

Submissions accepted: 7/31/2013 | 12:00 AM

Review: Full, Anonymous: No

Fundamental Properties of DC Circuits

Kirchoff's Laws

- Analysis:

1. For Laboratory Application Assignment on pg. 281 examine Fig. 9-26 and Fig. 9-27.
2. Perform calculations for Fig. 9-26:
 - a. V_1
 - b. V_2
 - c. V_3
 - d. V_4
 - e. V_5
 - f. I_t (total current supplied by V_t)
 - g. I_1
 - h. I_2
 - i. I_3
 - j. I_{4-5}
3. Perform calculations for Fig. 9-27:
 - a. V_{R1}
 - b. V_{R2}
 - c. V_{R3}
 - d. V_{BG}
 - e. V_{AG}
4. Scan all calculations showing all work in a file called "Lab7_Analysis_StudentID".

- Simulation:

1. Construct the circuit in Fig. 9-26 with MultiSIM.
2. Measure the values:
 - a. V_1
 - b. V_2
 - c. V_3
 - d. V_4
 - e. V_5
 - f. I_t
 - g. I_1
 - h. I_2
 - i. I_3
 - j. I_{4-5}
3. Capture a screenshot of measured values and paste into a Word document entitled "Lab7_Simulation_StudentID"
4. Construct the circuit in Fig. 9-27 with MultiSIM.
5. Measure the values:
 - a. V_{R1}
 - b. V_{R2}
 - c. V_{R3}
 - d. V_{BG}
 - e. V_{AG}
6. Capture a screenshot of measured values and paste into the Word document entitled "Lab7_Simulation_StudentID"
7. Answer all questions in the "Applying KCL and KVL" section on pg. 281 in this same document.