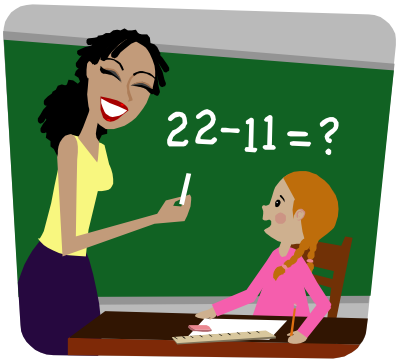
Mathematics Professional Development Project



For this project, you will be designing a short 2-3 hour professional development (PD) program for in-service elementary or middle school teachers. You will work in groups for this project (2-3 people per group). The PD program must be designed to creatively teach the participating teachers *why* a particular numerical algorithm works. Algorithms you can choose include:

- Whole-number addition & subtraction
- Whole-number multiplication
- Whole number long division
- Integer addition and subtraction
- Integer multiplication & division
- Fraction multiplication
- Fraction division

Other topics are negotiable – for example, if you wanted to provide PD for secondary teachers, you could focus on logarithms or exponents. You must consider the needs, interests, and motivations of your students (i.e., the in-service teachers), including their likely degree of prior knowledge. You must make the PD engaging and informative, and use various models and manipulatives, including technology if desired.

You may have the opportunity to deliver this PD to pre-service elementary teachers at Southern Methodist University, and be graded on your delivery of the PD as a replacement for the math content portion of your final exam.