MATH 311/510 HOMEWORK–2 DUE AT THE BEGINNING OF CLASS ON TUESDAY, SEPTEMBER 13.

(1) Contact a high school or middle school and arrange for (at least some of) your observations for the semester. If possible, observe once, but this is not required before Tuesday. Bring to class the name and address of the school where you will observe. Also bring the name of the teacher whose class you will visit, or let me know that you will be with different teachers.

(2) Read pages 2-27 in the NCTM Principles and Standards for School Mathematics. Based on the reading, what does the NCTM think about procedural versus conceptual knowledge and about constructivism in mathematics education?


You should be able to access the article, through JSTOR, from a campus computer.

Below is a part of Homework 3, due Tuesday September 20, for those who are able to get an early start:

(1) During your observations this week, make note of whether the lesson, or any parts of it, could be called constructivist. Also, make note of whether the objective of the lesson is directed more toward conceptual or procedural knowledge. Write a typed, 250-300 word description of what you observe. It will probably be best to focus on one class in the write-up, although it is okay to compare several. It is okay to focus your paper on one of the topics above, or to include both. In the heading, write the level(s) and grade(s) of the classes you observe.

Your grade will be based on your understanding of constructivism and conceptual versus procedural knowledge, as well as on the quality of the writing.

Please remember that each hour on the signature sheet corresponds to one of the 48 required class periods.