulation schematic and outputs)

R12 = 5000
R34 = 2000
RT = 7016
IT = 1.29 mA
VA = 2.57

Find IT, RT and VA via *test* (capture your test setup and measure all resistors, VA and IT).

R1 = 16.097k
R2 = 9.952k
R3 = 1.983k
R4 = 1.001Sk
RT = 6.999k
IT = 1.283mA
VA = 2.590V