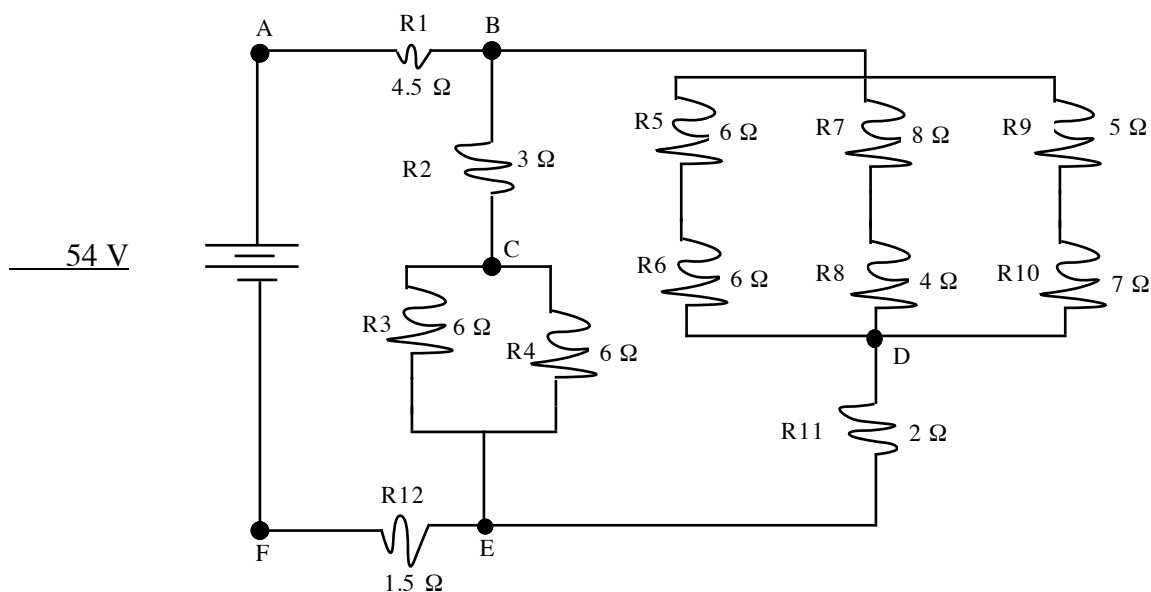


I'd encourage you to work collaboratively with your classmates on homework and practice.

- Mon. 9/9 1) Check and go over Ch. 23 HW (Ch. 23 questions 3, 9 and Problems 9, 21, 22, 30, 33, 62 and 72)
2) Sign up for Mid-Ohio groups
3) Continue with Kirchhoff's Laws lab
4) HW: By Wednesday, get me a written description of your plan for your individual Mid-Ohio lab
- Tues. 9/10 1) Light Box activity! Complete reflection on this for Wednesday
- Weds. 9/11 *2-hour delay schedule*
1) Collect Mid-Ohio proposals
2) Kirchhoff's Laws Lab
- Thurs. 9/12 1) BIG Circuit Quiz
2) Kirchhoff's Laws Lab
- Fri. 9/13 1) Kirchhoff's Laws Lab – finish
2) HW: For Tuesday, read and take notes (required) on Ch. 20 (Electric Fields and Forces) for a reading quiz
- Mon. 9/16 1) Sample problems from previous AP tests
2) View AP Classroom, 5 Steps to a 5
- Tues. 9/17 1) Ch. 20 reading quiz and discussion of Coulomb's Law, electric forces and electric fields. Also go over examples.
2) HW: Complete Ch. 20 conceptual questions (on handout) for Thursday, and Ch. 20 problems (#'s 7, 14, 24, 29, 33, 35, 37, 51 & 68 for Monday 9/23)
- Weds. 9/18 1) **TEST** (Up through circuits and lab work). Your Ch. 22 and 23 HW must be corrected for a curve.
- Thurs. 9/19 1) Planning for Mid-Ohio
2) Begin LAB: (a) Sticky tape electrostatics ... or ... (b) Non-ideal properties of meters and batteries
- Fri. 9/20 1) Mid-Ohio Trip! Be in my room by 7:50 AM!





Directions: Place the answers (with units) to the following problems, which refer to the circuit above, in the spaces provided at the right. Do the computations mentally if you can, but compute if needed - with your work near the appropriate blank. If you get an answer wrong and do not show work, you cannot earn partial credit. If answers need to be rounded, please no more than 3 digits!

1. What is the equivalent resistance of R3 and R4? 1. _____
2. What is the combined resistance of R2, R3 and R4? 2. _____
3. What is the combined resistance of R5 and R6? 3. _____
4. What resistance would a multimeter measure from B to D? 4. _____
5. What is the equivalent resistance of R5, R6, R7, R8, R9 and R10? 5. _____
6. What resistance would a multimeter measure if placed across B and E?
Think carefully about this one! 6. _____
7. What is the total resistance of the circuit (from A to F)? 7. _____
8. What is the total current in the circuit? 8. _____
9. What is the potential (voltage) drop across R1? 9. _____
10. What is the potential drop from B to E? 10. _____
11. How much current passes through R2? 11. _____
12. What is the potential drop across R3? 12. _____
13. What is the current in R4? 13. _____
14. How much current passes through R11? 14. _____
15. What is the voltage drop from B to D? 15. _____
16. What is the voltage drop across R11? 16. _____
17. What is the current in each branch of the circuit from B to D? 17. _____
18. What is the sum of potential drops across R9 and R10? 18. _____
19. What is the potential drop across R7? 19. _____
20. Find the sum of the potential drops from A to B, B to E, and E to F. 20. _____
21. What is the sum of all currents flowing from B to E? 21. _____