Physics 303
Summer 2003
Learning Center #13
Ohm’s Law and Circuits

You wanted another “lab” so here it is.

Two light bulbs can be connected in series or in parallel to an identical battery.

Draw the circuits in the space below.

Will there be a difference in the light bulb brightness for one of the circuits compared to the
other? If yes, hypothesize which circuit you think will produce the greatest brightness.

Do an experiment to test your hypothesis (which could be that there is no difference). Was your
hypothesis confirmed?

Do a calculation to see if theory matches experiment. You need to calculate the power dissipated
in each light bulb (more power consumed ⇒ more energy “used” to produce light). Later you
can look at Physics 35, lecture 8 to see the calculation and pictures.