

Math 201 Homework #1

Instructions: you may work by yourself or in a group of 2. If you work in a group, turn in one "paper" with both names on it. The easiest way to turn this in is electronically as a Mathematica file. Just email it to me. You can turn in hard copy if you prefer or if your file ends up being too large to email. It is due Friday, September 11, at 1:10. Late papers lose 15% the first day or partial day late, plus 10% for each additional day late. I will be glad to discuss the assignment with you until, but not including, Thursday night. Start early, ask questions, and do well!

We will spend some time in class setting up the rating system I use for college football. The ratings paper is posted on Y (Public): \Mathmatica. It is a pdf file titled "RatingsPaper." If you are interested, you are welcome to go online and read about how the ratings have done in recent seasons. The home page is at <http://www.roanoke.edu/staff/minton/bynumbers.html>.

The result is to be a paper, written with complete sentences and explanations. Your grade will be affected by how well you communicate (that includes grammar). The paper will also contain calculations. If you are using Mathematica as a wordprocessor, just leave the commands and output in the appropriate place in the file. If you are not using Mathematica as a wordprocessor, neatly write out your results and attach the Mathematica print-out. The paper should include results from doing the following tasks:

Work #5-8 and 16 from the ratings paper, using Mathematica to do the calculations.

Work #11 from the ratings paper, and explain why this result is important. This is theoretical, so Mathematica may not be of much help.

For your favorite sport and season, look up the schedules and results and apply a version of the rating system. I do not want duplication of effort here, so sign up for your season (e.g., NFL 2007, MLB 2009 so far, ODAC soccer, ...) with me, on a first-come, first-serve basis.