

As the schedule says, this assignment is due on Day 6 (Friday), on paper, at the start of class. Hand in these six problems:

- Section 1.6 #3. Solve without electronic help (but feel free to check your answer electronically).
- Section 1.6 #6. Write the system of linear equations needed to balance this chemical reaction. You are not expected to solve it.
- Section 1.6 #12. The problem is referring to the figure just after this problem, with the number 200 at the top. These traffic flow problems are just like the current flow problem (Kirchoff's law) that we discussed on Day 1. Let's take the phrase "find the general traffic pattern" to mean just "write the system of equations". But part c requires slightly more subtle logic.
- Section 1.8 #16, 17, 18.

Finally, let's clarify some of the course expectations. Here are three crucial skills, that you should have at this point of the course.

- Recognize when an applied problem is a linear system in disguise. Write the linear system in standard form and in matrix form.
- Solve linear systems of up to three variables by hand.
- Add vectors, scale vectors, subtract vectors, and multiply matrices by vectors.

If you are not able to do these tasks quickly, then practice them until you can. I recommend that you march through the textbook, doing problems. Of course, you can also ask me or the prefect for ideas. My point is: Do this extra practice *now*. Don't wait until the week of the exam!

(The list above is not meant to be exhaustive. It's just a list of three concrete, important skills that you can definitely practice until you are fast.)