Questions and Answers

ECE 2300 – February 12, 2015 – Dr. Dave Shattuck

There were 13 separate questions on the equivalent resistance problem that we worked on February 12. With this many questions, I have decided to work that problem again in class on February 17. Thus, I will not address those questions here.

Question (Q): Why not take the approach of leaving *vW* and *iX* alone in Example Problem # 1?

Answer (A): We could do so. As we noted in class, we could write 15 simultaneous equations in 15 unknowns. However, that is tedious, typically takes longer, and gives less insight into what is going on in the circuit. We could do delta-to-wye or wye-to-delta conversions on the left hand side of the circuit, but it will really not simplify the circuit much. In any case, I would like you to feel comfortable with the approach we used; it can be very helpful.

Q: How do you determine the sign of the voltages using the voltage divider rule (VDR)?

A: As I said in class, this is a tough thing. I encourage you to do several problems, with and without the VDR. Make sure that you develop a rule for yourself, which makes sense for you. This is good practice for being an engineer. That is what engineers do.

Q: Will adequate time be given on tests and exams for redrawing the circuits as necessary?

A: Yes, we expect you to redraw the circuits, and yes you will have enough time to do so.

Q: Could we do meter examples in class?

A: Yes, we will.

Q: Is there an easier way to tell what is in parallel or in series?

A: If there is, I hope someone will share it with me. I have shown you the easiest way I know of, that always works.