All problems are from the textbook unless otherwise noted. Note that the book contains “Exercises” and “Problems.” I’ve assigned some of each. Exercises are usually direct applications of the material covered in lecture and in the chapter, and are almost all very straightforward. Problems are trickier and require synthesis of different topics. If you get stuck on an assigned problem, try a few related exercises.

If you don’t have the book yet, and can’t borrow from a friend, email me and I can get you a copy of the relevant pages.

Homework 1:

1. Exercise 2.1
2. Problem 2.2
3. Problem 2.4
4. Problem 2.6
5. Problem 2.10 assuming you have resistors of {1Ω, 5Ω, 20Ω, 50Ω, 89Ω, 100Ω, 1000Ω), and you are allowed to special order ONE resistor of ANY positive value you choose
6. Problem 2.17 (yes the answer in the back of the book is right)
    a. See slide 24 of Lecture 2 for a hint
7. Explain why we can’t use the “series” and “parallel” resistor combination tricks to solve Exercise 2.3.d
8. Exercise 3.1
9. Problem 3.3, part (1) only

Extra problems (not for a grade):

1. Exercise 2.3.d: Hint: What is I if we connect a voltage of 1V across the terminals
2. Problem 2.3
3. Try Problem 2.10 with node voltage AND using equivalent resistance replacements. See how much easier node voltage is?
4. Problem 3.1