MATH 311/510 HOMEWORK–3 DUE AT THE BEGINNING OF CLASS ON TUESDAY, SEPTEMBER 20.

(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 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.

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

(2)  
(a) Find one or two other students to work with.

(b) Find the Journal Mathematics Teacher in a library.

(c) Find two activities from the Mathematics Teacher that would make good lessons for your group to present to the class, and bring these to class on Tuesday. Try to find ideas that would help you to present *new* math to your colleagues. (You won’t be expected to present these on Tuesday.)

(3) Think more about models for fraction multiplication and division. Bring to class at least two conceptual problems for fraction multiplication and at least two for fraction division. Try to come up with one fraction division problem for which the divisor is larger than the dividend. See whether you can show how to solve the problems using an area model, as Sean suggested in class.